

Title:

The Role of Collaborative Partnerships with Business
Clients for the Sustained Growth Strategies of Telecom
Service Providers

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Statement of Original Work

I declare the following:

This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

Where another author's ideas have been presented in this applied dissertation, I have acknowledged the author's ideas by citing them in the references.

Where another author's words have been presented in this applied dissertation, I have acknowledged the author's words by using appropriate quotation devices and citations in the required style.

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Abstract

In the last decade, the traditional telecommunications business began to decline and has continued to decline since. Service providers are still trying to survive and achieve sustained growth in a highly competitive industry.

The central aim of this research is to investigate how collaborative partnerships might help telecommunication service providers (TSPs) achieve sustained growth. The study critically evaluates the existing theories and empirical studies related to collaborative partnerships and explains why and how they are performed. The literature review showed a gap and a lack of a unified theory to explain the problem under consideration. To carry out the investigation, empirical, multi method qualitative research is applied. Primary data from individual semi-structured interviews and focus groups were collected and thematically analysed. Fourteen providers were involved; twenty-eight interviews and two focus group sessions were conducted. The research takes constructivism and interpretivism as the epistemological positions, and the embedded single case as the design choice.

The results show that resources only cannot create competitive advantages. TSPs' internal resources are not enough to compete in a highly dynamic market.

To achieve sustained growth, TSPs must build dynamic capabilities and be adaptive to meet complex client requirements. With these capabilities, a new relationship with business clients must be developed to gain trust as a basis for long-term investment and the sharing of resources. This relationship is what characterises a successful collaborative partnership where TSPs see the positive impact on sustained growth. The results are shown in the growing demand of business clients and the continuity of current business. It is a challenge to survive and grow in a declining business unless TSPs adapt and make the necessary changes.

Traditional TSPs may struggle to change their core business and make the shift to new IT-based cloud services and products. At the same time, their current commercial model, and short-term strategies are not helping them to achieve sustained growth. The findings illustrate the need for TSPs to make changes and collaborate more with clients. However, there are concerns about whether the growth of traditional TSPs, if achieved, can be sustained for a long period.

The research findings provide guidance to managers as to how they can develop successful collaborative partnerships that can help providers create competitive advantages. At the same time, the empirical findings contribute to the theory by increasing knowledge on collaborative partnerships and how developing these partnerships might help service providers achieve sustained growth in a dynamic business environment.

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Abbreviations

AI	Artificial Intelligence
ARPU	Average Revenue Per Unit
AWS	Amazon Web Services
Benelux	Belgium-Netherlands-Luxembourg
BT	British Telecom
CapEx	Capital Expenditures
CEO	Chief Executive Officer
COVID-19	Corona Virus Disease 2019
CP	Collaborative Partnership
CSAT	Customer Satisfaction
DBA	Doctor of Business Administration
DC	Dynamic Capability
EMEA	Europe, Middle East, and Africa
EU	European Union
FG	Focus Group
FSB	Federation of Small Businesses
GCN	Global Content Provider
IaaS	Infrastructure-as-a-Service
ICT	Information and Communication Technology
IoT	Internet of Things
IT	Information Technology
M&A	Mergers and acquisitions
ML	Machine Learning
NaaS	Network-as-a-service
OpEx	Operating expenses
OTT	Over the Top
PaaS	Platform-as-a-Service
PoC	Proof of Concept
RBV	Resource Based View
ROI	Return on Investment
SaaS	Software as a Service
SD-WAN	Software Defined Wide Area Network

SLA	Service Level Agreement
SME	Small and Medium-Sized Enterprise
TSP	Telecommunication Service Provider
UCaaS	Unified Communications as a Service
UK	United Kingdom
US	United States
VP	Vice President
VPN	Virtual Private Network
VRIN	Value, Rare, Imitable and Non-Substitutable
VRIO	Value, Rare, Imitable and Organisation

1 Introduction and Structure

1.1 Research background

The motivation to pursue this doctoral study comes from a long-standing interest that developed during the Master of Business Administration and from my daily job as a leader of a European sales engineering team for a global telecommunications service provider serving business clients. The interest for this study is driven by the continuous industry challenges and the decline that traditional providers are facing.

The work is composed of a series of six chapters after this Introduction, arranged as follows:

- Chapter 2 is a literature review, focusing on significant writing and publications.
- Chapter 3 explains the methodology to show how the research was conducted.
- Chapter 4 features the data analysis and findings, while
- Chapter 5 discusses these findings
- Chapter 6 focuses on the research conclusions.
- Finally, the reflections on this research journey are stated in Chapter 7.

This chapter, however, begins by providing the research background in Section 1.1 with four sub-sections explaining the key characteristics of the telecommunications industry, its dynamism and complexity. The first Sub-section 1.1.1 presents the industry trends and challenges, while the second Sub-section 1.1.2 is talking about market liberalisation, competition, and regulatory frameworks. The third Sub-section 1.1.3 is about the technological changes and specifically the artificial intelligence (AI) developments, the opportunities and threats related to the AI implementation. The context in which TSPs manage their clients, create joint ventures, and develop new partnerships is in the fourth Sub-section 1.1.4.

Further, Section 1.2 defines the research problem showing the revenue decline, decrease of bandwidth tariffs, the shift from national to international business for some TSP (globalisation or deglobalisation). The aim of the research is described in 1.3, and the last Section (1.4) defined the objectives to indicate how this aim will be achieved.

The telecommunication service providers (TSPs) considered in this research are the traditional providers, offering fixed bandwidth connectivity and voice services. These providers serve business clients and face competition from different players such as over the top (OTTs) or global content providers (GCNs) of information technology (IT) and cloud services (e.g., Amazon, Microsoft, and Google).

1.1.1 Industry trends and challenges

The telecommunications industry is facing increasing challenges, and only a minority of TSPs have managed to find a way to achieve sustained growth. This growth is understood as an increase in financial results that the TSPs can achieve and maintain without running into financial problems. This means that the annual percentage increase in sales is consistent with the firm's established financial policies (Higgins, 1977).

The rate of growth that allows the company to grow without having too much or too little cash is called the sustained growth rate (Ashta, 2008). Higgins (1977) describes the sustained growth rate using four variables: The profit margin, the retention ratio, the asset turnover, and the financial leverage ratio:

- Profit margin: The net profit margin on new and existing revenue
- Retention rate: The fraction of earnings retained in the business
- Asset turnover ratio: The ratio of sales revenues to total assets
- Financial leverage: Desired dividend payout and debt ratios. Debt is money that has been borrowed and must be repaid at an agreed date.

Higgins' (1977) formula is widely used and covers the most common financial characteristics of an organisation. These characteristics can be used to measure and manage financial performance, set commercial targets, and support the building of a financial forecast.

Financial statements, quarterly, and annual reports are almost standardised and fall within country and sector legal policies. Such official reports are regulated, especially for publicly listed companies on the financial stock exchange. Companies may not report their financial status using the same model, but the most important characteristics are the same (e.g., revenue, margin, costs, growth rates depending on company target and previous results). In addition, earnings before interest, taxes, depreciation, and amortisation are well-known performance metrics that measure a company's profitability from operations and are used to compare company performance. Other performance indicators are also used to evaluate the company's performance, such as market value, market share, cost of sale, and efficiency. However, share prices are sensitive and often change. Market share is not accurate and does not give a concrete financial result, that is why revenue (existing and new business), and earnings before interest, taxes, depreciation, and amortisation are the most used metrics to compare financial performance.

The TSPs are different in the market value, the home market country in which they were founded, and the shares percentage owned by the national state as presented in Appendix 1.

The value shows that TSPs are in three classes: Five high value providers above \$65 billion, four medium class providers with a value between \$15 and \$65 billion, and five TSPs with a value below \$15 billion (CompaniesMarketCap, 2024). The value is an important factor in the TSP capability to create joint ventures, for the acquisitions of other providers, and to invest and buy more shares. TSPs are usually strong in their traditional home market and can offer competitive products and services. However, some TSPs have generated more revenue from their international operations rather than from domestic sales (e.g., Deutsche Telekom and the BT group).

Except for a few providers owned by private investors, other traditional service providers (old monopolies) are partially owned by the state. The national governments own some golden shares that are enough to block acquisitions or reject mergers with other external providers. Governments run national security checks for critical network infrastructure and can reject acquisitions or block investors from buying more shares. As an example, the acquisition of kpn by América Móvil in 2013 was rejected by the Dutch government for security reasons. In 2024 the Spanish government increased its shares in Telefonica to protect them from a possible takeover by STC, the Saudi Telecom Company.

The TSPs value, the size and the dynamism of their home market and the interests of different shareholders including the national governments are different factors affecting the way TSPs operate. The mix of private and public shareholders and the different national and European regulatory rules create a complex environment for TSPs. However, some enterprises have been satisfied by the level of competition on markets for ICT services and they are less engaged in policy and regulatory processes (Sutherland, 2013).

TSPs continuously invest in building networks and implementing advanced technology. With a sustained growth they can achieve a reasonable rate of return for investments. TSP usually finance business cases for network expansion with a return of investment between three to five years, or longer for specific projects such as sub-marine cables. Expansion helps TSPs to serve more clients and to offer multiple services and products to meet business client requirements. New data received in June 2024 from one TSP summarised the continuous challenges in an internal document presented to the leadership team (analysis based on 2023 data). These challenges are related to the client's buying behaviour and how a TSP should deal with it regarding the investments and strategies:

- Only 17% of customers make 80% of 2023 booking (revenue from new business)
- 60% of customers were not buying from this TSP in 2023
- 61% of customers were buying one product only

- Only 2% of sales concerned a new logo (new customers)
- 58% are out of or near-term contract, meaning a high risk in switching over to other TSPs

Further analysis of voice services shows that over the past 20 years the voice proportion of revenues dropped from 57% to 15%. This is a generic trend driven by the move of communication to the 'over the top' players (e.g., Zoom, Microsoft, WhatsApp). The same or similar percentages are valid for other TSPs showing that service providers are facing big, continuous changes related to customers buying behaviour, products, revenue sources and risk. Another example of such big changes in TSP revenue results and customer buying behaviour was presented in KPN Q1 results: In 2023, the growth was driven by business (+3.9%) and consumer achievement of +0.6% year on year, but in 2024 the growth was mainly driven by Consumers (+4.5%) and the revenue from business clients declined by 0.7%. In 2022, the revenue growth in Q1 was 1.6% and it was mainly driven by consumers. These rapid changes in revenue sources are pushing TSPs to continuously review and position their services, the way they serve customers, and the segmentation model (who is buying what and where is the most potential to win more profitable business).

Telecom Italia issued three profit warnings in 2021, not caused by the pandemic. On the contrary, TSPs benefitted from the high demand for bandwidth and voice services during the corona virus disease in 2019 (COVID-19) thanks to related restrictions, such as working from home, the increase in video conferencing and cloud services, and the urgent upgrades that were needed because of the peak in data traffic.

The pandemic (in 2020 and 2021) created a high demand for TSPs, pushing them to review their resources for the peak period with network expansions, fast track processes (orders prioritisation during COVID-19, and hiring additional human resources. The pandemic was an unexpected business circumstance and required a short-term strategy to deal with a high degree of business uncertainty, but generally, TSPs succeeded in achieving growth because of the high demand. However, the poor performance results after the pandemic illustrate that it was temporary and not sustained growth.

Furthermore, unexpected, and disruptive events such as the pandemic created much uncertainty in the market space but accelerate the digital transition, the move to cloud services, and the re-design of all critical applications. They are a wakeup call for many business clients to review their service resilience and check their business continuity to ensure they have access to their systems at any time and from any place. COVID-19 was a temporary a threat, but for many TSPs. It was also an opportunity to create new differentiating factors and achieve growth, which

they hoped to sustain for a long time. It was a period where TSPs saw the ability to be flexible to deal with unexpected market conditions and urgent customer requirements for resilience and remote working resources.

It is a complex, very dynamic, and highly competitive market with continuous pressure on TSPs' revenue and financial profitability. Changes are not new in the telecommunications industry, but when studying the creation, strategy, and performance of ten technology, media, and telecommunications companies, change and (mis)management of change was one central theme that runs consistently throughout the cases (Curwen and Whalley, 2004).

1.1.2 Market liberalisation, competition, and regulatory frameworks

The privatisation and liberalisation of the telecommunications market started in the UK in the early 1980s and in the 1990s in other countries in Europe, providing the conditions for a dynamic and competitive industry. Some TSPs that achieved high revenue growth for many years lost their dominant position, and their financial results now show a decline. The competitive environment in telecommunications is still facing key issues related to market regulation and prices (Laffont and Tirole, 2001), especially with regard to the rules that should apply to the new global providers compared to traditional TSPs. In addition, the TSPs market leaders, providers with the largest numbers of subscribers, should be able to show relative performance advantages over other competitors with fewer subscribers (Asimakopoulos and Whalley, 2017).

The liberalisation and privatisation allowed TSPs to expand their businesses and enter new markets, which explains the high increase of mergers and acquisitions (M&A) in the 1990s (Pennings, Kranenburg and Hagedoorn, 2005). Appendix 2 presents a list of European service providers and how the liberalisation and privatisation developed over time, principally in 1998 (Pennings, Kranenburg and Hagedoorn, 2005). Privatisation, the increase of private bodies power, started in 1984 in the UK, with Greece, and Switzerland, the last two countries, following in 2004.

This new market development was an opportunity for TSPs to grow but also a risk for them to enter a rapidly changing market and face new international competition. Some TSPs keep expanding globally. For example, in 2024, Colt technology services announced their expansion to six new countries in Asia with an investment of 100 million Euro. However, some TSPs made the decision to focus on local business and go back to their home market and concentrate less on global services. In March 2024, when presenting the annual report, the BT Group announced the plan to simplify the business by fully focussing on connecting the UK,

generating significant growth for all their stakeholders, and exploring options to optimise BT global business.

In contrast, the decision to focus on the local home market was taken before by KPN in the Netherlands. The reason for TSPs' decision to focus either on local business or on global services is a combination of financial results, shareholders' strategy, and the nature of TSPs (acting as a national or an international provider).

The discussion about globalisation or de-globalisation in the telecommunication business will continue. The European Union published a report in 2024 calling for consolidation in the telecommunications industry and the creation of one European market in order to increase the global competition (Hartmann, 2024). Such a market with the focus on Europe will make TSPs able to compete against the global providers from US and China. However, the creation of the one European market, instead of the focus on small local markets, can only take place with a new regulatory framework. The national regulatory bodies collaborate together, and they are, to a certain extent, aligned with the EU Telecom regulation but this is currently not enough to create one consolidated and competitive market. Other studies related to public policy targets in EU broadband markets show that the technological choices that occur within individual EU countries are shaped by the complex and dynamic interaction between a series of dependencies that may vary significantly across as well as within the different member states (Briglauer, Stocker and Whalley, 2020). The differences are not only for broadband markets but cover the wider ICT and telecommunications services and products.

The home market is more regulated at national level, especially to allow other competitors to access the network of the local TSP incumbent or some other providers (e.g., interconnection tariffs, fixed and mobile termination, and wholesale broadband access). The regulatory strategies decide on market structures, approaches to network access and price control, and approve mergers and acquisitions to ensure the competitiveness of the local telecommunication market.

1.1.3 Artificial intelligence and cloud computing: Opportunities and threats

There is no one universal definition of Artificial Intelligence (Gbadegeshin et al., 2021). The reason that AI is difficult to define is linked to the evolution of this discipline (Sheikh, Prins, and Schrijvers, 2023). AI is beyond a specific technology. It is combination of different technologies, systems and devices that use large amount of data to perform complex tasks (Gbadegeshin et al., 2021). Sheikh, Prins, and Schrijvers (2023) recommend the definition of the High-Level Expert Group on Artificial Intelligence of the European Commission who

define AI as “systems that display intelligent behaviour by analysing their environment and taking actions, with some degree of autonomy, to achieve specific goals”.

AI supports service providers to automate processes and improve efficiency. AI tools are part of the cloud computing offering (e.g., Copilot, ChatGPT, and Gemini).

Cloud computing systems allow users to access applications via the internet and pay as they use it. The model is usage-based, instead of investing in software, hardware, and database systems. It is scalable, easy to deploy, and cost effective. Users call it Software as a Service (SaaS), or Network as a Service (NaaS) or Platform as a Service (PaaS). For TSPs the NaaS is a growing business and is fully automated. It is the new way clients consume bandwidth (especially hyper scalers using high bandwidth between key data centres).

AI is a key driver of digital transformation which TSPs start using it to automate routine tasks, improve processes, add intelligent customer analysis, and increase profitability. However, TSPs are aware of the risks in implementing AI, such as data privacy and ethical challenges, and higher energy consumption. A standard data centre computer rack requires four kilowatts (kW) of power, an AI rack requires twenty times that power (80kW), and a single data centre may contain thousands of AI racks (De Vries, 2023). Specifically, TSPs are looking to Generative AI, not only for internal process improvements, but as an accelerator of bandwidth consumption and more cloud-based services.

The importance of AI in the telecommunication business is the reason why some TSPs created a new AI Alliance in 2024. Singtel, Deutsche Telekom, e& Group, SoftBank and SK Telecom launched the Global Telco AI Alliance and announced the creation of a new joint venture to develop Large Language Models, a type of AI programme catering specifically to the needs of telecommunications companies (Tomas, 2024). In 2024, twelve TSPs collaborated with Ericsson, the telecommunication supplier, to create a new joint venture to provide network API (Application Programming Interfaces) to different ecosystem partners and access to different networks (Staff, 2024). Half the TSPs in this new JV are included in this research: AT&T, Verizon, Vodafone, Orange, Deutsche Telekom, and Telefonica.

In addition, vendors, system integrators and resellers continue to invest in AI. Cisco, a network, and technology vendor has made over twenty AI investments and acquisitions in the last several years, recently announcing the launch of a \$1 billion fund to invest in AI start-ups (Sweeting, 2024).

AI real time and interactive applications will change TSPs processes and automate the way they engage with customers and handle front desk activities. Automation will help to reduce the cost base for TSPs but will decrease the head counts and result in more job cuts on top of ongoing

transformation programmes because of the low financial performance. In 2024, Vodafone Spain announced the reduction of the total workforce by 30% and Telstra will cut 9%. In 2023, BT announced a plan to become a leaner business and reduce 40% of the global workforce by 2030, including 10,000 jobs to be replaced by AI (Deslandes, 2023).

In addition to the usage of AI to achieve more efficiency, Generative AI will create more content and require more connectivity and cloud capability to share and exchange between different users, which is an opportunity for TSP to grow but at the same time a challenge for all providers to cope with exponential demand in network access and cloud capacity. The high demand in bandwidth and real time data is visible in mobile network generations. Appendix 3 shows how the mobile network developed and how it has become faster and demanding of more bandwidth. This exponential growth (tests show that 6G can be five hundred times faster than 5G) is an opportunity to sell more network access, especially to global content and cloud providers, but also a challenge to invest in new technology and on time. TSPs provide the mobile and fixed connectivity but not the content, which is why they are necessary but not sufficient for the digital ecosystem (Whalley and Curwen, 2024).

Digitalisation has intensified the competition and uncovered new competitors who are acting globally and not just at local or national level and AI will continue to drive the Digital transformation. In addition to AI benefits such as automation, data enhanced analytics, identifying patterns for complex tasks, and gaining insight into a client's behaviour, there are threats when deploying AI. Data privacy, security challenges, AI-driven decisions and challenges on human rights pushed for more trustworthy AI rules as done by the EU on 12 July 2024 when the AI Act was introduced (European Commission, 2021). The AI Act adds a high-level protection and creates a legal framework for AI implementation and new technological development to ensure a balanced approach by applying different rules for different risk levels. AI, mobile access generations, cloud computing, and new technologies will continue to transform and digitalise the business. TSPs are facing the challenge that products are becoming increasingly complex and multi-technology due to rapid scientific and technological advances (Palmberg and Martikainen, 2006). However, these developments increase the access requirements, the on-demand services, as well as creating new opportunities in the telecommunications industry for both TSPs and business clients.

1.1.4 Clients management, joint ventures, and partnerships

Through their relationships with their clients, service providers gather feedback on delivery and service assurance incidents. Some carriers have introduced periodic workshops as a proactive

approach to managing the relationship, but the goal of these workshops is to increase sales and revenue. In this approach, common purposes and mutual goals between the service providers and their business clients are not defined. However, service providers believe that clients will purchase more, stay in business longer, and the revenue will grow when their clients are satisfied, engaged, and loyal.

Hence, TSPs aim to provide a better customer experience, by measuring customer loyalty indexes, such as a Net Promotor Score. Additionally, they are focusing on customer engagement, collaboration, partnerships, and sending periodic customer satisfaction (CSAT) surveys. Customer experience is considered a priority for the service provider's strategies. Customer experience refers to the customer's feelings and thoughts based on their interactions with the service provider and the extent to which the delivered services meet their expectations. It does not refer to the service itself and how it is delivered, but rather how the customer experiences contact with the service provider.

In this connection, Mattessich, Murray-Close and Monsey (2001) suggest that a well-defined relationship between the service provider and client will help to achieve common goals and fulfil a common mission.

In this relationship, all partners contribute resources and share rewards and leadership to achieve the goals and outcomes for the entire partnership's benefit. The interaction between two or more business partners to develop and achieve a common goal is defined as a collaborative partnership - a way of sharing authority and responsibility for planning and implementation (Hord, 1986) which involves much more than just coordinating or cooperating for short-term goals (Winer, 1994).

In the literature, partnerships are often described as a way of working together between companies, vendors, clients, and external third parties to achieve greater efficiency, save costs or share knowledge. Sectors such as education, healthcare, and construction often use this type of partnership.

Every partnership is unique, has different interests, plans, assets, and goals, and will involve different key decision makers at various levels. Partnerships can help the service providers address some challenges in selling to business clients, but it is unclear if the service providers can convert this into a long-term relationship that can create sustained growth.

Growth is the reason why TSPs have historically engaged in joint ventures, collaborative partnerships, and strategic alliance activities to improve their capabilities and create competitive advantages in the telecommunications sector which will help them to achieve sustained growth. When creating strategic alliances, TSPs consider different reasons such as

economies of scale, access to a larger customer base, further network expansion, market presence, and new business models and products but the most important of all to any strategic alliance is synergy between collaborative partners (Selvarajah, 2000). Alliances, such as for research and developments, are developed for new or complex technologies where the uncertainties, risks, and liabilities, are shared between different partners (Giuri, Hagedoorn and Myriam, 2002). In addition, large international alliances like Unisource, Global One and Concert Communications were created to service global customers owned 61% of the telecommunication traffic (Gerpott, 1997) but none of these three alliances still exists after ten years. The Concert joint venture between BT and MCI (WorldCom) collapsed but later continued with AT&T (\$10 billion in assets) but failed again. BT retained most non-US assets and operated further as BT Ignite and later BT Global Services. Concert was the first multinational joint venture offering global connectivity to multinationals, challenging national monopolies.

The high value of these alliances was linked to known international providers likes AT&T and Deutsche Telekom rather than any increase in sales or new customers (Jakopin, 2008).

Appendix 4 presents an overview of TSP history, joint ventures alliances and partnerships activities (e.g., Concert, WorldCom, Global One), and explains the reasons for all these collaborative efforts. The overview is not only about these past JV activities but covers the recent JVs and M&As (e.g., Vodafone UK & Three, Vodafone Italy sold to Swisscom, Telecom Italia sold their fixed network to KKR private investors, and Vodafone Spain sold to Zegona Communications). JVs, M&As, the changes in TSPs fixed and mobile networks, and the focus on national markets (KPN, Proximus) or the move from global services to national markets or to a consolidated market (BT, Vodafone) are all dynamic industry trends that TSPs are dealing with. The failure of the most famous JVs was due to commercial losses, management conflicts, and cultural issues.

The data collected from the TSPs official websites shows that most of the providers had a long history and the most were state-owned and operated as incumbent national operators before the liberalisation of the telecommunications market in Europe started in 1991.

Additionally, partnership activities were focused on capabilities and resources to service global customers, expansion to new markets and share investments. The general thought was that joint ventures and alliances would enable TSPs to be the one-stop shop demanded by multinationals (Curwen and Whalley, 2004). National incumbent providers accessed the global resources to acquire skills, capabilities, or resources where knowledge is an important factor for their meta-national successful strategies (Turner, 2008). However, these strategies paid less attention to business clients and what they expected from their service providers. The failure of some joint

ventures shows that TSPs were not able to get enough clients to justify the investments and achieve their goals, as stated in the reasons for partnerships and joint ventures in Appendix 4. Some international alliances created in the past were not successful (e.g., Telefonica of Spain/KPN of Holland, Telia of Sweden/Telenor of Norway, France Telecom and Deutsche Telekom experience with Global One). The failure of TSP alliances and mergers is linked to ownership, cultural diversity, and the common objectives (Selvarajah, 2000). In alliances, TSPs prefer to develop new skills in different areas but in practice the best way is via the joining in of new alliance members or M&A (Curwen, 1999). Expansions through alliances or acquisitions may help service providers to grow. However, other empirical studies on mobile providers showed no evidence of positive internationalisation effects on accounting-based firm performance criteria (Gerpott and Jakopin, 2005).

TSPs are developing new partnerships and seeking different revenue streams and various sources to grow the business and achieve profitability. They are continuously reviewing services and products, systems and applications, commercial models, technical innovation, and their capability of customising offers to business clients.

Most traditional service providers are still trying to implement different strategies and apply new business models, transform their businesses, and consolidate their resources to save costs - some TSPs acquired other companies. For example, in 2016 certain providers merged with other companies: Verizon acquired XO Communications, AT&T acquired Time Warner, Windstream merged with EarthLink and CenturyLink merged with Level 3. However, regulation policies, innovation, and capital expenditures (CapEx) have been the key factors driving the transformation of the telecommunications industry (Sengupta and Fanchon, 2009). TSPs are trying to understand customer needs and business developments in the telecommunications market. They have different views on how to manage the customer experience, which they consider a top priority.

The way TSPs manage and influence their clients, interact with them, and build relationships with them is different per service provider: selling to business clients is a long, complex process. Technical access is a commodity, and the new success factors are related to applications, convergent services, and dedicated customer orientation (Czarnecki and Dietze, 2017). These key differentiators have pushed service providers to focus more on the customer experience, to report on CSAT, to pay more attention to their business clients, and to increase the need to build long-term relationships. Furthermore, the client's buying behaviour is important for the business, helping to make the right decisions and develop the right growth strategy. Usually, business clients are willing to buy more and ask for additional services, such as customised

solutions and non-standard terms and conditions. Their buying behaviour is more rational and commercially oriented than that of consumers (Fill, 2009). Therefore, it is important to understand the collaborative partnership with business clients to see if this can help TSPs achieve sustained growth. This is the research problem that points to the need for meaningful understanding and detailed investigation.

1.2 The research problem

The market challenges as described in previous sections influenced the TSPs' results. The revenue growth rate is low, and most service providers are not achieving their targets, even with some acquisition activities or cost savings transformation programmes. Traditional services are declining due to price erosion; services become commodities, and with more deregulation, the competition becomes more intense. The introduction of new products and services does not compensate for the total decrease in old product revenue.

Figure 1 shows the revenue for eight global listed TSPs whose data is collected from their official annual reports. The revenue for the last 5 years has either declined or is almost stable (not growing), except for one TSP (Deutsche Telekom), but the increase or growth is non-organic and was caused by the acquisition of Sprint. The figure illustrates the revenue results for the last 5 years using local currency, as mentioned in Appendix 5. TSPs may reduce costs to ensure higher profitability, but without an increase in sales (revenue), the service providers cannot achieve growth, and if they do, they will only sustain it for a short period.

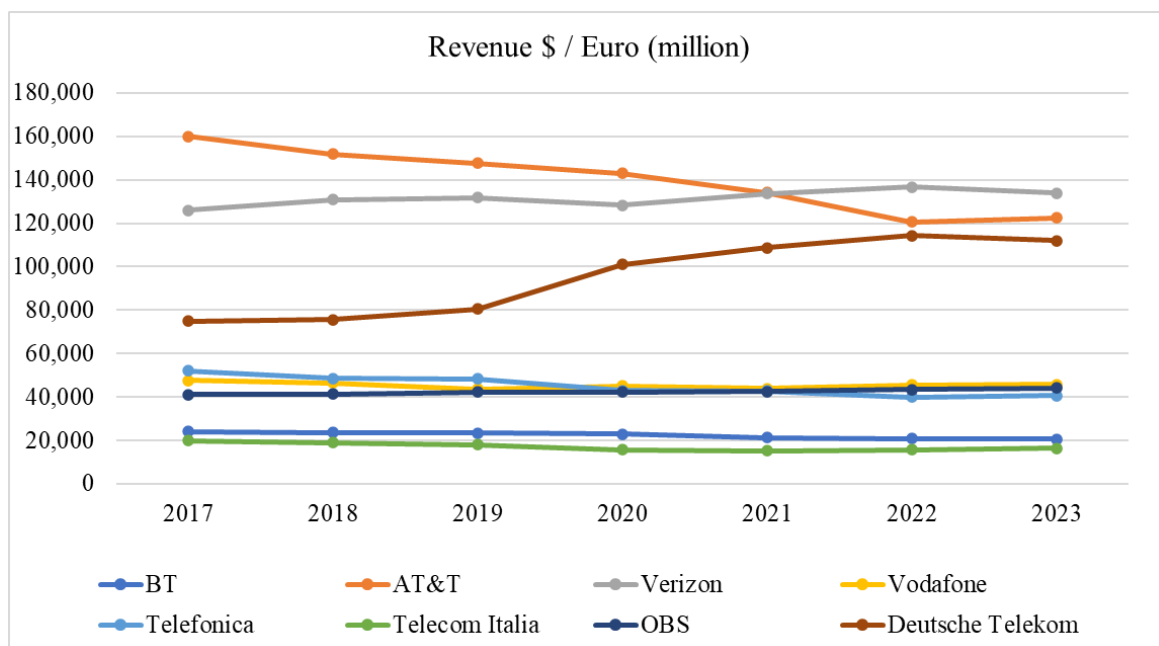


Figure 1: TSPs revenue growth rate

These results show the challenge that TSPs are facing. They may succeed in increasing revenue, but this is often a direct result of acquisitions or any other form of non-organic growth. Furthermore, the results indicate that global TSPs reached their revenue aim mainly through the global and international services they provide and not through the services they provide in their home countries.

Deutsche Telekom’s 2020 annual report presents the breakdown of revenue per region: 24.5% in Germany (home country), 14.4% in Europe (excluding Germany), and 60.7% in North America. In the 2023 annual report, Deutsche Telekom stated that 77% of the total net revenue is from international sales in Europe and United States (US), and only 23% from domestic activities in Germany. Furthermore, Figure 2 indicates the revenue during the last 20 years for three TSPs that were owned by the state and acted as monopolies in their countries: KPN in The Netherlands, Proximus (formerly Belgacom) in Belgium, and Telecom Italia. Figure 2 shows that the revenue of these companies has been declining since 2002, as mentioned in Appendix 6.

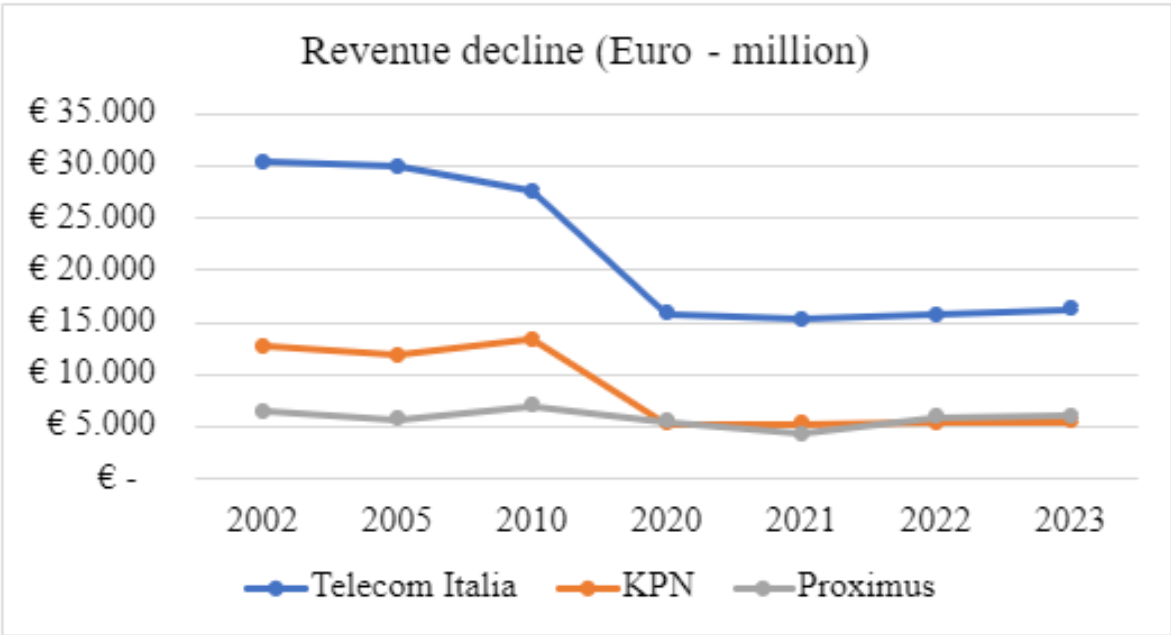


Figure 2: Revenue decline from 2002 to 2023

Other TSPs have similar results, and the double-digit growth is not evident. Some TSPs managed to achieve positive profitability results through continuous restructuring programmes, offshoring, and cost savings initiatives, but not through increase of revenue from new business. In their 2009 annual report, Proximus mentioned that 78% of their revenues were generated by products and services that had not existed 15 years previously. This statistic suggests that the

TSPs must adapt and innovate to ensure they will meet the business requirements and demands of their clients.

In addition, the data obtained from one TSP (Figure 3) indicates that the decline in bandwidth prices continues to have a significant impact on TSPs growth and margins. The decline for Off-net services (services from third party network provides) is 18%, and the decline for On-net services (TSPs own network) is 27%, equating to a 20% decline for total connectivity services (Figure 3). The percentages reflect a global price evolution and do not simply reflect the four services considered in the data shown in Appendix 7.

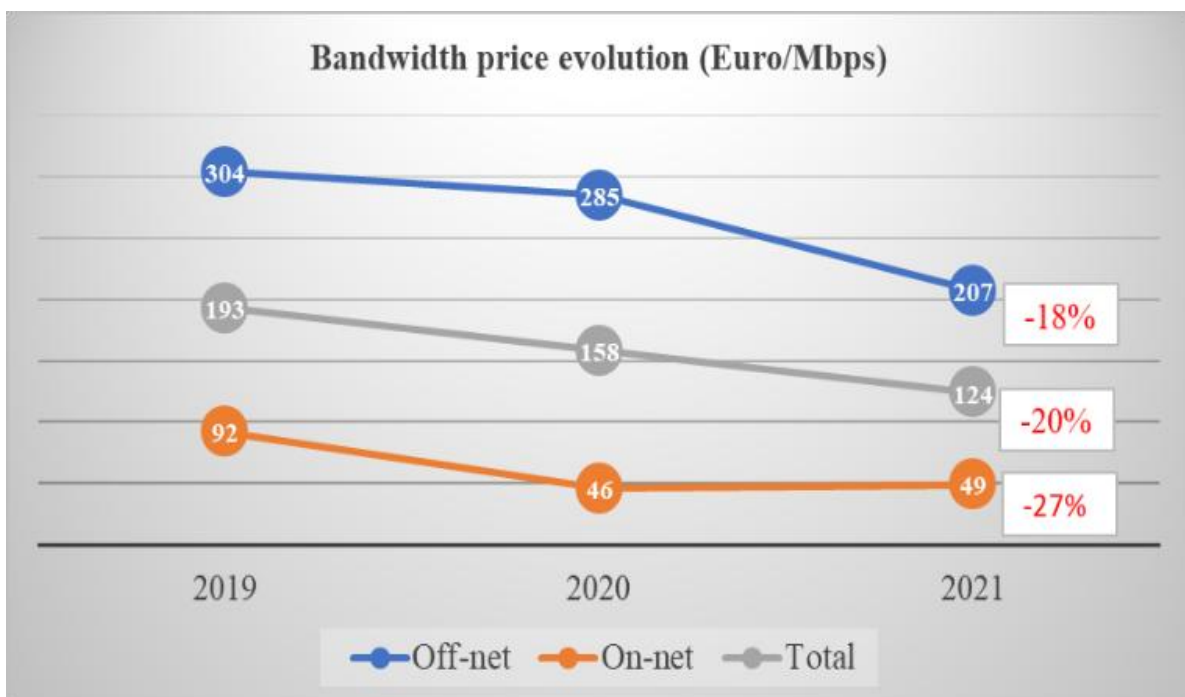


Figure 3: Bandwidth price evolution

The same data also indicates a decline of 6% in the average revenue per unit (ARPU) from 2019 to 2021. ARPU is a metric measuring the average revenue per circuit (access) and, in some cases, the average revenue per user.

Moreover, in Europe, the average monthly subscription from April to December 2023 for businesses using fibre-based broadband \ decreased by 15.3%, cable broadband tariffs fell by 11.1% and the average combined cost per megabyte per second on business broadband packages went down by 37.6% (Stanke, 2024)

Price erosion, the difference between the actual price and the potential price, is not new, and TSPs have always faked this difference. However, the decline appears to be accelerating, which is putting pressure on TSPs to have a strategy that can maintain profitable and consistent pricing over a long period.

On top of the declining revenues, the service providers are facing customer churn, where clients decide to cease the service and switch to other service providers. The churn for wireline providers is estimated between 2% and 2.5% per month (Springer et al., 2014). According to Statista.com, in 2018, the customer annual churn rate in the telecom industry in the US was 21%, and for Telecom Italia, it was 26.3% (this is not only for business clients).

The telecommunications industry is very competitive and characterised by high churn rates (Ribeiro et., 2023). System integrators and IT companies are stronger than traditional telecommunications carriers in the IT business, which is why companies such as Colt Technology Services decided to exit the managed IT business in 2015 (ETTelecom, 2015).

Also, the TSPs' decline includes data centres services. Providers specialising in data centre services (e.g: Equinix, Digital Realty) reached a growth rate higher than 10% year on year, but traditional carriers do not have the capability to compete with them. In 2016, Verizon sold twenty-four data centres to Equinix (Verizon, 2016) and in 2021, Colt Technology Services sold 12 data centres to Atlas Edge, a new joint venture between Liberty Global as a TSP and Digital Bridge as an investment firm (Swinhoe, 2021). In 2024, Proximus sold their data centre business to Belgium's Datacentre United (Swinhoe, 2024).

Sustained growth is not easy to achieve and maintain but it is important for TSPs to ensure they have a strong financial position to serve customers, take care of employees, and invest in new projects. Founders and investors usually ask for rapid growth and short return on investment (ROI). This short-term strategy is often the reason why TSPs do not manage to achieve long term and sustained growth.

The literature does not provide a clear explanation of the TSPs' revenue decline or a solution that can help them build a better strategy and grow. It is important to understand collaborative practices, what the barriers are, and how to introduce and maintain such practices to manage the decline and achieve sustained growth. Otherwise, the challenges will continue, TSP performance will decrease, and this will have a negative impact on the telecommunications industry and the global economy. Almost all industries use ICT and telecommunications in their daily operations, and the performance of telecom is linked to overall economic growth (Jamison, Berg and Jiang, 2009). This view is supported by Curwen and Whalley (2004) who consider the telecommunications industry and business as one of the most influential and significant global industries and crucial for the economy.

Thus, industry trends, including liberalisation, competition and regulation, new developments such as A.I., cloud computing, client management and various patterns, leading to the research problem, aim and objectives have been opened up as important areas (which follow).

1.3 Research aim

The aim of this research is to increase current knowledge regarding TSPs' collaboration with business clients and ways in which the collaboration might help them achieve sustained growth.

1.4 Research objectives

To achieve the research aim, the following objectives must be completed:

1. Critically evaluating the existing theories and empirical studies related to collaborative partnerships between TSPs and business clients to establish how the research problem is currently understood.
2. Exploring why and how TSPs collaborate with business clients.
3. Exploring the benefits and challenges of collaborative partnerships between TSPs and business clients.

To achieve these objectives, the existing theories and empirical studies are critically evaluated in a thorough literature review, presenting Transaction Cost economics, resource-based view (RBV), knowledge-based view (KBV), dynamic capability (DC), absorptive capacity, and adaptive capability in order to establish how the research problem is currently understood.

This paper sets out to delve deeper into TSPs' collaboration with business clients. The data analysis with examples from industry practices illustrating such exploration and analysis.

There follow explanations illustrated by examples of why TSPs collaborate with business clients. In addition, there are descriptions of the basis and grounds for developing these collaborative partnerships.

The issue of whether collaborative partnerships can help achieve sustained growth, i.e., the benefits and drawbacks or challenges of collaborative partnerships and what the conditions might be is also investigated, as will be seen in subsequent sections. First, in Chapter 2, which follows, the current state of knowledge regarding the research area is summarised in a collated literature review.

2 Literature Review

2.1 Introduction

Chapter 1 has already focussed on the trends and challenges being faced by the industry, and goes on to briefly explore client management, joint ventures and partnerships. This chapter goes into further depth than the overview in Chapter 1. It examines the relevant literature to establish the current thinking about the role of the collaborative partnership with business clients in the TSPs' sustained growth, resulting from TSPs' engagement with business clients, customer-centricity and the results of other studies on collaboration and growth (Section 2.1).

In addition to the engagement impact under Section 2.2, another section (2.3) explores the sustained growth and competitive advantages of the telecommunications industry as a fast-moving market. Another important section (2.4) defines collaborative partnership as a key concept for this study, leading to the competition with new TSPs, Ecosystems and Aggregator Strategies (presented in Section 2.5), while the entire Section 2.6 (2.6.1 – 2.6.8) focussing on the Theoretical Background), explores the providers' ability to maintain a competitive advantage by modifying or reconfiguring resources based on external market conditions and considering how they can add value and differentiate their services by making strategic choices. It presents six theories and concepts: the Transaction Cost economics, resource-based view, knowledge-based view, Dynamic Capabilities (DC), absorptive capacity, and adaptive capability. These are referred to in detail as follows:

Theories such as the RBV and DC are reviewed to reveal the role of collaborative partnership phenomena and to explain the relationship between clients and the strategies of service providers. The RBV focuses on resources, and DC is concerned with capabilities and the extent to which a firm can adapt to create a competitive advantage and achieve growth. The focus of these two theories is to analyse a firm's strategy may help explain business growth in a dynamically changing environment.

Furthermore, the concepts of absorptive capacity and adaptive capabilities can be used to explain TSPs' ability to learn from the external environment and their capacity to absorb external knowledge to create competitive advantages. This process starts with the identification and understanding of knowledge that can be analysed and used together with TSPs' existing experiences to increase competitive advantages or create new ones. The recognition of potential opportunities and the ability to absorb and transform them to make use of them to create new advantages are important and should stay dynamic. The same is true for adaptive capability,

where TSPs will show the extent to which they understand and adapt to external threats and opportunities.

The Theoretical Background Section (2.6) explores the providers' ability to maintain a competitive advantage by modifying or reconfiguring resources based on external market conditions and considering how they can add value and differentiate their services by making strategic choices.

Finally, the chapter presents the conceptual framework and the gap that this study aims to address. At the end of the chapter, the research question that this empirical research intends to answer is stated.

2.2 Customer -centricity and the impact of engagement with business clients

The benefits of customer-centricity have been discussed for decades. Drucker (1954) suggests that the customer determines what a business is and what it produces, but it was not until the 1990s that customer centricity gained increased focus. By implementing a customer-centric approach, TSPs can adapt their strategies to meet evolving demands in fast changing telecommunications markets. Customer-centric strategies require an alignment between all levels of the organisation and are related to organisational culture from frontline employees to top management, processes, and customer goals (Payne and Frow, 2013).

Empirical studies on national firms and customer involvement, such as Dietz, Pugh and Wiley (2004), who studied the Canadian banking sector, or Freng Svendsen et al. (2011), who studied Norwegian suppliers and international buyers, have generated mixed results but showing a positive relationship between clients and their providers. Other studies, such as Carbonell et al. (2009), who focused on Spanish service companies, show no relationship between customer involvement and their providers' performance. Furthermore, studies, such as Feng, Sun and Zhang (2010), who studied Chinese manufacturing companies, and Field et al. (2006), who focused on the financial-services industry in the US, showed a negative relationship between customer involvement and their provider's performance.

Other researchers, such as Doyle and Stern (2006), state that the purpose of a business is to satisfy its clients' needs. Doyle and Stern (2006) also claim that businesses that are good at satisfying customer needs have the best opportunities to grow.

However, certain research shows that CSAT is not sufficient to achieve customer loyalty. Most of the clients who switched to a different provider had previously classified themselves as satisfied in surveys they had undertaken (Symonds, Wright and Ott, 2007).

True customer-focused service providers do not only focus on CSAT and customer opinions; they also try to find the best way to manage business clients and deliver services and products to them.

Symonds, Wright and Ott's (2007) study based on the results of a global benchmarking survey of senior executives and customers at 30 major retail banks in fifteen countries stated that customer experience is the most important factor in success. However, the banks efforts to deliver on that key dimension were falling short because they focused too much on how to improve bottom-line performance. These researchers found that widely used customer promotion tools and satisfaction scores did not promote client retention or increase the willingness to buy additional products or receive referrals. CSAT surveys are unreliable indicators and sometimes poorly conducted (Slater, 2001). They measure the wrong activity or target the wrong customers. CSAT has declined for the last few years and is not important even for customers who are more rewarded when they are not satisfied (Williams and Visser, 2002). Researchers found that the most loyal customers are those who report the complaints they face to their service providers, except if they are customers of monopolistic companies, in which case CSAT is their solution to give feedback to their provider (Goodman, Broetzmann, and Ward, 1993).

The Vodafone CARE programme focuses on four key aspects of the customer experience and aims to deliver an outstanding and differentiated customer experience. The CARE formula stands for: Connectivity that is reliable and secure, Always excellent value, Rewarding loyalty, and Easy access to customer support. Vodafone made good progress in 2018 in each of the areas covered by CARE and continued to see the benefits of these initiatives in CSAT scores. Moreover, in 2015, Vodafone launched the Customer Experience Excellence (CXX) programme, a global project to ensure that they deliver the best-in-class experience to all customers in Vodafone markets. The programme was considered a source of sustainable differentiation.

For Vodafone, finding the differentiating factor from other TSPs by building best-in-class CXX helped to build deeper partnerships with customers.

The CXX programme for customers means:

- Simplifying processes, products, services, and engagement
- Creating a seamless experience, network, and value for money
- Solving problems and addressing client challenges

Investors, top management, and marketers do not consider CSAT an important concept for the company's performance, and do not believe that CSAT will help the company compete. Instead,

they think the competitive advantage will be achieved by managing customer relationships, partnerships with vendors, joint ventures, and alliances with competitors (Williams and Visser, 2002). Recent financial reports show that commercial results and the financial status of the company are more important for investors than CSAT. Generally, the financial results are also important for executives who are normally hired to run a company for a few years and are looking for quick wins and not long-term achievements. Annual or quarterly financial reports do not report on CSAT. TSPs' focus on classifying their business clients is shown in the tier segmentation based on the addressable budget or the business potential that a specific customer may have.

TSPs often decide to cease the service with some clients, rejecting the renewal of existing clients' contracts, and offloading a substantial number of customers because they are not profitable and not contributing to growth. TSPs do this, no matter whether these unprofitable customers are satisfied or not (Florentine, 2022).

Additionally, satisfaction may affect service delivery, service assurance, the pre-sales phase, the technical or commercial part of the business, the legal area, or all these business factors together. However, CSAT is difficult to measure, and it is difficult to integrate all customer feedback into one general satisfaction rate or score to be compared with other competitors in the market.

The initial effects of CSAT erode rapidly, become insignificant, and cannot continue to be a competitive advantage. CSAT is more effective in the short run than for the company's long-term performance and sustained growth (Haumann et al., 2014).

However, the literature has advanced towards a more balanced approach, understanding that companies must help customers move in the direction they want rather than simply satisfying their needs.

KPN collaborates with Accenture and recently signed a five-year contract with Accenture to improve KPN's customer experience (Accenture, 2018). Like other service providers, KPN uses the Net Promoter Score (NPS) as a measure of CSAT and as an indicator of customer loyalty. In the experience lab, KPN interviews customers and observes their behaviour to determine their needs, test prototypes, and validate solutions. Another example of a tool that measures CSAT is the Next Generation International Customer Contact Analysis, which is one of Deutsche Telekom's four strategic pillars. The programme's aim is to drive the best customer experience by constantly measuring and analysing CSAT using satisfaction surveys issued to customers and independent studies. The goal of the Next Generation International Customer

Contact Analysis is to understand and respond to client needs and consciously improve service quality.

In recent years, there has been increasing interest in establishing and maintaining customer relationships as a key success factor for customer-oriented firms.

The importance of competitive advantage goes beyond CSAT and wants to understand and address long-term customer needs in a proactive way. This way is the market-oriented approach and not the short-term customer-led approach, which is concerned with satisfying the customer's expressed needs (Slater and Narver, 1998).

However, this thinking of customer-led versus market-oriented has been challenged by Connor (1999), who stated that companies live in a balanced way between the present and future and therefore do not need to make a choice between a customer-led and a market-led approach. Instead, companies should think strategically and have a balanced view of clients' current and future needs.

Companies must work jointly with clients to see how existing needs can be developed in the future because long-term needs evolve from the short-term, as proven by a close relationship with existing customers (Connor, 1999).

Market orientation is essential to success (Dougherty, 1990; Leonard-Barton, 1995; Quinn, 1985). This orientation will help companies understand current and future customers' needs and offer the right solutions, ideally in a new unserved market to escape from the tyranny of the served market (Hamel and Prahalad, 1994).

However, involving clients in the development of services may be difficult because firms are likely to create new services only if they expect benefits resulting from such collaboration (Jouny-Rivier, Reynoso and Edvardsson, 2017).

Researchers (Rust, Lemon, and Zeithaml, 2004; Venkatesan and Kumar, 2004) have shown higher financial performance for companies by making marketing investments in clients. However, a weakness of this argument is the limitation of the research to marketing activities, specifically the customer relationship management tool usage, which does not focus on growth or consider collaboration with clients.

This type of customer relationship is limited in scope, covers specific products, does not address broad customer needs, and will fail to achieve high quality at the corporate level (Peters and Waterman, 2015).

Many studies draw attention to the importance and relevance of relationships with clients. However, other studies conclude that firms may lose their position in the industry because they follow their clients too closely. Providers may fail to adopt critical modern technology or

expand to new markets because clients put limits or unachievable targets on their strategies, the way they do business, and how they provide the services (Christensen and Bower, 1996).

There are, however, many studies related to customer relationship management that suggest that the customer's voice is positive and improves service provider performance (Lacey, 2012). Other studies (Blocker et al., 2011) have searched for the role of the proactive customer approach in creating customer values, identifying that many firms underestimate, misunderstand, or overlook customer expectations. These studies suggest that proactive customer orientation is the most consistent driver of customer value.

In May 2022, British Telecom (BT) announced the creation of their partner advisory board (PAB) for different companies and clients of all sizes (Wood, 2022). They will come together to discuss and share best practices, promote innovative propositions, and find potential solutions to current and future industry challenges. BT's goal is to accelerate co-creation and focus on specific solutions for sectors such as healthcare, logistics, transport, and manufacturing, where 5G, cloud, edge, IoT, and AI services will be developed. According to BT, the PAB initiative will provide "a more structured partnership engagement that would allow to accelerate the ambitions and co-innovate in a more coordinated way."

Scholars have argued that customer involvement generates new ideas and can increase firm performance because clients are the fundamental source of competitive advantages that add value to firms (Lengnick-Hall, 1996; Vargo and Lusch, 2008). Michael Porter (1985) affirms that competitive advantage grows fundamentally out of the value a firm can create for clients. At the same time, customer engagement involves the costs of coordinating with clients and increases the risk of failing to satisfy clients' expectations (Goodman et al., 1995).

Some scholars have argued that customer involvement has a negative impact on firm performance because it introduces extreme levels of complexity and uncertainty into the production and delivery process for services (Bowen and Schneider, 1988) and creates costs for firms (Zhang, Zhong and Makino, 2015).

Proactive customer orientation uncovers future needs, is strategically important for value creation in business markets, and can offer a competitive advantage for the more dynamic, changing industries (Blocker et al., 2011). This view is supported by Day (1990), who wrote that the creation of superior value for the customer is a company's ultimate goal. Huber, Hermann and Morgan (2001) argue that the competition for superior value for clients becomes an essential precondition to securing a competitive position in the marketplace.

In sum, this section has discussed the impact and results of TSPs' engagement with clients as well as the benefits and issues of using CSAT as a key performance indicator. Additionally, the

TSPs' engagement with clients and the co-creation of services has been outlined to show the opportunities for joint activities and the threats because of the costs and complexity.

The study results presented in this section reinforce the importance of clients in the process of creating competitive advantages and the issues that TSPs can face when managing their business clients. The matter of striving to maintain their competitive advantage, or to increase it, is taken up in the following section.

2.3 Sustained competitive advantage and growth in fast moving market

Sustained growth is achieved when a firm improves its efficiency and effectiveness compared with other competing firms and forces them to cease any efforts to imitate these activities (Barney, 2001). Growth can be achieved when TSPs succeed in developing unique selling points or unique value propositions and create competitive advantages.

Additionally, competitive advantage is sustained when other firms face a cost disadvantage when imitating or substituting the same resources (Barney and Mackey, 2016).

These challenges concerning growth are related to sustained competitive advantages that researchers and practitioners have tried to understand. However, for the same industry, services, and products, and when targeting the same business clients, companies have shown differing performance results, making it difficult to sustain the growth they achieved (Wiggins and Ruefli, 2002).

Once the growth targets are achieved, companies face the challenge of maintaining the targets and ensuring they reach a sustained growth rate. TSPs continuously need to learn and adapt quickly, knowing that the telecommunications business requires collaboration across a wider set of stakeholders (Bocken, Rana and Short, 2015). A study involving 40 industries in the United States found that sustained superior performance is rare; the few firms that can sustain superior profitability positions do so for only 5–7 years (Wiggins and Ruefli, 2005).

Certain researchers believe that sustained competitive advantages are made through a sequence of temporary advantages that companies achieve over time, but it is unclear how companies can move from the temporary to the sustained stage (D'Aveni et al., 2010; Wiggins and Ruefli, 2005). To the contrary, Huang et al. (2015) believe that sustained competitive advantages can be attained via resources and capability positions, whereas temporary competitive advantages are achieved via a firm's market position.

In practice, TSPs are on a continuous journey to find the right business values that can help them create sustained competitive advantages and achieve growth. The telecommunications

industry is open to global competition, subject to many local regulatory rules, and driven by rapid digitalisation and technological changes.

These competitive forces have increased the level of uncertainty that could not be addressed using only old, traditional business approaches. Service providers operate in complex business environments that require a high level of adaptability to rapidly create new sources of competitive advantage. This explains why sustaining a competitive advantage has become increasingly difficult and the behaviours in complex adaptive business systems (CABS) are fundamentally unpredictable.

The renewal quests based on the temporary characteristics of competitive advantage proposed by Tanriverdi, Rai and Venkatraman (2010) conclude that the old quests have become less relevant in CABS.

Table 1 is a summary of the old and new quests to address the challenges in a complex environment.

Old quests (static business environment)	New proposed quests (complex, adaptive business systems)
Strategic alignment	Co-evolution with a changing competitive landscape
Integration	Reconfiguration: Agility to cease all non-profitable activities from the old company position
Sustained competitive advantage	Renewal: Temporary advantages instead of long-term permanent ones

Table 1: New quests in a CABS competitive space (Adapted from Tanriverdi, Rai and Venkatraman, 2010)

Co-evolution addresses competitive strategy challenges and also corporate strategy questions. Furthermore, it increases company dynamism and creates new growth positions. To remain competitive, TSPs must co-evolve with the competitive landscape, as they operate in a dynamic space and need to adapt to corporate business changes (Tanriverdi, Rai and Venkatraman, 2010, pp. 5-6). To support such co-evolution, a change is needed to revise the old processes, services, and resources to reconfigure new ones that can support the new re-positioning of the business. The process of disintegrating and integrating new profitable resources quickly allows a company to successfully implement the new corporate strategy (Tanriverdi, Rai and Venkatraman, 2010, pp. 6-7). Temporary competitive advantages refer to companies trying to group a set of temporary advantages over time instead of creating permanent advantages (Tanriverdi, Rai and Venkatraman, 2010, pp. 7-8).

Information systems strategy involves building on the resource-based view of the firm and its dynamic capabilities. The primary objective of this strategy is to promote sustained competitive advantages (Tanriverdi, Rai and Venkatraman, 2010). However, the practice of competitive advantages that can be sustained for long periods could be a strategic mistake and a distraction for firms (D'Aveni and Gunther, 1994).

McGrath argues in her book “The End of Competitive Advantage” (2013) that it is time to go beyond the concept of sustained competitive advantage. She proposes a new set of practices based on what she calls the transient competitive advantage. The strategy should be dynamic and should move as fast as the business.

This new concept is supported by Wiggins and Ruefli (2002), who have questioned whether sustained superior performance is a reasonable goal to set for a firm. Their empirical research illustrates that the rarity of achieving sustained superior economic performance implies that it is extremely difficult to achieve. From a sample of 6,772 firms in 40 industries over 25 years, only a small minority achieved superior economic performance.

For TSPs, the performance is impacted by the strong entrance of new OTT providers, who are TSPs' competitors, but are also business clients as they buy TSPs' network services. TSPs face tough competition from other providers (similar TSPs, local providers, and system integrators). Specifically, they face more difficulties competing against the new OTT players. OTTs are new in the telecommunications business, but with a strong global capability, and they use traditional TSP resources to compete against them.

For TSPs, having OTTs as both competitors and large business clients is new.

According to Farooq and Raju (2019), the best way to compete against OTTs is to bundle OTT offers with existing services and partner with them as new providers with strong IT and cloud capabilities. Additionally, TSPs can try to become an OTT provider and expand to provide OTT services and network optimisation (Krüssel and Göbel, 2019; Aidi et al., 2012). TSPs could also simultaneously compete and partner with OTTs (Steingröver, Cardozo Larrea and Zhelev, 2019), choosing the aligning strategy proposed by Aidi et al. (2012), or collaborate and partner (Krämer, 2019).

The different proposed strategies vary from competing to partnering with OTTs based on the services overlap level and the OTTs' size. At the same time, OTT content creates opportunities for telecommunications service providers by selling network services and high bandwidth for internet access (Nooren, Leurdijk and van Eijk, 2012).

Awwad (2021) concludes that TSPs activities, specifically mobile operators, can be categorised into three approaches: compete, partner, and accept. The research analysis shows that the

“accept strategy” was the most recommended by 54% of the 26 revised studies, followed by 27% who recommended partner and collaborate with and 19% who recommended the approach of competing.

In practice, TSPs accepted the OTTs impact on voice and data services and acknowledged this shift as a critical point (Sujata et al., 2015). TSPs started to collaborate and partner with OTTs, and they created an eco-system combining telecommunications and IT cloud-based services. This collaboration will continue to bundle more TSPs and OTT services and make the ICT and telecommunications sectors evolving ecosystems (Fransman, 2010).

The temporary and transient characteristics of the competitive advantages in the ICT and telecommunications markets are relevant and should be considered by TSPs. Summarising, this section has shown that sustained growth is difficult to maintain and should therefore not be a goal for companies, particularly those operating in turbulent market conditions or competing against new global OTT providers. However, the studies discussed in this section did not specify when sustained growth can be achieved or when firms should count on temporary business advantages because of market changes. The discussion now turns to partnerships of various kinds – all of which need definition (please see Table 2, and the definitions on p. 46).

2.4 Collaborative partnership

Words such as collaboration, cooperation, coordination, and even partnership are often used interchangeably (despite the differences between these terms) to describe the inter-relationship between organisations. It is important for this study to include a distinct definition to ensure a clear and mutual understanding when discussing collaborative partnerships. The definition may not be based on the practices applied in the telecommunications industry alone but will cover the way other businesses are developing collaborative partnerships and how they benefit from the positive results. This section defines collaborative partnerships, presents several types of relationships, and critically assesses the risks and benefits.

Relationships between collaborating stakeholders are based on the collection and exchange of data that is informed by ideas of legitimacy. Trust is a central concept in the process of collaboration, and its presence or absence in multiple forms is likely to underpin the relationships within a governance network.

Collaboration is a way of sharing authority and responsibility for planning and implementation to achieve a defined common goal (Barfield, 2016). It involves defining roles and

responsibilities to ensure a clear understanding and trust of what the partnership is trying to achieve in a collaborative way. It is a way to create and share rewards and leadership skills to lead and achieve the goals and outcomes for the entire partnership's benefit.

Himmelman (2001, p.278) defines collaboration as “exchanging information, altering activities, sharing resources and enhancing the capacity of another for mutual benefit and to achieve a common purpose”.

For Brown (2019, p.86), a collaborative partnership happens when a “group engages together in an attempt that pools their common interests, assets, and professional skills to support goals that will work to the benefit of the entire group”. Brown (2019, p.86) defines the collaborative partnership (CP) attributes that must be included in any partnership:

- i. Identification of common goals
- ii. Willingness to work towards the agreed-upon common purpose
- iii. Ability to recognise the expertise of all collaborative team members
- iv. Training and development opportunities for all team members
- v. Process transparency
- vi. Respect and trust of all parties

This definition can be applied in the context of TSPs because it covers the key elements considered in the telecommunications business when trying to collaborate to grow a business, as defined in Chapter 1. It is not only the commercial, legal, or technical part of a business that counts when collaborating but also the social part, such as trust and respect, because people collaborate with each other and not organisations.

Other definitions of collaboration focus on challenges or problems within a business and the ability of the various parties to find a solution in a constructive and collaborative way: “Collaboration is a process through which parties who see different aspects of a problem can explore their differences constructively and search for solutions that go beyond their own limited vision of what is possible” (Gray, 1989, p.5). This is the dynamic of collaboration, where parties create new value together.

Lasker, Weiss and Miller (2001, p.180) focus on the complementary strengths of partnerships that can “enable different people and organisations to support each other by leveraging, combining, and capitalising on their complementary strengths and capabilities”. They define the determinant factors for partnership synergy, as shown in Figure 4, considering synergy as an instrument that provides collaboration its unique advantage.

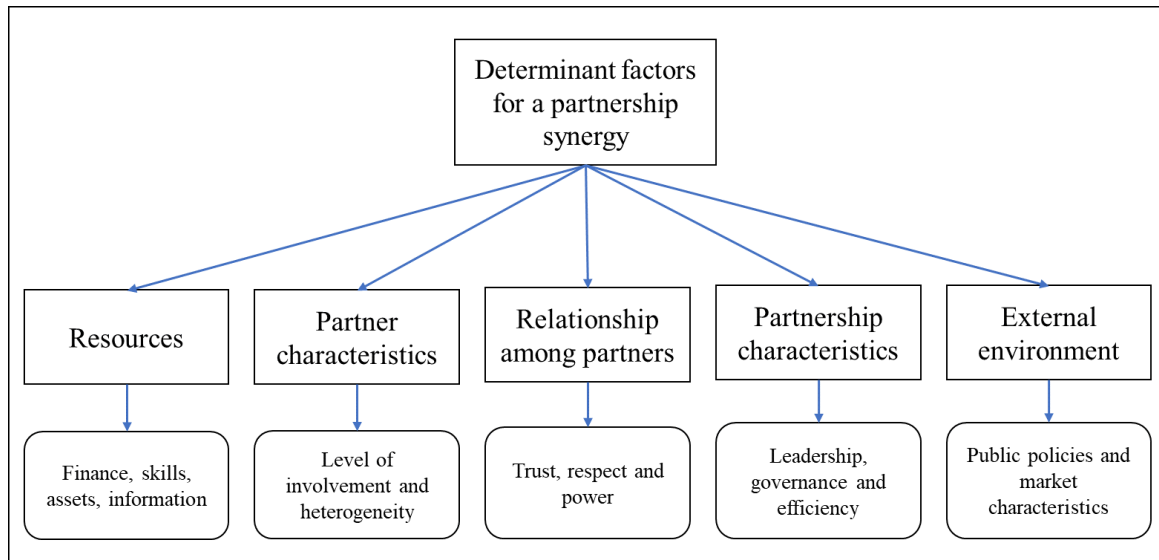


Figure 4: Partnership synergy factors (adapted from Lasker, Weiss and Miller 2001, p.189)

The definitions of collaboration that have been given in this section may have been created with a background from other industries, such as education, healthcare, or for different types of organisations, and may be implemented for different purposes. However, this study focuses on the common practices that can be applied in the telecommunications business and not on specific collaboration activities that were made for special target groups.

The different views and their definitions are needed to understand the nuances of phenomena such as collaborative partnerships and the different types of business relationships. There is no one universal definition of collaboration that is applicable for all companies, all sectors, everywhere, and at any time. The quality and purpose of a relationship between two or more companies defines if it is a partnership and if it is a formal or informal entity.

In this text, a collaborative partnership is defined as the formal interaction between two or more business partners (in this study between the TSP and the business client) to support each other and share liabilities, profits, and resources to achieve common goals. It is an investment between partners, and it includes sharing risks, rewards, and requires a high level of trust and management commitment. The investment can create different types of entities. Liu et al. (2017) mention six inter-firm relationships: mergers, acquisitions, joint ventures, strategic alliances, cooperative network alliances, and entrepreneurial partnerships. These business arrangements are defined in Table 2:

Relationships	Definition
Merger	Two or more organisations decide to integrate and become one entity
Acquisition	When a firm takes over another organisation
Joint venture	A formal agreement to combine resources to achieve mutual goals during a fixed period
Strategic alliance	An informal agreement where business partners share compatible goals and work together to reach mutual benefits
Cooperative network alliance	A network based on the cooperation between business alliances
Entrepreneurial partnerships	Collaboration between sectors to promote innovation

Table 2: Different inter-firm relationships (Liu et al., 2017)

These types of relationships are often between firms, rather than between the firm and the client, and are usually used to expand the business and achieve growth, especially in the private sector, where commercial targets are leading. However, the focus of these relationships is not to collaborate but to define common goals to help each other grow as partners do in collaborative partnerships. Acquisitions and, to some extent, joint ventures do not happen if the relationship between different parties is a collaborative partnership, as providers do with clients. Strategic alliances are informal agreements that can be the start of a long-term relationship that can be converted to a collaborative partnership, the same as cooperative network alliances. Cooperation is where resources are not shared or divided (Huxham, 1996, pp. 176-180). Entrepreneurial partnerships are widely used between sectors to enhance innovation or standardise some practices. TSPs can learn more from all these types of relationships and try to improve existing ones to a higher level of collaboration.

Mergers, acquisitions, joint ventures, and strategic alliances are widely used in business, especially in the telecommunications industry. TSPs needed new or additional capabilities and resources to fulfil the new clients demand and to respond quickly. TSPs unable to acquire new competencies decide to use mergers, acquisitions, and partnerships to acquire the important knowledge and to expand to new markets (Pennings, Kranenburg and Hagedoorn, 2005). Table 3 shows one example where the same TSP (Global Crossing) was acquired four times between 1997 and 2022, either as a whole company, the unit serving business clients, or the EMEA region. The company faced a new acquisition every 5–6 years on average (without counting

small acquisitions or the sales of some small business units). The value of the company changed from more than \$40 billion to bankruptcy in 2002. Following the bankruptcy, the company was back in business before facing a new acquisition. This example gives an idea in relation to the future of some TSPs: they were non-profitable, their value decreased over time, and they were acquired by other TSPs who were looking for non-organic growth. Except for some of the old national telecommunications incumbents (former monopolies), other TSPs faced many challenges to their existence; some were bankrupted, and those that succeeded in surviving were not able to achieve sustained growth.

Date	Provider (Who is acquiring whom?)	Reason for acquisition	Value	Source of Information
1997	Global Crossing founded	- To provide computer networking services - To operate as a tier one carrier - To maintain a large backbone network	In 1999, Global Crossing was valued at \$47 billion but was not profitable	http://www.fundinguniverses.com/company-histories/global-crossing-ltd-history/
1999	Global Crossing acquired Global Marine Systems, the undersea cable maintenance arm of Cable & Wireless (Cable & Wireless is a TSP)	- To create a global transmission as a worldwide carrier - To create new packages of maintenance	\$885 million (\$725 million plus \$160 million in debt).	https://www.wsj.com/articles/SB925115342684119931
2004	Global Crossing sells submarine cable installation unit	- Global Crossing focused on becoming the market leader in global IP connectivity solutions for enterprise customers - To build unique networks and develop technology advantages	\$132 million	https://www.lightwaveonline.com/business/article/16674335/global-crossing-sells-submarine-cable-installation-unit

2011	Level 3 acquired Global Crossing	- The combined company operates a unique global services platform - To expand a fibre optic network on three continents - To develop extensive undersea facilities - To build a new network serving a worldwide customer set with the network being available in more than 50 countries and having connections to more than 70 countries	\$3 billion (In 2002, Global Crossing entered one of the largest bankruptcies in history.)	https://www.businesswire.com/news/home/20110411005956/en/Level-3-to-Acquire-Global-Crossing
2016	Century Link acquired Level 3 Communications	- To provide the ability to offer its larger enterprise customer base the benefits of a Level 3 global footprint with a combined presence in more than 60 countries. - The new company would be positioned to invest its broadband infrastructure	\$34 billion	https://ir.centurylink.com/news/news-details/2017/CenturyLink-acquisition-of-Level-3-receives-approval-from-Federal-Communications-Commission/default.aspx
2020	Century Link re-branded and created	- Lumen will focus on enabling enterprises to address the challenges	Cost of rebranding was not published	https://ir.centurylink.com/news/news-

	Lumen (for large accounts in enterprise and wholesale)	of the fourth industrial revolution (e.g., digital technologies, AI, cloud computing and autonomous vehicles) - For Lumen to bring both edge computing and intent-based networking, among other capabilities		details/2020/CenturyLink-Transforms-Rebrands-as-Lumen/default.aspx
2022	Colt Technology Services acquired Lumen (EMEA)	- To go global and become a Tier 1 provider - The transaction would extend Colt's infrastructure to new geographic markets, boosting the services and capabilities it delivers to global enterprises and strategic partners - For Colt to access a full range of product solutions for diversified enterprises, hyperscalers, government and wholesale customers - For Colt to meet growing enterprise and international IP traffic in EMEA via extensive terrestrial and subsea reach	\$1.8 billion	https://www.uctoday.com/unified-communications/lumen-agrees-1-8b-sale-of-emea-business-to-colt-technology-services/

Table 3: Global Crossing acquisition activities

The reason for these acquisitions is to expand network coverage, add more clients, and offer new products and services. The goal is to improve the business and achieve sustained growth. This is where TSPs collaborate, and if there is a match between partners, they move on to discuss acquisitions, which is a quick way to reach temporary growth.

However, an examination of, for example, the period of the founding of Global Crossing until its acquisition by Colt Technology Services, shows that providers who are not profitable for a long time are acquired to be sold again years later (Figure 5).

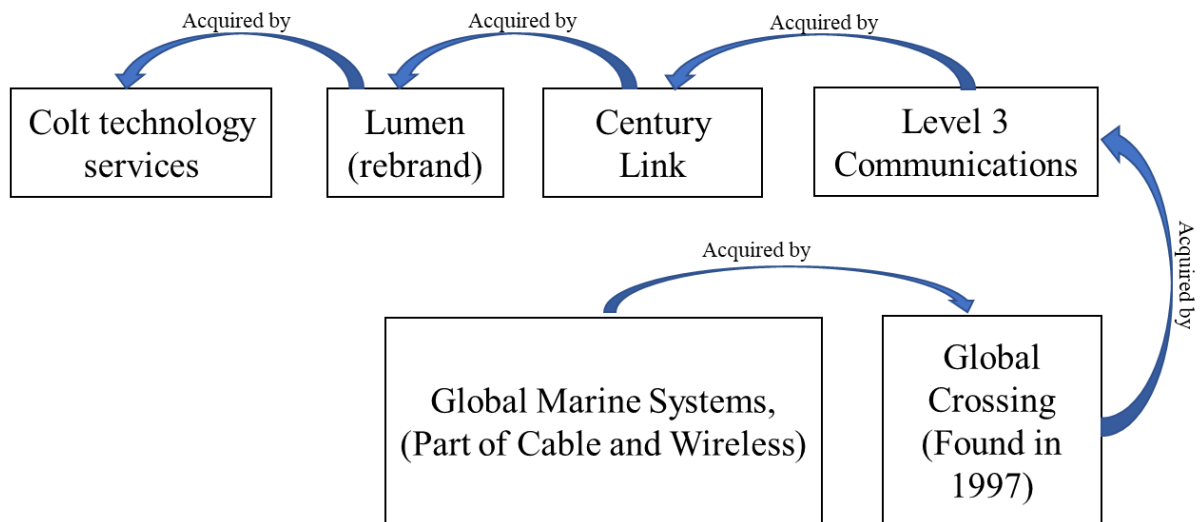


Figure 5: Acquisition cycle for Global Crossing

Coopetition is also applied in telecoms; this is where TSPs and business clients compete and cooperate at the same time (cooperative competition). They cooperate when they need each other, and where there is no overlap in services and products, they compete against each other. The key characteristic of these types of relationships focuses on the collaborative interaction between firms (Roussos and Fawcett, 2000) so that they can achieve sustained growth. To present these business arrangements in more detail, some examples from the telecommunications business are shown in Table 4.

Name of TSPs Partners	Type of Relationship	Date	Deal Value	Reason	Source of Information
- Orange (Spain) - MasMovil (Spain)	Joint venture (combined operations) controlled by both companies with equal governance rights (50–50)	July 2022	€ 18.6 billion	The combined entity invests in Fibre to the Home services and 5G in Spain. This reduces competition and increases operator's profitability	https://newsroom.orange.com/orange-and-masmovil-sign-an-agreement-to-combine-their-operations-in-spain/
- Liberty Global - Telefónica - InfraVia	New UK fibre joint venture 50% for Liberty Global and Telefónica jointly 50% for InfraVia	July 2022	£4.5 billion	To increase competitiveness and digital infrastructure and accelerate access to next generation broadband connectivity	https://telecoms.com/516795/liberty-global-telefonica-and-infravia-plough-4-5-billion-into-new-uk-fibre-jv/
- British Telecom (UK) - One Web	Partnership	November 2021	Unknown	To offer satellite services to customers to enable digital solutions anywhere in the UK by 2028	https://newsroom.bt.com/bt-secures-industry-first-global--partnership-with-oneweb/

- Colt Technology Services (UK) - Microsoft (US)	Collaboration	September 2021	Unknown	To power the next generation of cloud voice. SO, customers can benefit from flexible and competitive calling tariffs and a single provider for multi-country coverage.	https://www.colt.net/resources/colt-builds-on-collaboration-with-microsoft-to-power-the-next-generation-of-cloud-voice/
- Proximus (Belgium) - Infosys (India)	Extend strategic collaboration	December 2021	Unknown	To digitally transform, develop, and maintain Proximus IT applications with leading AI and automation solutions	https://www.newindianexpress.com/business/2021/dec/02/infosys-proximus-tie-up-for-it-application-transition-2390782.html
- Deutsche Telekom (Germany) - SK Telecom (South Korea)	Joint venture (50% each)	November 2020	Unknown	To develop new and innovative products (advanced 5G technology in building solutions)	https://www.telekom.com/en/media/media-information/archive/skt-and-dt-to-establish-5g-technology-joint-venture-in-germany-612216
- Vodafone Italy,	Merger of Vodafone Italy's towers into INWIT (37.5% stake	March 2020	Unknown	To maximise tower utilisation and support the deployment of Telecom	https://www.gruppotim.it/en/press-archive/corporate/2020/CS-TIM-closing-

- Telecom Italia Group - INWIT (Italy)	in INWIT for Vodafone and 37.5% for Telecom Italia Group)			Italia Group and Vodafone Italy's respective 5G networks	Inwit.html#:~:text=The%20merger%20will%20be%20effective,a%2037.5%25%20stake%20in%20INWIT.
- Verizon (US) to take over Tracfone	Acquisition	November 2021	\$6 billion	To enhance pre-paid and value mobile services	https://www.verizon.com/about/news/verizon-completes-tracfone-wireless-inc-acquisition
- Telefonica (Spain) - Allianz (client from Germany)	Partnership (later to create a joint venture)	October 2020	€ 5 billion	To invest in fibre optic network infrastructure in remote areas and regions within Germany	https://www.telefonica.com/en/communication-room/telefonica-and-allianz-create-a-partnership-to-deploy-fibre-in-germany-through-an-open-wholesale-company/
- NTT (Japan) - Toyota (business client: Japan)	Business and capital alliance to build a long-term and cooperative relationship	April 2020	Unknown	To establish technologies for the creation of a smart mobility society	https://www.nttdata.com/global/en/media/press-release/2020/april/toyota-connected-and-ntt-data-announce-new-business

- KPN (The Netherlands) - All KPN partners	Partner network	March 2019	Unknown	To bundle all partners (clients) together to create one network	https://www.channelconnect.nl/telecom-en-voip/kpn-bundelt-partnerorganisaties-tot-kpn-partner-network/
AT&T (US) joined an alliance founded by Singtel, SoftBank, Etisalat, and Telefónica	Global alliance	March 2019	Unknown	To enhance cybersecurity capabilities and technologies	https://www.telefonica.com/en/communication-room/att-joins-global-cyber-security-alliance-formed-by-etisalat-singtel-softbank-and-telefonica/
- Orange Business Services (France) - Additiv (Switzerland)	Partnership	July 2018	Unknown	To offer digital wealth management as-a-service products to financial institutions	https://www.orange-business.com/en/press/orange-business-services-partners-additiv-offer-cloud-based-wealth-management-solutions
- Sprint (US) - T-Mobile US	Merger (SoftBank, Sprint owner, will hold about 24%, and T-Mobile's parent Deutsche Telekom will hold about 43%)	April 2020	\$26 billion (all shares deal)	To build a wireless entity and create America's largest 5G network.	https://www.telekom.com/en/media/media-information/archive/new-t-mobile-us-with-combined-resources-to-launch-on-april-1-2020-598134

- British Telecom (UK) - Huawei (R&D team) - University of Cambridge	Joint research and collaboration group	2017	£25 million	The research group will explore modern technologies which have the potential to unlock economic benefits for UK businesses and organisations	https://www.silicon.co.uk/networks/bt-huawei-cambridge-224965
- Telia (Sweden) - Beyond by BearingPoint	Partnership to creating a new 'Division X'	2017	Unknown	To focus on integrating modern technologies such as the internet of things (IoT), AI, and 5G. To experiment with new services and business models	https://www.beyondnow.com/ecomaXL/files/TMForum_Excellence_Awards_Telia_Case_Study.pdf?download=1&itemId=2092

Table 4: Examples of different inter-relationship between TSPs and business clients

In addition to the different business relationships mentioned above, Himmelman (2001) defines four strategies to describe how firms can work together: networking, coordination, cooperation, and collaboration. These strategies are applied depending on the level of the relationship and the challenges that partners are facing.

- i. *Networking* is the start of any relationship where partners exchange information for their mutual benefit.
- ii. *Coordination* is networking but with additional activities to achieve a shared and common purpose.
- iii. *Cooperation* is coordination but where both partners share resources to achieve their mutual benefit and the defined common purpose, knowing that cooperative partners may have different goals.
- iv. *Collaboration* is cooperation with the willingness of both partners to support each other to enhance the capacity and achieve their mutual benefit and the defined common purpose. It includes sharing risks, resources, and rewards and requires a high level of trust.

These four strategies that organisations can use to work together are defined and summarised by Huxham (1996), showing the common activities and the dimensions of each strategy (see Figure 6). Collaboration is the highest level when creating a collaborative advantage by improving and building each other's capacity. Collaboration is a journey that starts with networking, cooperation, and coordination and involves reaching the highest level of the relationship.

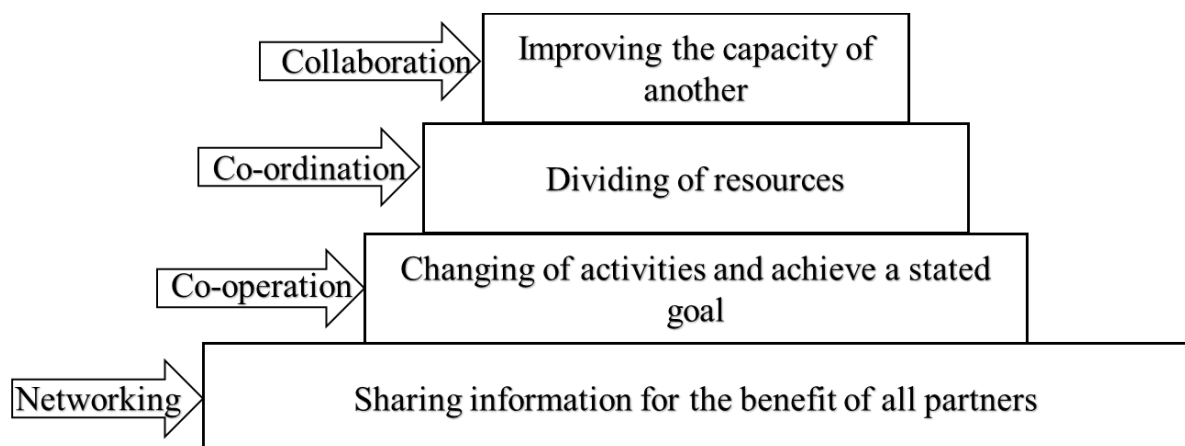


Figure 6: Collaborative advantage visualisation (Adapted from Huxham, 1996)

The level of interactions will determine the type of partnership between TSPs and their business clients. They can share information only (networking), change the activities they do and facilitate how they achieve their end goal (cooperation), divide resources, and agree to achieve a common goal (coordination), or create a new solution and adapt it to the business need (collaboration).

These collaborative agreements are characterised by their legal form, the usage of shared resources, the type of activity, and the goals to be achieved. TSPs are reporting on the organic growth achieved by sales activities, including non-formal collaborative partnerships, and non-organic growth because of acquisitions or some joint ventures. In practice, it is not always easy to distinguish the interaction between TSPs or TSPs and their business clients, if they are mergers, acquisitions, joint ventures, or strategic alliances, or if they can be defined as one of the inter-firm relationships mentioned in Table 2. Sometimes, the relationship begins informally, exchanging information, and later develops to sharing resources and the creation of a formal collaborative partnership.

The type of relationship that evolves over time depends on mutual benefit and trust to continue and achieve a long-term collaborative partnership. Furthermore, market dynamism, as an external factor, plays a role and influences the way business relationships evolve. The need to create solutions pushes partners to develop their relationship, create value, and define success criteria.

Furthermore, the collaboration activities can be defined depending on the activity direction followed by partners, as described by Gomes (2011). Here are the four activities:

- i. Horizontal: Mergers, acquisitions, or alliances between similar companies (same business and same customer and suppliers)
- ii. Vertical: Mergers, acquisitions, or alliances between companies in a production process where they can merge, acquire, or create an alliance with suppliers or customers
- iii. Concentric: Mergers, acquisitions, or alliances between companies with various products but with some elements of commonality
- iv. Conglomerate: Mergers, acquisitions, or alliances between companies from different industries

Collaborative partnership activities are not limited to one of these four directions. Some partnership cases may have a mix of these four directions at the same time. Usually TSPs can work together (e.g., Telecom Italia and Vodafone – in a horizontal direction) or collaborate with customers (e.g., NTT and Toyota – in a vertical direction).

However, some other classifications of business alliances examine the activities based on the defined collaborative purpose (operational or strategic) and if the partners are competitors or non-competitors (Sheth and Parvatiyar, 1992).

The four alliance types are shown in Table 5:

		Partners	
		Competitors	Non-Competitors
Partnership goal	Strategies	Competitive alliance	Collaborative Ventures
	Operations	Cartels	Co-operative

Table 5: Types of partnerships (adapted from Sheth and Parvatiyar, 1992)

If a business relationship is formed for operational efficiency purposes between competitors, it is a cartel. If it is with non-competitor partners, such as suppliers and customers, it is called a cooperative partnership. If the business relationship is created for strategic goals between competitors, it is a competitive alliance, where companies, such as TSPs, compete against each other but also buy from each other (called off-net services or services from other licenced operators). Direct competitors are more likely to engage in future competitive behaviour (Park and Ungson, 2001), which can cause a partnership to fail rather than create a collaborative venture.

If the business alliance is between non-competitors for strategic purposes, such as between TSPs and their business clients, it is a collaborative relationship.

The classification is not based on the collaborative purpose only but also on the uncertainty and trust level as defined by Sheth and Parvatiyar (1992). Sheth and Parvatiyar (1992) highlight the importance of uncertainty and trust because of their impact on the business relationship, showing that successful collaborative alliances require a high level of trust between partners.

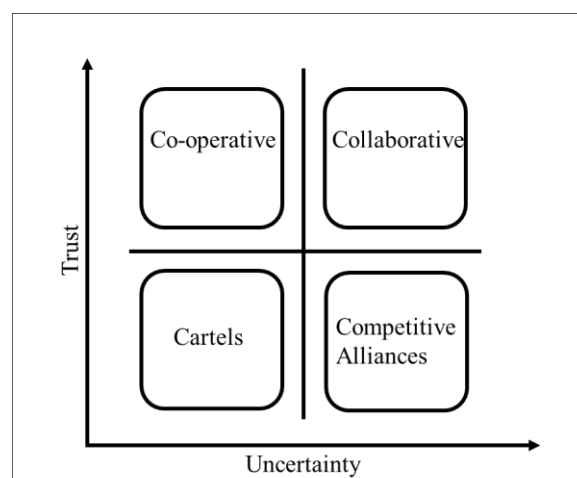


Figure 7: Types of alliances and the link to uncertainty and trust (adapted from Sheth and Parvatiyar, 1992)

A competitive alliance is the opposite of a collaborative alliance, where the TSP and their business clients work together to achieve sustained growth instead of competing against each other. Trust is important in explaining strategic alliance behaviour and the key success factors. The political, social, personal, and other dynamics of the external environment cannot be ignored when creating collaborative partnerships (Albers, Wohlgezogen and Zajac, 2013).

Moreover, a research case from the telecommunication industry that studied the experience of NTT, a service provider from Japan and one of the world's largest telecommunication carriers, shows that relationships between firms can contribute to the development of technological resources by collecting advantageous technologies from other partners (Nishioka, 2009). Collaboration facilitates and mediates the combination of new and existing technologies to create new services.

The study of the NTT case showed that inter-firm relationships are not static but dynamic. There is an adaptive ability for changes in the external environment when TSPs gain advanced technologies from other partners. The resources developed from partnerships with external players can lead to competitive advantages. The relationship between TSPs and other external firms can help gain new technical knowledge, especially in the research and development (R&D) area, and through collaboration with foreign partners, companies can acquire advanced technologies.

In the same way, TSPs seeking growth are trying to develop the sensing capability to acquire external knowledge. Day (1994) insists on two important capabilities that companies should have:

- The capability to recognise market changes and the readiness to respond to business changes (This is the adaptive capability which is explored in more detail below in this chapter.)
- The ability to achieve collaborative customer relationships (customer-linking capability)

Growth is the reason why companies not only focus on their own resources or existing relationships but continuously seek new external partners with potential technologies to innovate and contribute to the development of unique services (Nishioka, 2009). This assumption is also confirmed by Bustinza Sánchez et al. (2017), who state that collaborative partnerships increase the positive effect of product innovation on overall performance.

To gain more innovative knowledge and product innovation skills, companies work together to achieve more than an individual could achieve on their own (Barfield, 2016). No matter what the exact type of relationship is, being a good collaborative partner becomes a valuable resource

and collaborative advantage. In the global economy, the ability to create and sustain successful collaborations gives companies a significant competitive advantage (Moss Kanter, 2021).

Kerka (1997) argues that successful collaboration is the commitment to working collaboratively to build a relationship that includes patience and trust and where the involved partners have the awareness that goals will take time to be accomplished. This idea is supported by Batt and Purchase (2004), who mention that collaboration is not only about legal relationships, commercial contracts, and service level agreements (SLAs) but also involves social factors, such as trust, commitments, culture, and communications.

The turbulent telecommunications business environment forces service providers to continuously adapt and change their services to meet clients' preferences (Eisingerich and Bell, 2008). Global business environmental uncertainty and service complexity are two important reasons to collaborate (Kohli and Jaworski, 1990), and the relationship intensity between service companies and other partners is important for performance (Eisingerich and Bell, 2008). Companies start to consider their business clients as collaborative partners and turbulent external environments as a chance to create new business and a potential source of opportunities (Lusch, Vargo and O'Brien, 2007).

However, collaboration is not always successful and may also involve some risks. The main factors that influence the failure of collaborative partnerships are a lack of common vision, no shared resources, a lack of mutual benefits, no collaborative leadership, and no management commitment from all partners. These factors may cause the termination of the partnerships or a change in the level of collaboration. Hence, some studies raise concerns about whether collaborations will work and to what extent (Bodin, 2017).

During the collaborative partnership period, some interests may change for some partners compared to others. They may start competing against each other instead of collaborating. This change in relationship creates unbalanced contributions to shared resources, and the collaboration will fluctuate (Mizrahi, Rosenthal and Ivery, 2013). These changes may have a negative impact on the success of the collaborative partnership, especially in the case of long-term relationships, with a risk of changes in interests between partners.

Many business alliances face a high failure rate: Harrigan (1985) and Kogut (1989) report a business alliance failure rate of 50% and 54%, respectively. This occurs because of factors such as a lack of strategic fit in terms of resources, a poor decision-making process, and a lack of experience managing alliances.

High costs are another reason for alliance failure (Argyres and Mayer, 2007), because maintaining an alliance that does not offer significant benefits to the partners generates

additional costs. According to Park and Ungson (2001), the high failure rate evident in the literature indicates that strategic alliances are more likely to fail than succeed.

In summary, relationships between different firms, TSPs, business clients, and vendors evolve. Partners collaborate by sharing resources and authority to improve each other's capacity and capabilities, trying to achieve sustained growth. They can work together to achieve a defined goal, compete against each other, or do both activities at the same time. TSPs work together and with their clients, especially to expand network coverage, but at the same time they compete to offer many standard services. The market turbulences in the telecommunications industry make this relationship more complex and push partners to continuously seek the right form and conditions to create an effective way to work together and build a successful relationship that can positively impact the company's performance and increase mutual benefits.

Partners can work together through networking, cooperation, coordination, collaborative partnerships, or any other form of business alliance. In this study, collaborative partnership is the highest level of relationship between partners, usually between non-competitors who want to achieve strategic goals. The high market dynamics of the telecommunication industry can benefit from collaborative partnerships in businesses with high levels of trust and high levels of uncertainty (Sheth and Parvatiyar, 1992).

However, Mangus et al. (2020) found that with low market turbulence, the relationship between personal trust and performance in the relationship is positive, but with high market turbulence, the relationship between business trust and personal trust and relationship performance becomes negative. The next section, on ecosystems (as in, for example, digital business ecosystems) will help to explore successful relationships insofar as they are more limited in focus and scope.

2.5 Ecosystems and Aggregator Strategies

Ecosystems in the ICT and telecommunication sector define the relationship between TSPs for fixed and mobile services, vendors, software and cloud services, content providers, and different IT and system integrators. Ecosystem members operate within a defined business environment. The relationship is not only around services, products, and other resources but includes clients, decision makers, national regulatory authorities, and stakeholders like the Body of European Regulators for Electronic Communication. This relationship will help TSPs to understand client needs and requirements which is essential for the adaptation and use of different ecosystem stakeholders' resources to achieve growth. Ecosystems help firms to make on average 13.7% of their total revenues, to achieve 12.9% in cost reduction, to generate 13.3%

in incremental earnings and more than 6% in cost reduction and incremental earnings in telecommunications (Sarafin, 2022).

To focus on their business clients, TSPs are continuously updating their segmentation strategies to know how to position their services (national, global provider, niche player or leaders with global services), what type clients they target (SME, global accounts, enterprises, or wholesale partners), and how they should serve selected clients (desk based or with a global account model). In addition, segmentation classifies and defines the potential that clients may have and the opportunities that TSPs can create. The thresholds (spend potential) for enterprise are not the same for wholesale clients and it is not the same for all countries. TSPs continue to implement new intelligent technologies that help to analyse data, predict client behaviour, and recognise interactions with clients to improve customer engagement. Recent studies highlighted the importance of prioritising customer needs and preferences and the need to adapt and innovate in response to changing client behaviours and market dynamics (Akbar, 2024).

Common business goals, target groups, and external market conditions increase the focus for ecosystems by calling them digital business ecosystems, innovation ecosystems, service ecosystems, and Telco ecosystems for the telecommunications industry. The collaboration between the ecosystem stakeholders and the inter-organisational ties help to increase the competitiveness of each company. The partnership with competitors in the telecommunication operator's ecosystem helps TSPs to reduce costs through collaborations (Kobylko, 2020).

Ecosystems may help to improve business performance. However, TSPs that tried to diversify services and create opportunities for more revenue have had mixed results from their experience of ecosystems (Telco ecosystems: How to make them work, 2023). The growth challenge pushed TSPs to move from traditional service provide (Telco) into more technology-focused businesses (Techco) as the most frequent solution to growth (Semenov and Snesar, 2024). The Telco-to-Techco transformation requires a dynamic ecosystem focused on technology, innovation, and on-demand services and not just point-to-point connectivity. The software driven ecosystems helped TSPs to transform, manage costs, automate processes and simplify their business but sustained growth is still a challenge.

Deutsche Telekom applied an open innovation ecosystem based on four process stages: idea generation (from any source), research (collaboration or sourcing of technologies), development (engaging with partners to create new products or services), and commercialisation (engaging with external partners to bring products to markets). The opening of the traditional development process using external creativity and knowledge resources

showed that Deutsche Telekom was able to improve innovation capacity (Rohrbeck, Hölzle and Gemünden, 2009).

In addition to ecosystems, transformation to technology providers and the integration of external third-party products, TSPs explored the opportunity to transform and become an aggregator to offer a full set of aggregated services or solutions and act as an intermediary provider between traditional telecommunication providers and the end clients. Aggregators can add values to the offered services and products, simplify the way to order and deliver services via automated unified online platform, and bundle various solutions from the ecosystem third parties.

The strategy of Telco aggregation opens a potential new revenue stream by collaborating with multiple technology ecosystem solutions and partners, including service agreements and support functions. Some TSPs are currently developing the aggregation strategy and defining the scope. Telefonica was one of the TSPs that participated in the creation of Wholesale Applications Community (WAC), the global consortium, as one platform to commercially enable selling service, facilitating payment, and sharing revenues. This aggregation can reshape the landscape of network infrastructure and the telecommunications business which is currently facing a competition and a decline in the profitability of their traditional markets (Rueda, Gomez and Chimeno, 2011).

Ecosystems and aggregations and other collaborative forms can help TSPs to build new relationships with a variety of vendors, IT system integrators, and business clients. This relationship creates opportunities to access resources and build new capabilities that can help TSPs to be competitive and achieve sustained growth. However, this relationship requires a long-term investment and a strategic transformation from traditional providers to more customer centric, technology driven provider with new aggregators capabilities.

Telecommunications have faced dramatic transformations, and it is one of the most volatile industries overall (Rohrbeck, Hölzle and Gemünden, 2009). TSPs are still facing growth challenges, and they are trying to collaborate in an open ecosystem to improve performance. Section 2.6 looks at the theoretical background as below.

2.6 Theoretical background

2.6.1 Introduction

The theoretical background section discusses the theoretical views and perspectives given in the literature on different types of capabilities that can help create sustained competitive

advantage. The discussion examines the position of resources and the ability to adapt and reconfigure to compete successfully and achieve sustained growth.

The ICT and telecommunications industries are centred in a fast-changing business that faces market dynamism and much uncertainty. This was especially the case in 2020 and 2021 during the COVID-19 outbreak and the lockdown period due to a high connectivity demand for enabling clients with a distance or hybrid working model.

TSPs that succeed in delivering on time and adapting quickly to high client demand achieve high but temporary growth.

TSPs are providers of digital, cloud, and security services using critical infrastructure and operating in an industry with a high degree of dynamism (Keil, 2004). Collaborative partnerships with clients rely on organisations' dynamism and their capability of adapting as mentioned by researchers such as Bocken, Rana and Short (2015), Eisenhardt and Martin (2000), and Ringov (2017). These researchers do not discuss the need for dynamism and adaptability but rather whether this will only have an impact on performance in stable markets or also in highly changeable environments.

This study explores if and how a partnership between TSPs and business clients can contribute to TSPs' sustained growth by using six different theories and concepts. The most basic inputs are resources, which find their roots in the RBV, the Knowledge-Based View, and the transaction cost economics (to explain the decisions to make or buy resources). In addition, dynamic capabilities, absorptive capacity, and the extent to which TSPs can adapt to business changes (adaptive capability) are examined. This section investigates the relationship between collaborative partnerships with business clients and service provider growth by creating a competitive advantage, utilising six theories.

The choice of the six theories is made to ensure that the key collaboration factors that can have an impact on sustained growth, even those with some similar characteristics, are not overlooked. The RBV considers resources a key element for organisations to attain high performance and growth. This belief is strenuously debated because of the static (non-dynamic) nature of resources in a dynamic business environment, and the need to continuously evaluate if TSPs should acquire resources or purchase them externally from different vendors and ecosystems partners. Based on the debates around the RBV and the position of resources in TSP strategies (Transaction cost economics), DC (Dynamic Capabilities) was introduced to address the gap between the static nature of resources and the link of the organisation's performance to its ability to be dynamic and cope with a high rate of changes in business. However, DC may not be able to explain how TSPs can reconfigure their resources and create competitive advantages.

The DC itself does not present a unique proposition, but the way TSPs use it contributes to the creation of new knowledge and the enhancement of core competencies. The same applies for adaptive capability and absorptive capacity; they help explain the extent to which TSPs can adapt and absorb new knowledge, but they do not answer how TSPs can achieve sustained growth. The six theories and concepts discussed do not address the research objectives separately, but when considered together, they are helpful in examining the problem from different angles and therefore contribute to achieving the research objectives.

By conducting continuous analysis of the market space, TSPs are trying to adapt, understand the challenges, find the right solutions, and execute on time. Changes in the telecommunications industry are predominantly technical, and technological change is the greatest threat to any firm's competitive advantage (MacInerney-May, 2012). Adaptive capability is key to facing these threats, staying flexible when managing resources, and ensuring TSPs are aligned with client demand in an industry characterised by a very high rate of change.

In addition to TSPs' transaction cost economics, resources, knowledge-based view, DC, and adaptive capabilities, absorptive capacity is discussed to understand how service providers address valuable external knowledge and how they use it to create new opportunities. Absorptive capacity is the capacity and capability to acquire new external knowledge and make use of it (acquisition), understand the acquired information (assimilation), combine new knowledge with existing knowledge (transformation), and translate all this into operations (exploitation). The six theories listed above are important to organisations' ability to successfully evolve in response to a changing business environment. The next sections present the six theories and concepts in detail.

2.6.2 Transaction Cost Economics

The journey of continuous improvement forced TSPs to explore and implement offshoring and outsourcing strategies. Outsourcing is sharing control and delegating tasks to external third parties. This can be onshore (in the same country), nearshore (in a nearby country), or offshore (far from the TSP home market). TSPs outsource tasks such as local delivery, technical fibre installations, and support for IT activities in order to reduce costs but also to focus on their core business and to avoid adding resources for temporary tasks without volume commitments. TSPs outsource tasks to system integrators, consultancy providers, and global IT services. In addition, TSPs use offshoring of tasks by moving part of their operations, and process to other countries but to a dedicated team of remote employees. Offshoring is mainly to reduce operational and

labour costs, and this is why TSPs moved some back-office activities to India, Romania or Portugal.

The reasons for TSPs to decide in favour of outsourcing or offshoring or any other form of engagement with third parties are related to costs (savings and long or short-term investments), the nature of their activities (key tasks or easy administrative back office), and risks (business continuity, time difference, language, and cultural differences). The decision between making products and services in-house or buying and using external suppliers is a strategic choice. TSPs are not only trying to achieve sustained growth by achieving more revenue but also by managing costs and increasing margins. In addition, a make-or-buy decision focuses on considering knowledge and the availability of human resources that TSPs should have in place to maintain the quality of customer relationship management. Outsourcing knowledge-based activities, such as product management and research development, can offer cost savings but can also put firm's unique resources and capabilities at risk (Mudambi and Tallman, 2010).

For critical activities, TSPs can consider having what is referred to as a hybrid model (Williamson, 1991) where they keep some control over the activities and do not insource or outsource them completely. Outsourcing critical knowledge activities cannot help to gain strategic advantage (Mudambi and Tallman, 2010).

Table 6 presents some figures about the outsourcing of some activities, the number of employees, and the tasks that are performed by some TSP employees based in different low-cost countries.

The figures were published on TSPs' official sites, they show that TSPs consider the reduction of costs but also the increase in diversity and they ensure they can find highly skilled people for the business continuity for global clients based in different countries. Since the pandemic, TSPs are open for more flexible and hybrid ways of working on top of the matrix organisation model they have already had in place for many years.

TSP	Low-cost country and number of employees	Tasks
BT Group	India – 12000 employees Hungary – 2400 employees	Supporting global customers and solving technology, digital and cyber security challenges. Maintaining regional Operations Centre, and managing customers across Europe using 18 different languages
Colt Technology services	India (Bangalore and Gurgaon)- 3000 employees Romania 80 employees (76% female)	Operating resilient back office, network operation centre, and fraud monitoring. Customer relationship management across Europe (orders and desk-based account management)
Vodafone	Egypt – 8600 employees South Africa – 5400 employees	Moving customer care operations from the UK to Egypt and South Africa (November 2023)
Deutsche Telekom	India - 561	A strategy adopted by a Systems Solutions operating unit and the group service segment to increase numbers of software engineers, applications, and systems.

Table 6: TSPs employees and tasks in nearshoring/offshoring countries

TSPs consider this flexibility as a condition to attract young talents but also to save costs and just have offices for a third of their total employees instead of guaranteeing a desk for every employee (flexible desk policy). TSPs are legally allowed to attract more skilled people from different low-cost countries.

To identify the factors that influence the make-or-buy decision, the theory of transaction cost economics (TCE) is used to explain the process. TCE, proposed by Williamson (1979; 1981), can help to understand how organisations reduce costs and complexity through boundary setting. TCE is understood an alternative mode of organising activities that minimise costs (Williamson 1979). Organisations try to manage transaction costs strategically so that some transactions take place inside the organisation, while other transactions take place outside the organisation (Williamson, 1981).

TCE defines three factors for the make-or-buy decision:

- Frequency: Frequently needed resources will be made internally and infrequently needed resources will be bought from external third-party providers.
- Specificity: Highly specific resources (key assets) will be made internally, while non-specific resources will be bought.
- Uncertainty. Resources will be made when the environment is uncertain, while they will be bought when the environment is certain. It is risky to rely on external suppliers when the telecommunications market conditions are unstable or poorly regulated.

Table 7 presents the three TCE factors with some practical applications and if TSPs will decide to make and own the resources internally or choose to create alliances for technology to buy resources from external providers.

TCE) factors / dimensions	Buy it (External transaction)	Make it (Internal transaction)
Frequency	Infrequently needed resources will be bought (e.g., OLO tails, access to off-net data centres, and sub sea cables)	Frequently needed resources (e.g., access to key Data Centres, API connectivity, core network)
Asset specificity	Non-specific generic resources (e.g., network devices, routers, switches, co-location, IT support)	Highly specific resources (e.g., Voice network, core switches and point of presence interconnects, key data centre and network nodes, cyber security and fraud detection, lawful interception)
Uncertainty	Environment is certain and well regulated (e.g., access to incumbent locations, mobile and fixed termination rates, number portability, regulated access services)	Key resources in an unstable or poorly regulated market (e.g., High bandwidth devices, Dak Fibre in key routes, wireless technology)

Table 7: TCE factors to make or buy decision for TSPs

TCE can help TSPs to draw the boundaries, deciding which activities should stay “inside”, and which activities can be “outside the organisation. However, it is unclear how different combinations of the three TCE dimensions might translate into different of internal and external information. TSPs decisions can be short-term or long-term and may change depending on market conditions, regulation, and geographies.

The TCE theory focuses on just two sources of information where providers can “make” or “buy”, but TCE is not talking about collaborative partnerships and how TSPs can work together with external business clients to jointly achieve sustained growth.

However, there is a variety of hybrid models and different collaborative options mentioned between make and buy decisions: make, buy or ally (Mudambi and Tallman, 2010; Boukadidi, 2015); build, buy or partner (Ego, 2023); make or buy for coordinating collaboration (Anderson and Dekker, 2014); Build buy or borrow (Ohlhausen and Owings, 2023; Velasco and Montoya, 2020). The options, from make, to buy, borrow, partner, and collaborate specify how companies can define their sourcing strategy and position all resources they need to compete successfully and achieve sustained growth. Ego (2023) has studied publications in this field showing that 44% focus was on the “build or buy”, 31% on “buy or partner”, 25% on “build or partner” but the most frequent variables (84%) are financial, human, and technological resources (84%).

TCE is influential in the study of outsourcing but cannot explain the complexities of outsourcing and for this reason it should be applied with caution (McIvor, 2009). This view is shared by Sarafin (2022) who said that companies are not structured or culturally aligned to manage the complexity of different relationships and commercial models.

Other studies introduced the Intelligent Transaction Cost Economics (TCE) where TSPs can make, buy or ally (Boukadidi, 2015). In addition, TCE is considered as one of the most widely referenced organisation theories in operations and supply chain management. It is a theory focussing on the efficient management of transactions and exchange relationships, rather than on competence (Ketokivi and Mahoney, 2020). However, in practice, TSPs consider the decisions related to resources (make-or-buy) as a part of transformation programmes to save costs combined with skills availability (e.g., knowledge, language, the ability to learn new vendors technologies), while saving costs, productivity and quality may also be lower when moving tasks to external resources (Erickson and Norlander, 2022).

In addition, some TSPs were impacted by the pandemic lockdown in a few countries. Their employees were not prepared to work remotely, which caused a problem for order management and delayed invoicing clients. The right decision to buy-or-make different business operations tasks can create advantages in cost reduction, access to new skills, and deliver better client experience. However, it can be a risk if TSPs are not undertaking the right sourcing strategies and thus will not achieve the desired business outcomes. TCE can help TSPs to make the right decision by taking into consideration the frequency, asset specificity, and uncertainty in a very dynamic telecommunications market. These decisions are not only about resources (tangible and intangible assets) but also about capabilities. Ordinary capabilities (e.g., operations, administration) can often be bought or rented but dynamic capabilities are complex and difficult to develop, and they must be built (Teece, 2019).

The next sub-sections will explore the resource-based, knowledge-based, and dynamic capabilities and how they interact together to explain TSPs competitive strategies.

2.6.3 The Resource-Based View

The RBV was introduced as a theory to explain how to manage a company's resources to achieve sustained competitive advantage (Wernerfelt, 1984), which can be sustained for a period to enable successful competition against other TSPs. Sustained growth is achieved when a certain level of profitable growth can be maintained and when a firm improves its efficiency and effectiveness compared with other competing firms (Barney, 2001). Additionally,

competitive advantage is sustained when other firms face a cost disadvantage when imitating or substituting the same resources (Barney and Mackey, 2016).

The RBV considers a firm's internal resources and capabilities to be the best source of competitive advantage when they are managed in such a way that competitors cannot imitate the outcomes. Likewise, Wernerfelt (1989) has suggested that both internal and external resources created through environmental changes may form the basis for sustained competitive advantage, but the resources owned by the firm are the most critical ones. The RBV explains firms' competitive advantages, competitive parity, temporary competitive advantages, and sustained competitive disadvantages (Barney, 1997).

Kaufman (2015) argues that the RBV theory is only a theory of competitive advantage and provides no clear direction about how to determine which resources are valuable and which are not. However, Barney and Mackey (2016) reject Kaufman's criticism because resources evolve and do not necessarily remain valuable.

According to Eisenhardt and Martin (2000), the RBV has not sufficiently explained how and why certain firms achieve competitive advantage in fast-moving markets with unpredictable situations.

Furthermore, the RBV of the firm was criticised by Zander and Zander (2005) because the role of established clients as a source of competitive advantage has been neglected. This criticism was based on the notion of Penrose's (1959) inside track on the growth of firms to explore new ideas among established clients, where the RBV paid limited attention to the role and importance of clients in firms' growth. Penrose's classic growth theory was a resource-based approach, which can help clarify if the RBV can explain the creation of competitive advantage and the realisation of sustained growth for TSPs that operate in dynamic market conditions and fast-moving industries.

On the one hand, internal skills and resources in a company cannot replace the role and importance of clients. These resources are difficult to match with other competitors when they are combined with a strong customer orientation (Bharadwaj, 2000).

On the other hand, the RBV has been criticised for viewing single firms outside of the industrial context and for its inflexibility regarding the deterioration of the value of resources over time. According to the RBV, a firm is a bundle of resources; it takes an inside-out approach when analysing the business propositions and the firm's advantage capability. The starting point of the RBV analysis is the internal resources and environment of the organisation. The potential for a competitive advantage is measured using the Value, Rareness, Imitability, and Non-substitutable (VRIN) principles.

VRIN is a framework that is used to measure the competitive power of a firm or evaluate the value proposition regarding the competition. The four elements of this framework are:

- i. Value: Resources that can create and add value.
- ii. Rareness: Resources that are not available to all competitors.
- iii. Imitability: Resources that are not easy to make and obtain or are costly for other competitors to imitate.
- iv. Non-substitutable: Resources that cannot be substituted by any other resources.

Following the VRIN framework, Barney (1991) developed the VRIO framework, replacing “non-substitutable” with “organisation”. This organisation element focuses on capturing values and refers to the ability to exploit a firm’s resources and the capability to use and transform these resources.

The VRIO framework assesses and analyses the firm’s internal resources and the potential to use these resources to achieve competitive advantage. This assessment can help improve internal resources and increase the firm’s ability to compete.

The first step of the VRIN and VRIO models is to ask if the organisation’s internal resources are valuable and will allow the organisation to exploit opportunities; if not, then they have a competitive disadvantage. If the resources are valuable but not widely owned and used by other competitors (rare), then there is a competitive parity that will result in an organisation achieving average results when compared to others in the same industry. If the resources are valuable and rare but easy to acquire by other competitors, then this is referred to as a temporary advantage. When organisations have valuable resources that are rare, inimitable, and non-substitutable (VRIN path) or are organised to capture value (VRIO path), then they could achieve a competitive advantage and sustain it for a limited period.

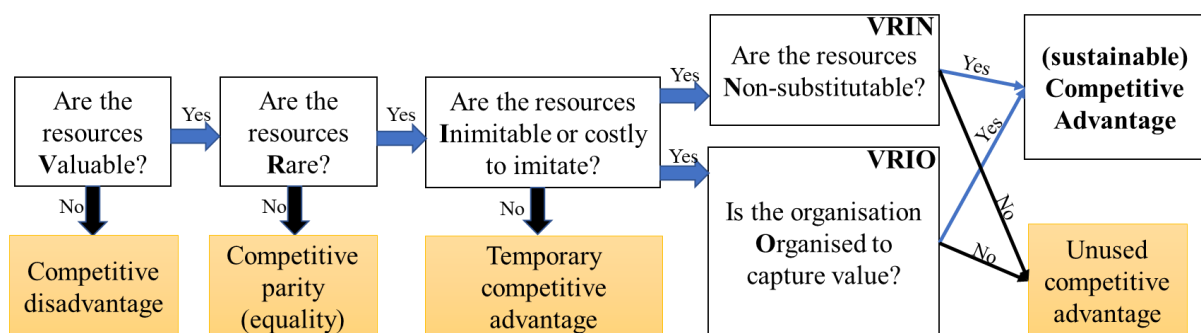


Figure 8: VRIN and VRIO flowchart (adapted from Barney, 1991)

In the ICT and telecommunications industries, the RBV might help to understand how and why IT system planning enables companies such as TSPs to achieve competitive advantage (Fürstenau, Schinzel and Cleophas, 2014).

Resources are the tangible, intangible, and personnel-based assets a firm uses to implement its strategies (Barney, 2001), while capabilities are the firm's ability to convert resources to create a competitive advantage (Grant, 1991). Capabilities are often embedded in hidden processes related to resource allocation (Christensen and Overdorf, 2000). This view is supported by Singh Sandhawalia and Dalcher (2011), who argue that the efficient usage of knowledge improves competitive advantage and a firm's success. Both resources and capabilities form the core competencies that can lead to the creation of competitive advantages and a growing financial performance (Figure 9):

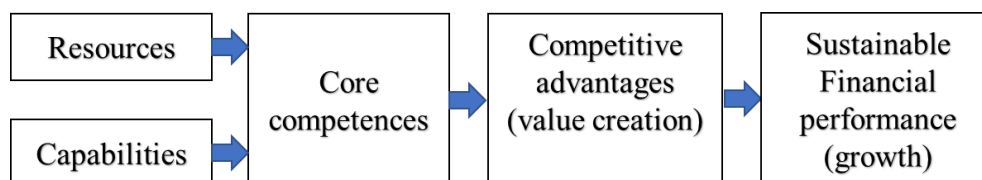


Figure 9: From resources and capabilities to growth

The RBV links an organisation's performance to specific resources and skills that are rare and difficult to imitate and assumes that the resources are heterogeneously distributed across the firms and that these firm differences remain stable over time (Barney, 1991). To develop and improve resources and ensure they are contributing to the competitiveness of the company, a new knowledge is required (Eisenhardt and Martin, 2000). The next section will explore the importance of such knowledge to improve performance and achieve growth.

2.6.4 Knowledge-Based View

The aspects of the RBV and the VRIO model (Barney, 1991) offer a rationale to consider knowledge as a key strategic resource for organisations, therefore a knowledge-based view (KBV) is a development of the resource-based view as a source of competitive advantage (Kogut and Zander, 1992). The knowledge-based view suggests that the capability of organisations to learn faster than competitors is the only source of competitiveness, and they define knowledge as usable information that is relevant to a decision and that can be transformed into action (Kaur, 2019). Other studies define KBV as a dynamic concept, which is continuously modified during social among people both inside and outside the boundaries of an organisation

(Kirsimarja and Aino 2004). The Knowledge-Based View theory assumes that resource and capability-based advantages are a result of superior access to and integration of specialised knowledge (Grant, 1996; Denford, 2013). However, other studies consider that KBV in strategic management is still a contested and unmapped field without unified clear-cut theories (Kaplan et al., 2001). Also, KBV was criticised by shifting the focus from all types of resources that organisations use and integrate to prioritise knowledge and other forms of intellectual resources (Styhre, 2004).

Knowledge did not gain strategic value until the emergence of the Resource Based View considering that knowledge is a dynamic capability, and that current knowledge is not enough. Organisations should create new specific knowledge to address unpredictable market conditions (Eisenhardt and Martin, 2000). However, the creation and use of knowledge is significantly influenced by organisational designs that enable organisations to access external knowledge (Foss, Lyngsie, and Zahra, 2013). While the Resource-Based View assumes that knowledge can be controlled, KBV assumes that knowledge cannot completely be controlled but can only be managed by creating enabling conditions (Kirsimarja and Aino 2004).

For organisation, especially TSPs who are competing in a very dynamic market, knowledge is considered as a fundamental strategic asset (Chung, Yang and Huang, 2015) and can create competitive advantages for organisations (Gonzalez and Martins, 2017). Knowledge is a key intangible resource that is the primary source of a sustainable competitive advantage (Acedo, Barroso, and Galan, 2006) and the ability of organisations to learn faster than competitors is the principal source of competitiveness (Curado and Bontis 2006).

In the telecommunications business, as fast-evolving markets, there is a general belief that knowledge is the driver for innovation which can help TSPs to create competitive advantages and increase performance. Moreover, the differences in the performances of organisations exist because of the differences in knowledge and the individual capabilities to develop and utilise the knowledge (Curado and Bontis 2006) and only when knowledge management capabilities are introduced in the equation (Bogdanovska Djurovic, 2013). Knowledge management is the process of knowledge sharing with individuals and groups in the organisational context (Gonzalez and Martins, 2017) and the capability of dynamic knowledge management has a positive direct effect on high-performing organisations (Pattanasing et al., 2022). In addition to this, management of knowledge can be a key source of organisational advantage, and the sustainable competitive advantage is driven by intellectual capital and no longer rooted in physical assets and financial resources (Fazili and Khan, 2016). Knowledge is an asset that develops over time and organisations identify tacit and explicit knowledge and build a process

for managing, transforming, and increasing knowledge (Gonzalez and Martins, 2017). However, there is critique on the notion of tacit knowledge as it is used in KBV because it is an umbrella for unrepresentable knowledge instead of permanent type of knowledge (Styhre, 2004).

TSPs continue to invest in human resources and to implement knowledge management as a source of competitive advantage. They have created special learning academies with web portals for online courses and industry certifications as well as continuous vendor specific trainings. These corporate centrally managed programmes may not pay enough attention to local market conditions or to the differences in human and cultural aspects, knowing that the work culture is a crucial factor for the successful application of knowledge management in corporate organisations (Nasyiratudina et al., 2022).

KBV classifies knowledge, as a critical resource, into three types: Tacit knowledge (held in the minds of the employees), codified knowledge (in documents) and encapsulated knowledge in the systems and applications (van den Berg and Kaur, 2021). Moreover, Cepeda and Vera (2007) defined six knowledge areas: legal knowledge, knowledge about the competition, internal policies, management styles, the public sector, and market segmentation.

The capability to acquire and leverage knowledge is the essential source of value and define KBV as an extension of the resource-based view (Asiaei et al., 2021) and the basic principle of the KBV is that organisational capabilities and resources evolve through knowledge processes (Garcia-Perez et al., 2019). Organisations' dynamic capabilities, as strategic competitive advantages, are considered a cyclical, collective process as a result of the integration between learning and knowledge (Bach et al., 2016). In addition, other studies suggest combining the dynamic capability with the knowledge-based view to create the Knowledge Based Dynamic Capability (KBDC) as a new capability to make organisations knowledge-based and dynamic (Teece, 2000) and this will help them to remain relevant and competitive in fast-moving environments (Denford, 2013). However, there is a lack of consensus about the true meaning of KBDCs, which has led to a conceptual confusion surrounding this critical concept (Kaur, 2022). KBDCs as an emerging field and the literature on KBDCs suffer from incomplete abstractions and inconsistencies (Kaur, 2023). TSPs are aware that operating in the telecommunications industry requires specific knowledge and dynamic capabilities to transform and reconfigure resources to be able to create competitive advantages. It is important to distinguish knowledge from the internal process to manage it (Easterby-Smith and Prieto, 2008). Knowledge management is the exchange of information that is transformed, developed, and shared (Ozaki and Avona, 2016). It is the process to

evolve the organisational routines and, therefore, dynamic capabilities (Hattore et al., 2022). TSPs and their business clients are large companies, and this means the intensity of knowledge management processes is high and knowledge is especially important for the competitiveness of large companies, with 250 employees or more (Soniewicki and Paliszkiewicz, 2019).

Other studies have proved that knowledge management is crucial for organisations' competitiveness, and the combination of knowledge specifically is the major contributor towards competitiveness followed by the capability to acquire and protect knowledge respectively (Kaur, 2019). The position of clients and the collaborative partnership with clients is not specified when talking about the importance of knowledge. However, some studies suggest that companies must constantly acquire knowledge about customers, competitors, and suppliers (Kaur, 2019) without a focus on partnerships with clients and the development of common and shared long-term goals. Sepúlveda-Rivillas, Restrepo-Ramírez and Jaramillo's research (2022), defined three stages for a dynamic knowledge management capability, starting with intellectual resource management (managing internal resources), knowledge management (acquisition and distribution of knowledge within the organisation), and the organisational learning management to use acquired knowledge. Knowledge acquisition, integration, and protection are the three (most?) important steps for knowledge management process capabilities.

However, with definitions and the importance of process managements only, TSPs will continue to face the challenge to find and manage the specific knowledge that can help them to increase competitiveness and improve performance. In addition to the market dynamism challenge and the changing business conditions, knowledge is not fixed and, in some studies, is considered an unstable, fluid, and elusive capacity (Styhre, 2004).

The dynamic nature of knowledge pushes TSPs to develop dynamic capabilities and face new challenges to find the right way to improve performance and achieve sustained growth. The importance of new knowledge and how this is linked to the market dynamics is focussed on the next section, exploring the dynamic capabilities.

2.6.5 Dynamic Capabilities

In response to critiques pointing at the static nature of the RBV, the DC concept highlights how linking a firm's internal and external resources can enable them to achieve competitive advantages by adapting their organisational competences in line with the changing environment (Wójcik, 2015).

The DC theory, which was introduced by Teece, Pisano and Shuen (1997), highlights that firm performance depends on the ability to react and reconfigure the business to adapt to market changes. Teece, Pisano and Shuen (1997) consider DC to be a firm's ability and capability to integrate, construct, and reconfigure internal and external expertise to be able to respond to a rapidly changing business environment. An organisation's capability of scanning, reading, and understanding the market space and trying to build business strategies to create opportunities and address any business threat is the capability to adapt to change, be able to add value to business clients, and create competitive advantages.

DC can explain why collaborative partnerships with clients can gain new resources and succeed in reconfiguring and sharing existing resources to create competitive advantages and achieve growth. The relationship between DC and competitive advantage is linked to the strategic fit between organisational and dynamic environmental factors (Fainshmidt et al., 2019) and not only to static internal resources. Other studies are more specific and link the DC contribution to competitive advantages to the environment in which firms operate (Schilke, 2014; Winter, 2003).

Teece, Peteraf and Leih (2016) define three primary, main categories for DC as *sense* (identify and create strategic insight), *seize* (mobilise assets and execute strategy), and *reconfigure* (shape, transform and renew assets), as below:

- i. *Sense* refers to the identification, development, co-development, and assessment of opportunities and threats in relation to business clients' needs. This is the "sensing" of unknown market developments.
- ii. *Seize* refers to securing new and additional resources to address needs, create opportunities, and capture value.
- iii. *Reconfigure* refers to the renewal of company assets. This is the transformation, configuration, or shifting aspect of the organisation.

Sensing, seizing, and reconfiguring are important if the firm wants to sustain its business in the long term because business clients, competitors, and market conditions will continue to change and be pushed to adapt to the business environment. When organisations such as TSPs are facing a high degree of business uncertainty, they need to sense and read the environment to develop or create growth opportunities and outperform their competitors; this is the generative sensing capability for growth, as called for by Teece, Peteraf and Leih (2016). After the sensing phase, firms will implement and apply the decisions they make by creating new products,

services, business models, or processes (seizing phase) and ensuring they transform and reconfigure the organisation structure. Sensing, seizing, and reconfiguring are the three dimensions of dynamic capabilities that must be created and built to maintain a competitive advantage. The dynamic capabilities framework (Figure 10) illustrates the three dimensions sense, seize, and reconfigure, which allow organisations to sustain and enhance their capabilities and resources to be able to face business uncertainty.

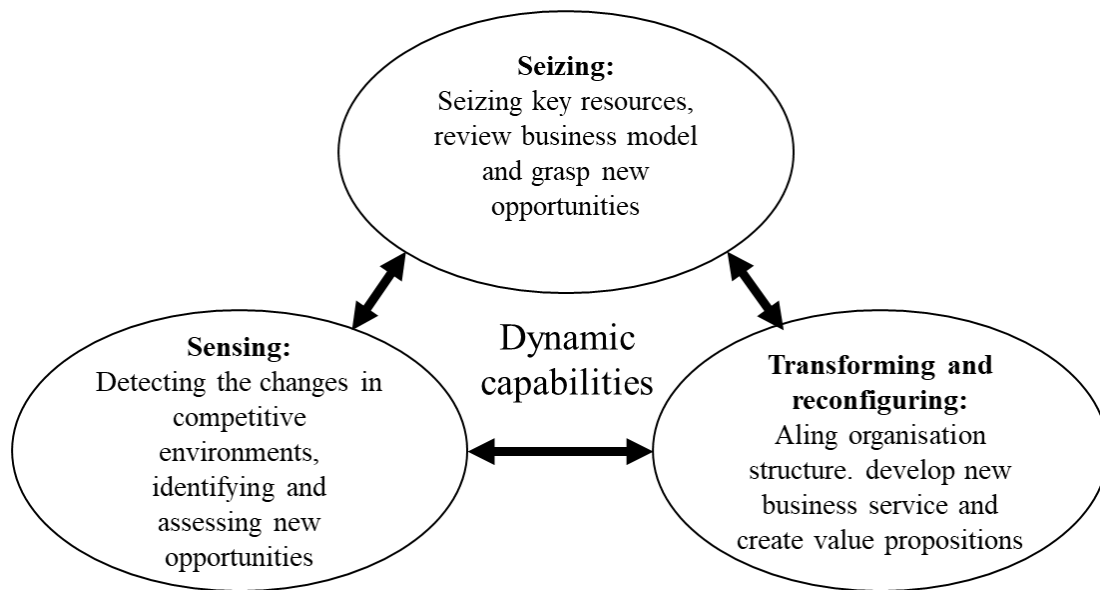


Figure 10: Iterative Dynamic Capabilities process (adapted from Teece, Peteraf and Leih, 2016)

These three dimensions of DC are often designed in a sequential way (sensing, seizing, and then reconfiguring), but, practically, it is an iterative and dynamic process. Especially in the telecommunications industry, the turbulent environment, market dynamism, and changing needs of business clients require a flexible process. They are three dynamic steps that should feedback on each other regularly. When changes are detected, the seizing and reconfiguration steps should start for new opportunities and also when reviewing current business models. At the same time, threats and challenges during the seizing and reconfiguring phases may require additional input and ask for a new competition assessment.

Wang and Ahmed (2007) define DC as a firm's behavioural orientation to merge, reconfigure, and regenerate its resources and capabilities and renovate its core capabilities in response to the changing environment to attain and sustain competitive advantage. However, Eisenhardt and Martin (2000) reject the view that DCs can provide the ability to address rapidly changing environments, but they suggest that new specific knowledge is needed to address unpredictable situations rather than utilising knowledge from previous experiences. Collaborative

partnerships allow TSPs to gain specific knowledge that they can absorb to develop new services and products. DC theory can help scholars understand how TSPs detect changes, review their business models, and align the organisation structure to create and develop new opportunities that can lead to sustained growth. The three key elements of the theory will help discover if TSPs will build new competitive advantages if they have dynamic capabilities and implement the right strategies.

The two papers by Teece, Pisano and Shuen (1997) and Eisenhardt and Martin (2000) have had the most impact on the dynamic capabilities research area. They show two contradictory aspects of dynamic capabilities related to the link between dynamic capabilities and firm performance in dynamic markets. The contradiction is when considering the dynamic capabilities as a source of sustained competitive advantage or when seeing the value for competitive advantage in the resource configurations that they create and not in the dynamic capabilities themselves, which are not sufficient conditions for competitive advantage.

However, Ringov (2017) rejects Eisenhardt and Martin's (2000) idea and argues that dynamic capabilities can positively contribute to a firm's performance even in high velocity environments. At the same time, Ringov (2017) and Eisenhardt and Martin (2000) agree that dynamic capabilities as simple rules may not be sufficient for competitive advantage in fast-moving high-velocity environments.

Eisenhardt and Martin (2000) define two paths of DC depending on market dynamics: Linear, in the case of moderately dynamic markets where change occurs frequently, and nonlinear, in the case of highly dynamic markets where change is not predictable. This understanding of DC is different from the above definitions, where dynamic capabilities apply only in rapidly changing environments. In this approach, organisational knowledge is considered the most essential part of performance (Dosi, Nelson and Winter, 2001), and because of the rapidly changing environment, companies are forced to manage their resources very well to ensure they are competitive across the product's lifecycle (Helfat and Peteraf, 2003).

Table 8, which follows, illustrates the main characteristics of the stable, predictable, and moderate markets in comparison with the high-velocity and unpredictable markets. The differences in market dynamism will have an impact on the competition and the dynamic capabilities that companies should have in place if they want to win customers and grow.

Moderately dynamic markets	High-velocity markets
Change occurs frequently but with roughly predictable and linear paths	Nonlinear and unpredictable change
Stable industry structure with clear market boundaries where competitors and customers are well known	Blurred boundaries, fluid business models, and shifting competitors and customers
Must rely extensively on existing knowledge	Must rely on newly created knowledge that is specific to a situation
Dynamic capabilities are causally ambiguous because they are complicated and difficult	Dynamic capabilities are causally ambiguous because they are simple and not completely unstructured or “organic”
The threat to competitive advantage is destroyed from outside the firm	The threat to competitive advantage comes not only from outside but also from inside the firm
Competitive advantages are destroyed from outside the firm	Dynamic capabilities are difficult to sustain
Effective dynamic capabilities rely heavily on existing knowledge	Dynamic capabilities consist mostly of simple rules and real-time knowledge
“Learning before doing,” analyse the situations and then proceed to the implementation	“Learning-by-doing” was advantageous in the more rapidly changing markets

Table 8: Moderately dynamic and high-velocity markets (adapted from Eisenhardt and Martin, 2000)

This finding remains in line with Wójcik’s (2015) view, which considers the perspective of dynamic capabilities as a response to critiques of the static RBV and states that a firm’s success is driven by its ability to adapt to a changing environment.

In another study related to strategic information systems planning, an easier reconfiguration of resources was unable to explain better performance even in dynamic environments (Fürstenau, Schinzel and Cleophas, 2014). This finding conflicts with Eisenhardt and Martin’s theory because DC is expected to help firms gain competitive advantages and achieve better performance.

Dynamic Capabilities remain critical for a firm’s growth and financial performance in uncertain and dynamic environments, and without entrepreneurial management and a flexible structure, firms cannot be dynamically capable (Teece, Peteraf and Leih, 2016). Leaders and managers

are responsible for developing and implementing the business strategy, creating the resources and capabilities they need, and defining how to create and sense opportunities. When the targets are not achieved, they are responsible for transforming the company and ensuring it will grow again or at least decrease costs to be profitable. TSPs' business environment is changing rapidly, and the entrepreneurial mentality will help manage the quick changes and develop new services and products. The entrepreneurial mentality will create dynamic capabilities instead of ordinary capabilities.

DC refers to recognising the business and identifying the opportunities at the right time, while ordinary capability is about managing the standard processes to get the business plan implemented. This is the required flexible structure where managers and leaders should act quickly, rather than wait for changes to happen and then try to transform. TSPs should have the ability to adapt and innovate to create competitive advantages. These entrepreneurial management tasks are part of the organisation's capabilities.

DC and ordinary capability are the two most important and interdependent elements for companies that want to reach a high level of organisational agility to manage business uncertainty. Moreover, the importance of collaborative partnership strategies is translated into the flexible organisational structure by creating a Chief Partner Officer (CPO) position, as Microsoft calls it, or a Chief Strategy and Transformation Officer, as TSPs, as British Telecom calls it. This position was created during the last few years to lead and manage a company's eco-system partners and grow the mutual partner business. The consolidation of all partners under one division will avoid conflicts between sales channels and improve the customised solutions offered to all partners. Especially for global TSPs, this role will ensure the smooth implementation of one partner strategy across all markets where TSPs are operating.

The responsibility of the CPO is to grow the partner eco-system programme and ensure that the TSP organisation will collaborate and invest in the right partnerships. A separate executive leadership role with a focus on partnerships means faster decision making compared with an organisational structure where this function is reporting to sales and marketing and under the pressure of short-term strategies.

Other cloud providers, such as SAP, appointed their first CPO in 2019 to drive the next generation partnering at SAP. The CPO's responsibilities at this firm are "evolving partner commercial models to intensify partner innovation, platform adoption and the sale of cloud solutions with partners across all customer segments and markets." The ecosystems are a major driver for growth, and the SAP cloud platform business is estimated to be worth approximately

US \$ 100 billion, with more than 60% of that business in the cloud, where all partners can build and develop their own services (Fahrbach, 2018).

The high level of agility and flexibility of an organisation's structure that can be quickly adapted will help build a good competitive strategy. According to Teece, Peteraf and Leih (2016), companies need to have an entrepreneurial approach to be dynamically capable, and at the same time, entrepreneurs need an organised and structured company.

This explains competitive advantage, and companies that cannot anticipate or respond to external disruption are unlikely to survive in volatile industries. The business market is no longer about "structure follows strategy" or "strategy follows structure" but about dynamic strategies and structures that enable the sensing, seizing and shaping of business opportunities (Felin and Powell, 2016).

The dynamic process and continuous evolution of the firm in a constantly changing environment are challenges. According to Gustafsson, Kristensson, and Witell's (2012) empirical study, companies find it difficult to identify and adopt knowledge about the values that clients experience. Accordingly, companies have started to treat their clients as active collaborators when developing different services. This contrasts with companies' traditional view of passive clients from whom information can be extracted by means of surveys or focus groups. In line with this, Witell et al. (2011) show that new services or products developed through the customer co-creation process are more profitable than those developed with traditional market research techniques. Other empirical studies suggest that the dynamic capabilities of an organisation co-evolve with environmental changes (Ambrosini, Bowman and Collier, 2009; Bruni and Verona, 2009; Newey and Zahra, 2009).

Volberda and Lewin (2003) also claim that organisational renewal and change are not management decisions or management adaptations but a result of environmental effects. Change within firms is more of a co-evolution than a self-renewal or evolution; it is driven by external market developments. Changing client requirements and their buying behaviour are part of the new developments in the market space, and these developments are pushing TSPs to change and adapt.

Some researchers believe that firms' co-evolution—how and why they develop over time—is still not sufficiently explained and that there is no theory that can help understand this (Dooley and Van de Ven, 1999; Van de Ven and Poole, 1995). However, according to Volberda and Lewin (2003), co-evolution can occur when firms are heterogeneous, have learning and adaptive capabilities, and are able to build relationships that allow them to interact with and influence each other. Co-evolution should be a dynamic approach, where organisations are

continuously open to adapt and change as a result of mutual interactions and external factors (adaptive capability and absorptive capacity), This understanding suggests that organisations co-evolve with their business environment, or, as mentioned by Volberda and Lewin (2003), that they should manage internal change frequency to match or exceed external rates of change. Nonetheless, in practice, firms are not always able to adapt. Furthermore, they face the challenge of neglecting market changes or suffering from an internal culture that refuses to adapt and accepts that competitors are simply stronger and have a bigger market share.

However, recent developments in the field of sustained growth suggest that sustained competitive advantage is difficult to achieve (D'Aveni and Gunther, 1994). D'Aveni and Gunther (1994) propose a shift from a static long-term strategy to a dynamic strategy to create short-term advantages.

However, Tanriverdi, Rai and Venkatraman (2010) studied sustained competitive advantage and propose that organisations implement the renewal quest, which recognises the temporary nature of competitive advantage.

Dynamic capabilities are necessary but insufficient conditions for competitive advantage. Eisenhardt and Martin (2000) argue that long-term competitive advantage lies in using dynamic capabilities more intelligently than the competition but not in the capabilities themselves; they are not long-term competitive advantages.

Moderately dynamic markets rely on existing experience, while DC involves the creation of new specific knowledge but becomes difficult to sustain in high-velocity markets (Eisenhardt and Martin, 2000). Birkinshaw, Zimmermann and Raisch (2016) argue that it is not possible to identify a generic DC that applies in all situations. It is easier in the telecommunications market to manage risks because the outcomes are generally known but uncertainty, which is called the “unknown unknowns,” has increased dramatically because of the global nature of business (Teece, Peteraf and Leih, 2016).

In general, risks are known and easy to manage, and the availability of financial securities makes it possible to calculate and cover the risks. However, uncertainty and high market dynamism are not easy to manage. They require highly effective entrepreneurial management, a high degree of organisational agility, and strong dynamic capabilities that are important for the organisation's growth and financial performance.

Strong dynamic capabilities are characterised by highly effective entrepreneurial management teams and robust organisational designs (Teece, Peteraf and Leih, 2016).

In times of great uncertainty, the business requires entrepreneurial management to take the risk and stay agile without putting the business in a continuous mode of changes and

transformations. Flexibility and changes are necessary for an organisation to remain competitive, not only in times of crisis but as a regular process. Rapid technological changes and regulatory conditions in the telecommunications business are creating the need to build a strong strategy to manage the uncertainty and be able to turn the risks and threats into new opportunities.

Rapidly changing environments are a challenge for firms that want to be competitive. Some are continuously seeking ways to reconfigure the business and integrate internal and external competencies to attain and sustain competitive advantages. Sustained growth is difficult to achieve. However, a dynamic approach to dealing with internal and external resources and capabilities may help overcome these problems and create the ability to quickly implement new business models that are favourable for customers (Teece, Peteraf and Leih, 2016). However, no one can have a full understanding of the latest changes in customer preferences (Felin and Powell, 2016). The challenge of knowing customer preferences and the fast-moving telecommunications market is pushing TSPs to continuously review and develop their dynamic capabilities (add resources, detect changes, and reconfigure and align organisation structure). The challenges require focus and specific capabilities and capacity that TSPs must recognise and process. The next section takes this further, in 2.6.6.

2.6.6 Absorptive capacity

The process of recognising new market developments and discovering new ideas requires firms to have the capability to assess if their signals and ideas can be used to introduce new competitive services and products. This organisational process will merge existing and new information and knowledge necessary to qualify and evaluate the feasibility of launching new services or products. Firms are better equipped to promote the launch of new products and services when they integrate this process into their routines (Rodríguez-Serrano and Martín-Velicia, 2015).

Absorptive capacity is a specific capability to gain external knowledge and merge it with internal knowledge to create competitive advantages. The focus of this capability is on external knowledge, and the framework is concerned with the extent to which TSPs can absorb external changes and use them to innovate and compete, especially in highly dynamic markets.

Organisations can increase their capability to innovate by acquiring knowledge from suppliers, customers, and other external sources. Sourcing for external knowledge can be critical for an organisation's capability to innovate and increase its performance (Chesbrough, 2003). This

explains the link between the significant contribution of externally gathered knowledge, identified as absorptive capacity, and the organisation's performance.

The absorption capacity of an organisation depends on its level of ability to recognise valuable external knowledge and align this with its organisational capability to transform and apply the new knowledge (Ter Wal, Criscuolo and Salter, 2011).

Absorptive capacity is the firm's ability to gain and transform valuable external information obtained from collaborative partnerships with business clients, together with prior information, into a new source of knowledge and innovation (Cohen and Levinthal, 1990).

Furthermore, it is the key to the success of global firms, and results suggest that the market orientation of global firms has a strong association with absorptive capability (Rodríguez-Serrano and Martín-Velicia, 2015). When global competitors achieve parity in their operations and market positions, the ability to link and use acquired knowledge is the factor that differentiates the winners from the losers (Bartlett and Ghoshal, 2002).

Zahra and George (2002) extended the framework of absorptive capacity by specifying four dimensions: Acquire (prior knowledge), assimilate (understanding), transform (internal conversion), and exploit (use and implementation). These capabilities are often embedded in the less visible background processes that support decisions relating to areas such as resource reallocation (Winter, 2003).

Figure 11 below illustrates the absorptive capacity dimensions where collaborative partnerships are considered a knowledge source. This is applied to the collaborative partnership between TSPs and business clients and covers new and existing knowledge that can be absorbed.

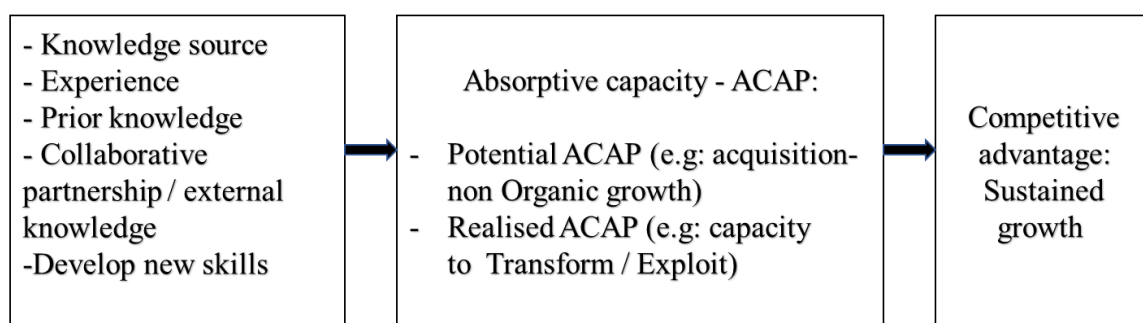


Figure 11: Absorptive capacity (adapted from Zahra and George, 2002)

A firm's ability to "relearn" is critical (Chen, Coviello and Ranaweera, 2021). When organisations are not agile and dynamic enough to quickly absorb external business changes, especially in a fast-moving market such as ICT and telecommunications, they will lose their position, fail to compete, and not be able to sustain their competitive advantages. Known

examples are companies such as Blackberry, a smartphone pioneer, which lost its leadership position in the smartphone industry. Nokia, a globally dominant, innovative organisation, faced the same downfall between 2005 and 2010. Both Nokia and Blackberry failed to act quickly and change their internal operations to address the challenges in the smartphone industry and the innovation created by competitors such as Apple. Both organisations lacked the capacity to improve their internal processes and efficiency in turbulent and changing environments. There was no balance between the external developments and the internal dynamism.

An INSEAD Business School qualitative study tried to understand why Nokia was not capable of changing and adapting at the right time. The study found that the organisational fear was grounded in a culture of leaders and middle managers who were not able to tell the truth (Vuori and Huy, 2015). It was the organisation's internal lack of dynamism and capability that resulted in the company closing down of the mobile phone business. The article "Who Killed Nokia? Nokia Did" from INSEAD Business School (INSEAD Knowledge, 2022) supported Vuori and Huy's (2015) finding (Who Killed Nokia? Nokia Did, 2022).

The absorptive capacity theory supports and guides answering the research question by exploring the extent to which a TSP is able to absorb and acquire new external knowledge and transform this into a new competitive advantage. The way any new potential knowledge is absorbed gives a basis for understanding the link between absorptive capacity and the creation of sustained growth for TSPs when collaborating with their business clients. Absorptive capacity focuses on external knowledge, specifically in highly dynamic and changing markets. For some TSPs, collaborative partnerships are a source of external knowledge that can help them gain more resources and transform these into competitive advantages. Dynamic capabilities and absorptive capacity highlighted the need to be flexible and able to cope with changes but the next section, adaptive capability, will focus on the role of external environmental changes to explain how TSPs can create competitive advantages.

2.6.7 Adaptive capability

TSPs interact with their business clients to discover unmet needs. Yet, they also need to sense legal, commercial, or technical changes in the market, which can create new chances and opportunities or cause threats for the service provider. Sensing these changes enables the service provider to develop new services and products and make expansions and improvements to the existing ones.

This capability allows the service provider to react to threats and exploit new opportunities by aligning with external environmental changes.

Adaptive capability is the creation of awareness and responsiveness to a continuously changing market environment to take advantage of market opportunities and address threats. The focus on external factors can provide a useful background to understand the relationship between collaborative partnerships with business clients and service providers' growth. Collaboration with business clients as an external factor might help identify and capitalise on emerging market opportunities (Chakrovarthy, 1982). Adaptive capability is more specific than DC. It was defined by Pavlou and El Sawy (2006) as a firm's ability to sense its business environment, and Wang and Ahmed (2007) argue that adaptive capability is a main component of a firm's dynamic capabilities.

Adaptive capability shows the ability of TSPs to align with external market conditions and adapt to continuous changes. It synchronises the resources and ensures they are aligned with external changes so that organisations such as TSPs have the ability to swiftly respond to market developments. The utilisation of external technical, legal, and commercial influences to adjust to potential threats and opportunities help the TSPs take advantage of their competitors. The adaptive skills are called strategic flexibility (Wang and Ahmed, 2007), and these critical skills are needed to meet the demands of a changing business environment.

Organisations must innovate to sustain their competitive advantages (Rubera and Kirca, 2012), and to innovate, they need to reconfigure their resources and adapt to changing business requirements. Internal dynamism is needed to adapt to external market dynamism.

There should be a balance between internal and external dynamism, but when both are high, the positive impact on a firm's innovation capacity is the strongest. However, some participants criticised the change frequency they are facing internally as TSPs. One participant stated that the problem is not that TSPs do not adapt or change but that they are changing too much. High internal dynamism increases internal openness to absorb external resources, and high internal dynamism is likely to provide little benefit when external dynamism is low (Chen, Coviello and Ranaweera, 2021). Internal dynamism is a capability that allows a firm to reconfigure its resources (assets, procedures, and business rules) and adapt to changes, which can influence its competitive advantage. This concept of adaptive capability can be used to help understand the behaviour of TSPs and how they apply flexibility to keep the resources aligned with the business challenges. This is an outside-in-oriented approach, not a static approach, because it involves anticipating and responding to changes.

The link between internal and external dynamism is summarised in Figure 12:

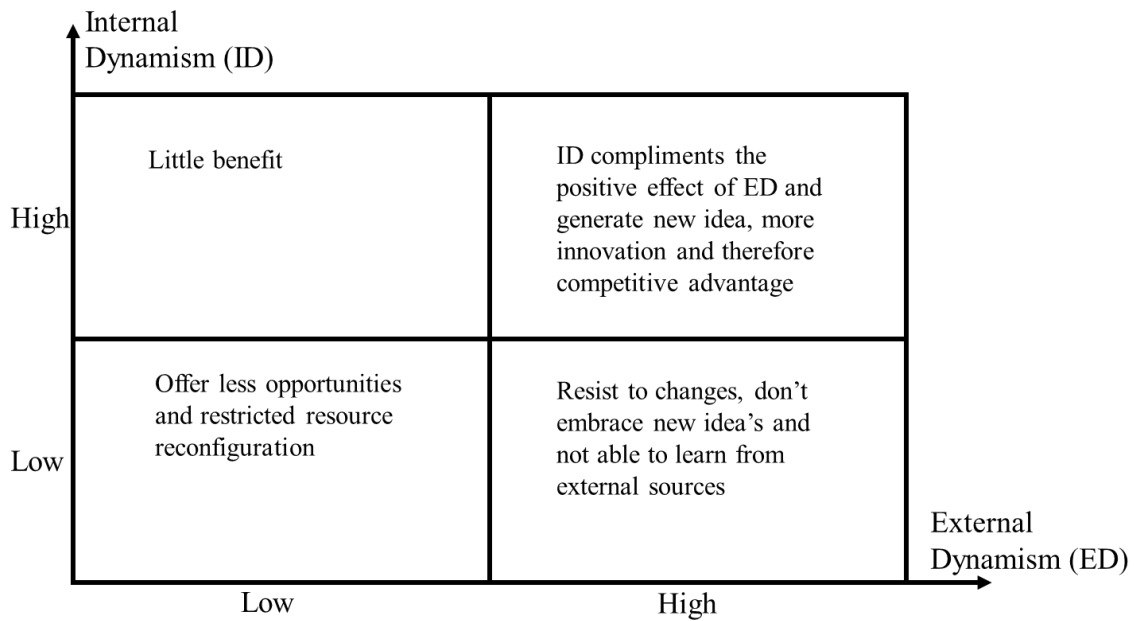


Figure 12: Dynamism quadrant (adapted from Chen, Coviello and Ranaweera, 2021)

2.6.8 Conclusion

The six theories – the transaction cost economics, resource-based view, knowledge-based view, dynamic capabilities, absorptive capacity, and adaptive capability – are used to understand the relationship between collaborative partnerships with business clients and service provider growth by creating a competitive advantage.

Each of the six theories discussed in this chapter provides a different perspective for understanding the relationship between resources, capabilities, and TSPs growth. Service providers have been striving to identify new ways to build long-term relationships and collaborative partnerships with their business clients around common goals. However, despite the positive views on customer involvement and the purpose of businesses to satisfy customer needs, some scholars have highlighted that engagement with customers is a difficult process, which can add complexity.

There is still insufficient data to understand the relationship with business clients, and there is no general agreement or reliable evidence on the direct impact of collaborative partnerships with business clients on TSPs' sustained growth.

TCE can help TSPs to decide if they are going to create and own resources or to buy them from other providers and vendors. Exploring the TCE impact on resources will shape TSP strategy and clarify the position of resources. In addition, the use of RBV is to explore the importance of resources and if they are a source of competitive advantages. RBV is criticised because of the static nature and the lack of clients focus. Knowledge-based view (KBV) is considered a

development of the resource-based view, other studies consider knowledge as resources, specifically the new knowledge. KBV is explored and used to understand how TSPs can use it, manage it (knowledge management process) and link it to dynamic capabilities (knowledge based dynamic capability). In addition, dynamic capability is discussed to understand if and how TSPs can develop new capabilities, reconfigure their internal resources, and create competitive advantages. Furthermore, absorptive capacity and adaptive capabilities, considered as the main components of dynamic capabilities, can help to explore the extent to which TSP's can absorb new knowledge and adapt in order to create opportunities and achieve growth. Despite some similarities, the focus of dynamic capabilities, absorptive capacity, and adaptive capacity is not the same and this is why they are used as three separate theories. This focus will help to explore the research problem in detail and improve the contribution of the proposed theories to answer the research question.

The differences between the six theories and concepts are not only regarding the focus area and conditions but also the approach type. As shown in Figure 13, RBV, TCE, and KBV follow an inside-out approach and focuses on internal strengths, capabilities, processes, and systems. Additionally, an outside-in approach exists, where organisations are continuously reviewing their progress and trying to remove all weaknesses. Dynamic capability, absorptive capacity and adaptive capability follow an outside-in approach where the strategy is based on what is gathered from the external business environment and the marketplace. The outside-in approach focuses on customer-first mindset, thinking about customer demand and how to create opportunities first rather than TSPs own internal processes.

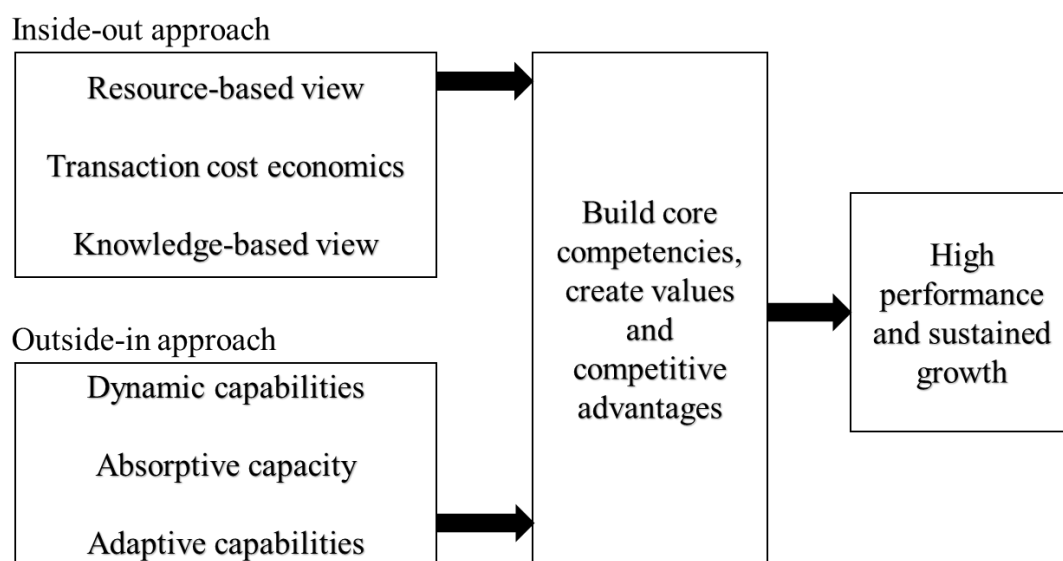


Figure 13: Resources and dynamic theories and approaches

Most companies are likely to use both inside-out and outside-in thinking to some degree, and the most successful companies likely apply both, combining internal practicalities and external developments. However, these approaches do not seem to give much attention to collaborative partnership practices. They focus on the skills and competencies to create competitive advantages rather than on clients (customer-centric), how to collaborate with them and meet their business requirements.

Previous sections showed that business decisions about which capabilities to create and which to buy are influenced by transaction cost considerations, and the way companies manage their knowledge shows the interactions between transaction cost and capability dimensions (Argyres and Zenger, 2010). In addition, knowledge-based view is a development of the resource-based view as a source of competitive advantage (Kogut and Zander, 1992). The focus is on the dynamics of industry, the mechanisms that change the business, and the forces that shape competitive environment (Jacobides, and Winter, 2005).

The relation between transaction cost, resources, knowledge, capabilities, and the market external factors is defining the competitive environment in which TSPs are operating. This is what the next section will present in the conceptual framework.

2.7 Conceptual framework

The purpose of this section is to present the key constructs of this study and the relationship between them as in Figure 14. This section presents the research's position on the problem and guides the study so that the relationships between the different constructs can be investigated. The literature review has established the importance of engagement and partnerships with clients for TSPs and has provided the rationale for performing this research, where key theories are used to provide a guiding framework.

No empirical study can be successful without a theory to guide the choice of the research question (King, Keohane and Verba, 1994), in this case about collaborative partnerships with business clients and whether they can contribute to service providers' sustained growth.

Maxwell (2013) uses the terms conceptual framework and theoretical framework interchangeably, but Ravitch and Riggan (2017) argue that the conceptual framework serves as the superstructure for the study and that the theoretical frameworks each fit within that superstructure. This research is underpinned by concepts, so the term conceptual framework is used instead of theoretical framework.

To present the non-linear complex behaviour between all variables a feedback systems principle of system dynamics is used (Abdel-Hamid and Madnick, 1989). In this approach the feedback

is based on actions (or input), and the impact (result). Variables, both tangible and intangible, are not independent but they are related to each other in a complex and dynamic way.

The Transaction Cost Economics, RBV, Knowledge based view, DC, adaptive capability, absorptive capability, and collaborative partnership are defined under Section 2.6. The theories interact together and contribute to the creation of core competencies which will impact the competitive advantages and help to achieve sustained growth. The core competencies influence the creation of a competitive advantage and help achieve profitable growth through a consistent increase in sales in line with a firm's financial targets. When growth is not achieved, TSPs will focus on their core competencies and other external factors (to some extent). This is illustrated by the unidirectional arrow from sustained growth to core competencies (Feedback principles as described by Abdel-Hamid and Madnick, 1989). TSPs may influence some external factors conditions, through consultation and engagement with regulatory and other legal associations, but this is limited in scope and time consuming. Hence, Figure 14 focuses on the direct relationships between the presented theories, and their direct contribution that can influence the end results. The conceptual framework presents TCE, resources, knowledge, capabilities, and collaborative partnerships with business clients as an input into the whole process together with other external influences. It also indicates that sustained competitive advantage is an expected result that is measured using profitable growth (financial metrics).

The focus of this study is on collaborative partnerships, customer centricity approach, between TSPs and the business clients. This collaboration includes all agreed objectives, defined goals, leadership commitment, and how joint activities should be funded. Collaborative partnerships with business clients are presented in Section 2.4 and defined as a way to share authority to finally achieve a common goal (Barfield, 2016; Himmelman 2001, p.278). TSPs' collaborative partnerships with business clients are considered core competencies when they are developed to add value to the business and create competitive advantages, they can achieve growth. Therefore, collaborative partnerships in Figure 14, are presented by a bidirectional arrow to core competencies (feedback process) and further via unidirectional arrow to competitive advantages. Existing and new core competencies can influence the way TSPs collaborate with business clients, and the collaboration can define the core competencies required for the partnership. The double-headed arrows indicate that both variables can influence each other. In addition, the competitive advantages are not only created by TSPs' resources, capabilities, and the way TSPs collaborate with their business clients but also by external market factors. The influences outside TSP organisations are often related to:

- Regulatory changes (changes of the telecommunications legal rules),

- Economic conditions (economy growth, recessions, or global financial crisis),
- Political changes (boycotting of services and products from specific countries or region or vendors due to security issues),
- Large temporary changes in demand and disruptive events, such as during COVID-19, where TSPs faced an increase in client demand, and
- New competitive threats when new providers enter the market or when global IT and content providers start offering telecom services (OTTs and GCNs).

All these external factors influence the competition in the market, but TSPs can act at the right time using their capabilities to minimise the risks, transform the changes into opportunities, and achieve a unique competitive advantage that can help achieve sustained growth. This is presented by a unidirectional link to competitive advantages and further to sustained growth.

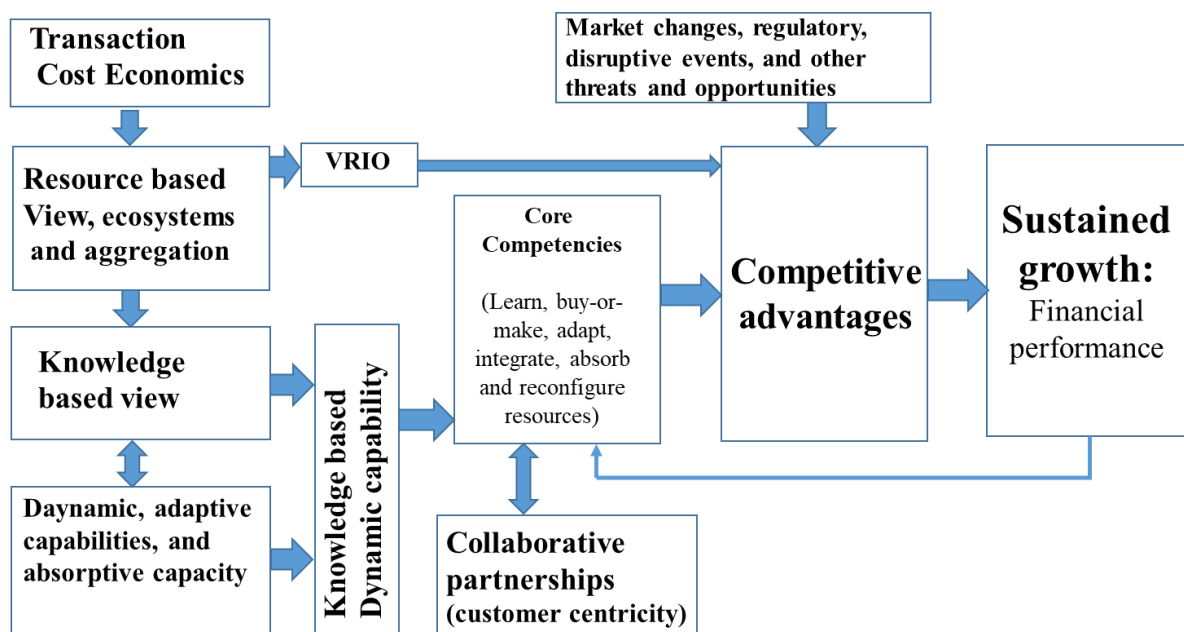


Figure 14: Conceptual framework

In addition to the core competencies and external market factors, resources, knowledge, and dynamic capabilities are used to establish the research dimensions and the relationships among them in order to anticipate the outcome (sustained growth). As shown in Figure 14, transaction cost economics have impact on resources, on the make, buy, or partner decisions. Both, internal resources, external ecosystems resources, and third part resource required for the aggregation services are influenced by TCE. All resources can have a positive impact on competitive advantages if they are valuable, rare, inimitable and organised (VRIO model) and therefore can contribute to sustained growth (Barney, 1991). Further, the conceptual framework is showing that knowledge-based view (KBV) is a development of the resource-based view as a source of

competitive advantage (Kogut and Zander, 1992) and when combined with dynamic capabilities (bidirectional arrow) they create the knowledge -based dynamic capability.

KBDC is improving core competencies and helping to create the competitive advantages and achieve growth.

The presented theories help to explore the opportunities that TSPs can create when focusing on TCE and resources, knowledge, collaborative partnerships, or dynamic and adaptive capabilities. Also, a combination of these concepts may help to review TSP strategies, create strong core competencies, and competitive advantage to achieve sustained growth.

However, the literature review shows that resources, knowledge, dynamic capabilities, and new skills are important but not enough to create competitive advantages and growth when neglecting clients' roles. This is the focus of this research which will be explored further in defining the gap, and the methodological choices to answer the research question.

2.8 The research gap and the significance of the research

The literature review on performance and strategic management, especially regarding competitive strategies, shows several types of strategies that could lead to competitive advantages to achieve sustained growth. However, existing literature and relevant theories pay insufficient attention to the role those collaborative partnerships with business clients can play in the provider's strategy to achieve sustained growth.

The research question has not yet been satisfactorily answered, and this is what this research wants to address. The answer would contribute to the overall growth of the telecommunications industry and specifically to a better understanding of how service providers and business clients can achieve sustained success through collaborative partnerships.

The current literature on collaborative partnerships lacks an explanation of why TSPs are declining and how sustained growth can be achieved through collaborative partnerships between TSPs and their business clients.

There are a considerable number of management models, analytical tools, and strategies that were applied in the telecommunications industry and helped service providers survive, save costs, and achieve positive results. However, the traditional telecommunications business is declining; services and products have become commodities, and the providers are not successful in growing the business. The telecommunications industry is continuously pushed to adapt to the requirements of the new age in a changing environment and to prepare for a strategy and a fundamentally different way of doing business. Collaboration is helping partners achieve what would be difficult or even impossible for them to do on their own (Huxham,

1996). This is why TSPs are collaborating more often without a consistent and clear internal process on how to collaborate and how to manage collaboration performance. TSPs are collaborating to create competitive advantages and achieve growth with their clients, particularly over the long term.

The service providers mainly focus on how to be competitive and increase CSAT. Despite various strategies that were applied to stay on the growth curve, service providers have failed to find the right way to collaborate with clients and achieve sustained growth.

Telecommunication is one of the most dynamic and rapidly changing industries, which means that researchers can make original contributions to knowledge and practice in this area. How to digitalise data, secure it, and make it available via the cloud in the telecommunications business is becoming more critical for the availability of client's services. Telecommunication and ICT services enable effective communication and provide data networks and global internet connectivity. All companies use ICT and rely heavily on the availability of their own systems and the security needed for business continuity.

The findings in this study will contribute to creating a growing and securer telecommunication industry and help to understand how to apply the collaborative approach broadly. Telecommunication and ICT play a profound role in any business' sustained growth.

The significance of the study is in the contribution that this research will make to the existing literature on how collaborative partnerships impact TSPs performance and sustained growth. The importance of the results will help TSPs to review their strategies, invest more in collaborations with clients, and reconfigure their resources and knowledge basic dynamic capabilities. This study will help TSPs to decide on their competition's strategies, especially against the new cloud and content-based providers. TSPs, clients and the whole industry and eco systems will benefit from the research findings. The findings of the study are important for all current stakeholders in the telecommunications business but also to justify further exploration of the collaboration and alliances practices.

2.9 The research question

The purpose of this research is to investigate the impact of collaborative partnerships with business clients on TSPs' sustained growth and extend knowledge and understanding of collaborative partnerships with clients. To achieve this, the following research question is posed: *How do collaborative partnerships with business clients enable TSPs to ensure sustained growth?*

2.10 Conclusion

This chapter started with a review of the literature related to TSPs' engagement with business clients, the creation of competitive advantages, and growth achievement in a turbulent and fast-moving market. Next, a detailed section was developed to describe the relevant collaborative partnership definition, presenting the different inter-relationships between TSPs and business clients. Furthermore, this section presented the collaborative advantages, the types of partnerships and alliances, and how they are linked to uncertainty and trust, including a discussion of the various levels of relationships, from networking to collaboration.

Additionally, the TSPs' competition was reviewed, especially regarding new providers, such as the OTTs. The TSPs' competition was discussed to understand whom TSPs are competing against and what different strategies they can implement. The section provided a comprehensive view of the different activities conducted when partnering in a collaborative way.

Moreover, Section 2.6 reviewed important theories and concepts related to the research background. This section explained the Transaction Cost Economics, Resource based and knowledge-based view, the need for a firm to have dynamic capabilities, the extent to which firms can absorb external market changes, and a firm's adaptive capability to align with the business environment. These theories can help TSPs to improve their performance through long term collaborative partnerships with business clients and by showing where TSPs can adapt and be dynamic to create competitive advantages. Customer centricity, collaborative partnerships, ecosystems, make or buy, resources and knowledge, dynamic capabilities, and the ability to adapt are all strategies that are still applied by TSPs and their competitors.

In addition to this, a conceptual framework was developed to present the important constructs of this research and the relationships between the different elements. An overview of the literature and the research framework form the basis for developing the research questions. The literature review and the research question underpinned the objectives of this study, which were to critically evaluate the existing theories and empirical studies related to collaborative partnerships and explore why and how TSPs collaborate. Furthermore, the literature review explored the benefits and challenges of collaborative partnerships in partnering towards achieving sustained growth, this was done to address the research gap, as the literature review showed that the research question was not satisfactorily answered.

From a broad perspective, the existing literature and relevant theories pay insufficient attention to the role those collaborative partnerships with business clients can play in the provider's strategy to achieve sustained growth. Furthermore, the literature on collaborative partnerships

lacks an explanation of why TSPs are declining and how sustained growth can be achieved through collaborative partnerships between TSPs and their business clients.

Clearly, the next step is a thorough-going investigation and description of the research methodology and the ontology and epistemology of the current study, with the research philosophy and a transparent presentation of the research method, followed by the data collection methods and their analysis is called for, and follows in Chapter 3. Particular reference is made to Easterby-Smith, Thorpe and Jackson's work (2015) work, coupled with a view of the decline of TSPs and the development of collaboration with business clients is critically important, and follows.

3 Methodology

3.1 Introduction

Chapter 2 contained a literature review and an overview of precepts relating to aspects of partnerships, the six basic theories and research connected with TSP partnerships and building the future – how TSPs face it and their considerations.

Now, in Chapter 3, the argumentation moves from theoretical concepts and aspects of research to the decisive step of selecting the concrete *modus operandi* for this work. There follows a description of the methodology used to conduct this research, with an explanation of how the data was collected and analysed. First the research philosophy is presented, together with the ontological and epistemological perspectives based on the research question. Then, the research method, design, and unit of analysis are explained.

After this, the interviews and the focus groups are presented, with the data collection and the coding and analysis process.

Finally, this chapter covers legal, ethical, and environmental considerations as well as risk mitigation.

3.2 Research philosophy

In this section, the research is philosophically positioned by outlining the researcher's views about the nature of reality (ontology) and the nature of knowledge (epistemology). These areas are covered in 3.2.1 and 3.2.2, as follows:

3.2.1 Ontological perspectives

Ontology refers to the nature of reality and existence. There are four ontological positions discussing the relationships between realism, internal realism, relativism, and nominalism (Easterby-Smith, Thorpe and Jackson, 2015). Other researchers such as Snape and Spencer (2003) define three ontological positions, realism, idealism, and materialism and for all three positions there is external reality, but the difference is in the way in which reality can be understood or what is considered to be real. Other studies have applied different approaches of knowing, perceiving, and interpreting the nature of reality, if it exists and the extent to which facts can be accessed. This research will further discuss the four detailed positions as defined by Easterby-Smith, Thorpe and Jackson, (2015).

For a realism position there is one single truth, and the facts exist, and they are known, as for internal realism, the truth exists but is not clear and the facts are precise but cannot be accessed.

The relativist position focuses more on capabilities and how to adapt in real time, and because there are many truths, the performance indicators like revenue, profit, value of the company are all important and relevant metrics for the overall performance. In addition, for a nominalist approach there is no truth, and the facts are human creations. In fact, it is the opposite of relativism, and in business the focus is more on the way performance figures are constructed. Because the purpose of the study is to explore, explain, and understand how collaborative partnerships with business clients may contribute to growth, relativism is proposed as a philosophical assumption about the nature of reality. Relativism posits that there are multiple realities with multiple meanings and that facts depend on the participant's perspective. In the relativist position, the focus is on how service providers develop their strategies and adapt their strategic choices in real-time competition.

Following the relativist approach, business clients and TSPs decide what is true and relative for them. They define how they wish to collaborate and build the partnership and what the key growth indicators are for the business. What works for a specific collaboration between two specific partners may not work for other partners. Different TSPs and business clients are likely to have different views on each collaborative partnership they develop.

Relativism, the ontological position as the research view of reality and to what extent it exists, means that participants views and experience on collaborative partnerships is key to evaluate TSPs performance and the decide on the sustained growth metrics. This ontological position of realism, taken in this paper, considers participant views as multiple truths and different partnerships with different business clients can have different goals to ensure TSPs will achieve long term growth.

3.2.2 Epistemological perspectives

Epistemology is the study of the nature of knowledge. Easterby-Smith, Thorpe and Jackson, (2015) define four different epistemologies: Strong positivism, positivism, constructionism, and strong constructionism.

In the strong positivism approach the researcher should discover the rules and theories that explain the reality which exists independently of the observer. For positivism, the social world exists externally, and the properties can be measured by objective methods, the observer must be independent, and the outcome is theory testing. Constructivism is often used interchangeably with interpretivism (Merriam and Tisdell, 2015). Unlike other epistemological positions, interpretive research assumes that reality is socially constructed. It is important for this current research to understand the realities constructed by all participants to be able to generalise the

findings from multiple data sources. The outcome for constructionism is theory generation and for the research design it means cases and surveys using questions as starting points. By exploring these different realities, the research gains in-depth knowledge and understanding of how collaborative partnerships work and if they help companies achieve sustained growth.

In addition, strong constructionism assumes there is no pre-existing reality, and the researcher should understand how structures are invented.

Based on the definition of different epistemologies and their methodological implications, this research proposes constructivism / interpretivism as a philosophical assumption about the nature of knowledge. It should be emphasised that the objective of interpretivist research is to understand and interpret the meanings in human behaviour and not to generalise and predict (Neuman, 2000). For this research, it is important to understand the meanings, experiences, and context of different collaborative partnerships. The four different epistemologies have certain strengths and weaknesses. For constructionism and interpretivism, the access can be difficult and can not accommodate cultural differences, but it accepts values of multiple data and enable generalisation beyond the unit of analysis or samples. This epistemological position choice means a qualitative method used to analyse the collected data related to human actions beliefs, experience, and values and this will be explained in the next section for the research approach. The philosophical positions discussed above and the link to the research methodology are summarised in Figure 15 using the four-ring model developed by Easterby-Smith, Thorpe and Jackson, (2015).

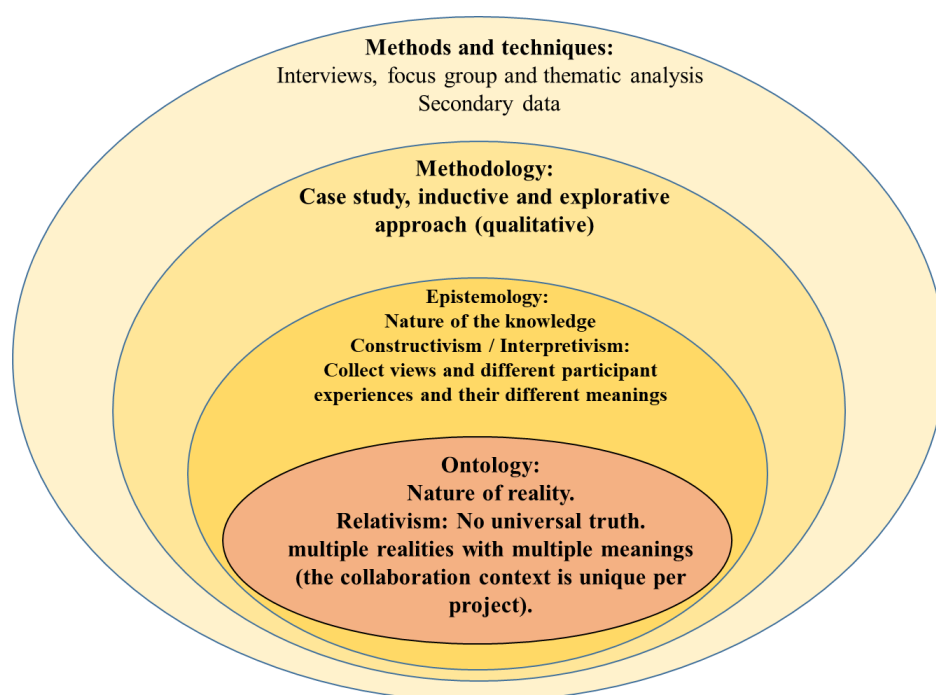


Figure 15: The four-ring model (adapted from Easterby-Smith, Thorpe and Jackson, 2015)

3.3 Research approach

The philosophical assumptions about the nature of reality (relativism) and the nature of knowledge (constructivism / interpretivism) led to the use of qualitative methods in this study. This conclusion was shared in some studies that argue that the adoption of relativist ontology and interpretivist-constructivist epistemology is within the area of qualitative research (Kabaji and Mukanzi, 2018). The qualitative method collects non-numeric data using an explorative approach and provides a better understanding of the context and meaning of the data. The collected views and thoughts of participants is not measured in a statistical way and TSPs are not reporting separate results related to collaborative partnerships, this is why the quantitative approach is not able to gather the right data to answer the research question. The qualitative approach is rich with experiences, complex practices, contextual and process-oriented data those quantitative methods are not able to offer, especially in a dynamic collaborative partnership behaviours and competitive strategies within TSPs. However, the lack of numerical data on different forms of interactions with TSPs and the challenges to quantify the collaborative activities may affect the outcomes and influence TSPs choice to collaborate more. Other critiques about qualitative positions are not only about the type of data or data bias but also the number of participants (sample size).

Nevertheless, the in-depth explorative data in the context of complex collaborative partnerships is unique and valuable field data to answer the research question.

Furthermore, the qualitative method uncovered information and investigated the patterns that had emerged from the collected data. This inductive reasoning helped provide a deep understanding of how collaborative partnerships might contribute to service providers' sustained growth.

This approach started with observations to explain the research problem (Bryman, 2001). The inductive approach is the process in which the collected data and the developed theory are a result of the data analysis (Saunders, Lewis and Thornhill, 2003, p. 120).

This method ensured the validity of the research, where the results from the selected participants reflected reality and represented true findings among similar participants from other TSPs. Under the same conditions, another study may give the same or equivalent results. However, the ICT and telecommunications markets are very dynamic, and there exist certain difficulties in discussing the same circumstances that guarantee the reliability of the research to achieve the same findings.

The next stage was to establish the research design – a flexible term, needing definition for the purposes of this study (as in 3.4).

3.4 Proposed research design and strategy

The term research design may have different meanings in different publications. In some research, it reflects the whole research process, and in other literature, it refers only to the data collection and data analysis methods. For the purposes of this paper, research design is how to plan a study, collect and analyse the data, and select the case and the participants (Flick, 2014). The design constitutes a broad plan for collecting and analysing the evidence to answer the research question (Ragin, 1994). For certain authors, research design is not related to any particular method of collecting data or any particular type of information. Any research design can, in principle, use any type of data collection method and can use either quantitative or qualitative data (De Vaus, 2001).

However, the explorative form of the research question in this study, the extent of control over the set of events, which is difficult to manage, and the multiple sources of data used are more likely to favour the case study as a research strategy. The case study is defined by Yin (2018) as an empirical method that investigates a contemporary phenomenon (the case) in depth and within its real-world context, especially when the boundaries between the phenomenon and context are unclear.

Collaboration with business clients in the traditional telecommunication industry to achieve competitive advantages and improve the low growth rates is a real phenomenon and not an abstraction. This current study involves one explorative case study, which studies the link between collaborative partnership and sustained growth. Different participants and multiple telecommunication providers are used as units of analysis. It is an embedded single-case design (Yin, 2018) with one context, one case, and multiple units of analysis. The participants are not a sample, like in the survey design where statistical generalisation is used.

Other types of designs for case studies with multiple cases and contexts, like multiple-case designs, require significant resources and time to collect and analyse data from different TSPs. They are not able to address the defined research question in the selected context of TSPs when collaborating with business clients. TSPs are not defined as separate cases and a subject of their own field work. This study is not considering each TSP as a single case study, and the findings are not a comparative summary of all individual case studies. Additionally, other researchers (Eckstein, 1975) consider multiple-case design as a different methodology from the single case study as described by Yin (2018). The single case logic is different from the multiple-case

replication logic where results can be predicted and where the cases selection requires prior knowledge of the outcome (Yin, 2018).

However, Yin (2018) mentions some concerns about the use of case study research, such as the risk of not following a systemic procedure, the difficulty of generalising from a single case study, and the risk of collecting massive data. To address these concerns and the general criticism about single case choice, accurate TSPs choice was made, and the importance of the right data access was considered in the whole design and research methodology.

The selection of TSPs was based on these criteria:

- TSPs with a full set of services (e.g., network, voice, security, cloud, colocation service, and converged communications)
- Service providers with a special focus on collaborative partnerships, ICT eco-systems, and familiarity with customer centric programmes
- Service providers serving business clients through different channels (Wholesale, Enterprises, and indirect sales)

The criteria above excluded global content providers, sometimes called OTT providers, such as Amazon, Google, and Microsoft. The OTTs do not provide a complete set of telecommunications services, and they use the existing traditional telecommunication providers to offer some services (over the top). These providers are both TSPs competitors and TSP global business clients, and they are used in this study as examples from the field to show the performance and competition that TSPs are facing. Additionally, TSP competitors were mentioned in a few cases to show the best practices of collaborative partnerships and why business clients may choose to collaborate with them instead of TSPs. The findings are based on the primary data, from the interviews and the focus group sessions. The struggle for growth is observed in the traditional telecommunications industry segment and not in the OTT market, and the TSPs business decline is what this research aims to explore.

For the data collection part, interviews were selected to be the source of evidence because they provide personal views and meanings and in line with the research philosophy choices as presented and discussed in Section 3.2. However, interviews are frequently criticised for the possible impact of biases and what the interviewer wants to hear (listening selectively). The interviews with the selected TSP participants went deep into the topic to collect stories and thoughts to be able to explore the collaborative partnership's impact on growth. This approach is different from the survey strategy, where a large amount of data is collected from a considerable number of participants and is normally associated with the deductive, quantitative

approach and not the exploratory research type with an inductive approach (Saunders, Lewis and Thornhill, 2009).

The interview questions were designed to gather information about the opinions and thoughts of participants about TSPs' engagement and collaborative partnership with business clients. Good questions and the right interviewer skills and values for the single case are crucial to get the necessary participants' view. Skills are not only about asking good questions or to listen but the capability to adapt during the interview, based on the participants answers, is important to explore the TSPs practices and to understand the contribution of collaborative partnerships on TSPs overall performance. This is the responsive interviewing as a type of qualitative interviewing, built on trust, friendly tone, and the questions evolve based on the responses (Rubin and Rubin, 2012).

The questionnaire was designed to collect data that helps understand the phenomenon, achieve research objectives, and answer the research question. It does not constitute a comparative study between multiple cases to analyse the similarities and differences between the participants and does not replicate or expect the same results from all participants.

3.5 Data collection

The ontological and epistemological positions as in previous Section 3.2.1 and 3.2.2 means the data collected should be mainly words (Easterby-Smith, Thorpe and Jackson, 2015). In addition, the collection method is related to the research questions and the type of data needed to address these questions and achieve the research objectives. The most common technique for exploratory research is interviews with open-ended questions. Interviews are commonly used in case studies, they are the most important source of case study evidence, explain the 'how' questions (Yin, 2018). Direct interviews reflect the relativist approach for participants (ontological position) by exploring the views, opinions, attitudes, and meanings and how participants see collaborative partnerships contribution to TSPs sustained growth. This is why direct semi-structured interviews are the most relevant source of evidence for this case study.

The exploratory questions used in this study expand the understanding of the interviewed participants. These questions were answered directly in face-to-face, semi-structured interviews with the strategists, decision makers, and key individuals in business development. The interview questions had qualitative insights but no statistical significance. The interview guide can be found in Appendix 8, and the interview questions, as shown in Appendix 9, are structured around a few topics, starting with how to respond to competition, resources, relationships with

clients, and collaborative partnerships' contribution to growth. Additionally, prompts are used to cover different dimensions of responses.

As well as the face-to-face semi-structured interviews, two online focus group sessions were organised to discuss the findings from the individual interviews.

The accuracy of the data collection is essential to maintaining the integrity of the research. To ensure high-quality results, in-depth interviews were conducted. They were one-to-one direct conversations with key individuals, executives, and leaders with relevant experience and specific knowledge about the TSPs collaboration with business clients.

Different methods were used to reach the participants; for example, direct e-mails were used, and colleagues and ex-colleagues referred participants or key contacts within the selected list of TSPs. The personal data gathered included the office location, participant's background (such as technical, commercial activities), role in the organisation, and level of involvement in collaboration with customers. This data may help the researcher understand if there is a link between this data and results. The data was recorded, anonymised, and stored on a private, secure drive (private Microsoft OneDrive).

Anonymised and coded personal data and audio recordings will be saved during the data collection and analysis phases for 5 years after their completion under secured conditions. Access to the data and organisation of the interviews and focus group sessions were managed via the contacts available through the TSPs' charts, as published on their websites. Furthermore, the first invited participants helped find and reach the second participants based on their involvement in collaborative partnership activities. This was done via other online platforms and contact with different TSPs as part of the daily practice in the field of telecommunication. The collected data was managed using secure online applications, especially the recorded interviews and focus group sessions.

3.6 Selection of participants

The research focused on traditional TSPs with a complete set of telecom products and services. The interview participants were selected based on their position in the organisation, the focus on customer experience, and the different strategic programmes related to collaborative partnerships with business clients. The participants are from 14 telecommunications service providers based in different countries.

These service providers (AT&T, BT Group, Colt, Deutsche Telekom, KPN, NTT, Orange Business Services, Proximus, Sprint, Telecom Italia, Telefonica, Telia, Verizon, and Vodafone)

are the main players in the telecommunications market and provide business services in different markets. Service providers from China were excluded because the market is not open for collaborative partnership as in Europe and US as the data is not easy to access. At least two providers were contacted but they considered questions about collaborative experiences as confidential data and competitively sensitive information. Content and cloud global providers, system integrators, small local or regional providers, and resellers are also not considered as traditional TSPs with a set of telecommunication services.

To collect data, this research interviewed participants in senior or executive positions, including account managers, CEOs, business development managers, and customer service experts with experience in collaborative partnerships with business clients.

In this study, 28 executives and key decision makers were interviewed for a duration of 45 minutes each (two participants per selected provider).

The direct individual interviews were face-to-face, and conference calls were used for some interviews. The focus group sessions were online, and the participants in each session were from different TSPs (the same providers who participated in the interviews). This was done to ensure that each participant in the focus group discussed the group context and experience of other providers instead of having two participants from the same TSP provide the same or similar feedback.

3.7 Interview questions design (questionnaire)

Collecting interview data is one of the major methodological approaches in qualitative studies (Flick, 2014). The design of the interview questions took into account that the collected data should help answer the research question and achieve the research aim.

Regarding the design of the questionnaire, it is important to plan the order of the open questions and how to word them when conducting the semi-structured interviews. The question sequence was in line with the three research objectives mentioned in Chapter 1, Section 1.4. However, the order and the sequence of the questions is not fixed but can be adapted on the progress of the conversation. The goal is not to follow a defined order of open questions but to collect rich and detailed information.

The interview questions were designed to open the conversation and push the participants to think about the topics and explore them based on their different views. Furthermore, they were designed to be simple and concrete while covering the main topics, such as resources, engagement with business clients, collaborative partnerships, and the link to overall growth and TSPs' performance. These topics are based on the conceptual framework (Section 2.7) and the

interview guide (Appendix 8), and they are showing the link between the interview questions and the conceptual framework. The role of resources and knowledge-based view, capabilities, collaborative practices, and development of eco-systems in creating competitive advantages is translated in the interview questions. The next steps of the conceptual framework are also covered in the interview design by asking more questions about the sustained growth that core competencies or external factors may create.

The interviewer began by asking the participants to introduce themselves. They were then asked to discuss current business conditions, such as competition, churn, declining revenue, and customer experience programmes. In the collaborative partnership topic, the participants were asked to explore the way they develop collaborative practices and how they monitor the performance and results of the collaborative partnerships. Some of the participants' answers may have raised more questions. In these cases, they were asked to clarify and explain their view and be more concrete. The questionnaire design was made to be flexible so that it could be adapted during the interview, based on the provided responses. The iterative process, to re-evaluate the core competencies if required, is reflected in the conceptual framework diagram (Figure 14, above).

In some cases, follow-up questions were needed to foster a deep discussion related to specific interview topics.

At the end of the section, participants were asked to add any information or perspective that was not mentioned during the interview. This was to ensure they are not only guided by the pre-defined questions but that they are also free to add their views, opinions, and any valuable information from their own experience as practitioners when collaborating with business clients.

The questions were used for some pilot interviews; this was not done to collect data but to check and review the design based on participant responses. The pilot shows that more accuracy and clarification were needed in wording, terminology, and definitions. Some open sub-questions were added for each topic, and some were specific to each service provider, depending on the collaborative partnership activities they have in place, or the customer experience programmes they have developed.

The questionnaire design steps are summarised in Figure 16:



Figure 16: Interview questions design

3.8 Individual interviews and the pilot experience

Before the start of the primary data collection, four pilot interviews were conducted to determine the feasibility of the research methodology, the methods used to select the study participants, the unit of analysis, and the data collection methods. All four participants were from TSPs included in this study. Additionally, the pilot interviews were used to assess the research design and run a test analysis of the pilot data to see if the coding method was appropriate. This was done to support the refinement of data collection and to help identify any issues that may negatively affect the research and quality of the data.

Some study participants gave feedback about important themes and asked questions about the research scope (e.g., collaboration and if it includes vendors and all types of clients and partners). The pilot interviews stage gave the researcher an estimation of the time and resources needed to complete the interviews. Furthermore, it allowed the researcher to practise how to conduct the face-to-face and online interviews and record and transcribe the collected data.

Pilot data is a crucial part of the research design, and it was used to examine the feasibility of a research approach that is intended to be used in a larger-scale study (Kim, 2010; van Teijlingen and Hundley, 2001).

It is important to modify the questions or other procedures and methods that can help obtain appropriate responses or rich data (Gudmundsdottir and Brock-Utne, 2010; Kim, 2010).

However, pilot semi-structured interviews also have their limitations, particularly the small size and limited number of participants that were interviewed. A larger number of participants can contribute to more modifications of the questions and possibly the whole design and methodology. The number of pilot participants selected for this study was high enough to ensure the interview questions were appropriate to the collection of the right data

The data from the pilot interviews is not included in the main results, and the pilot participants are not counted in the main study participant list. After the pilot interviews, the wording of

some questions was changed, the sequence of some other questions was modified, and some new definitions were used in a more accurate way.

The participants were screened based on the selection criteria as presented in Section 3.6 to ensure they engage in collaborative partnership activities in their companies and could give their views, share their experience, and best practices when collaborating with business clients. Twenty-eight interviews and two focus group sessions were conducted. The list of participants is summarised in Table 9.

TSP Code	Participants Code	Participants Locations	Participants Job Position	Interview Duration (minutes)	Interview Date	Size of Audio File	Pages of Transcribed File (Font type: Times New Roman, 12pt, single spaced)
TSP 1	Participant 1	UK	CEO: Chief Executive Officer	22	17 October 2019	20.2 MB	14
	Participant 2	UK	Director of Global Strategic Sales	42	27 November 2019	39.1 MB	13
TSP 2	Participant 3	Belgium	Director of Corporate Sales and Partnership at Orange	40	30 October 2019	36.9 MB	15
	Participant 4	Belgium	Senior VP Europe	31	13 February 2020	28.3 MB	9
TSP 3	Participant 5	UK	Business Development Director	36	26 November 2019	33.7 MB	14
	Participant 6	The Netherlands	Senior Enterprise Architect	36	20 April 2020	33.1 MB	11

TSP 4	Participant 7	The Netherlands	Account Manager – Wholesale	37	26 November 2019	34.5 MB	19
	Participant 8	The Netherlands	VP Sales Wholesale & Manager Roaming	40	26 November 2019	36.5 MB	15
TSP 5	Participant 9	Italy	Sales and Business Development Manager	41	6 December 2019	37.4 MB	13
	Participant 10	Italy	Data and Transport Provisioning Manager	30	17 February 2020	27.9 MB	8
TSP 6	Participant 11	UK	Head of Voice	35	12 December 2019	32.1 MB	16
	Participant 12	US	Global ICT Solutions Sales specialised in 5G, SDWAN, Networking, SIP, UCaaS, Security and Cloud	45	2 April 2020	41.6 MB	12
TSP 7	Participant 13	Belgium	Account Manager wholesale partnerships	47	23 December 2019	28.3 MB	16
	Participant 14	Belgium	Head of Customer Experience	38	15 January 2020	34.7 MB	12

TSP 8	Participant 15	US	Technical Sales	36	21 January 2020	32.8 MB	16
	Participant 16	US	Experienced Telecommunication Industry Executive	26	28 February 2020	24 MB	11
TSP 9	Participant 17	The Netherlands	Client Solutions Executive	36	28 January 2020	32.6 MB	13
	Participant 18	The Netherlands	Managing Partner Benelux	35	7 April 2020	32 MB	13
TSP 10	Participant 19	Germany	International Product Solutions Manager at Sprint	31	6 February 2020	28.3 MB	12
	Participant 20	US	Wireline Account Director	40	11 February 2020	37 MB	14
TSP 11	Participant 21	Belgium	Bid and Commercial Manager at Deutsche Telekom Global Business Solutions	40	20 February 2020	36.9 MB	10
	Participant 22	Belgium	Strategic Account Manager	28	18 March 2020	25.5 MB	13

TSP 12	Participant 23	Spain	Fixed Voice and Added Value Services Manager	35	11 March 2020	31.8 MB	11
	Participant 24	Spain	Senior Unified Communications & Collaboration Consultant	29	30 March 2020	26.9 MB	10
TSP 13	Participant 25	The Netherlands	Head of One-Voice	52	27 March 2020	47.6 MB	12
	Participant 26	Spain	Service Client Relationship/Account Management – Retail Banking	37	17 April 2020	36.5 MB	10
TSP 14	Participant 27	The Netherlands	Manager Product Management – Carrier and Managing	36	25 February 2020	32.9 MB	15
	Participant 28	Sweden	VP Strategy	41	13 March 2020	37.5 MB	11

Table 9: Interview details

3.9 Focus groups

The preliminary findings from the interviews were discussed in a focus group of participants who were interviewed before the discussion. The answers given in the interviews showed that some of the participants had different views and were implementing different strategies among themselves. However, the group discussions went beyond the semi-structured interviews and the individual experiences of all participants and focused on the collective group conversations to confirm the preliminary findings as they came from the individual interviews. The focus group discussed the participants' views on these results and explored the findings emerging from the individual interviews.

Generally, the data from different empirical studies show that focus groups and individual interviews are similarly able to generate unique items or a list of topics within a domain (Guest et al., 2017).

The focus group discussion in this research was used to uncover more of the participants' experiences and thoughts in a collective group context. It was expected that the dynamic interactions between the participants would provide insights beyond the key themes that emerged from the individual interviews. The dynamics of group discussions are more appropriate than a clear and well-ordered single interview situation (Flick, 2014). The themes presented in the group discussions are publicly known in the industry and to the participants and they are not too sensitive or specific for some TSPs and this is making the focus group a good source to exchange and explore new data. Focus groups are not a method to do different interviews at the same time and with the same number of participants. The aim of the focus groups in this study was to collect the data in a group context and create a situation of interaction that can develop a group view rather than an individual experience. The participants agreed and disagreed on some points, but they understood the differences between their experiences better. The focus group and the dynamic group discussion, which was guided by a set of key themes, helped produce new data and insights. This can only be developed in a group conversation, not in a separate and isolated single interview. Focus groups are generally used for topics and themes that should be addressed in a group and not in individual interviews (the focus group questions and themes are in Appendix 10).

However, managing focus group sessions is difficult compared to individual interviews. Some participants were more engaged and influenced the group context, while others tended to easily agree with the rest of the group or frequently referred to the themes from their individual experiences. It was a challenge to plan the sessions and to manage the differences in the group

to get a high level of interaction between the participants to ensure the group discussion would add more knowledge.

The participants were from the same list of individual semi-structured interviews. They joined two different online focus group discussions. To have different views and thoughts, the researcher avoided having two participants from the same TSP provider in the same focus group session. Taking into consideration the availability of the participants and even the time differences, some selection criteria were added. Guidelines, such as the knowledge of the participants, their collaborative partnership experience, and how they were open during the individual interviews by either sharing a considerable amount of data or just giving short answers, were taken into consideration. Some participants considered the details about some specific partnership projects confidential or sensitive data, especially during the focus group discussion.

The list of focus group participants is shown in Table 10:

Focus Group Session	Participant Code	Interviewees' Function and Location	Date	Duration (mins)	Audio File Size (MB)	Pages (transcribed file)	Hosted via
Sessions 1	P18/ TSP9 P2/ TSP1 P21/ TSP11 P3/ TSP2 P7/ TSP4 P14/ TSP7 P24 / TSP12	1. Managing Partner Benelux (Netherlands) 2. Director of Global Strategic Sales (UK) 3. Bid and Commercial Manager 4. Director Corporate Sales and Partnership at Orange 5. Account Manager (Netherlands) 6. Head of Customer Experience (Belgium) 7. Senior Unified Communications and Collaboration Consultant (Spain)	22 April 2022	61:29	56.2	38 Font type: Times New Roman, 12pt, single spaced.	Online using Microsoft Teams meeting
Sessions 2	P12/ TSP6 P9/ TSP5 P17/ TSP9 P4/ TSP2 P26/ TSP13 P8/ TSP4	1. Global ICT Solutions Sales specialised in 5G, SDWAN, Networking, SIP, UCaaS, Security and Cloud (US) 2. Sales and Business Development Manager 3. Client Solutions Executive 4. Senior VP Europe (Belgium) 5. Service Client Relationship/Account Management – Retail Banking (Spain) 6. VP Sales Wholesale and Manager Roaming (Netherlands)	6 May 2022	58.08	53.2	28 (introduction excluded) Font type: Times New Roman, 12pt, single spaced.	Online using Microsoft Teams meeting

Table 10: Focus groups details

The interviews generated specific data, including participants personal thoughts and views and the results of the collaborative activities. However, the focus group sessions were more about the context, and the view of the whole group reshaped the themes that emerged from the individual interviews. The key characteristics of all the data collection methods are summarised in Table 11:

	Individual interviews	Focus groups
Topics, views, and thoughts	Produce more specific details, views, and thoughts	Generate more topics that can only occur in a focus groups context
Specific in-depth data	Offer more depth understanding in personal ideas and feelings	Produce information that might not be gathered from an individual participant
Data creation	Generate more themes and topics	Generate a wider range of views and ideas
Comparison and willingness to share sensitive data	Participants can share more sensitive data, strategies or business results that cannot be shared with a group of competitors	Re-shape the themes to a group's sector or industry view (different participants critique and comment on each other's ideas)
Data access and challenges	Participants have more time to explore the research and interview questions	The focus group questions and challenges participants' views

Table 11: Key characteristics of individual interviews and focus groups

3.10 Coding and analysis process

Thematic analysis was used to interpret various aspects of the research topic where the data could be assessed in a meaningful way regarding the phenomenon (Boyatzis, 1998). This is a method for identifying, analysing, and reporting patterns and themes within data. Thematic analysis, also known as inductive thematic analysis, develops codes and themes from the data because it is essential to view the text in a theoretical or analytical way rather than approach it with a descriptive focus.

The collected data from the semi-structured interviews and the focus groups was transcribed and coded. The transcription was limited to the data that was relevant to addressing the research question (Flick, 2014). Coding involved arranging the data in a systematic, structured way as a preparatory step to minimise the data and prepare it for interpretation and the final analysis.

Specifically, the coding involved labelling and categorising data as the first and crucial step in the analysis process; it is an interpretative exercise (Easterby-Smith, Thorpe and Jackson, 2015). A code is often a word or short sentence that represents aspects or captures essential features of data (Saldana, 2009).

The focus group analysis was about the group interactions, how the conversations were organised, and how the participants influenced each other. Participants started by asking each other about their views and experiences and commenting on these, which created the group statements. The analysis part focused on the differences between the participants' views and whether they were due to the background of the group members or because some participants changed their roles and the way they understood collaborative partnerships. The analytical challenges of the focus group sessions are to keep the data with the context of the group interactions and not as single statements from individual participants.

Furthermore, Saldana (2009) added the coding in cycles, with the first cycle where the coded part of the data varies in size and magnitude, and the second and possibly third and fourth cycle coding processes further filter and focus to generate themes and concepts.

Coded data with similar factors and characteristics was grouped into categories. The relationship between the categories created the themes and the final theorisation of the findings. The theme is a level of patterned response or meaning with the data (Easterby-Smith, Thorpe and Jackson, 2015). The collected data was coded, categorised (grouped according to multiple codes) and grouped in high-level categories before theorising was done as a final step. The link from the theorisation back to the data collection phase indicates the iterative nature of the process. The analysis process as explained in Figure 17 was applied to the semi-structured interviews and then to the focus group.

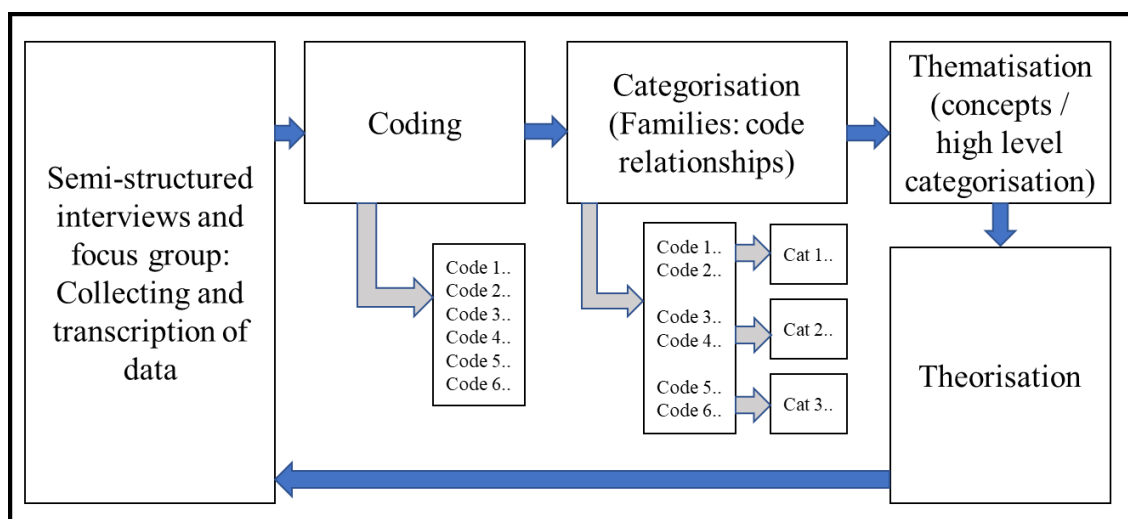


Figure 17: Data analysis process

Computer packages for data analysis (NVIVO 12 Plus version) were used to support the analysis of the data and improve the validity of the qualitative research. Twenty-eight audio files were collected and were first transcribed using the www.otter.ai application and later fine-tuned manually to be ready for analysis. The use of NVIVO was initiated with the import of all transcribed interview files and then the manual coding of each file. Automatic coding was also used to see if there are some themes or sub themes not captured by the manual process. For example, Appendix 12 on page 286 under ‘Codes (marked in red) show that the ‘Autocoded Themes’ folder and the relevant themes for this research, if not captured by the manual process, will be placed in the ‘Codes’.

The automatic process is faster, but the manual process is more accurate and focuses on the themes and sub-themes that are relevant for this research. Important thoughts, ideas and participants views on a specific topic are coded manually by highlighting the selected sentences and creating a code (title under which similar code may be created). For example, in Appendix 11 on page 285, this is shown by the participant view in blue “that’s what my group does...” which was coded manually and added to a sub-theme (code) ‘external resources like partnerships are necessary to compete. This sub-theme is part of another sub-theme ‘external resources’ and they are all grouped under ‘resources’ as a main theme.

This step is repeated for all files and every coded section can be saved under a new code or under an existing code as a child code (Appendix 11, using NVIVO version 14). Codes (not nodes) will be grouped further based on the relationships and common topics they have. See for example Appendix 12 on page 288 where internal resources (including sub-themes) and external resources (including sub-themes) are grouped together under one code ‘Resources’.

Under a specific theme (or sub-themes), a reference tab shows the file name, reference codes, and the coverage percentage that indicates how much of the source content is coded. In the old NVIVO versions the codes show Codes → Nodes and in version 14 it is: Coding → Coding. The container (codes) is the same as a Node (store codes related to the same topic).

The coding process by making the nodes, the different relationships between the nodes, and how to explore and visualise the data (maps, diagrams, and word tree) was applied to the interview and focus group session files.

The final coding process presents five themes as reported in Chapter 4 and as shown in Appendix 12 using NVIVO screenshots (codes are called nodes). More examples of codes, categories, and themes are presented in Section 4.2 (coding and analysis of primary data).

However, one of the most frequently mentioned criticisms of the coding approach to qualitative data analysis is the possibility of losing the context of what the participants discussed (Bryman

and Bell, 2015). For this reason, the coding process was done shortly after the data was transcribed, focusing on the important texts and concepts raised during the interviews and conveying the full meaning of what had been recorded.

Figure 18 summarises the major steps of the whole research methodology.

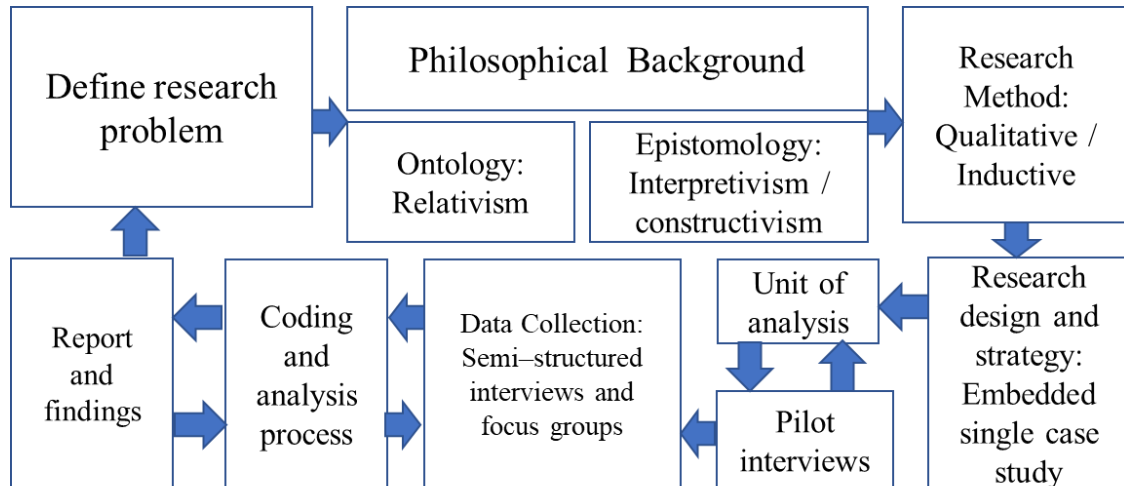


Figure 18: Methodology framework (exploratory research)

The overall case study protocol, guidelines to structure this research, has four sections (Yin, 2018), which were defined in previous sections:

- Overview of the case study (Section 3.4: proposed research design and strategy)
- Data collection procedure (Section 3.5: data collection)
- Protocol questions (Sections 3.7, 3.8, 3.9)
- Case study report and data format (the analysis described in this section and findings are presented in Chapter 4)

Conforming with regulations and legal requirements is an essential step, and was carried out as follows:

3.11 Legal considerations

The research was supervised by and completed at Hertfordshire University. It took the principles of general European and UK competition law into account. International copyright law, the General Data Protection Regulation, and the UK Protection Act 2018 are applicable. Similarly, ethical codes and conformity for all data gathered needed to be respected, as below:

3.12 Ethical considerations

Studying strategic management with a focus on collaboration with business clients in the telecommunications industry does not involve vulnerable human subjects, but nonetheless people's privacy, security, rights, and freedom were respected.

All gathered data was considered confidential; the names of the service providers and their clients were not publicly distributed. If applicable, a non-disclosure agreement that could be required by participants to receive access to more advanced and detailed data will be evaluated by the university's legal service support.

For this research, an ethical approval was provided by the university to collect the data using semi-structured interviews (approved under protocol number: cBUS/PGR/UH/03932, and this was extended to cover the focus group sessions [approved under protocol number acBUS/PGR/UH/03932(1)]).

A further area to be observed was the environmental one, as in 3.13 below.

3.13 Environmental considerations

This research was not involved in any of the discussions such as the use of telecommunication equipment and how these may affect the environment (e.g., health effects from radiofrequency electromagnetic fields) or global warming and how this can be solved (e.g., power usage and recycling of old equipment).

Environmental policies and rules were respected when conducting the research.

There are a number of risk areas to be taken into account. They have been listed in Section 3.14 below:

3.14 Risk mitigation

Risk includes all uncertainties in the research process. For this project, risks were managed by first identifying the potential risks, assessing their probability and severity, and planning responses to the most important ones that could happen during this research. Risk mitigation means reducing the risks by reducing the impact.

At the same time, there are negative consequences for not taking a risk. Risks must be anticipated and managed continuously.

Table 12 illustrates some risks and how they can be managed:

Risk	Action
Interview and questionnaire are not clear	Pilot in a small group of participants
Number of participants is not big enough to collect data with a good quality	Add more participants
Data loss	Make regular copies and keep using the online cloud storage with backup option enabled
Lack of the right participants	Find new participants or new TSPs
Lack of responses	Direct contact and reminders; consider involving new contacts
Participants do not have adequate skills	Collect data on participants role and experience
Cultural aspect, participants conservative approach, not open or not willing to be transparent and share inside information	Separate the data from clients' personal information, work with non-disclosure agreement, and respect confidentiality, if applicable

Table 12: Risk mitigation

3.15 Summary and conclusion

The complex process of interview question design (aiming for total clarity, unambiguity, and conciseness of recording), data collection, based on qualitative methodology, through interviews and focus groups, together with concomitant variants and risks, has been completed. There were many practical steps to be taken with selection of participants, scheduling and organising the questionnaires, interviews and focus groups.

In academic terms, accurate, representative recording of interviews and focus groups was a major consideration – simply, gathering the raw data. There were many concerns with the contextualisation of what the participants said.

Grouping the responses appropriately, coding, analysing and refining the data was another stage that needed immense care.

The emphasis now shifts to Chapter 4, where the methods of analysis used and the findings are analysed and then grouped into a summary, followed by a section dealing with the impact of internal and external resources.

4 Data analysis and Findings

4.1 Introduction

This chapter provides a natural sequel to the preceding Chapter as it furnishes an analysis of the collected data and presents the key research findings from the semi-structured interviews and focus group sessions. The findings are integrated incrementally from one method of data collection to another and grouped together in a summary of the key results – an accumulation of key findings, in fact.

The findings provide researchers and practitioners with an in-depth insight into the collaborative partnerships between the TSPs and their business clients and the impact on sustained growth. First, a coding and analysis section (4.2) explains the method of analysing the data collected from the interviews and focus groups, beginning with codes, and moving on to categories and themes.

Second, the findings from the semi-structured interviews, and the focus groups are presented. The findings include five themes that emerged from the interviews: The impact resources on TSPs' business, difficulties to adapt, engagement with business clients, trust and successful collaborative partnerships, and the link between collaboration and TSPs' sustained growth.

Then the partnership practices of the TSPs' competitors are presented together with their performance results.

Finally, all findings are summarised at the end of this chapter in one integrated Section (4.5) and are not divided based on the data collection method. The data progress as codes, then themes and categories and ultimately a final theme, ending.

4.2 Coding and analysis of primary data

This section presents how the coding and analysis processes were applied using the primary data. Table 13 shows how the themes were developed from codes to categories based on the collected data from the semi-structured interviews and describes the way TSPs manage declining revenue and churn rates, how they improve their business relationships, and how they experience the methods to develop and evaluate collaborative partnerships. Key words and phrases were collected as codes and further grouped together to create categories and a final theme. The selection was based on the contribution of the participants' views to the research question and whether their ideas can help achieve the research objectives.

TSPs attempt to control and minimise the decline and reduce the churn rate to keep their business clients on board as long as they can. It is easier for them to keep existing clients than to find new clients and win new opportunities.

The coding process as explained in the methodology chapter (Section 3.10) for qualitative data is applied here by showing how to move from coding to themes and finally to the findings. The structuring and organisation by thematic analysis into topics, ideas, and important patterns were used to define the final themes linked to the impact of collaborative partnerships and the TSPs' sustained growth, in a more "digestible" form.

Codes	Categories	Themes
TSPs need external resources to offer total package to their business clients	External resources are necessary to compete	Maintain and grow the business by investing in resources
External resources through partnerships and eco-systems are helpful for the competition		
External resources are a new way of thinking and doing business		
TSPs have enough internal resources but not the right skills and quality they need to address current market challenges	Current internal resources are sufficient to manage the business but not enough for future growth	
Collaborative partnership is not compensating any lack in TSPs’ resources		
Internal resources can be enough to maintain current business		
Internal resources are not enough to grow and address near-future business challenges		
We can compete using customised and solution-based offers	TSPs continue to find ways to compete successfully and grow	
TSPs achieve inorganic growth through M&A		
Marketing intelligence is essential for the competition and the re-position of service providers in different markets		
Strong value proposition makes TSPs innovative and their products attractive to customers, and it is		

crucial for the service provider’s success and survival		TSPs are forced to react to the market changes and to adapt in order to compete successfully
Product prioritisations help focus on results and increase the TSPs’ efficiency and effectiveness		
TSPs continuously try to develop and deploy new technologies		
TSPs should transform to be cloud providers and enablers of digitalisation	TSPs are applying different strategies in order to adapt	
Innovation is key and shows the extent to which TSPs can transform and create added value to the business		
Service providers change from a traditional vendors relationship to collaborate and partner with their clients		
TSPs continue to develop client-centric strategy to address clients’ complex requirements	A new approach is needed to understand clients’ requirements and develop the right strategy.	
New OTT entrances are competitors but also global business clients		
It is not always easy for TSPs to understand against whom they are competing		
Difficult crisis time can create new opportunities and chances for high demand, and TSP can gain market shares		
TSPs should focus on their own strengths and not on competition		
It is important to understand clients’ specific business environment and offer them customised support		
TSPs are still collecting customer feedback, managing periodic surveys, and measuring the NPS		

Customer advisory boards are still in place to listen to customers and develop products and services where there is a demand	Clients’ experience is important feedback for TSPs	Perceived clients’ experience and how TSPs engage with clients have impact on business growth.
There is a need for strategic customer experience management by analysing data and understanding customer challenges		
TSPs have special customer forums to develop and implement customer experience programmes		
Providers still make use of traditional sales approach when engaging with business clients	Changes in the relationship with business clients generate more business and help to achieve growth	
Long-term relationship is still a challenge when organisations are managed to deliver short-term results		
Relationship with clients’ needs authentic and empathic leaders		
Trust is the most important element in building a strong relationship with business clients	Relationships are built on mutual trust between providers and business clients	Trust is important and necessary to build a successful collaborative partnership.
In daily face-to-face contacts with clients, the organisation’s trust is crucial		
It is not only about trusted services but, more importantly, about trust in people		
TSPs and clients should believe in each other and build a trustful relationship		
Business clients want to collaborate with a provider that can be trusted (trusted brand)	Trusted TSP brands can count on client’s loyalty to increase the willingness to do more business with TSPs	
TSPs want to deliver the best service and the best solution that clients should have for their business		
Trust is still the main condition if client’s partner with service providers		
Collaboration, both internally and externally, is built around trust. Without trust, there can be no collaboration	No trust, means no collaboration	

Trust is a differentiator if organisations have a high level of confidence and understanding of their business	and no partnerships	
TSPs can make contracts, but businesses change, and it is difficult to cover all eventualities and changes in a contract		
Increase the understanding of product diversifications	Increased activities to minimise the declining business	Sustained growth through collaborative partnerships
Change the focus from cash to margin		
Churn is a problem and should stay under control		
Investments in relationships effect growth	Improved relationships and partnerships with business clients	
Better relationships with clients contribute to growth		
Focus on the most profitable segments and business channels		
Create new services and explore more merger and acquisition activities	Collaborative partnership is not easy to develop or evaluate	
Collaborative partnership is a long-term activity		
Hard to prove the collaborative partnership results		

Table 13: From codes to themes

This coding and analysis process are the same for the data collected from the focus group sessions. For both, the NVIVO application was used to structure the data and organise the key ideas and thoughts mentioned by the participants.

Appendices 11 and 12 are showing the analysed data using NVIVO. The appendices are showing the data source (interviews) with the main themes such as resources, adaptability, engagement with business clients. In Appendix 11 on page 283, the files (interviews) are shown in the red square (6 files were selected to explain the process), the auto coding is applied using 'resources' as a key word and the texts from the interviews are shown in the blue square. The texts are shown with the reference coded (file source) and coverage percentages. The coverage percentage indicates how much of the same content is coded.

In addition, the full list of codes and sub codes (themes and sub-themes) are shown in Appendix 12. On page 285 and 286. All codes (five themes) are in the red square, and the sub-themes are in the blue square. For the sub-themes, the files (source) and the number of references is shown. For example, theme number four ‘trust is key to collaborate’ is shown in 15 references (codes) coming from 12 different files (interviews).

Section 4.3 deals with the findings in greater detail, focussing on why TSPs form partnerships and collaborate in certain ways using particular resources. Five themes were identified, as can be seen in the following section.

4.3 Findings from the interviews

4.3.1 Introduction

The primary purpose of the interviews was to gather the views and opinions of relevant decision makers and strategy makers to increase understanding of why TSPs collaborate with business clients and to understand if the collaborative partnerships might help them achieve sustained growth. The participants, who are TSP key decision makers involved in collaborative partnerships with business clients, were asked to explain how their organisations address competition and constantly changing market conditions, what impact internal and external resources has on the business, how they engage with business clients, and if they see a relationship between collaborative partnerships with business clients and sustained revenue growth. The findings provide empirical insight into these themes:

After an iterative process of thematic analysis, five themes were identified:

- i. The impact of internal and external resources on the TSPs' business
- ii. Difficulty adapting and competing in a highly competitive market
- iii. Rethinking how to engage with business clients
- iv. Importance of trust in building successful collaborative partnerships
- v. Achieving sustained growth through collaborative partnerships

These themes are presented and discussed below together with some sub-themes. These were related to the resource position in the TSPs' growth strategy, the need to adapt and remain dynamic, and the contribution of collaborative partnerships to the creation of competitive advantages to achieve sustained growth. Each theme emerging from the interview data is first explored with the supporting quotes, and then the findings are summarised in a separate conclusion under each theme.

The quotes were selected to reflect the strong patterns in the data and support the theme topic by situating it in the context and have been used to provide arguments and make the ideas stronger using the study participants' voices. To ensure the quotes are more representative, they were selected from different participants and different TSPs.

4.3.2 Theme 1: Impact of internal and external resources on TSPs' business

4.3.2.1 Introduction

Essentially, this section deals with the use of resources and assets to form competitive advantages in partnerships and collaborations.

Resources are tangible, intangible, and personnel-based assets (Barney, 2001) and capability is the extent to which a TSP can use these assets to create a competitive advantage (Grant, 1991). The data analysis breaks down the resources into two types: Internal resources that are owned by the TSP and external resources that are gained through collaborative partnership activities.

- a) Internal resources: All tangible and intangible assets developed and owned by the TSP
- b) External resources: All external physical, human, or knowledge assets that are used by the TSP to serve business clients but not owned by the service provider. Outsourcing, knowledge sharing, collaborative partnerships, ecosystems, and the use of other licenced operators' assets are some examples of external resources.

TSP resource capabilities are the service provider's ability to manage all their internal and external resources in a way that can create a competitive advantage and achieve business growth.

This theme is a synthesis of two subthemes based on two dimensions: The position of internal resources and the impact of collaborative partnerships on the TSPs' capabilities.

Dependence merely on internal resources is not sufficient to achieve sustained growth in this modern, dynamic world of new technologies and differing demands from clients. Participants have made focussed comments in this regard.

4.3.2.2 Internal resources are not enough to compete and achieve growth

The importance of internal resources is discussed in several managerial frameworks and theories. The RBV presented in the literature review shows a debate about the static nature of these resources and whether they are enough to help the TSPs achieve and maintain growth.

The analysis of the participant interviews shows a debate about the sufficiency of internal resources to achieve growth. Participants tended to agree about the limited competitive advantages of using their internal resources. TSPs face the challenge of having the right technical and human resources in place, especially when serving global business clients seeking specific solutions and customised products and services. In a digital and knowledge-based economy, TSPs are recognising the importance of experts and the value they deliver to businesses. The data suggests that keeping the technical and non-technical resources up to date

is a challenge that TSPs face when trying to achieve sustained growth. Some TSPs have enough resources to maintain the business:

Internal resources are enough; we are well supported, and this should be enough for the time being, overall, we are doing well (Participant 10).

However, internal resources are not enough to grow and be competitive. For some TSPs, internal resources should be increased to gain more competitive advantages, and they should validate, prioritise, and select which customers they want to serve:

Today, we have enough resources, but we can always do better because things will continue to evolve. I continuously keep on training my team members, bringing in fresh talents; it needs to be a continuous loop because otherwise I will fall behind (Participant 3).

I think, like every provider, resources are limited. So, you need to look from a management perspective at the most promising customers because it is an investment (Participant 18).

Other TSPs are suffering from a lack of quality and the right skill sets, and they explained why they need more resources:

Quantity is enough, but quality is more limiting. We see a move towards automation, traditional machine automation, and developments in gaming. In networking, automation is a skill that is lacking (Participant 6).

The lack of specific skills pushed TSPs to place employees at the heart of their strategies, especially in human resources. Like many other companies, TSPs believe that investing in employee engagement is key to their success and the best way to drive high performance. The study participants stressed the importance of their intellectual resources and the need to reduce attrition and keep their talents.

The telecommunications industry is highly dynamic and rapidly evolving. Research on the mobile telecommunications industry indicates that it is highly dynamic, and strategic and technological changes have become the norm (Ghezzi, Cortimiglia and Frank, 2015).

Since the 2000s, the telecommunications market has undergone rapid deregulation and opened itself up to international competition. The deregulation process in the US started earlier, but the EU reached the liberalisation of voice telephony and infrastructure in 1998 (Mayer-Schonberger and Strasser, 1999). Because of this process, the telecommunications industry entered a period of worldwide change (Beard and Hartmann, 1999).

These changes accelerated innovation, digitalisation, and the adoption of new technology. However, the impact of this change on the TSPs' human resources is significant, and they are facing the challenge of attracting, maintaining, and developing the experts who will deal with

the market changes. Research by McKinsey (2021) shows that 88% of digital talent switching jobs will leave the telecommunications sector. Therefore, competition regarding talent is occurring for the whole technology, media, and telecom sectors.

The data suggests that TSPs are continuously seeking ways to assess employees' skills and implement learning, certification, and development programmes. This helps the TSPs innovate and cope with the technical changes in a disruptive business environment:

In some areas, we probably have a bit of, I would say, too many people, but with certain skills. You cannot just reduce the headcount to manage the cost (Participant 13).

We have more than enough, but we do not have the right skills. So hence, we really need to have a programme in place where we can change the profile of some employees. People who no longer fit the profile of the company should be replaced by others. If we have more resources, we can achieve more (Participant 14).

It is difficult to recruit new employees with the right skills and at the right time, especially for functions that require experts with a high level of specific knowledge (technical and non-technical). For new technologies, TSPs are facing the same challenge. Recruitment takes a few months and then another two or three months for the new hire to learn the TSP products, services, and processes. Many learning programmes are developed by TSPs and their learning partners to ensure their employees' level of knowledge stays up to date:

Collaborative partners are good because they give you the knowledge on where the customers head and you may not have any solutions for that (Participant 12).

However, the attrition rate in some countries is too high, and the study participants confirmed that TSPs are losing between 10% and 15% of their employee base every year. Attrition rate is the rate at which people leave their jobs (in this case the TSP they work for), whether voluntary or involuntary, to search for a new career opportunity; this is also known as the employee turnover rate. The fact that the attrition rate is currently too high is a challenge for all TSPs; therefore, they must try to attract and develop new employees. The participants stated that people are the most valuable resources they have and that employees make a considerable difference to the business and business clients.

Despite all these difficulties, TSPs attempt to find the balance between the investments to add more resources and the right forecast, which enables them to know the market demand and understand their customers' needs. Technical resources are easy to forecast if they are for standard and predictable requirements, but for customised solutions, the costs must be justified by the specific business case, and this can only be done during negotiations with the business

clients. For some service providers, adding more headcount resources is necessary when they acquire more business:

Internal resources are not sufficient to address additional customers, but when we win a deal, we go and recruit (Participant 15).

TSPs require time to select, recruit, and develop the right experts they need to manage growth. For all types of resources, TSPs must be dynamic, proactive, and continuously seeking the best way to assess future needs:

It depends on the business area, especially in growth areas where a lot of resources are needed to grow. In general, resources should undergo ongoing improvement (Participant 16).

However, the data suggests that some study participants feel it is too late to start recruiting until they win a deal. The additional resources are necessary to win more deals, and they are mainly engaged in the pre-sales and service delivery phases. In practice, recruitment is not a pro-active process based on the business forecast and the targets that TSPs want to achieve but a reactive approach. TSPs would like to see the financial benefits and business justification for additional costs to recruit more people. In practice, TSPs face recruitment difficulties, and the skills gaps is a result of the rapidly shifting market conditions. The lack of internal resources is mainly due to a lack of investments and the decision to outsource some activities. Service providers are forced to reduce costs to compensate for the decline in revenues.

Service providers' strategy to only use internal resources cannot explain how they can develop their own capability to gain a competitive advantage and achieve sustained growth; for this reason, they consider using collaboration to be more competitive:

The statement about the resources and resource level will not change, but the skill set for the transition will, and this is a key point where people are not managing hardware anymore but managing licencing and usage.... I do not think we necessarily have all the resources we need to be able to do what we want to do (Participant 11).

Multinational TSPs are facing the challenge of finding the right balance between central resources (original home country) and international markets where the business needs more local resources, knowledge, and skills. Some interesting dependencies emerge when it comes to the sufficiency of internal resources to achieve business growth because resource management is not a static but a dynamic process that depends on the TSP strategy and market demand. Expansions of business activities and providing services for international clients add more challenges to the TSPs' capability to manage the resources adequately:

When we made a strategic decision to move into a new market, we immediately concluded that the resources we had internally were not the right ones to address that market. So, we had to do a bit of a shift in the company (Participant 27).

It depends on the original DNA of the organisation, and for our organisation, the original DNA was a national company owned by the state. We have a lot of resources in our home country, but it is difficult to find resources for international projects (Participant 21).

The same balance must be applied among specific business units within the same company:

My company is resourced quite sufficiently to be able to cope with changes, but for my environment—product management—that is less, and that is down to the fact that this is very specific knowledge; it is a bit more of a struggle (Participant 25).

Participants see that collaborative partnerships can play a role in how TSPs can meet clients' demand for multi-country services. TSPs with an international network have more advantages in serving international business clients than those who are focused on their original home market or in a limited geographic area (e.g., Benelux, Nordics countries, or TSPs from the US with clients in the EU).

In a highly competitive market, all organisations' elements, such as strategy, culture, processes, and people should be aligned to create a high performance.

The findings from this section suggest that it is not only about tangible resources, assets, and network expansion but also the capability to adapt and be flexible to review the processes, restructure the resources, and implement different business models:

It is more of a change in mentality to cope with traditional service providers but also system integrators and global content network providers. It is more about strategic alignment and preparing personnel and resources for this change (Participant 12).

Even the traditional TSPs with enough internal resources for growth areas still require more resources to make sure their products meet or exceed their business clients' expectations.

These TSPs' expectations are the reason to explore new collaborative partnerships with their clients and create value for them. Finding the right business collaborators is key to co-developing customised and innovative solutions that can improve the TSPs' competitiveness.

Internal resources are not enough or lack the qualitative requirements to increase the TSPs' performance and achieve sustained growth. Both the resources related to internal skills, and the network are not creating the competitive advantages that TSPs should have to grow their businesses. This challenge pushed TSPs to move towards external resources, particularly collaboration with business clients. Moving in this direction means a committed business, shared resources, and more investments to achieve common goals.

From what has been mentioned by the participants above, the need for external resources is underlined. The issue of how to find and/or devise such resources, probably through partnerships, is also investigated. It presents challenges to existing TSPs, which may be remaining in the same traditional modes as before or may be attempting long or short-term partnerships to advance their business scenarios.

4.3.2.3 External resources through partnerships

Most participants mentioned that they must build collaborative partnerships with their business clients to respond to business dynamism and that they must adapt to compete. The data suggests that TSPs cannot address business client needs only by using their own internal resources.

One way to expand beyond internal resources is through the co-development and co-creation of new services, products, and concepts to offer complex and non-standard solutions and by introducing new technologies. Collaboration can improve the complementary portfolio for product management when seeking a partner with specific knowledge. For example, one study participant is involved in blockchain or artificial intelligence (AI) projects that require cooperation and investment between service providers who are trying to simplify their processes, improve customer support, create new revenue streams, and save costs:

Some of the technologies we do not have experience in, like AI, are probably the best examples, as is blockchain. Those are technologies that we have some experience with but certainly not the depth of resources that we need. In that case, we have to go out and try to hire those resources. It is not sufficient to use internal resources because you just cannot train somebody overnight on some of these things (Participant 1).

These technologies have been applied in the telecom industry for a few years, but for some TSPs, they are new, and they must collaborate with external partners to implement them and gain the benefits.

Other TSPs are collaborating to create solutions for specific market segments such as the capital markets, media, and cloud-based content providers. For them, external resources gained from collaborative partnerships are necessary to achieve this goal:

Partnership is part of success; it can be a complementary portfolio from someone who has more experience in some specific condition. But yes, I think part of the success can come from being able to partner (Participant 24).

Working collaboratively with clients allows the TSPs to address client requirements and create new opportunities. One of the study participants referred to collaboration as a way of creating

a collaborative business ecosystem where collaborative partnerships with business clients are essential:

I think collaborative partnerships are fundamental. We absolutely need external partners to be able to compete. Ecosystems are really the new buzzword. we always have a partner in our ecosystem today that can bring value to specific customer needs (Participant 2).

TSPs consider external partnerships an important factor in offering services, products, and customised solutions that can make their proposition in the market unique. Acquiring external partnerships helps them create and implement a differentiation strategy that aims to distinguish their solutions from other services and products offered by their competitors. For some TSPs, collaboration is not only necessary to compete, but it can also show different ways to do various activities; it is like adding an extra brain to the business, as one CEO mentioned during the interview:

Collaboration with business partners can enlighten you or show you different ways of doing things. Like we are working with a large OTT player now; they think entirely differently, and that helps us to accelerate our thinking in terms of things that we have done for one hundred years but have not thought of the way they think. That is a big advantage (Participant 1).

Some TSPs took the global streaming and content providers (OTTs) as an example, where collaboration with them can change the thinking in terms of services that have been delivered for many years, but traditional providers have not thought of them in the way the OTTs think about:

I am always interested in understanding what the OTTs are good at and where we are less good at and then finding a win-win and synergy. One of the examples is one global content provider who, when they arrived, was a new competitor and a threat, not a Belgian phenomenon but a worldwide phenomenon. We worked with them and bought licences for our customers; we made it easy and integrated it with a set of our services. We have to be more open to these kinds of partnerships in the future (Participant 13).

For the wholesale type of business, service providers are always collaborating by providing the building blocks to the business clients ‘Wholesale is only about collaboration. We provide the building blocks for our clients to be successful. So that is always collaborative’ (Participant 8). The data suggests that TSPs can collaborate and partner with global business clients, but at the same time, they compete with them. For the TSPs, the OTTs are global business clients and can help them win more business and grow, but they are also competitors. OTTs are buying from TSPs to serve some of the TSPs’ enterprise clients (end users). This relationship can be sensitive and forces the TSPs to continuously review their market positioning to decide with whom they collaborate and what type of clients they want to serve. Several participants suggested that

collaborative partnerships as an external resource support them in gaining insights from their customers and a deep understanding of their business client's needs, behaviours, and preferences. TSPs must be closer to their business clients to understand what they want and what drives them to move forward. External resources, through a collaborative partnership process, become part of the customised solutions offered to different business clients:

A collaborative partnership can help gather feedback to deliver a product or service that is more fit for purpose and come to those conclusions faster than we would by just looking at it ourselves. We have done that a couple of times, and it is very useful, but it is also challenging to define and set up those kinds of collaborative partnerships (Participant 26)

However, the continuous changes in the telecommunications business are a challenge for the TSPs to cope with and ensure they develop more collaborative capabilities with their clients. It is easier for TSPs to sell standard products and services (transactional business) instead of customised services. Only a few service providers who are more focused on delivering standard and not-customised services mentioned that their internal resources are enough to serve their clients without the need to collaborate. Standard transactional business does not require customised and flexible solutions or additional features created through a partnership with business clients.

Some other TSPs do not see collaborative partnership as something that compensates any gaps in internal resources because 'Collaboration between providers and clients will not replace internal resources. I do not think that is realistic' (Participant 1).

The reasons for collaboration vary among TSPs. The flexible and adaptive approach is pushing some TSPs to not only use their internal resources but also to include collaborative partnerships for product development activities to ensure there is demand in the market:

So, you need to have sufficient resources internally to develop new functionality, but then you need to work together with your customers to test it in the market very quickly. Because if there is no demand, it does not work either; you need both (Participant 18).

For some other TSPs, expanding the business and operating at an international level is another reason for them to collaborate and build partnerships. One TSP observed that business clients are asking their service providers to collaborate, especially when managing complex and big international projects:

We are more driven by the customer, by opportunities, very concrete opportunities; it is more a question of the customer asking us to collaborate, to speak to, to put something in common with another (Participant 24).

Other TSPs may consider establishing more partnership activities to increase their ability to compete at the EU level ‘If you want to compete for your EU business, you must establish several partnerships with complementary companies that also know the environment very well (Participant 22).

The flexible and adaptive approach, the co-development of services and products, the international business expansion, and the competition at the European level are all reasons for the TSPs to develop collaborative partnerships with business clients.

However, one participant stated that collaborative partnerships do not compensate for shortages of internal resources. He added the following ‘in the long term, you need to be able to develop internal resources to deliver services to your customers’ (Participant 11).

This specific TSP is a global provider, and they consider the use of external resources as a tactical and short-term measure. They prefer to invest and have more internal resources, which they consider a strategic choice to support their core business. Another TSP was concerned about the potential risk of collaborating to develop customised services that can only work for a limited number of customers:

We should be aware of the potential danger that if you start to co-develop with one or two customers, you might end up developing something that is very good for them but not for others. So, you need to be careful (Participant 25).

Only one TSP mentioned that collaborative partnerships compensate for the lack of internal resources, as compared to other TSPs who suggested that collaborative partnerships do not compensate for the lack of internal resources:

Yes, I think the answer is yes, and it has to do with upskilling people. We are a big group, and we can shift resources internally if required (Participant 6).

This is probably related to the TSP tradition in their home market in Asia, where they collaborate because of the lack of internal resources and to manage the high workload for some international projects.

As has already been underlined, TSPs are seeking external partnerships to gain more knowledge, which allows them to compete successfully but not to compensate for gaps in internal resources. TSPs should not try to do everything by themselves ‘It depends on what you want to create for yourself and what you want to own yourself versus what you can gain from your partnerships’ (Participant 11). Clearly there is a vast range of wishes and wants that indicate the need (and sometimes fruitless, search) for flexibility and innovation, often via collaboration in a variety of forms. Internal resources do not furnish adequate potential. This point is further developed in the following section.

4.3.2.4 Conclusion

One of the most meaningful findings of this section (4.3.2) suggests that service providers' internal resources may not be enough to achieve sustained growth all the time and for all types of users, especially global business clients. Although service providers tend to be positive and willing to increase the collaboration with their clients, they do not have a clear process in place for defining the partnership conditions, setting goals, and managing performance. They often do not succeed in finding and/or forming short-term partnerships (4.3.2.3).

Collaboration can help some service providers find new skills and knowledge resources that can create innovation and attain a competitive advantage.

Current resources are not sufficient to address changing conditions. The TSPs may have enough resources to manage the current business but not enough or the right type of resources to address changing market conditions in one of the most dynamic industries. Very few participants disagreed with this point and mentioned that they have enough human resources. However, these participants are struggling because they do not have the right skills; the TSPs that are struggling are mainly the old national incumbent TSPs. The old TSPs were operating in a monopolistic market and had no competitors for many years. Furthermore, they needed many resources to sell all their products and services. However, national TSPs have been more recently facing the challenge of having many old, obsolete resources that cannot be used to sell new services and products in a smaller market share. This issue was mentioned by some participants as a challenge, and they are still trying to solve this by reducing the old resources and acquiring new ones suited to serving new business clients with new requirements.

In a highly dynamic telecommunications industry, internal resources cannot be managed as a static process but should be dynamic and able to quickly adapt. This necessity is shown in the traditional RBV, which has not adequately explained how or why certain TSPs achieve competitive advantage and others do not, especially in a changing business environment. The TSPs are not achieving their competitive advantage by investigating the resources and the potential they may have, as the RBV suggests they should. The RBV can develop a limited and short-term competitive advantage but is not able to support the TSPs' view of serving global business clients with long-term growth plans in a very dynamic and rapidly changing market. The RBV partially impacts the TSPs' capability to create competitive advantages. When offering services using their own network and internal resources, TSPs may achieve higher profits, but this is limited in scope as other competitors also have similar networks. Resources may differ from one TSP to another, but it is not a real and unique differentiator to win more

business and achieve growth. With the move to more cloud-based services, resources also migrated to the cloud, and TSPs only provide connectivity between business clients' points of presence (offices, branch locations, etc.) and the distributed cloud. Critical applications moved to the cloud, and the cloud providers have more capability to acquire more space than TSPs, which are partially involved in the cloud business. Resources moved from being asset-based and dependent on client location to a more virtual, software-defined, and remotely managed network. Business clients have the choice to be connected to any cloud provider's point of interconnect, and this flexibility has decreased the importance of connectivity as a key competitive differentiation. Clients may not order access from the traditional TSPs; instead, they might order a complete package from the cloud provider where they host their systems and applications. Clients continue the migration to the cloud, and they are building new relationships with the OTTs and GCNs and less with the TSPs.

Even with the basic VRIO framework assumptions of the RBV, the TSPs cannot create a differentiating factor with the static nature of internal resources. The VRIO framework is part of the RBV and sets four conditions to achieve sustained competitive advantage: the resources should be valuable, rare, inimitable, and organised. The participants were not convinced that TSPs can compete and survive because their internal resources are not unique (not VRIO).

This is why the RBV was extended to include DC (Teece, Pisano and Shuen, 1997). However, DC itself is not sufficient for TSPs to compete. Competitive advantage can be achieved through the TSPs' ability to reconfigure resources, which they can build using dynamic capabilities (Eisenhardt and Martin, 2000).

The data collected from the interviews confirmed the need to pay attention to the long-term management of resources (3–5 year planning). At the same time, the participants recognise the need to add external resources through collaborative partnerships with business clients to compete successfully.

Internal resources could be enough to manage the current business, but external resources are necessary to innovate and ensure the TSPs are on the growth curve. Taking external input or ideas may help you be competitive. Some TSPs have no clear process or guidelines to manage and evaluate external activities when seeking more resources. This understanding is in line with Huxham and Vangen (2005), who describe collaboration as a highly complex endeavour.

TSPs' capability to adapt and cope with rapidly changing business environments is important for achieving competitive advantages because the changing nature of the telecommunications environment suggests that resources cannot stay static and therefore need to be reconfigured to

create value for the business. The study participants stated that changes in their businesses were the only constant factor.

TSPs see collaboration partnerships as a compelling solution for business clients. They should be part of the overall strategy to understand the customer's needs and meet their requirements. Collaborative partnerships help provide new and customised solutions on top of the standard products and services that service providers already have in place.

The way TSPs can adapt to changing market conditions and respond to high competition is explained in the next theme. The theme presents the different strategies that TSPs are using to adapt and to stay dynamic to create competitive advantages. The findings in the next theme show the challenges that TSPs face when trying to adapt to and outperform the competition.

In summary, internal resources, especially network resources, are not enough for TSPs to grow their businesses. TSPs need to go beyond the use of internal resources, and the change that is required is more qualitative than quantitative. Some TSPs have difficulties finding the resources and closing the skills gap. TSPs could address this challenge by moving towards external resources, in particular collaborative partnerships with business clients who can provide the missing expertise. This issue will be dealt with subsequently in the following sections (4.3.3., 4.3.3.2, 4.3.3.3), with particular reference to the competitiveness and dynamism of the TSP world.

4.3.3 Theme 2: Difficulties adapting in a highly competitive market

4.3.3.1 Introduction

The participants confirmed that TSPs are struggling to respond to declining results. They are continuously trying to adapt and change so that they can create new revenue streams. At the same time, some providers are not focused on revenue but on margins. They aim to reduce costs and make efficient use of their assets. TSPs are aware of market dynamism and the need to adapt to a continuously changing business environment.

This theme captures the sentiment of many TSPs that are trying to compete in a new global telecommunications market and quickly adapt to changes in business. TSPs are facing new threats from new providers and new regulatory frameworks, but they also see new opportunities and a high but temporary demand for services. Business clients are seeking more cloud-based products, more cyber security, and customised solutions. It is in these areas that the TSPs' capability to adapt can create competitive advantages.

4.3.3.2 Different ways TSPs are adapting to rapid market changes

TSPs apply different strategies when they want to adapt to quick changes in the market. They combine different approaches, such as commercial, technical, innovation, and improvement, to the customer experience and the way they engage with their business clients. There are some differences between TSPs in the way they adapt to changes, they adapt to market changes by taking a commercial or technical approach or a combination of both. It depends on the service provider, the services they offer, and the type of business clients they are serving. The TSPs that seek the commercial aspects must consider costs, margins, and revenue, and calculate all risks:

What we do to overcome, I would say commercial, lower revenue, increase the portfolio, or sell more for the same value or a little bit more. Sell additional products or bundle products combined portfolios whilst keeping the prices trying to keep the prices stable, because in general, there is a bit of a price pressure in the market (Participant 5).

However, TSPs are not only taking a commercial approach. They consider other methods to adapt and create a differentiating factor ‘Differentiation is not only on prices. We are usually trying to develop joint services or trying to add new features to reach customer-specific requirements’ (Participant 20).

The TSPs that choose a technical approach adapt by offering a customised solution, implementing new technologies, moving to more cloud-based solutions, and undertaking more marketing intelligence activities to create innovative products and services. It is a challenge to understand the customer business needs:

So, I think for us, what is really key to cope with, is to understand the customer. What does the competitive landscape look like because there is no one-size-fits-all approach. I think it is really understanding the clients’ environments and the clients’ challenges to really make sure that you have a winning sales strategy (Participant 15).

TSPs should be flexible so that they can adapt to any internal or external changes and apply the appropriate strategies. One CEO stated that their problem as a service provider is not because they do not adapt but because they are changing too much. Some TSPs are reacting to the market changes, but they are not investigating deeply enough to understand the clients’ needs and make a successful change:

The problem is not the change. It is not that we do not change. Our problem is that we are changing so much at the same time all the time that we sometimes do not finish the job. That is too much (Participant 1).

Different strategies have supported TSPs to adapt and compete with other service providers.

However, the TSPs have a lack of knowledge about the providers they are competing against and the frequency of changes they are forced to do. TSPs traditionally operated in a stable market condition. However, due to the increasing competition, they have been forced to find a way to keep doing business in a turbulent circumstance. TSPs are still struggling in this area and therefore keep making changes in their strategies. TSPs do not expect to have less competition and so they are still struggling in this area and therefore keep making changes in their strategies and adapt in the hope that they will achieve sustained growth.

What all this means in terms of changing, adapting and constructing the desired competitive advantage is outlined in the next section (4.3.3.3)

4.3.3.3 Challenges for TSPs to adapt and build a competitive advantage

Each TSP strategy for reacting to competition is different per provider and per sales segment. It is not a one-size-fits-all competition, and it is moving from a stable and long-term sustained approach to a more dynamic and adaptive strategy. This is also known as a transient advantage, or the renewal journey based on the temporary competitive advantage. TSPs continue to adapt and consider different strategies, from product innovation to commercial changes and more cloud-centric services:

So sometimes it can be commercial, sometimes it can be production proposition. Sometimes it can be, you know, simply complete evolution of a product into a different service (Participant 11).

It is a challenge to apply different strategies, as this requires a high level of flexibility and knowledge of the business environment to know what to implement and with which client.

The data indicates that business clients are usually looking for services as one complete package and solution. Therefore, TSPs create profitable collaborative partnerships to ensure they can include content in their portfolio and not just the classical and basic telecommunication services.

The new cloud platforms and GCN providers are making it difficult for traditional TSPs to compete and achieve competitive advantages using their internal resources and capabilities. The TSPs have the network and the connectivity, and the new players have the content. The new providers, such as the GCNs and OTTs in particular, are a threat that was previously unknown to the TSPs. They offer different content globally and many free applications that are also used by consumers and business clients.

The partnership between the TSPs and the new competitors worked well in the beginning. Later, TSPs adapted their new business model to work and partner with the new global players. They

share the revenue and bundle their offers with the services of their partners to meet the business client's requirements:

We would have been better off collaborating with Microsoft, Amazon, and Google as opposed to trying to compete with them when they do not have the brand or the capabilities (Participant 1).

It is difficult for TSPs to achieve long-term, sustained competitive advantage in a highly dynamic market such as the telecommunications industry. TSPs are collaborating to create competitive advantages by managing their resources, reconfiguring their businesses, and improving their capacity to absorb new knowledge and adapt to external environments. The collaborative partnership with business clients allows TSPs to understand and address their clients' needs and apply the right strategy to develop the right services to create competitive advantages as participant 15 stated 'that is what my group does. So, we need external resources like collaboration and partnerships to compete successfully.

Successful collaboration can achieve commonly defined goals and create unique values for the clients, but not all collaborative partnerships can help TSPs gain competitive advantages. Some partnerships fail when the TSPs and the business clients are unable to define a clear goal that creates the mutual benefits that both partners should achieve.

TSPs manage to reach short-term financial results on a monthly and quarterly basis, but these short-term goals do not help TSPs set up a collaborative partnership with long-term objectives. One CEO confirmed this and stated that the board members are expecting him to go for the quick wins and not the strategic and long-term results:

You never met a good long-term manager who was not a good short-term manager. You will not be there in the long term unless you deliver good results in the short term (Participant 1).

Since 2016, firms in the EU are not obliged to publish quarterly results anymore; this includes listed companies on all stock exchanges. This rule allows the firms to focus on their long-term vision instead of their short-term results. It allows more TSPs to adapt, collaborate more, and have long-term partnerships instead of using the traditional business models that were developed during the monopoly period. However, TSPs are still doing business based on the old model: publishing quarterly and annual results, periodic forecasts, and managing monthly sales performance targets.

The challenge for TSPs is not only to be dynamic and have a flexible and agile organisational structure but also to maintain a high level of adaptability and understand business client requirements:

I think for us, what is really key is to really understand how we serve our customers and what the competitive landscape looks like because there's no one-size-fits-all approach. I think it is really about understanding the clients' environments and their challenges to make sure that you have a winning sales strategy (Participant 4).

During the pandemic, especially in 2020 and 2021, TSPs showed a different behaviour to the usual business practice, with faster and quicker actions to respond to the unexpectedly high demand. They collaborated with their business clients to ensure urgent requests are managed on time; they created specific internal labels for pandemic-related opportunities and orders; and they tried to enhance their automated processes. Data in this period showed an increase in internet, mobile data, and fixed broadband traffic. This increase resulted in profit and revenue growth for some TSPs.

However, the short-term increase in demand for TSPs was not maintained after the pandemic, and the decline in revenue was shown in some global TSPs' annual results: AT&T revenue until June 2022 was -17.06 vs. 2021 (Macrotrends, 2022b), and BT revenue was -7% in 2021 vs. 2020 (BT, 2022).

TSPs adapted to the increase in demand because of the pandemic, which created temporary growth. However, this is not the same challenge as being adaptable to external market changes and competition to create competitive advantages and sustained growth. These comments show that achieving competitiveness is not an individual company's goal but must be seen in the light of what everyone else is developing or constructing that might have a special "edge". Please see the Conclusion below.

4.3.3.4 Conclusion

The findings in Section 4.3.3 indicate that TSPs are competing in a global telecommunications market with rapidly evolving competitors and changing business clients' needs (including in 4.3.3.2). They are competing against strong providers with higher scale and capability, operating on an international level instead of a regional or national footprint. However, competition is not new; TSPs have always competed to win more business and gain clients' trust, but they must learn to understand the new dynamism in the market space (4.3.2.3). TSPs are aware of these changes and are trying to be flexible to adapt their businesses by building collaborative partnerships with their clients. This allows them to understand their clients' needs and offer the services that they demand.

As the findings show, different TSPs apply different strategies in the way they adapt to changes and compete, but they are still facing internal organisational barriers to transforming the

business, creating the cultural mindset to invest in collaborative partnerships, and embracing innovative thinking. Externally, the TSP challenges are related to the go-to-market strategies, adoption of new technologies, legal and regulatory compliances, and the way to manage and serve their clients. Digitalisation of data and customer experience has become one of the top priorities for TSPs and is facilitating collaboration with their business clients, who are willing to partner with their providers and invest to achieve sustained growth. However, the TSPs' eagerness for change and the business client's willingness to collaborate do not always lead to a successful partnership. Lack of clear common goals and management commitment may result in partnership failure. This is why it is important to understand how TSPs build relationships and engage with business clients and the important factors that create a successful collaborative partnership. Freshness and re-invention of approach to businesses are important aspects in dealing with existing clients and seeking out new ones, responding to changes in a dynamic market, as well as re-formulating partnerships.

4.3.4 Theme 3: Rethinking how to engage with business clients

The current TSP engagement with business clients diverges from the old models and is built around customer-centricity. The customer is at the centre of every decision or what TSPs call the "customer first" strategy. This strategy is the opposite of the top-down approach that TSPs use to decide clients' wants and needs. TSPs collaborate and engage with their customers to achieve better outcomes and build long-term relationships, which helps achieve sustained growth. Different engagement strategies between TSPs and business clients, including collaborative partnerships, are presented in Table 14. During the interviews, the participants mentioned how they interact with clients. They use the direct approach, where they engage directly with the end clients, the indirect approach, where they serve the end clients via resellers, and the wholesale approach, where TSPs enable other TSPs and content providers. Additionally, the special strategic sales model was mentioned as a focused way to manage important global business clients. For these strategic clients, TSPs offer more dedicated support resources and special technical and commercial service management teams. On top of direct, indirect, and wholesale engagement models, TSPs also implement collaborative partnerships with business clients across all segments, especially wholesale and global content providers. The types of engagement with clients are TSPs' decision when designing the segmentation strategy. In this strategy, TSPs decide which clients they want to serve and via which sales channels. This is decided based on the client's size, the budget they plan to spend, and the opportunities and potential growth that can accompany a specific client.

Segments	Channels	Definition	Engagement	
			Advantages	Disadvantages
Direct Sales	Enterprises (Governments, ICT, capital markets, media, international clients, etc.)	Sell directly to the end users (end-clients)	• Direct contact with the end client • Maximum profit	• Additional cost to set-up a channel to manage all direct end clients (usually thousands of business clients) • Requires many resources (repeating the same process of all clients)
Indirect Sales	Resellers	Sell to companies who are acting as a reseller: Buy from the TSPs, adding their own services and reselling to the end clients	• Low overhead cost (cost of sales, operation, and maintenance) • Less margin but usually high volume • Easy from operational point of view	• Price and availability can change • The margin and sales volume are not constant • Resellers can do business with competitors
	Franchisees	Resell TSPs' services and products and get a monthly commission based on the total value that the TSPs receive from the end clients	• Able to reach new market and network of new potential clients • More focus on special clients (special sector and industry)	• No added value, especially when the franchise has no platform or network • Less margin
	Partners (commission based)	Bring opportunities to TSPs and receive a fee	• Reach new business clients • Create partners network	• Less margin • Often less volume • No high pipeline growth

Wholesale	Wholesale providers	TSPs sell to other TSPs and system integrators	• Sales process can be automated • Use other TSPs network to sell own products and services • Usually, high volume and high revenue	• No direct connection with the end business clients • Less margin • Enable competitors by selling services that make them able to compete and serve their end users' business clients
	OTTs and GCNs	TSPs sell to global content and OTT providers	• High volume and high value opportunities • Multinational deals • New business markets and serving new type of business clients (content users)	• Demanding business clients • Complex solutions • Quick delivery and challenging SLA and service support model • High churn risk (when ceasing services and signing renewals)
	White label	Sell to business client by serving their end-clients directly but under the business client's own brand, tariffs, and processes.	• Less cost of production • Can take advantage of market developments • Higher margin by selling more (such as invoicing end clients and maintaining sales tariffs)	• High competition • Easy to copy and to start as business model • White label may require system developments (high project CapEx costs)
Strategic Customers (Elite Accounts)	Corporate multinational business clients	Sell directly to selected business clients with high potential of new opportunities	• Clients with high potential business opportunities • Dedicated focus (account management, service management and business development)	• Special resources (high support costs) • Long sales process • Complex decision making

Collaborative partnerships	All channels	TSPs close a partnership to invest, co-develop new services, add capability to sell more and grow the business	• Can develop solutions for concrete opportunities (committed business) • Chance to win new opportunities is high • There is commitment between the collaborative partners to keep and grow the business • Very low churn rate (to switch to other TSPs)	• Long process to establish a collaborative partnership • Can be business clients specific, and may not apply for all type of clients • Both partners may not sell each other products and services proactively • Often complex solution and time consuming to implement (long lead times)
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Table 14: TSPs' sales engagement models

The data suggests that most TSPs are still applying a traditional direct sales approach to building relationships with business clients. Local and central accounts teams manage relationships with different client entities and decision makers. The relationship management is predominantly a sales-oriented approach:

Very traditionally, account management and then opportunities are passed on to technical teams, and then they are managed by somebody from account management, very traditional style (Participant 22).

It is more if you look at the business customers; it is more account management relationship forms and accounting, sale team accounting, and they should develop together with the customers (Participant 4).

Sales activities are usually organised based on segments or industries (e.g., media, finance, global cloud providers, ICT, and system integrators) and based on channels (e.g., direct sales, indirect sales, partners channel, resellers, and franchisees):

Our engagement with customers depends on market segments – so very high-end multinational corporates; we have very dedicated account teams, and we have consultancy services (Participant 8).

The TSPs' choice to be organised around segments and customer levels (small, mid-size, national, multinational, and global) increases the focus on dedicated sales channels, and this helps create value for the business clients:

We try to create value, and the value can be for a commodity service, ease of deployment, ease of change, excellent customer service; and for your enterprise services, it can be much more in thinking with the client to build the best solution for them (Participant 18).

Engaging with business clients by creating value and focusing on selected types of customers and industries allows for building a long-term relationship. TSPs are aware of the need to have these long-term partnerships and not just lock down clients and build a traditional and transactional relationship but 'you have to build a relationship, discuss what you are looking for and then look together how we can help each other' (Participant 4).

The days of locking the clients in many years and not looking at them and then coming back after two years and asking to renew the contracts are old days (Participant 18)

No, we are not transactional relationship or revenue numbers with double digit percentages. We are really looking for a long-term relationship (Participant 15).

Engagement with business clients is not easy and requires management and leadership skills to have the right conversation with the clients' key decision makers and to understand their business. However, TSPs may lose their market position if they deeply engage with their clients and follow them too closely. As stated earlier in the literature review, engagement and

collaboration with clients involves costs and increases the risk of failure and not meeting clients' expectations (Goodman et al., 1995; Zhang, Zhong and Makino, 2015). Furthermore, some studies have argued that involvement with clients has a negative impact on firm performance because of the level of complexity and uncertainty in the production and delivery process (Bowen and Schneider, 1988). TSPs are aware of the risks and uncertainty, and that is why they discuss the need to invest in clients and understand their business:

Be authentic, be logical and be empathetic. It takes time to get the biggest gains. We need to invest in our customer and that is critical...What are we doing differently as a TSP to support customers that makes us so successful? It has nothing to do with a solution, nothing to do with what we provide. It is about understanding the client's business, and when we do that and have those conversations with our clients, then we are much more engaged (Participant 6).

Despite the awareness of and importance of clients and engagement and collaboration with them, TSPs perform poorly regarding customer experience:

I think we know that customer experience is a development area for us. I do not think we do it to a level that some great competition did (Participant 6).

The data suggests that TSPs are continuously seeking ways to improve clients' experiences. They are focused on digitalisation, adapting new technologies, having a dedicated customer experience department, and creating a customer advisory board:

We have customer advisory council. Customers were engaged, we tell them the roadmap and then we ask them for input, and then we try to customise those products and make sure that we also look for trial customers willing to work with us to deliver something new (Participant 19).

TSPs also analyse data to understand customer challenges. The marketing intelligence and data analysis activities attempt to gain a deep understanding of client's buying behaviour, how to compete, and how to position their products and services:

I think it is one experience, so not just for strategic customers, but for customers in general, and then we start looking at market data and how to understand the challenges that our clients have (Participant 1).

TSPs are still adapting to the traditional sales approach to interacting with their clients and build trust, which allows them to reach a long-term collaborative relationship instead of a short-term one. The TSPs' challenge is to find the balance between the short-term commercial targets and the long-term benefits of collaborating with their business clients.

TSPs continuously measure their CSAT, the NPS, and the ease of doing business index. They try to transform this feedback into action to get their clients engaged and willing to collaborate and partner with them. Competitive benchmarking using a set of metrics helps TSPs compare

and position themselves against their competitors; they do not compare financial results but focus more on customer perceptions, experience, satisfaction, and, more importantly, clients' willingness to enter a long-term relationship and collaborate to invest together and achieve sustained growth. As stated in the literature review, satisfied clients can still consider ceasing the services and switching to another TSP (Symonds, Wright and Ott, 2007). Especially for business clients, a high CSAT index is not a guarantee for an increase in customer loyalty and business growth (Williams and Visser, 2002). TSPs are continuously developing customer loyalty programmes to upgrade the relationship with business clients and build a long-term collaborative partnership instead of measuring satisfaction and customer happiness (Mattessich, Murray-Close and Monsey, 2001).

The next theme explores trust and why it is important to achieve competitive advantage and drive high performance and productivity, yet not lose personal and business trust and transparency. Similar to freeing an enterprise from old resources, there needs to be a re-think of any possible shifts in the attitudes, needs and business activities of the clients, both existing and new, while responding to and anticipating moves in the market. This implies TSPs overhauling their approach and tactics, as well as their innovation or flexibility (see below in Sections 4.3.5 and 4.3.5.1).

4.3.4.1 Conclusion

Collaborative partnerships are still new for TSPs, and even though they were applied on a case-by-case basis in the past, they are still not widely applied as a business strategy with long-term vision; instead, they are used as quick, short-term sales activities. Participants who were interviewed and spoken to during the focus group sessions agreed that their sales approach is still a traditional one and not built with a collaborative business development mindset. They insist on reviewing and making changes to their commercial models (what they can offer and how they sell services and products). Business clients in particular are forcing their TSPs to change how they are served and how their providers meet their requirements. Table 14 summarises how TSPs are engaging with their business clients and how they sell their products. TSPs engage with business clients to do business and sell products and services using the right channels (direct, indirect, wholesale, and collaborative partnerships).

Table 14 shows the segments (sector or type of business), the channels (specified type of clients), the definition of each segment, and the advantages and disadvantages of each model. They are all used and applied by TSPs, but they are different in size (e.g., wholesale is normally high volume buy low profit business) and focus (e.g., direct clients and indirect channels) and

profit (direct corporate clients with high profit). The data in Table 14 is from the researcher's current knowledge and is not collected from individual interviews or any other data source. The table is made to make the findings related to the TSPs' engagement more concrete and visible. The engagement model is important so that TSPs know where their resources and focus are going. The engagement model and segmentation help TSPs continue to analyse their business clients' profiles and decide the right inter-relationship between clients and their providers. This client analysis is important in helping TSPs select and build the right collaborative partnership with the right clients.

The long-term profit and sustained growth that TSPs can achieve from each segment are the main factors when making business strategies. Growth and profit are all about how to create value for clients and monetise the network resources they have. These are the two main challenges mentioned by the participants that TSPs should consider when thinking about the changes in the client engagement model. The current short-term strategies based on the old sales approach without any collaborative activities are not helping TSPs achieve growth as they did in the past.

Collaborative partnerships improve the products and services that business clients desire, which helps achieve a strong relationship and long-term trust between TSPs and their business clients. Service providers know that their goal is not only CSAT but also to gain clients' trust and build real engagement that results in sustained growth and high performance. Just how important are these "human" factors (for example, trust, dependability, confidentiality) in re-affirming relationships and partnerships? According to what follows, trust is critically important. (How does "trust" come about?)

4.3.5 Theme 4: Trust and successful collaborative partnerships

Most of the study participants argued that trust is an essential component for successful collaborative partnerships; almost all of them insisted on the importance of trust between TSPs and business clients. Building trust facilitates defining common goals and sharing responsibilities and is the start of developing a successful collaborative partnership where TSPs and business clients invest to achieve sustained growth. The findings highlight the importance of building clients' trust. The study participants were convinced that trust significantly contributes to a strong and long-term business relationship 'trust is the most important element in building a relationship' (Participant 18) or as participant 11 mentioned 'it is important

because if you trust, then you have a trust-relationship between us as providers and our customers’.

Even without a collaborative partnership, business clients want to do business with service providers they can trust. Clients buying standard services and products also consider the trustworthiness of their service provider as a key selection criterion. Trust gives them the confidence to get the right quality and the right pre-sales and after-sales support and ‘customers want to collaborate with a provider that can be trusted, a trusted brand’ (Participant 19).

Trust is essential for increasing clients’ engagement and influencing customer loyalty in TSP business environment. These factors have a positive impact on sustained growth:

For us as TSP, trust is a differentiator from everybody else. If you have a real level of trust across a company and understanding their business, what is important to them, what they are trying to achieve what you want to deliver, it differentiates you and makes growing business and doing more business much easier. You change from being a transactional person to being a trusted advisor (Participant 3)

To gain and maintain clients’ trust is a challenge and is different from signing a contract between TSPs and business clients and trying to comply with the SLA and all terms and conditions. It is about values and a belief that TSPs can serve their clients and have the ability to create a win-win situation:

You get more trust from a customer if you have been working side by side. Believe in what you are doing rather than you are trying to just sell them the product as they are being involved in (Participant 23).

I think the most important is trust, the belief in each other, but also trust that both partners want to work together and win together. You should always try to find a basis or a business relationship on a win-win basis. If any party feels he or she loses, then the partnership is over (Participant 5).

Trust is also seen as a necessary condition for successful collaboration. Both collaborative partners can only start when they trust each other:

Collaboration, both internally and externally is built around trust. Okay, if you do not have trust, you will not collaborate. That is a simple fact. So, we as individuals, as human beings, will not collaborate with somebody unless you trust them (Participant 6).

Trust is ‘still the main factor when building partnerships. I think trust is key, especially in the face-to-face world of big sectors’ (Participant 22). This level of trust is in line with the theory of collaborative advantage and the trust-building loop showing that trust should be developed

incrementally, and that trust is a prerequisite for successful collaboration (Huxham and Vangen, 2005).

However, managing trust is a complex process and requires clear common goals where TSP and their business clients should have a defined collaborative partnership plan to avoid conflicts and the risk of losing trust. Building trust means that TSPs and their clients could adapt and cope with situations where the collaborative partnership is at risk or when they face a lack of trust.

Lack of trust may not lead to failure (Vangen and Huxham, 2003), but TSPs cannot build a strong partnership and create a collaborative advantage if there is a lack of trust.

At the same time, collaborative partners must take risks to start a new partnership and create new solutions, products, and services.

As stated in the literature review about CSAT, the same is true regarding trust. Trust is necessary for a successful relationship with business clients but having trust may not lead to customer loyalty or more business growth. Recent study results in the banking sector indicate that trust has an influence on commitment and client intimacy. No relationship was found regarding customer loyalty, but commitment and client intimacy are intertwined with client loyalty (Tabrani, Amin and Nizam, 2018). Another study shows that trust and customer engagement are intertwined, and customer engagement has a positive impact on customer loyalty (Agyei et al., 2020).

In this study, the results suggest that trust is important for building a successful collaborative partnership and that it influences client loyalty and contributes to the TSPs' growth.

It is important to have legal contracts, terms, and conditions before the start of any formal collaborative partnership, but this is not enough to create trust, such as interpersonal interactions, with clients. Clients must believe in the TSPs' capability of developing and delivering services and solutions and in how they build the partnership and achieve the collaborative advantage. This belief creates trust and positively impacts the client's engagement. Some TSPs describe the focus on legal contracts and master-level agreements as a sign of mistrust and lack of confidence and not a sign of a strong relationship with trustworthy business clients. There are different ways to see "trust". This summary puts them in a nutshell.

4.3.5.1 Conclusion

The importance of trust was confirmed in all of the individual interviews and the TSPs' annual reports and business strategies. The participants stated that trust has become more important than ever before, especially in a global and dynamic market such as ICT and

telecommunications. TSPs are forced to build trust with demanding business clients from all countries and clients with complex requirements.

For participants, trust is related to all interactions in collaborative partnerships with their business clients. It is a precondition for successful collaborative partnerships and for both the interpersonal relationship between the salesperson and client and the interorganisational trust between collaborative partners (TSPs and business clients).

Participants who are on the front lines collaborating with clients know that trust helps build a relationship that can define common goals, invest in resources, and have a managerial commitment to grow the business together. This research examines a multidimensional perspective of trust and not only organisational trust (confidence based in the partners' brand and capability), business trust (salesperson and clients), or personal trust (the personal relationship outside business activities).

However, the findings indicate a challenge that TSPs face when building a relationship of trust with their business clients and trying to make trust a differentiator element when collaborating. Trust building is costly in terms of time and effort. The positive performance outcome for one partner can result in a substantial cost for the other partner, and even with a well-defined partnership strategy, partners have business conflicts. Furthermore, after time, they may start competing against each other. This is a risk for trust and the long-term relationship and therefore for the long-term growth and performance of the partner. Collaborative partners should see their partnership as an investment that pays off in the long term, and that is why trust is essential to building this collaborative investment. TSPs may take a risk for short-term business (especially low value opportunities), but they are not able to do this for long-term projects that require a vision, shared goals and resources, and executive commitment based on trust and not just legal contracts. During the individual interviews, one participant described the partnership contracts as a necessary legal document but also as a sign of mistrust.

How do collaborative relationships grow, and into what spaces and forms, with what (hoped-for) results?

The next theme presents the findings related to the collaborative partnership between TSPs and business clients and how this can contribute to the TSPs' performance and grow the business.

4.3.6 Theme 5: Growth through collaborative partnerships

4.3.6.1 Introduction

How do collaborative partnerships with business clients enable TSPs to ensure sustained growth? This is the research question that this study wants to answer. The findings related to the position of internal TSP resources were presented in the previous themes, followed by a discussion on the extent to which TSPs can adapt, the way they engage with their business clients, and the importance of trust and its positive impact on client engagement. This theme presents the findings regarding the collaborative partnership challenges and difficulties, specifying the collaborative partnership challenges and difficulties, the way TSPs evaluate and develop collaborative partnerships, and the types of clients that are willing to consider collaboration with their service providers.

Furthermore, this theme explores the relationship between TSPs and their business clients and whether this helps to generate opportunities, create competitive advantages, and achieve sustained growth. This theme discusses the relationship and not the engagement as discussed in theme three, which goes beyond managing the client experience and includes the way TSPs motivate and add value to business clients to develop the relationship and create a collaborative partnership. The relationship is about how to manage the interactions between the TSPs and their clients. The last section of this theme (4.3.6.4) focuses on the link between collaborative partnerships and growth and explores the strategies implemented by TSPs to manage declining revenue and reduce churn rates (which are a worrying aspect of any business seeking advantage and dynamic progress).

4.3.6.2 Difficulties in developing collaborative partnerships

It is difficult to convince business clients to collaborate. The data suggests that they can accept collaborative partnerships with TSPs but only when they see the value. Clients are not just buying products and services; they want to see what their TSP is capable of providing.

The business value is the most important brand statement that TSPs can make to identify why they are unique, how they can differentiate their services, and how they can convince their business clients to collaborate with them:

Customers will not collaborate if they do not see the value of that... So, we are not into mass advertising, we are not into a big social media campaign. So, building your brand with those businesses is important. Collaboration can do that (Participant 1).

The value convinces clients to trust TSPs and facilitates the acceptance of new solutions, the adoption of new technology, and the development of new products and services. This value-based collaborative partnership must be built over time.

There is certainly a trust in the technology and the reliability of your services, as well; you have to have both. They have to have trust in the people they are working with and to be supported and working with a set of products and services that are trustworthy as well.... Collaboration comes with a high degree of trust. Not everybody is going to trust you, you need to build that trust over time; you have to do something. As I say, you have to start with something small. And do it well, and then they will trust you a little bit more. So, collaboration on bigger things just takes time (Participant 1).

Collaborative partnership results are for the long term and need a mindset shift from standard and traditional transactional relationships to a strategic collaborative focus. This is a long journey where business clients are guided, educated, and supported to create growth:

So, shifting from that mindset to a more longer-term strategic focus takes time. So, you must help clients to create growth; you have to educate. You must change your compensation programmes over time in order to facilitate; that is not something you can do overnight (Participant 1).

However, some TSPs do not see the collaborative partnership as a long-term solution to achieve sustained growth; they think that service providers, at least, should own the resources and be capable of delivering all services and products related to the core business. Other added value, customised, and not very critical services can rely on the partnership with business clients:

I do not think that partnership works as a long-term strategy because at the end of the day, this is a core business. It takes a huge amount of effort to integrate partners into your environment. You would rather spend all that time and effort into ensuring that you mature, or you grow as an organisation, that we are getting the right people and setting the right processes. I think the strategy of developing yourself is a better strategy (Participant 17).

The business value and long-term focus are factors that both the TSPs and their clients should consider when developing a collaborative partnership, knowing that TSPs do not have a defined, structured way to start, develop, and maintain collaborative partnerships. It is case by case, and every partnership is unique, customised, and has different goals. TSPs are not using a structured way to develop collaborative partnerships, and there is no defined process in place on how to do this ‘we do not have a plan or a process.... I think it should be ad hoc’ (Participant 15) and ‘I am not sure if there is a plan or a process; it is more about the mindset’ (Participant 13).

Only one participant mentioned using sales methodology to build and develop collaborative partnerships. This is used as a tool to structure the way the TSPs sell services and products but also as a tool to organise and develop collaborative partnerships with business clients:

We use a sales methodology, a strategic selling tool, which enables us to focus on the opportunities but also to build a more collaborative process. So, yes, we tried, we tested the methodology, and we are applying it (Participant 5).

The lack of a clear method to develop collaborative partnerships may have some negative impact on the final TSP results. The continuity of the partnership can be at risk when TSPs make promises and afterwards cannot deliver. They lose credibility, and this impacts the relationship. Business clients want to see the clear value and benefits of any partnership. The challenge is around client expectations for any collaboration activities with the TSPs. This applies to standard and basic services and products, where the TSPs should be able to deliver and show that their clients can count on them to address their business needs and are able to develop more complex and customised services. This is where the TSPs start to gain trust and build a strong relationship, even if they still consider this a difficult task, especially when some clients are not willing to leave their comfort zone and ‘collaboration with business clients is, in general, difficult and a challenge’ (Participant 5).

The priorities between TSPs and business clients may not be the same all the time, or they may change during the long-term collaborative partnership journey. For this reason, the CP should be reviewed and evaluated periodically to ensure that the predefined shared goals and the leadership commitment are still in place.

Another difficulty in continuing the collaborative partnership is the lack of focus, especially when both partners define long-term goals. TSPs and clients may lose focus because of the commercial pressure of short-term results and quick wins. A collaborative partnership is an investment of resources, CapEx, operating expenses, time, and skills. Pressure on the time required for the collaborative investment to generate a return, or the ROI, may cause a partnership failure or have a negative impact on the contribution of collaborative partnerships to TSPs sustained growth and ‘it has a lot to do with focus and the amount of time you can spend, are allowed to spend, or want to spend on a relationship’ (Participant 6).

The impact of all these difficulties is visible in the way TSPs are responding to the question of whether the CP is a structured and regular activity or if it is done as an exception or case by case. The TSPs are divided on how to manage CP projects, and the overall study participant views tend to consider CP as a non-standard activity. This is often a sales task or is managed by the business development unit and not assigned to dedicated persons or functions in the

TSPs' organisation. Once the sales contract is signed, the motivation to develop the relationship into more collaborative partnerships decreases unless some individual takes the initiative to collaborate.

There is a need for the TSPs to move to a more structured way of collaborating to focus on the right business clients and it is 'case by case. Let me say it. I would not say the standard model yet, but it is certainly driving in that direction' (Participant 11).

Collaborative customer partnerships for us have not been that formalised. So, we have had successful partnerships, but we have not had a super systematic approach but rather guided by either the customer side or being in need of partners because of joint product development (Participant 28).

Small and medium-sized enterprise (SME) clients may not have the resources and capability to invest and start a long-term collaborative partnership, while global clients do have these and make a commitment to continue.

On top of the challenges mentioned above, the data suggests that TSPs are facing difficulties in evaluating collaborative partnerships. Even those who mentioned that collaborative partnerships are internally qualified and periodically evaluated are not aligned on the level or the way the collaborative partnership evaluations are performed.

TSPs using internal processes to qualify and evaluate CPs are insisting on creating win-win situations to be close to the customers and be able to manage the overall relationship. In their evaluations, they see the financial results as a key factor to measure whether the CP is successful or not. They see the CP in the business increase, renewals, opportunities, and pipeline growth:

We look at the financial results, and if we do not see the orders and revenue volumes or the payback, then it is not a successful collaborative partnership (Participant 19).

Some other TSPs are not sure if CPs are measured, but in any case, they expect to see a positive contribution to the overall financial results; otherwise, it is difficult to explain why TSPs should invest, create, and develop CPs. Collaboration is 'difficult to measure, you will feel it, you will see it. You will see when teams are collaborating cross function' (Participant 2) and in the wholesale business they 'look to collaborative partnership from a financial perspective' (Participant 8).

At the same time, other TSPs do not measure the CPs. Using short-term financial key performance indicators, other factors, such as market share, sustained growth, and new services, are all considered.

However, for TSPs, it is still difficult to measure the CP results and find a model which they can apply as a standard and regular measurement tool for CP outcomes. Many TSPs confirmed

that they do not have methods or concrete performance measurement indicators to evaluate collaborative partnership:

There are some SMART objectives you could put around collaboration, but I do not think there is a methodology to measure collaborative partnerships...I think collaboration can only be measured by the way in which people as individuals collaborate together (Participant 2).

The data suggests that TSPs do not see clients' satisfaction as a good metric to measure CPs. This finding confirms what was mentioned earlier in the literature review: Customer happiness does not guarantee a business growth. Satisfied clients can cease using the service and switch to other providers (Symonds, Wright and Ott, 2007). Some TSPs were asked why they collaborate if they cannot measure the outcomes. They stated that clients expect their TSPs to collaborate and partner with them.

The development of partnerships is not always smooth and untroubled. The next section presents the challenges and benefits of collaborative partnerships.

4.3.6.3 Collaborative partnership challenges and benefits

Despite the participants' impression that collaborative partnerships have a positive impact on TSP performance, at least based on their experience, they often mentioned challenges and possible dangers and risks. They insist on being careful when collaborating with business clients:

Unconscious of a potential danger, if you start to co-develop with one or two clients, maybe you might end up developing something that is very much fit for them but not for others. So, you always need to be careful about what you immediately want to achieve (Participant 25)

TSPs are aware that due to some conditions, collaborative partnerships are not always the best practice when both the TSPs and business clients are competing or when they may face cultural clashes. Furthermore, collaborative partnerships may not help to achieve business growth when there is no trust between the TSP and their clients or in cases of political considerations that can change at any time:

A collaborative partnership is not a good thing to do if you are both competing in the same market, especially in the telecoms industry, where the competition is too high... or where tremendous cultural clashes may happen (Participant 27).

If a business client 'does not have much trust but is just looking to get some short-term commercial benefits, then I think it is pretty much a recipe for failure' (Participant 28).

It is remarkable that TSPs consider the internal organisation's problems more challenging than external factors when developing collaborative partnerships. Often, a clear internal vision and

leadership commitments from the TSP are missing, and the goals to start a new collaborative partnership are not well defined:

The other challenge is making sure that whoever is in the executive leadership has a common vision and goal of what you want and what is important to that customer. So, if you think of a vision, an internal vision statement is an internal statement that says to your management, this is what I want to achieve with my customer (Participant 2).

Some TSPs are not doing enough to create collaborative partnerships. Once they sell a product or service and a contract is signed, they keep periodic contacts with the client, which looks more like a tick in the box than a true collaborative effort that the customer should drive, and the service provider should support. However, the support does not come through, especially in the operations environment, where the demand for the new technology is high. The lack of support is affecting the delivery of services, and this is a challenge because the collaborative partners want to see a shorter lead time, but their providers cannot deliver. Technology adaption, quick delivery, and digitalisation are key factors, and they require a mindset change before reviewing the resources and capabilities.

I would say that in the beginning it was difficult for us because it is really a mindset, and we are only getting better at it. So, I described them as going from acceptable to good (Participant 13).

Having the right skills is also mentioned as a challenge when collaborating. Skills are important and can make a difference in resolving problems and supporting TSPs in their go-to-market strategy and the propositions they want to develop and offer. Skills enable TSPs to engage with clients and not only have the right knowledge to create solutions. Collaboration also depends on the type of client, whether they have a long-term strategy or are just looking for quick wins. The willingness to collaborate and develop customised solutions requires mutual trust between business clients and their service providers. Building trust, credibility, and a strong relationship without fear of losing sight of the common goals is a challenge. This may vary per client and per service provider and is strongly associated with the organisational culture to which TSPs should adapt when managing multi-national and global clients:

The main challenge is building trust. So, you know, if it is a brand-new organisation where you have not built up a relationship over time and have not nurtured that relationship over time, then you are going to struggle to build any kind of engagement, meaningful engagement, or credibility. You will be viewed as a service provider, which is not a bad thing in some instances, rather than a partner with whom you can have that trusted dialogue that I just mentioned (Participant 2).

However, the challenge continues, and the TSPs, their clients, or both, will eventually ask if they still need the collaborative partnership or if they can continue without it and choose to do

it without partners because when a partnership ‘is truly successful, it will always lead to questions. Why don't we do it ourselves?’ (Participant 27).

The question “Why don’t we do it ourselves?” leads some TSPs to fear that clients may cease the collaborative partnership at any time and stop thinking about long-term benefits.

Fear that the other parties are not to be trusted in the end, fear that the other partner is trying to fully monetise or fear that that partner will try to get everything to itself and not be willing to share It is a cultural thing (Participant 8).

The data analysis shows mixed views between TSPs without a structured collaborative partnership approach. Some TSPs collaborate and qualify the partnership projects on an ad hoc basis, while other TSPs apply a collaboration process and work with a plan and clear direction on how to manage and develop collaborative partnerships.

Collaborating without a regular approach and without a process in place does not help the TSPs evaluate. Regular collaborative partnership activities and the standardisation process may help TSPs manage more collaborative partnership projects. At the same time, TSPs may lose the flexibility needed to adapt to clients’ requirements and create customised solutions:

There is a planning process, but also is somewhat dictated by some customer needs, and we need always to get some strategic weighing when usually it is a multi-power type of opportunity for the customers transforming the network, and they want to consolidate vendors, and there is an opportunity, and they are not too happy with their existing provider (Participant 12).

Another participant confirmed that ‘there is a plan, does not mean it always works. But yes, we work with a plan’ (Participant 18).

The challenges are also related to the type of business clients. In some countries, TSPs can collaborate with SMEs, but most who are interested in collaborative partnerships are the large and global business clients. These global clients are demanding clients and interested in achieving financial targets and protecting their business and brand. The demand depends also on the market where business clients are operating, the types of channels and segments, and their focus area. Some business units are focused on standard products and services and are not capable of developing any collaborative partnership, while other units manage global clients who are interested in collaborating or even require their TSPs to collaborate with them and not just have a traditional sales relationship. Big and international clients want customised products and services and non-standard solutions. It is ‘the global clients, mainly, I have seen that the SMEs are fairly happy with our standard products’ (Participant 27).

Many challenges were reported by the participants, such as internal organisational issues and lack of skills, but particularly important for this theme are the lack of structured approach and internal standards and processes to develop collaborative partnerships.

However, despite the challenges with collaborative partnerships, TSPs still see the value of collaborating with their clients even if they do not have a common method to evaluate and measure the CP results. They see the benefits of a good relationship with business clients and the impact to control the number of ceases or services (churn rates). TSPs see the link between CP and the contribution to sustained growth, which the next section explores in more detail.

4.3.6.4 Collaborative partnerships can contribute to sustained growth

This section discusses how TSPs address the revenue decline challenge, how they deal with the churn, where clients switch to their competitors, and if they see the positive contribution of collaborative partnerships.

The highly competitive telecommunications market is creating opportunities for business clients to easily cease services and switch to another provider. This is the churn that TSPs are trying to manage and reduce by building a strong and long-term relationship. When clients are engaged in a long-term partnership, they are less likely to switch to other competitors.

The interview data suggests that churn has a negative impact on overall TSP growth, reduces revenue, and adds difficulties to find new clients. For TSPs, it is easier and much cheaper to retain existing clients than to attract new business. TSPs recognise that churn is a challenge and a serious issue, but all providers have to address it because churn ‘is absolutely a challenge that all providers are dealing with’ (Participant 18).

Different approaches to managing churn emerged from the interview data. TSPs continuously monitor the churn rate to keep it under control. They try to help clients transform. Furthermore, they digitalise their businesses, upgrade their services, and ensure they are competitive enough to minimise the impact of other providers. Other providers accept the negative impact of churn on growth and try to compensate for this gap by expanding their domestic business or becoming more of a global service provider.

The proactive approach can help to keep the churn under control, and this is where long-term collaborative partnerships can help TSPs develop business clients and keep them on board.

At the same time, the data suggests that TSPs are addressing the declining revenue by applying new and different strategies:

- Trying to be agile when developing services and products, which means being flexible and able to adapt quickly:

Agile type of working—we see that and are taking up the whole of agile as a way to develop products, and we have moved towards that (Participant 25).

- Using the strategy of mergers and acquisitions (M&A). A TSP such as Verizon has a dedicated entity called Verizon Ventures, in which they collaborate with or participate in start-ups that bring new capabilities and new services to the company:

We make new services by acquiring other companies that have capabilities, and we also have what we call TSP ventures, in which we collaborate with or participate in start-ups that bring new capabilities and new services to the company (Participant 18).

- Using new technology to innovate and keep up with the latest technologies to be flexible and fast to go to market with ‘high-level innovation, it is what I think is the most important aspect to adapt to the current situations’ (Participant 24).
- Creating and adding value, not just selling products and services to increase short-term revenue but develop a strategy to ‘to provide more value on top of the connectivity itself’ (Participant 17).
- Managing the costs and focusing more on margin and not just revenue. When the results are declining, TSPs must make sure that the cost base is in balance. They focus on the most profitable segments, such as global OTTs and other content and cloud providers, means ‘constantly take out costs related to those areas [global OTTs and other content and cloud providers] in order to free up resources that can work on the growth areas’ (Participant 28)
- Diversifying products and repositioning the shift from old TSPs on-premises services to new digital and cloud-based offerings:

What we currently do is try to digitalise, and I forgot the word virtualise, our network, for instance. That is a major cost opportunity, and on the other hand, by bundling products in certain markets where we have the possibility, we increase flight prices with inflation in the consumer fixed line market, for instance (Participant 8).

These examples, as mentioned by the study participants, show that TSPs are aware of the problem and are trying to address them by applying different strategies, often at the same time, with the hope that revenue decline desists, and that growth can be achieved again. Additionally, the data indicates that churn reduction and how to compensate for declining revenue can be improved by focusing on the relationship with business clients. The study participants suggested that growth is linked to relationships with business clients. They see that growth can

be positively impacted when making changes in the relationships between TSPs and business clients:

I believe you can make changes. I think you should always be able to make this change to further improve your relationships, which would then result in additional business (Participant 8).

I think so. I mean, I think it can be made, but as I said earlier, it takes time. It is just that you are dealing with big clients with big budgets, and you know, their jobs are on the line too if they fail. So, again, it takes collaboration and trust to build a relationship before you get there (Participant 1).

Furthermore, the participants mentioned that it takes time for the TSPs to build this relationship with their clients, be able to collaborate with them, and be their trusted service provider. Moreover, the data shows that business clients are continuously trying to adapt to the business environment and change the way they do business. If TSPs can succeed in understanding this and addressing their requirements by creating a collaborative partnership, then long-term and sustained growth can be achieved:

I think it is a requirement. So, to grow your results, you need to work to be more intimate to have the relationship. On the other hand, business without good relationships is difficult (Participant 6).

It is interesting to see in the data that some TSPs may not be able to prove the growth results, but they are convinced that they were achieved because of a successful collaborative partnership. They ‘cannot prove it. But it is intuitively a given’ (Participant 22).

The study participants suggest that collaborative partnerships with business clients contribute to growth. For them, the benefits are not tangible, as they cannot split the overall TSP performance between collaborative and non-collaborative business activities. For some partnerships, they can measure the results, but this is not the case for most of their projects with business clients:

Definitely, it is related but if I could not give you any tangible, no kind of proof.... The more the trust will grow and the more or the opportunities will come to you, and the more the revenue will grow (Participant 15).

Participants see a direct link between sustained growth and the collaborative partnership they may develop with their business clients. Although they do not have the exact financial figures to prove this link, they believe that collaboration with clients helps increase revenue and contribute to their overall growth. It is difficult for TSPs to invest in a long-term collaboration without committed results, as they usually get when they sell and deliver standard services and products.

Furthermore, the data suggest that it is difficult to start a collaborative partnership, especially at the start of a relationship with clients:

The main challenge is to build the initial trust. If it is a brand-new organisation where you have not built up a relationship over time, you have not nurtured that relationship over time, then you are going to struggle to build any kind of engagement, meaningful engagement, or credibility. You will be viewed as a service provider and not as a partner (Participant 2).

Collaborative partnerships require a different mindset on how to deal with customised services and how to manage predefined common goals that both the TSPs and clients are investing in together to achieve in a collaborative way. Collaboration helps TSPs better position their new customised services, especially with similar types of business clients.

Historically, TSPs have offered their own services and products. Some providers still have the tendency to be less collaborative, especially when it is a partnership with long-term results. However, some TSPs may enter a collaborative partnership but quickly start thinking about offering everything by themselves. The data suggests that this model does not work and is not helping TSPs grow because TSPs are concluding that they should focus on their core business instead of trying to offer all types of services. They cannot do this without external collaboration ‘to have a positive result in the end, whatever results you want to reach... If you want to do it on your own, you will not. You will not reach the end result or the best results’ (Participant 7). Despite all the challenges and the long-term investments, the data suggests that TSPs are not questioning the benefits of collaborative partnerships, even if some of them do not have the exact data to show the positive results of the collaborative partnerships. Participants’ attitudes towards collaborative partnerships and their link to growth are generally positive, even though this is not based on specific financial evidence from collaborative activities.

Furthermore, participants are saying that business clients want to collaborate, especially the large, global ones, but it takes time to build collaborative partnerships and create new competences for TSPs to reach competitive advantages and achieve sustained growth.

4.3.6.5 Conclusion

The growth of collaboration is sure to face certain highs and lows. The reluctance or lack of impetus on the side of TSPs that rely on internal resources is evident and has been outlined in the foregoing sections. TSPs that are hamstrung by a dependence on traditional methods and resources are characterised by uncertainty, over-cautiousness, lack of collaborative thinking and risk-taking with partnerships.

This theme presented findings on how TSPs collaborate with business clients, the challenges they face when developing collaborative partnerships, and the way they monitor and evaluate the outcome of the agreed goals that both the TSPs and business clients want to achieve. The data suggests that business clients are willing to collaborate with their providers and are open to partnering with them, but only when they see the value.

A collaborative partnership is a long-term co-investment that can take place only when there is enough trust and leadership commitment from both the client and service provider. The commitment is needed to ensure the continuity and availability of resources that help create competences and competitive advantages.

A lack of trust means that collaborative partners cannot continue to achieve growth. There are some risks and threats when collaborating, such as lack of focus, not being able to deliver and meet deadlines, and not being able to develop a customised solution.

The data suggests that TSPs are not following a structured approach when thinking about collaborations and evaluating collaborative projects. TSPs make decisions about collaborations on a case-by-case basis, depending on the clients' requirements and the benefits that the TSP can realise. Furthermore, TSPs are struggling to measure the results of collaborative partnerships. They do not have a clear model to apply when evaluating these activities, but they believe the financial contribution should be visible to justify the investments in collaborative partnerships.

Moreover, this theme revealed the participant's views about the relationship between collaborative partnerships and sustained growth. One of the problems that TSPs are facing is churn, when business clients cease using their services and migrate to other providers. This is not a new phenomenon or a new threat, and TSPs usually manage to keep the churn rates low or at an acceptable level. However, churn is a good indication of client behaviour, and TSPs should be aware of it and prepared to act proactively and reactively by trying to win back clients. Clients may move to competitors due to poor engagement by current TSPs or low quality or when the basic requirements are not fulfilled adequately.

At the same time, TSPs are applying different strategies to manage the decline in revenue. This can be M&A, an agile way of working, product diversification, or managing the costs to increase profitability. These strategies can create some competitive advantages and contribute to temporary growth, but they are not new or innovative to the TSPs; rather, they have been in place for many years.

Participants' experiences show that a strong relationship between TSPs and their business clients can start more open conversations about client's expectations and future requirements.

These conversations are a chance for TSPs to show their capability and readiness to serve their clients and create value for them.

What is new for the TSPs in recent years is the increasing awareness that business clients should be at the centre of all business strategies. This is why they have started focusing on their relationships with their business clients and their collaborative partnerships with them. The data suggests that there is a link between collaboration and sustained growth.

TSPs are convinced that collaborative partnerships can contribute to sustained business growth. With all the challenges they are facing to build a collaborative relationship and the way they measure the results together with their business clients, TSPs see the value of building trust and establishing long-term collaborative partnerships. Moreover, clients are willing to have this type of long-term relationship and are also expecting it from their providers.

According to the interviewed participants, the risks may not appear at the start of the collaborative partnership but later, when both the TSP and the client start thinking about stopping the co-development and trying to proceed without collaboration. This cessation can happen when the collaborative partnerships become a competition between the service providers and the clients who are acting as providers to their end-clients, especially in the wholesale and reseller markets. A further source of data was the focus groups. They formed a significant part of the data collection process, and analysing the findings has led to the next section (4.4)

4.4 Findings from the focus groups

4.4.1 Introduction

Five themes were identified from the individual semi-structured interviews, where the study participants had different views, thoughts, and experiences. These themes were discussed further in two focus group sessions with participants who had already been interviewed. The five themes were the following:

- Impact of internal and external resources on TSPs business
- Difficulties to adapt in a highly competitive market
- Rethinking how to engage with business clients
- Trust and successful collaborative partnerships
- Growth through collaborative partnership

The focus groups discussed these themes in a group context to get more convergent views and discover the most important themes after they were discussed at the individual level. However,

participants did not necessarily discuss all the themes, but the similarities and differences between TSPs will be clear. The researcher's aim was to reveal new thoughts, views, and experiences of the participants from the group discussions. How do internal and external resources influence the formation of partnerships and growth?

4.4.2 Impact of internal and external resources

The focus group discussion did not reveal a considerable difference between the participant's position on the TSPs' resources. They agreed on the importance of internal and external resources. However, they also mentioned interesting activities that TSPs are doing without knowing why they are doing them or how this can help them be more competitive.

Internally, the TSPs are working to reduce churn, avoid revenue pressure, and manage the growth that is not where it used to be. The revenue decline has a resulting effect on total labour costs. They are driving costs out of the business and asking their employees to do more.

Externally, the TSPs face the challenge of building a strong relationship with their business clients and acquiring the resources they need to offer complex solutions to their business clients. For complex solutions, TSPs need a robust operating model that can integrate or manage external resources, processes, and systems in the organisation. What is new in this group discussion is the focus on a lack of understanding of long-term changes because of the TSP culture. TSPs often analyse old data without thinking about future changes and market developments. It was mentioned that the industry tends to be more risk-averse where acquisition is the best strategy, but for TSP, it turns out to be a challenge for the organisation, or as one participant said, 'we acquire them because they have value, but then we don't know what to do with them' (Participant 21).

Another participant adds to this by saying,

A lot of takeovers are especially in the security and in the cloud... etc., but to implement that in correctly into your organisation, which is quite a challenge. If Google or Microsoft are doing this, they do it right, and they become better in the revenue result, but when we take them over, we make them worse (Participant 12).

The regulatory constraints were mentioned. These constraints can stop some TSPs (national companies) from acquiring other partners because of the competition rules and to avoid returning to the monopoly structure. Instead, some TSPs choose to collaborate more and not just try to use their own resources. National mobile providers, in particular, were forced by the regulations to share resources (e.g., emergency calls) or the masts and any equipment used to improve the strength of mobile broadband. There is a general understanding among all

participants that TSPs should stay flexible and build collaborative partnership capabilities. They should understand that there is a critical need to build partnerships in order to have the right resources to serve business clients and survive:

Five years ago, we wanted to do everything ourselves. Now the views are changing, and we are more looking towards consortia where different shareholders work together to provide a better service to the customers instead of trying to do everything ourselves (Participant 21).

Building a successful consortium is sensitive from a regulatory point of view, especially if national TSPs, the old incumbents, are involved. A consortium can create a kind of dominant situation in the market, which would be subject to official regulatory approval to ensure that clients still have choices and are not obliged to order everything from one TSP. Governmental institutions usually work under national and European tender rules and report on the process to select their suppliers and providers. Collaborative partnerships with governmental institutions are different from those in the private sector. In any case, the type of solutions that TSPs want to see in the marketplace and those that business clients are now asking for can only be sold by building partnerships. There is a need to develop partnerships and relationships to meet business requirements because the complexity level has increased, and the pressure is on the TSPs to find solutions.

Some participants gave the example of AT&T as a TSP that has partnered with a global cloud provider (as a competitor and as a client at the same time) to have their 5G network running on the Microsoft Azure network, but the connectivity will be provided by local TSP providers. There is a need to collaborate and partner together to enable 5G to provide more mobile bandwidth capacity. On top of participating in collaborative partnerships, TSPs are investing to gain more knowledge by developing special learning programmes for their employees. However, some participants stated that TSPs are not offering formal programmes while their competitors have learning programmes every fiscal year, including sales, leadership, and technology, and all are aligned with the new fiscal year business objectives:

It is a mixture of partnerships, like those between AT&T and Microsoft, but also upskilling personnel and then revitalising the workforce, as well as bringing people from different areas with different backgrounds and views (Participant 12).

There is a general feeling among the participants that TSP competitors, especially the global content providers (e.g., Microsoft), are strong in collaborative partnerships because they consider these partnerships an important pillar and a long-term strategic business activity rather than a short-term tactical activity. There is a critical need for GCNs to partner with TSPs and allow them to re-sell their content, and TSPs benefit from selling their network's core business

to the GCNs. It is a mutual benefit for both, where one can help the other. Participants stressed the importance of collaborative partnerships and how they are critical for their future, especially partnerships with large-scale providers, to find the right spot where TSPs can create competitive advantages. Even if the margin is low, TSPs cannot win complex deals without the products and services of third parties with whom they should have a partnership in place. This is because of the change in how clients are consuming bandwidth:

The change in the way that people are consuming their networks across internet access is really commoditising the network and taking out a layer of complexity in one instance because they are connecting directly to the cloud service providers rather than connecting back into their data centres (Participant 3).

There is a change from the clients' point of view because they are buying more from the cloud, but issues still exist around time to respond, client needs and requirements, and provision complexity. There are changes in the way people buy and sell services and continuous changes in clients' business requirements. Furthermore, the competitive landscape has moved from the traditional TSP to newcomers and from local and national providers to global cloud providers. TSPs must be dynamic and keep trying to overcome these issues.

The feeling 'is that, in terms of the TSPs being flexible and dynamic, they have to do what they have to survive' (Participant 3).

The VRIO model suggests that sustained competitiveness can be reached when resources are available (VRI) and when the company is well organised (O). Participants mentioned that to be well organised, TSPs should be dynamic, flexible, and capable of adapting to the market conditions, and this is where they see the challenge, which is why some participants are questioning the TSPs' ability to achieve this. External resources are critical to serving business clients and offering complex solutions, but TSPs only get these resources when they enter collaborative partnerships.

For TSPs, network resources and assets (internally or obtained as third-party services) are important, but they create competitive advantages only when they succeed in collaborating and creating mutual benefits and value for their business clients. The participants in the focus group discussion do not believe that they can achieve sustained competitive advantage and growth if just using the TSP resources. If a market is indeed highly competitive, it is certainly also dynamic. It changes in response to client requests and their changing fortunes, market changes and developments and many external factors that are often unpredictable. What follows investigates some difficulties connected with adaptation, responsiveness and flexibility.

4.4.3 Difficulties adapting in a highly competitive market

The focus group participants were convinced that the challenge for TSPs is not a lack of knowledge about how the telecom market is developing or how quickly changes impact the telecom industry. They saw the TSPs' weaknesses as not reacting and responding quickly and in the lead time when developing and implementing new services and products. One participant summarised this by saying,

We are unable to be agile enough to meet the new demands of our customers, especially when you are thinking about security and all the services around that (Participant 2).

Originally, TSPs tended to be engineering-led companies that built infrastructure and put fibre in the ground. They were less commercially minded and did not face as much competition as they do now:

Our competition is very different from what it was; we used to compete with each other on the infrastructure layer, but we are now competing with other organisations as we move up the application layer (Participant 2).

However, telecommunication is a turbulent market and a fast-moving business with a high demand for telecom services and products. At the same time, TSPs are still traditional providers, and the focus group discussion shows that there is considerable doubt about whether they can be agile and have the capability to quickly adapt. Changing their core business model and how they serve their clients is difficult for TSPs:

The telecom market is a traditional industry; I do not see TSPs as a new generation but more as a technology- or information-led organisation. So, I see that is where we differ. If you think about the digital age and customer demands, I see the telecom industry becoming more of a dinosaur in that sense and, you know, not being agile enough to understand or develop itself to meet the needs of the customers (Participant 17).

TSPs business decline is why some participants are asking what telecommunication is. For them, it is an old world; it is a commodity referred to as underlay. TSPs will become irrelevant to the needs of their clients because they are just buying a service (not connectivity) that is managed by the cloud service provider, or they will have to pivot quickly to discover new ways and solutions to remain relevant to the entire enterprise sector:

On the wholesale side, we are selling the underlay (access) again, but they are selling solutions to their end-enterprise customers, and they have exactly the same question: How do I remain relevant to them? And the monetisation of the assets for traditional telecommunications providers becomes more complex (Participant 3).

When participants were asked if TSPs are on the right path or if they are still behind, almost all participants stated that TSPs are behind, that they are not adaptive, and not dynamic enough to

respond to changes in the market. Most of the providers have a home market and because they are trying to maintain that position, the whole market is becoming difficult for them, especially when they start competing with international players. Global cloud providers are building their own backbone network (own network which interconnects different networks) and developing a complete eco-system that makes it easy for business clients to buy coverage, expand their coverage, and serve more end users (clients of the business clients). This is a strong international capability (e.g., Microsoft cloud computing network) and it is difficult for traditional and local national players to compete against:

We are behind, and it also depends on what kind of organisation you are as a TSP; if you are a national player, then maybe you can act quicker than if you are an international player (Participant 21).

We were a strong national provider but were able to serve some international customers through partnerships, but now we have the same issue because Google and Microsoft are offering more services., now it is difficult for us to act internationally, and it is also difficult to adapt to those challenges because we cannot act quickly as the new global providers (Participant 7).

If you think about Microsoft, it is a legacy company. They used to build operating systems on your desktop and stuff like that, and at a certain point in time, Linux came around and they started operating systems for free. They understood that the future was going to be cloud-based services. This is an example of being able to adapt on time (Participant 17)

One participant was more specific about the challenges that TSPs are facing:

What hinders the telco industry is some of its processes. When comparing with GCNs, we see that the telco industry needs to reinvent itself so that its business processes can be simplified and automated. I think there is significant room for improvement in that area (Participant 12).

The discussion in the focus group showed that business clients are moving to lower-cost access, and they are facing the challenge of replacing the revenue that TSPs are losing on the infrastructure and connectivity core business. However, they always come back to the lack of ability to respond:

It is the speed of an ELT's [Executive Leadership Team] decision to pursue a particular business route. We know what the problem is. We know we have competition coming in from GCN providers (Global Content Network provides), Accenture, and the new players as well; we just cannot move fast enough to probably compete in that space (Participant 2)

Some of the challenges identified in the discussion include cultural change and the need for strong executive leadership team leaders to develop and explain the business mission and vision

to everyone. Chief financial officers may like assets and infrastructure because they are financially predictable to a certain degree, but they may not like new services, because they are unpredictable and may be risky. One participant who was interviewed previously (semi-structured interviews) when he was working for a TSP moved to work for a global GCN, and he described the differences he noticed:

The telco industry is trying, obviously, to fight against the commodification of its business... I think it is hard to monetise connectivity and assets. So, there must be other venues so that TSPs can add value on top of that, maybe with AI, capitalising on the Internet of Things (Participant 12)

Another participant shared the same information and stated the following:

If you just stayed as a TSP in the old world, then I do not believe you are going to be able to make the investments to stay relevant., it is a major challenge. If you do not change. There are horses for courses; there are some TSPs that are ahead, and there are some that are very far behind. So, a big conversation is how do I change my “Universal Soldier” into something that can have the conversation across a more complex product base? (Participant 3)

The challenges that TSPs are still facing when competing were partially mentioned in the previous individual semi-structured interviews. However, the focus group participants questioned the TSPs’ ability to adapt and radically change their business to add value to their business clients. The TSPs were not able to move from a traditional provider selling commodity bandwidth to a content or true global cloud provider. Some providers tried to sell new mobile services (to become a mobile operator); others were adding network services (to be able to compete with fixed carrier services); some tried to focus on IT and manage services or sell data centre facilities, but these activities have not helped traditional TSPs create competitive advantages and win the competition. Figure 19 shows the revenue results between 2017 and 2021 for three global OTTs and two global TSPs from their official annual reports.

In 2017, the differences were not big, but one year later, Google passed Verizon (the first red circle). The same happened between 2019 and 2020, when Microsoft outperformed Verizon and Google achieved more revenue than AT&T. In 2021, the results of Microsoft and AT&T were almost equal, but AT&T continued to decline, and Microsoft kept growing. This means all three OTTs have more revenue than two of the most global TSPs.

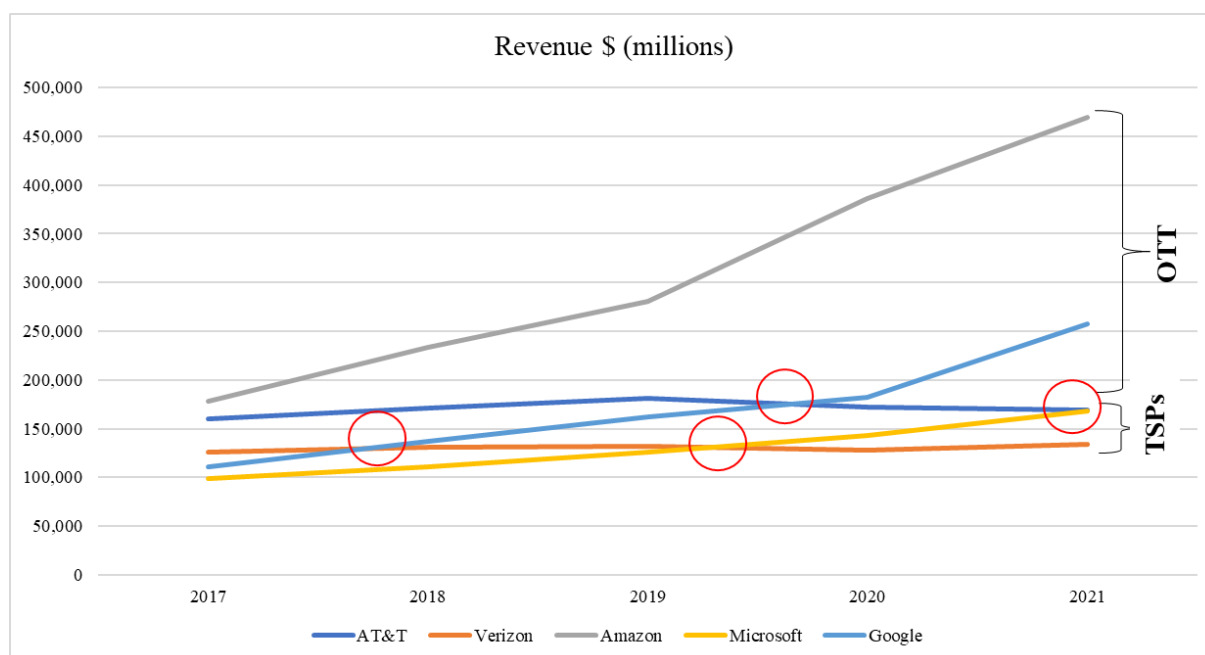


Figure 19: Revenue results (OTTs vs. TSPs)

Figure 19 also shows that OTTs that were found to be cloud, and content providers are performing better than Microsoft or other OTTs that made a successful transformation from old legacy services to being global cloud providers. TSPs, even the global ones, cannot easily match or exceed the OTTs' performance and growth rate. The competition against the OTTs and the content providers is difficult. For this reason, TSPs are considering collaborative partnerships with OTTs and corporate enterprises (as global business clients using TSPs network). Now, TSPs are engaged in battling against competition from OTTs and content providers: new challenges that necessitate new dialogues with clients. Read more below.

4.4.4 Engagement with business clients and how partnerships develop

Today, TSPs are having different conversations with their clients; the content is different, and the services and solutions are complex and often customised; therefore, the engagement model must be different. It is about data flows, application characteristics, and future developments and their values.

There is a large digital transformation in the telecommunications industry, and this cannot be managed the old way TSPs were interacting with their business clients. Clients want to feel safe and secure and to know what their providers are doing and what they can deliver to address their short- and long-term business needs.

TSPs should make their values visible and stay relevant in a purely digital world. Some participants were asking if TSPs can make this change. They do not see this being done in practice. There is a lack of dynamism and adaptability within TSP organisations.

This should be an open market model, and we should work together, but I also think that this will be difficult because I do not think we trust each other enough (Participant 7).

All participants shared this view, and one mentioned the lack of trust:

We all need to cut costs, or we try to automate more and more with our customers; they buy from people, not from IT systems. So, trust is the main word I would say... Customers buy from people; they do not buy from IT systems. They do not buy complex solutions from an automated portal (Participant 21)

The next 5 years are important for TSPs. They must learn how to engage with their business clients and remain relevant when the core asset is the fibre, but clients are buying a service. TSPs should move to be mini system integrators or true IT cloud providers:

It is a complex position for them to be in, but they have to make those choices over the next few years as to what they want to achieve (Participant 3)

Clients still go to the big provider names because they feel safe and assured of a good service when they choose companies such as Accenture, or IBM, as global service providers with a diverse range of service offerings. These companies are known as leaders in digital transformation, and they promote themselves as change leaders who believe in collaboration and modern engagement and leadership. This characteristic is what business clients sometimes miss when dealing with traditional TSPs. A risk highlighted by the focus group participants is that if TSPs do not make changes, especially in the way they engage with their clients, they will become less relevant, and their competitors (GCNs and SIs) will grow. One participant working for a TSP, the largest in their home country, used to be the incumbent and the most known national provider in their home market. He stated the following:

It should be different, but I think it is very difficult to do that because it is getting more and more complex, and I do not think everyone understands this and knows what to do. So, we should change. I am really wondering if we can do it... really wonder if we are able to do that (Participant 7).

TSPs are struggling to speak the same language, as one participant mentioned. Any change is difficult because it will touch the organisation's culture, but TSPs should try to find the right engagement model. Focus is key, and it was mentioned in the group discussion, with verticalisation as an example. IT, government and automotive are examples that can help TSPs focus on specific verticals. This helps understand what business clients are trying to achieve.

Verticalisation can increase focus and improve engagement with clients by being more collaborative and trying to build a partnership. TSPs are doing this; they call it segmentation. The key factor in segmentation is that the split is not based on function or industry but on potential growth and opportunities that TSPs can develop and create. It is not about names, brands, or industries; all are based on the chance to create business. The operating commercial model and engagement with clients are more important:

It is about having a robust operating model with either open standards or the way in which you engage with your wider eco-system to be able to deliver service solutions effectively and cost-effectively, still make money, and still make sure that you can give some service assurance to the customer (Participant 2).

The challenges that TSPs face when they engage with their business clients are a combination of factors such as the culture of the organisation, the right talents, and especially a lack of knowledge. The focus group participants consider knowledge a condition for building a good relationship and partnership with the business clients because knowledge is needed about the products, services, complex solutions, and what the clients want and need. At the same time, the participants insisted on a balanced way of doing business; it is not only about technical solutions, systems, automation, and cost savings but also the human relationship. Here again, the participants mentioned trust as a key contributor to building collaborative partnerships and overcoming the challenges that TSPs face when they engage with their business clients and try to sell products and services. The human touch will stay, even if working remotely during the pandemic becomes the norm, but this is still not the standard or default way to do business after the pandemic.

Business clients, especially global accounts, are willing to collaborate, but they require their TSPs to lead with innovation and a clear business value so that they can be perceived at a higher level. One participant who was employed at a TSP that took part in this study joined the focus group sessions, but now he is employed by a global cloud provider (OTT provider). He mentioned that:

When I compare and contrast (between the old TSP employer, and the new OTT employer), it is harder for TSP to be around at a higher level when they are in conversations at C-level. They were not able to have a vision for the next three to five years (Participant 12).

The TSPs' engagement and conversations with business clients should move from the transactional type (standard services) to a more strategic type, where the providers have a vision when discussing the cloud services, a transformational deal that has an impact on the client's entire business. TSPs must begin a conversation to understand how to remain relevant when the

core business of the TSPs is still assets and fibre networks but the clients are buying services and not the bandwidth. This is a complex position for TSPs to be in, but they have to make choices over the next few years regarding what they want to achieve. The next 5 years will be interesting because the demand for bandwidth will not go away, but TSPs should find the right way to monetise their assets by creating new sources of revenue, unlocking the economic value of their network, and winning the competition against global cloud content providers and big system integrators. Next, we turn to the human factor of “trust”.

4.4.5 The Importance of trust

Like the participants in semi-structured interviews, the participants in the focus group emphasised the importance of trust. A new conversation and thinking about the best way TSPs can gain enough trust to build a strong relationship is required. The focus group discussions indicate that trust is not included in the SLA, master service agreement, or any other legal agreement that TSPs and business clients may have. Creating trust, a totally human facet, is a long process. It must be earned and cannot be achieved from the first contact between TSPs and business clients. It is not a legal arrangement but more of an interpersonal activity between the key contributors who oversee designing and maintaining the collaborative partnerships. Business clients want to see that their TSP takes care of their business and is willing to go the extra mile to serve them well. Fulfilling the initial terms of an agreement, providing reliable, perfected service on time and even venturing new thoughts, are just a few aspects connected with trust.

The focus group participants focused on the cultural aspect of trust in business because the conditions to build trust are different depending on country or region and client. Participants mentioned that it is difficult to be a trusted provider for a client but see the need to ‘work together, but I also think that it will be fairly difficult because I do not think we trust each other enough’ (Participant 21).

The competition is pushing clients to continuously review their relationships with their providers and seek better commercial and operational conditions to ensure business continuity. Even if TSPs automate all their processes and digitalise the way they interact with clients, trust remains important and not replacing the personal touch. The principle of “people buy from people” is still valid today in the high-tech industry. This is what the focus group discussions show when discussing trust as a fundamental basis for relationships and long-term collaborative partnerships:

We all need to cut costs, or we try to automate more and more with our customers; they buy from people; they do not buy from IT systems. Trust is the main word I would say. And if you automate everything, I do not know whether a lot of customers will buy because they lack a bit of trust (Participant 21)

There was a specification for clients from the public sector that trust means risk management for them. The more risks the TSPs can manage for them, the more trust they have in the provider's ability to serve them in the short and long term. This is also partially true for private sector clients, but they are normally willing to take on more risk than governmental organisations. Risk management is a combination of factors related to what TSPs can show their business clients to meet the requirements and address the challenges in a consistent and sustained way.

4.4.6 The impact of collaborative partnerships on growth

Collaborative partnerships can help TSPs grow, but the participants questioned the long-term effect. Participants do not see how they are going to be relevant in ten years, balancing the costs on the one hand and the specific customer requirements on the other hand. TSPs cannot standardise all services. What they offer becomes a completely customised package that contains many complex solutions, and this is a challenge. To stay focused, TSPs understand that they cannot serve all business clients in all geographies and must make choices because every client has a specific requirement. Collaborative partnerships help TSPs understand what clients are trying to achieve and serve them using customised solutions. TSPs are asking where they can give value to the top of the business and how they can make the business clients more profitable or help them save costs and achieve sustained growth.

From a commercial and financial point of view, TSPs tend to work more with standard services based on their own network and with the highest margin instead of customised services using third-party resources with lower margins, where the partnership means special legal and commercial contracts. TSPs cannot standardise all services and keep costs low:

On the other hand, customers have very specific requirements that do not fit but cost too much money. You want to save money, standardise everything, and work with TSPs that will automate everything, and that is always a challenge. I see some internal IoT solutions that are good, but I do not know if they work for everyone. I think there is really a challenge, to be honest (Participant 7).

TSPs know that a service provider cannot satisfy all clients. There are many business clients with many requirements and different needs. TSPs should know how to ascertain what the standard solution looks like. They cannot be everything to all clients at the same time. Some

participants have experience with global clients and some with small ones. However, the challenges are the same for both:

Whether it is small or big, I think every customer has very specific requirements., the collaborative piece that you need to do is be able to help understand what the customer is trying to achieve and help them achieve that (Participant 17).

Some other participants see some strategic moves made by TSPs, such as the example of BT reaching an agreement for a very aggressive simplification of its business processes by partnering with AWS:

I think it is just a matter of establishing those strategic goals and having those partnerships. We are in an era where everything is measured by data. TSPs should focus on those metrics and show how partnerships are impacting this business. I do not see any other option. It is necessary for their survival (Participant 12).

Some TSPs are trying to make strategic moves. Vodafone Business, for example, have been trying to position themselves as a system integrator, not just as a telecommunications provider. The group discussion covered the risks of collaborative partnerships. TSPs may enter a partnership for few years and invest a considerable amount, but they may not succeed in adding value to the business and achieve growth. Some participants explained why:

Collaborative partnerships are a must, but they need to be mutually beneficial; they should not be focused only on connectivity...should be very well thought out in advance so that it is a mutually beneficial partnership. So, you need to look at long-term developments (Participant 12).

The group discussion showed a clear positive link between collaborative partnerships and sustained growth. The participants saw the importance of collaborative partnerships in enabling TSPs to offer customised and complex solutions, which increases the chance of creating and winning big opportunities. Partnerships help TSPs have more resources, expand network coverage, gain external knowledge, and expand their skills and learning developments. These changes can boost TSPs' sales and grow profitability. The group discussion gave examples to show that collaborative partnerships mean shared investments between TSPs and their business clients, and this will drive innovation by developing new services and products and implementing new systems and more automation. Business clients are expecting these changes and are asking their TSPs to be a leading technology provider in their fields with a proven track record in successfully designing and implementing complex global solutions (e.g., development of the application programming interfaces especially for business clients with high volume or orders, security for global enterprises using cloud services and enabling diverse G5 network).

One participant gave an example of the deployment of Secure Access Service Edge as a new alternative to legacy technological solutions. It is a globally distributed, secure cloud service that replaces physical and virtual solutions with a cost-effective and scalable alternative. Traditionally, TSPs do not have such secure service in-house, and the partnership with clients creates opportunities to offer new services and grow the business. By offering new security services TSPs become more relevant for their clients and increase business by getting more opportunities (long term win).

Collaboration is considered a must for TSPs, but they should do it right, select their partners and think about their goals and how to achieve growth. One participant gave an example of a collaborative partnership between a TSP and a global client (both included in this study) where the client was trying to re-sell the service to his end users (enterprise clients), but the real growth did not come from the initial phase. The growth was achieved later when the same TSP expanded the business and collaborated with Microsoft to enable them to serve their end users. This example shows the importance of partner selection, where some are successful because they are strategic and long-term solutions, and some were built to be quick fixes and short-term tactical solutions. TSPs have invested heavily in senior relationships, with much of its product investment making sure that the product is fit for purpose for Microsoft end users. This was described as a ‘very heavy partnership, and TSPs need to really make large collaborative partnerships like this work’ (Participant 3).

TSPs are pushed by their business clients and market development to make complex and big collaborative partnerships work because they are moving from their comfort zone (traditional core business) and integrating new third-party services into their portfolio.

4.4.7 Conclusion of the focus group findings

There is a common understanding among the participants in the focus group discussions that TSPs’ own internal resources are not enough to compete and achieve sustained growth. This point was also mentioned in the individual interviews, but the group discussion expanded on the point by giving examples of how TSPs could compete and achieve sustained growth, such as expanding coverage, increasing automation, and adding new fibre routes and subsea cables. Making these changes can help TSPs gain profitability but not create a stable competitive advantage. Internal resources, especially TSPs’ own network and cloud services, are not enough to create a unique differentiator factor and competitive advantages. Providers are all interconnected and buy from each other as none of the providers has global coverage. Companies can usually make more profit if they own network assets, but the end business

clients do not experience a big difference if they are buying a complete solution directly from the TSP who owns the network or from other providers who may own a small part of the network. Internal TSP resources are not a source of competitive advantage that can help add value and win more business.

At the same time, participants in the focus group sessions consider it necessary to have external resources to increase their capability of offering complete solutions to their business clients. The importance of external resources as discussed in the focus groups, is more than what was mentioned by individual participants during the interviews. The use of external resources depends on what they are offering at the TSP level because they may not have the same level of need to include external or third-party services. However, the participants in the group had different perspectives, and they stated that it was necessary to use external resources as no one TSP owns all types of resources. The proposed solutions are not limited to TSPs' own resources; they should also include external resources. There was some criticism of TSPs because they do not have a clear strategy on resources, what they own and develop, and what to buy from other partners. Despite the limitations that occur due to the regulations in every country, TSPs continue to build their capability, acquire other businesses, and expand their network.

However, although this may increase their financial performance, it does not create a competitive advantage by expanding the same network and services. Other competitors are still using TSPs' network; they do not own the network, but they make a profit and are successful in growing their businesses and building their own partner network.

TSPs see CP capability as a necessary condition for growth and know that business clients expect the providers to be flexible and adaptive. The group discussion showed that TSPs understand the necessity of building partnerships to have the right resources to be able to serve their clients and grow the business in a sustained way. It is not a choice but an urgent need to collaborate and build a partner network. This information was not mentioned during the individual interviews, and collaboration is how competitors such as OTTs and GCNs won business from TSPs and outperformed. TSPs' competitors believe in their partners, which is why they win and grow together, not just by selling their own services and products.

The discussion showed that TSPs are aware of market developments, but they face a challenge because they are not flexible enough to adapt on time and build new capabilities that allow them to compete successfully. They are not able to change their core business quickly and cope with the complex demands of clients.

A global network is no longer a differentiating factor and does not help make TSPs more competitive or support them in creating advantages that can sustainably grow the business.

TSPs know that competition has changed, and it is no longer about access but about the service on top of it. However, the changes are complex, and it is difficult for TSPs to quickly adapt accordingly. It is not only the ability to adapt that is important. It is also important that TSPs are dynamic enough to make the necessary changes on time. This is where TSPs fail, according to the focus group participants who consider that TSPs are near irrelevant for their business clients. Just selling network access in different forms and technologies with some additional features is a commodity and not unique. TSPs are still doing this with a traditional commercial model, as they were years ago. One participant gave an example of a model that was newly proposed in their company to get a minimum commitment from their clients (minimum guaranteed revenue) and allow clients to buy network access from selected routes with the capacity they want and at any time. However, the model was not internally approved because they could not support it. Even if it is a profitable model, it requires a change in processes and in the way, capacity is managed and delivered. TSPs cannot adapt to offer services with minimum commitment in a new business model. Offering more content-based services, as TSP competitors do, is more complex and challenging for TSPs. The content offering is a combination of market knowledge, the ability to adapt on time, and operational capability to implement changes and meet business client requirements, plus the ability to “look further down the road”.

The difficulties to offer content-based services is why the focus group discussions concluded that TSPs are behind and not on the right path to compete and create advantages. TSPs start losing market share even in their home markets, where they are traditionally very strong and well positioned. Participants in the focus groups mentioned that they believe that TSPs are not capable to win the competition against OTTs, GCNs, and other cloud and content providers. However, they questioned the TSPs’ ability and dynamism to move from a traditional network selling bandwidth to a content-based provider.

The development of the last decade showed that global cloud providers outperformed the biggest TSPs. Global cloud providers are still growing with a double-digit growth rate, while TSPs are declining or achieving a very small growth rate (lower than 5%, as in Figure 19).

There was a common view in the focus group discussions that TSPs should consider collaborating with OTTs and GCNs and building a strong ecosystem of partners with whom they can develop new services and products. Specifically, business clients are expecting their TSP providers to partner with them and build a partnership that can help them grow. This view is also shared by other researchers who have concluded that the best strategy for TSPs is to align with cloud providers and not compete with them (Aidi et al., 2012) or not to “compete

and accept” but to partner with them (Awwad, 2021). Some, if not all, cloud providers are already TSP clients buying network services, and the collaborative partnership can help both parties grow, especially for TSPs that gain more knowledge and integrate GCN providers’ services into their portfolio. It is time for TSPs to have different conversations with their business clients and focus on this aligning or collaborative partnership strategy. Clients want to know how their providers are doing and if they are ready to serve them in the short, middle, and long terms. TSPs should stay relevant for their clients and show that they are adding and creating value for businesses. They must be totally alert to new developments, new connectiveness.

This can be achieved when TSPs change the way they engage and interact with business clients. Collaborative partnerships need a new relationship with clients built on mutual trust. The focus group discussion showed that the engagement between TSPs and business clients should be different, and they stated that it is difficult for TSPs to do this. Some participants do not believe that TSPs can succeed in transforming and changing the way they serve their clients. Transformation is not only about customised technical solutions or systems and cost savings by partnering with clients, but more about the human relationship as a fundamental element and a key contributor to building a successful collaborative partnership.

The data showed that TSPs cannot easily change their operating or commercial model to move from transactional (easy and standard) services to more complex solutions as corporate business clients require. Some participants proposed making a shift from TSPs to cloud providers or changing the way they engage or serve their clients to be an SI with more added-value services rather than just selling commodity services. However, they also questioned if TSPs can move from their core network business and become a system integrator, or a cloud-based content provider. In practice, this is not what TSPs have been trying on a large scale, and no TSPs have succeeded in making this complete transformation. In any case, business clients are usually demanding, require resources to be well served, and often ask for commitment. They are continuously looking for long-term partnerships in which they can build a strong relationship and have a stable engagement model, and this is why participants see more future improvements through collaboration to better understand their clients’ journeys and address the challenges and difficulties they are facing.

Participants shared the same view that collaborative partnerships with business clients can help TSPs add value to the business, stay relevant for their clients, and achieve sustained growth. However, they currently do not know how TSPs are going to do this or what they can achieve in the next 5 or 10 years. Although they are aware of the challenges, they are still asking where

they should focus to create the exact value for the business and how to control costs to reach profitable and sustained growth. TSPs, especially those that come from a national monopolist position, are still struggling to automate their processes and adapt to clients' demand for digital self-service. Most are still in the transition phase to improve their processes and have short lead times to win new opportunities and quickly deliver what business clients are expecting. TSPs made some investments because of collaborative partnership projects for some corporate clients, but they were limited to a few clients and generally related to their standard services. This collaboration was mainly to improve the delivery process, automate communication between technical teams, or develop a flexible commercial rate card. TSPs are still looking to close more collaborative partnerships, especially with some global business clients, such as cloud providers (GCN and OTT competitors), for instance the BT example where they partnered with AWS for an aggressive simplification of the business process.

As well as emphasising the benefits of and need for CP, the focus group participants see some risks of collaborative partnerships that should be calculated and managed. TSPs may enter a partnership for a few years and invest resources, but they may not succeed in adding value to the business or achieving growth. The calculated ROI may not be achieved as planned between TSPs and business clients. Both partners can lose out on the potential profitability of a particular investment. Risks are part of any investment, but the capacity of TSPs to do this and take a big risk is limited. However, participants in the focus group discussions shared a common view about the positive impact of collaborative partnerships on TSPs' performance and their sustained growth, especially long-term growth. Collaborative partnerships are considered necessary for TSPs. This finding is in line with what was mentioned in the individual interviews, but the participants in the focus group sessions stressed the importance of TSPs collaborating in the correct way, selecting their partners carefully, and thinking about shared goals, resources, and how to achieve growth.

TSPs are already moving in this direction, building more partnerships, and expanding their ecosystems, all of which imply forward thinking, sharing and trust. However, there is pressure on TSPs to become more capable of adapting and be dynamic in taking quick but strategic decisions to transform the business. Achieving this would ensure that TSPs are ready to create advantages through partnerships to achieve better performance and more sustained growth.

Some participants have strong doubts about whether TSPs can make this change and be agile enough to transform the business to compete successfully. They do not see many other options for TSPs to survive and grow their businesses other than a collaborative model to close new long-term partnerships with business clients. These partnerships allow TSPs to serve clients

and offer a complete package to meet business requirements. TSPs cannot change to be a provider of everything to all clients everywhere, but they can keep their core business and add more services through strong and stable collaborative partnerships. Adding this capability means a high level of adaptability and DC, which TSPs do not currently have.

The focus group discussions and the group context made some statements stronger and clearer without trying to justify why TSPs are still struggling to build successful collaborative partnerships and achieve sustained growth. The following summary of integrated findings concerns the significance of the points raised in the analysis of the data and resultant findings.

4.5 Summary of integrated findings

This section is a consolidation of two groups of findings, interviews and focus groups, which focus on different questions: Why do TSPs and business clients collaborate? How do they collaborate? And what is the link between collaborative partnerships and TSPs' sustained growth? This summary gives a clear view of the findings and how they contribute to achieving the three objectives of the research and answering the research question.

The findings demonstrate that TSPs' internal resources are important and valuable assets for the service providers, especially if they are related to network services, cloud and content-based services, and on-demand applications. However, these resources in the current telecommunications industry cannot help TSPs create the differentiator factor and achieve competitive advantages. Internal resources are valuable but not rare, unique, or difficult to imitate (according to the VRIO requirements). This type of resources can create competitive parity for the TSPs but not a competitive advantage. The participants consider the internal resources an important asset to have for maintaining the business but not enough to achieve sustained growth because sustained growth requires changes in the way TSPs do business.

TSPs can keep expanding their network, which is the base of their core business, but the network alone or resources in general are not a source of competitive advantage. Network expansions can be done organically or through acquisitions of external resources.

However, some participants criticised the collaborative partnerships that end with TSPs acquiring the partner. They mentioned that some TSPs choose to grow by acquiring other small providers, but they are still operating in the same traditional and declining business, and they are not transforming to be service providers in the growing cloud and content businesses. As an example, Lumen's revenue has been declining for the past 4 years (Macrotrends, 2022a). The revenue was -4.97% in 2019 compared to 2018, - 3.48% in 2020 compared to 2019, -5.42% in 2021 compared to 2020, and -10.17% in 2022 compared to 2021. The acquisition of Lumen's

EMEA business added more network resources to Colt Technology Services, improve scalability, but did not stop the decline in revenue. Acquisitions can add resources but only when TSPs succeed in creating value for clients and developing a complete and customised package can they create competitive advantages. TSPs' businesses are declining despite the growth that some providers are making from time to time (e.g., during the pandemic, quick wins after acquisitions).

Therefore, to improve performance, TSPs are adding external resources, partially because there are no providers who own all resources and because of the need to offer customised solutions and meet the clients' complex requirements. External resources are necessary, and the relationship between partners starts by buying parts of the network (third party providers) to have a complete ecosystem. This ecosystem is where TSPs and partners collaborate, integrate customised services that add value to the business and make it more competitive.

Some TSPs like T-systems (part of Deutsche Telekom Group) made the choice to be a system integrator and specialised in complex IT projects, others with high value and international presence created global services (e.g., BT, Telefonica, Orange Business Services), while some other TSPs decided to go local and focused on their local market and national network, often the TSPs that are still owned by the state, at least the golden share (e.g., KPN, Proximus and Telia). TSPs strategy on resources, to expand organically or through acquisitions, to buy the network access, or not to focus on the network is different per provider. Some global providers focused on their home market with limited network coverage on other countries (e.g., AT&T in US or NTT in Japan). AT&T strong network and facilities are in US and in Europe they choose to white label their network services using other TSPs capabilities (mainly Colt Technology Services). Other TSPs sold their entire fixed line assets, 89% of the country's households, to private equity (e.g., Telecom Italia). Especially, when the revenue is declining TSPs will reduce costs, sell network (e.g., Telecom Italia, Vodafone), consolidate their resources (e.g., Proximus combined 3 local entities BICS, Telesign and Route Mobile), or focus on local market instead of global services (e.g., BT and Telia).

Resources may add profits and short-term operational efficiencies, but the findings, based on participants' views, clearly show that resources are not a source of long-term growth. More international capabilities mean more ability to serve global clients, but this is not for all TSPs the case. The focus on local clients of TSPs such as KPN, Proximus, is different from the way how Verizon, Telefonica, and AT&T serve their global clients. The Differences between TSPs resource management is also related to the geographies (Deutsche Telekom resources in Germany are not the same as in US) and the type of clients (Colt Technology Services focus is

on global international clients) while old incumbents are still serving national clients and local government institutions (Telefonica in Spain, Orange in France, KPN in The Netherlands, or Proximus in Belgium).

Despite the general participants' view that resources are not creating unique competitive advantages, the findings show that the way how TSPs manage national or international resources, internal or external resources is not the same across all TSPs groups.

Moreover, the research uncovered another important factor, namely that TSPs are not flexible enough to quickly adapt and are not dynamic enough to change. The findings show that TSPs are aware of the dynamism and competition in the market, but they are unable to make the necessary changes on time. The challenges are related to the organisation's structure (local entities, one central matrix organisations, or one organisation at national level and one for international services), culture (old monopolist providers or privately owned), and the way they run the business and monitor its performance (financial metrics such as targets, revenue, and contribution). One CEO said at the ITW in Washington, DC in May 2022, TSPs are still maintaining a business model and commercial environment that no longer exists. This is why they are not achieving the double-digit growth as they did years ago. The business is declining (Figure 1 and Figure 2), either because of the low bandwidth tariffs (Figure 3) or because of the strong performance of TSPs' competitors, such as the OTTs and GCN providers.

The extent to which TSPs are adapting, building dynamic capabilities, and developing absorptive capacity is limited and is not helping them create competitive advantages to compete against global IT and cloud providers.

The KBV, dynamic capabilities, adaptive capability, and absorptive capacity as inputs to TSPs' core competencies can help create competitive advantages and achieve growth, but the findings showed that service providers failed to successfully adapt. More importantly, the participants do not believe that TSPs can succeed in being dynamic and achieving sustained growth. This is recognised by TSPs, and it was mentioned especially in the focus group sessions by participants from TSPs such as KPN, Verizon and Vodafone. As Eisenhardt and Martin (2000) state, the dynamic capabilities that any provider can have, are not the source of competitive advantages but the way they can be used to develop new knowledge.

TSPs can learn for their competitors, the GCNs, however TSPs differ in the way how they adapt and change (commercial approach, technical or both). TSPs show different behaviours how they react to threats or opportunity. TSP with high value and ability to acquire global content providers, such as AT&T, when they acquired Warner Media in 2018. Other TSPs signed recent joint ventures and collaborative agreements but it was more about the network and security and

less content-based (e.g., In 2023, NTT signed an agreement with Sakana AI for R&D, Telefonica and Liberty global JV to create VMO2 in UK, and BT agreements with security provider Zscaler in 2023). Other small TSPs adapted to market development by selling non growing units like Telia who sold their operations and network assets in Denmark. Similar to Telia experience, Deutsche Telekom group tried to sell T-systems but finally in 2022 they decided to stop the sale and restructure T systems under the German domestic business.

The external market changes created threats and challenges and also opportunities. TSPs are trying to adapt and create competitive advantages even if the general believes (especially from the focus group discussions) that traditional TSPs are not dynamic enough to achieve sustained growth. However, some TSPs succeeds to achieve positive results by transforming their operations from national to international business (e.g., Deutsche Telekom in US and Europe vs. Germany domestic revenue, and Telefonica revenue from UK, Germany, and Latin America vs. Spain domestic revenue). At the same time, adaptability for some other TSPs means to sell their international activities and stay local in their home market (KPN, Proximus, Telia, Sprint already acquired by Deutsche Telekom). This is showing different behaviour how TSPs adapt and react to the industry challenges.

Additionally, the findings pointed to the importance of relationships and the way TSPs should engage with business clients. Changes in the relationship between TSPs and business clients and more collaborative partnerships allow the providers to understand their clients better and work together to invest in customised solutions and be ready for future demand. However, TSPs are still managing the relationship to achieve a short-term target, as they were always doing to drive growth monthly and not to invest in long-term relationships.

When discussing the importance of relationships, the participants mentioned that trust is the most valuable aspect of building a collaborative relationship.

It is essential that partners can trust each other before creating any long-term business opportunities. When TSPs succeed in building a trusting relationship, a collaborative partnership can be developed because business clients are willing to collaborate. They are open to new partnerships if they trust their provider and see the value of working together in a complex and continuously changing telecommunications market. The findings show the important lessons learned from TSPs' collaborative activities, how TSPs were performing, and the reason they were building collaborative partnerships. The findings suggest that collaborative partnerships can help TSPs achieve sustained growth. However, this requires a change in the way TSPs do business and build relationships with their business clients.

The same findings show that TSPs continue to apply the same management approach they have used in the past (e.g., not customer centric and short-term targets) and that they do not collaborate enough with their business clients. When they collaborate, they do not seem to have a clear process or a model to monitor and measure the performance related to collaborative activities. TSPs believe in a strong relationship and the importance of trust with business clients, but in practice they face many challenges to adapt and compete against new providers, which will involve serious research and awareness and may involve risks and chance-taking.

Table 14 shows the different sales engagement models that TSPs are applying when managing the relationship with their business clients. These models have different advantages and disadvantages, and TSPs should know which model they can use and for which client. Some TSPs confirm the importance of strong and good relationships with business clients but they implemented different segmentation strategies based on the expected clients spend. However, trust, relationships, and ability to collaborate is related to cultural aspects per country and per region. For example, national TSPs in Europe are acting in a more regulated environment than providers in US, but they are used to trusting local players. Asian providers (e.g., NTT, Esprit) are less open to collaboration with foreign providers (in the focus groups, some refused to share their experience over collaborative partnerships because they consider it as confidential information). One participant, a provider from Sweden, refused to participate in the focus group session because of the sensitivity of the topics (in his view) but his colleague from South Europe accepted and shared the provider collaboration experience with business clients. These differences are also visible in different geographies and in the way how local government try to protect the old incumbent providers to be acquired (e.g., KPN, Proximus). Other TSPs such as Vodafone, Telefonica (International part) are more open to expand their international business and develop new collaborative partnerships in regions like Latin America, Africa, and Middle East.

TSPs should rethink how they can build long-term engagement with their clients to develop the business and grow together. Short-term target management is a limitation that does not allow TSPs to build collaborative partnerships and achieve sustained growth. A collaborative partnership involves developing common goals, investing resources, and sharing commitment and leadership, and this cannot be achieved by the same organisation structure that is seeking quick wins and reporting on revenue and margin every month.

To achieve sustained growth, TSPs can learn from their competitors, who are not growing because of their own internal resources or external partnerships alone but because they engage their ecosystem partners by default. OTTs and GCNs offer their partner services for all

opportunities and for all clients, not only global corporate enterprises. TSP competitor results show that providers without network assets can grow while they are buying network services from TSPs. No provider can offer everything to all types of business clients at any time; therefore, TSPs must build an ecosystem and trust different partners to work together and serve their clients. The traditional relationship was always in place because all TSPs are interconnected and buy from each other, but now they partner together not just to buy some network services but to collaborate with their clients as a business development strategy to achieve sustained growth.

However, there are some challenges, and collaborative partnerships are difficult to establish because they require a long-term business case and clear goals. Risk management is also required in case one or both partners want to stop the partnership or change the agreement about the defined goals or the commercial benefits. TSPs must learn to understand their client's needs and become trusted advisors. Only then can they convince their clients to co-develop customised services, work together to achieve common goals, and share resources. Because of the commitment from both the TSP and the client, collaborative partnerships can be established, achieve positive results, and contribute to the TSPs' growth.

Participants mentioned the need to monetise the TSPs' network and add content, which they started doing but not fast enough to win the competition. There are still some concerns for TSPs when they develop new collaborative partnerships because growth is limited to standard services or customised solutions that may not be suitable for all clients. Growth can be achieved but considering the performance of the TSPs' competitors (Figure 19), it is unlikely that TSPs can compete with or outperform their competitors.

Decline is a problem, but the participants also questioned the sustained growth targets that TSPs expect from partnerships or from the acquisitions of other declining providers. On the one hand they do not see the value of this type of non-organic growth in terms of competitive advantages when combining two declining business entities. On the other hand, TSPs cannot choose the strategy of "do nothing" and it is difficult and too risky to try to become a content provider. AT&T acquired Warner Media, but after three years, they decided to exit the entertainment business and merge Warner Media with Discovery. Acquiring media and other content providers or creating joint ventures does not transform traditional TSPs into content providers capable of competing with global content networks. The findings show that a collaborative partnership strategy with OTTs and GCNs, or the aligning strategy, as called for by Aidi et al. (2012), are the most beneficial choice for TSPs in the current business environment. The 'Do nothing' option is not competitive, the 'Do it alone' choice is expensive for TSPs experiencing

revenue decline. The collaboration or aligning strategy for services such as TV/Video streaming is the most beneficial for TSPs (Aidi et al., 2012).

The findings show that the participants have positive views about the opportunities that collaborative partnerships can create for them. Furthermore, the findings confirm that core competencies as defined in the conceptual framework are partially based on resources and capabilities but also on TSPs' collaborative partnership skills.

The most important factor for TSPs to build collaborative partnerships is the long-term characteristics of the shared investment and resources, which create sustained growth. TSPs have many reasons to collaborate with their clients, and they have different models and types of inter-relationships in place (Table 4), which allows them to create different types of partnerships (Table 5). The examples of collaborative partnership projects between TSPs and business clients as in Table 4 illustrate that resources, expansions, and sustained growth are the most important drives behind TSPs' strategy to develop collaborative partnerships.

TSPs with dedicated wholesale business unit (some call it Strategic Alliances) are engaged in different collaborative partnerships activities (e.g., AT&T, Orange, Colt Technology services, BT). In addition, TSPs, with focus on local direct sales units, are less engaged in collaborative partnerships but only buying third party products such as security (eco-system partners). TSPs with high value, global focus, international network, and experiences with JV and M&A are more proactive in creating collaborative partnerships (e.g., Verizon, AT&T, and Deutsche Telekom). Other small TSPs, with less experience and less capital resources, are applying a conservative approach and they are collaborating at national level (e.g., KPN, Orange in Spain, Telecom Italia as in Table 4).

The integrated findings are summarised in Table 15, which are categorised into four central themes: Resources (including knowledge, ecosystems network, and TCE); Dynamism and adaptive capabilities; Relationships with business clients and the importance of trust; and Collaborative partnerships and growth. This summary highlights the findings, their relevance, and practical applications.

These findings underscore the necessity for external resources and ecosystem partnerships to achieve competitive advantages and sustained growth. Revenue figures indicate that resources alone are insufficient for long-term growth, emphasising the need for continuous reconfiguration and dynamic skills. Despite having a diverse geographical presence (US, Europe, Asia) and varied revenue sources (consumers and business services, local and global services), TSPs face challenges in adapting and being agile in the rapidly changing market competition. For example, Zayo, a competitor to traditional TSPs, acquired thirty companies

from 2007 to 2014, whereas BT in 2024 chose to focus on the UK and in 2025 announced that it was exploring potential partnerships that might involve selling part of its global business services.

Collaborative partnerships are crucial in addressing the challenges posed by declining business. The findings emphasise the significance of a customer-centric approach and maintaining strong relationships and trust with business clients, which are vital for successful collaborative partnerships.

Moreover, the application demonstrates how different TSPs implement strategies based on values, revenue sources (client type), geographic coverage, and relationships with local governments (as shown in Table 22). Additionally, TSP strategies are influenced by external factors such as regulatory conditions, geopolitical impacts on cloud services and security, client requirements, and technological developments (e.g., AI and cloud computing). The core competencies mentioned in the conceptual framework are critical to TSP strategy, influencing competitive advantages and sustained growth.

This comprehensive summary illustrates the interaction between key financial data (e.g., TSP values as highlighted in Table 22, TSPs values, revenue, and geographies) and thematic findings, underscoring the essential strategies, challenges, and collaborative efforts needed for competitive advantage in the telecommunications industry. Table 15, Summary of findings, their relevance and application, shows that collaborative partnerships are crucial for growth and offer substantial benefits.

Theme	Findings	Relevance	Application
Resources (Knowledge, ecosystems network, and TCE)	• Internal resources are important and valuable assets but cannot help TSPs achieve competitive advantages • External resources are necessary. TSPs and ecosystem partners collaborate and create customised services, add value to the business to become more competitive • TCE supports TSPs in managing by deciding whether to make them, buy them use a flexible combination of both methods) • Resources may add profits and short-term operational efficiencies, especially for large TSPs with global network, but they are not a source of long-term sustained growth • Creating or acquiring new knowledge is essential to reconfigure resources and enable TSPs dynamic skills	• The findings are relevant for TSPs as it demonstrates that different internal resources, external (off-net) resources, ecosystems, and the ability to buy or make more capabilities depend on TSPs' values, strategies, and the client requirements • The findings related to resources (assets and knowledge) and the usage of ecosystems indicate different behaviours and strategies among service providers. TSPs have different value and financial performance, and different responses to external threats and opportunities. However, the revenue results do not clearly show that TSPs can achieve sustained growth only based on how they manage resources	• TSPs are continuously building their intelligent networks on demand, expanding only into areas with potential new clients, or enhancing their capabilities by integrating sub-sea cables and low orbit satellite internet coverage • Global TSPs such as AT&T operate network services within the US while procuring these services in Europe. Some providers have divested their national fixed networks, such as Telecom Italia, whereas others like BT and Telia have adopted a new business strategy shifting from a global to a local focus.

Dynamism and adaptive capabilities	• TSPs are not flexible enough to quickly adapt and not dynamic enough to change. They are aware of the dynamism and the competition in the market, but they are unable to make the necessary changes. The challenges are related to the organisations' structure, culture, and how they run the business and manage performance • The extent to which TSPs are adapting, building dynamic capabilities, and developing absorptive capacity is limited and is not helping them create competitive advantages to compete against global content and cloud providers • Participants do not believe that TSPs succeed in being dynamic and achieving sustained growth	• These findings emphasise the need for TSPs to be dynamic and adaptive, highlighting the competitive weaknesses of traditional providers, especially in relation to their collaborative partnership practices • TSPs are restructuring their approach to serving business clients through new segmentations and repositioning their portfolios in the market. However, the ability to adapt varies among TSPs based on their position—whether they are private providers like Colt Technology Services, entrepreneurial companies, or national local providers such as KPN, Proximus, and Telecom Italia—and the types of clients they aim to collaborate with, be it national, small, global enterprises, or wholesale clients. These factors result in different adaptation strategies among TSPs	• The ability of TSPs to adapt and form collaborative partnerships is influenced by factors such as organisational culture (short-term versus long-term strategy), JVs history, and regulatory frameworks and national laws to protect critical infrastructure (for example, the Dutch Government's refusal to sell KPN due to national security concerns) • TSP segmentation strategies aimed at global business clients interested in collaborative partnerships can help TSPs become more adaptive and dynamic, addressing market challenges effectively
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Relationships with business clients and the importance of trust	• The relationship and how TSPs should engage with business clients is important. Changes in the relationship allow TSPs to understand their clients better and work together to invest in customised solutions and be ready for future demand • When talking about the importance of the relationships, participants mentioned that trust is the most valuable aspect when building the collaborative relationship	• The findings underscore the significance of client relationships and the necessity to collaborate with them within a broader ecosystem • The interaction is primarily influenced by financial results, segmentation (tier classifications), and the type of clients (consumers or business, enterprise or wholesale, national or international). • Participants view trust and client relationships as culturally related. • TSPs face the challenge that collaborative partnerships are long-term activities, whereas financial performance is managed based on quick wins and short-term targets	• The distinction between TSPs lies in their methods of client interaction and relationship-building to establish trust. For example, Colt Technology Services maintains dedicated divisions for GCN clients and financial clients, whereas other TSPs such as KPN manage these clients as wholesale accounts • Clients with lower potential are served through online platforms (e.g., Telia) or managed via offshore desk-based account management resources (e.g., Colt Technology, Orange)
Collaborative partnerships and growth	• Collaborative partnership with other competitors (aligning strategy) is the	• The findings indicate that participants believe collaborative partnerships can	• In professional practice, long-term partnerships frequently exist between TSPs and

	most beneficial choice for TSPs in the current business environment • Participants are positive about the opportunities that collaborative partnerships can create for them • The strategic advantages of shared investments and resources are crucial for TSPs to develop collaborative partnerships that promote competitive advantages and sustained growth	assist TSPs in achieving sustained growth. • Participants confirmed that clients expect their provider to collaborate with them, and they are willing to build partnerships if they see the value • The resources that TSPs can afford to develop through collaborative partnerships are not only limited by to the size or revenue but more related to the strategy and the way they interact with business clients	global business clients. Examples include NTT's collaboration with Yokogawa Electric, Colt Technology Services' engagements with stock exchanges, Proximus' association with Netflix, and AT&T's relationship with Disney • These examples highlight the significance of the size, value, and resources that TSPs bring to their clients, developing new partnerships aimed at achieving shared objectives and sustained growth
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Table 15: Summary of findings, their relevance and application

While this chapter has analysed and drawn primary conclusions based on interviewees' and focus groups' responses and the way TSPs are countenancing new challenges and the latest trends, the next chapter (Chapter 5) will discuss these results by linking them to the theories covered in the extensive literature review (Chapter 2), introducing new theories such as TCE and KBV, and connecting them to the revised conceptual framework. The discussion examines the influence of resources, adaptability, and client relationships on the performance of TSPs, emphasising collaborative partnerships as a central theme. In sum, the next chapter will draw upon resources and their use and value, integration of features of growth, merging, expansion, development and shrinkage among the TSP industry to produce significant understanding. The Discussion section (Section 5) focusses on all the important issues facing the TSP industry and its expansion and growth, covering all the major considerations throughout the paper, as emerged from the research data and findings above.

5 Discussion

5.1 Introduction

To achieve the research objectives, the study used a qualitative multi-method approach with data sourced from interviews and focus groups. The aim of this research is to increase understanding of why TSPs collaborate with business clients and how the collaboration might help them achieve sustained growth.

Resources, knowledge, capabilities, and collaborative partnerships as shown in the conceptual framework (Section 2.7) are included in the discussion to examine the impact on competitive advantages and how they influence TSPs sustained growth.

Theories and frameworks such as the TCE, RBV, KBV, DC, absorptive capacity, and adaptive capability were used to identify the resources, knowledge, dynamic capabilities, and other factors that can influence the collaborative partnership's results. The discussion is framed around the integrated findings as in Section 4.5 in Chapter 4.

In addition, the discussion considers the differences between TSPs values and shareholders, their collaborative partnership history, and the different strategies they adopt.

The discussion covers the key findings mentioned in Table 15 and the position of resources, knowledge based dynamic capability, TSPs' adaptive capability, relationships and trust, collaborative partnerships, and the impact of these on TSPs' sustained growth. The discussion includes the three research phases: Current TSP partnerships, why and how they collaborate with business clients, and the link between sustained growth and collaborative partnerships.

The discussion in this chapter is presented in four sections:

Firstly, the impact of resources and adaptability on TSPs' performance and the role that knowledge can play to improve the core competencies and contribute to growth. Secondly, the importance and influence of TSPs relationships and trust is discussed. Thirdly, collaborative partnerships are discussing the reasons why TSPs collaborate with their business clients, the collaborative ecosystem, how TSPs can benefit from the different partners, and how collaborative partnerships in practice looks like. This section is focused on the collaborative activities of TSPs considered in this research but adding more examples from the industry can help achieve the research objectives and contribute to answering the research question. The examples show if and how TSPs are collaborating and if they succeed in creating competitive advantage.

Finally, the discussion covers the partnerships of TSPs competitions and their performance and why they succeed to grow while TSPs fail and still facing the challenge to stop de declining.

The discussion covers the relationship between TSPs and their competitors, such as GCNs, who are also clients to buy services from TSPs and resell them to their end users. The specific focus on the competition with OTTs allows the researcher to explore the benefits and the right strategy for TSPs when dealing with OTTs as competitors and business clients at the same time.

5.2 Impact of resources and adaptability on TSPs' performance

In addition to the non-tangible resources, the core network is the most important asset for TSPs. The optical fibre network in the ground is the core asset for TSPs, and all their business is based on the network they own or the local access they may buy from other providers. The network is a central element in every collaborative partnership that TSPs can develop, either by investing more in the existing network or by adding ecosystem partner features and services to their network. TSPs' revenue still comes from network-related services and products, and to understand the future sustained growth they can achieve, specifically through partnerships, a focus on the value of the core network is needed.

An important reason for TSPs to create collaborative partnerships can be traced back to a lack of appropriate resources. Current collaborative partnerships between TSPs and business clients are, for the most part, still centred around capacity and network service availability in the short term (e.g., Orange and Capgemini to develop new Infrastructure, platform, and software as a service). The current practice does not involve having long-term relationships with global clients who choose to sign long-term contracts. This finding is supported by the quotations mentioned under theme one (4.3.2 Impact of internal and external resources on TSPs' business) and in section 4.4.2 (Impact of internal and external resources). The findings suggest that the current position of resources have changed, and TSPs are looking towards consortia where different shareholders work together (ecosystems) to provide a better service to the clients. Examples, mentioned in Chapter 1 in Section 1.1.3, about AI and cloud computing threats and opportunities: TSPs created a new AI Alliances in 2024. Singtel, Deutsche Telekom, e& Group, SoftBank and SK Telecom launched the Global Telco AI Alliance and announced the creation of a new joint venture to develop Large Language Models, a type of AI programme, specifically to the needs of telecommunications companies (Tomas, 2024). The new alliance offers TSPs a chance to co-develop new AI solutions and improve their clients' interactions via advanced AI chatbots.

The findings show that internal resources may be enough to manage and maintain the current business but are not enough to address new business requirements, especially for global clients where customised solutions are required. This conclusion is in line with the critique that was

mentioned in the literature review (Eisenhardt and Martin, 2000) on the RBV that the current literature does not sufficiently explain how and why certain firms achieve competitive advantage in fast-moving markets such as the telecom and ICT businesses. The findings suggest that internal resources can help companies grow, but they are not a key differentiating factor in a very dynamic market. In particular, the old national incumbent TSPs (Ownership, national government shares specified in Appendix 1) are suffering from not having the right skill sets despite the large network and high number of head counts. National TSPs are often criticised because of the legacy systems they are maintaining, partially because regulatory obligations, and the lack of new skills and resources to transform and be more competitive. Especially, participants from small and national TSPs are suffering from this problem (e.g., KPN, Proximus, Telia).

The way TSPs use their internal and external resources shows how they respond to rapidly changing environments and achieve growth. TSPs decision to make or buy resources is based on the TCE three factors (frequency, specificity, and uncertainty) as presented in Table 7. The decision is often a combination of a business case with a short return on investment based on commercial opportunities created by expanding the network and connecting more buildings and key data centre. However, competition stay a challenge for all TSPs with small or large network, national or international focus. Most of TSPs' collaborative partnership activities were undertaken because of a lack of capacity or the need to buy new applications, services, or features to be able to make offers to global business clients.

TSPs see their network resources as a source of competitive advantages, and they collaborate more with their vendors than with their business clients. For this reason, Zander and Zander (2005) criticise the RBV because the role of established clients as a source of competitive advantage has been neglected. Other competitors struggled to match the resources that have been developed by TSPs when they were combined with a strong customer centric orientation (Bharadwaj, 2000). However, the costs of coordinating and collaborating with clients increase the risk of failing to satisfy clients expectations (Goodman et al., 1995). Client involvement introduces complexity and uncertainty into the production and delivery processes and may have a negative impact on TSPs' performance (Bowen and Schneider, 1988).

In addition, RBV was also criticised because the static nature and other studies suggested to use the knowledge-based view as an extension of RBV. Knowledge is considered as a special resource that provides a strong view for the TSPs learning and dynamic intellectual capital.

The RBV (assets based) view changed later, especially when TSPs saw how their competitors performed without having network services, but by providing cloud-based content to clients.

The findings point not only to the position of resources in the competitive landscape but also to the fact that some TSPs are struggling to make a shift from old resources (old technology and skills) to the new digital and cloud-based services.

Furthermore, collaborative partnerships are needed so that TSPs can expand to new countries and digitalise how they serve new clients. Some TSPs start to be an enabler for global clients such as resellers and other providers by helping them deliver service to their end clients (e.g., Colt Technology Services is providing network services to AT&T clients in Europe via automated ordering system, and voices service to Microsoft Europe including regulatory and emergency features). When TSPs are developing new customised services, they know there is a match with client's requirements. Developing new customised services is a form of adaptive capability that TSPs are creating to stay relevant for their clients by showing their added value. However, the findings show that TSPs are unable to productise and repeat the customised solution quickly for different projects at the same time, which means a delay in delivery, no quick go-to-market actions, and finally revenue losses. Therefore, dynamic, and adaptive capabilities as developed by TSPs are necessary but not sufficient conditions to achieve competitive advantage (Eisenhardt and Martin, 2000). Dynamic capabilities, to create resources and engage ecosystem partners, can help achieve temporary advantages and better positive performance for the TSPs (Ringov, 2017) but not sustained growth.

Traditional TSPs sold standard services and products using standard resources, and all their processes and procedures revolved around transactional business (repeatable and not customised). More collaborative partnerships mean a different approach to building new relationships and investing in common goals. This is happening to some extent, but the findings show that TSPs are still running their businesses using the old sales approach with short-term results. Some participants suggested that collaborative partnerships are more successful when an entrepreneurial approach is applied, and partners are willing to work in a dynamic, adaptive, and flexible ecosystem by continuously adding new partners with specific knowledge. This suggestion reflects the result of some other studies, showing that highly effective entrepreneurial management is a characteristic of strong dynamic capabilities (Teece, Peteraf and Leih., 2016). The participants mentioned the challenge of short-termism and the tendency to avoid risks and long-term investments, and new services or products developed through the customer co-creation process are more profitable (Witell et al., 2011).

TSPs are maintaining their network, undertaking some expansions, replacing legacy services, and introducing new services, and they are examining how they can protect their network from the global GCNs or "big tech." Aidi et al. (2012) suggested different strategies that TSPs can

adopt when competing against OTTs and other cloud providers: Do nothing, do it alone (become an OTT provider), or collaborate (aligning strategy). Aidi et al. (2012) concluded that partnership with the well-known OTT players is the potential position that telecom operator should take.

TSPs, such as AT&T and Verizon in US, asked the federal regulators and lawmakers to approve their proposal to create fees against “big tech” companies to help finance the networks that their services run on top of. It is complex to manage the network usage between TSPs and OTTs, and it is unlikely that a change will occur in the US or other regions of the world. The network is a core business for TSPs, while the content (such as applications, videos, and real time data for social platforms), and cloud computing capability is a core business of the OTTs and GCNs. ABI Research reported in July 2022 that TSPs can still invest in network-as-a-service (NaaS) such as software-defined wide area network (SD-WAN), and wide-area network (WAN) services, and cloud access (Goovaerts, 2022). NaaS is the new way how clients order bandwidth, and this is considered as the heart of the aggregation business model that TSPs are currently exploring. They are expecting high NaaS adoption where TSPs can capture half (\$75 billion) of the overall NaaS market value, but they should adapt and change their operational model because the connectivity market continues to decline. TSPs should continue to virtualise their networks and develop more partnerships. Otherwise, cloud providers such as Amazon Web Services (AWS), Google Cloud, and Microsoft Azure will continue to expand and be dominant players in the NaaS space. AWS, Google, and Microsoft grow at 35–50% per year and own 65% of the total cloud market, while other small providers are growing between 10–20% (Synergy Research Group, 2022). This growth can create opportunities for smaller providers if they stay focused on specific regions or selected niches where they can differentiate themselves from the big three cloud providers who own a dominant market share, as shown in Figure 20.

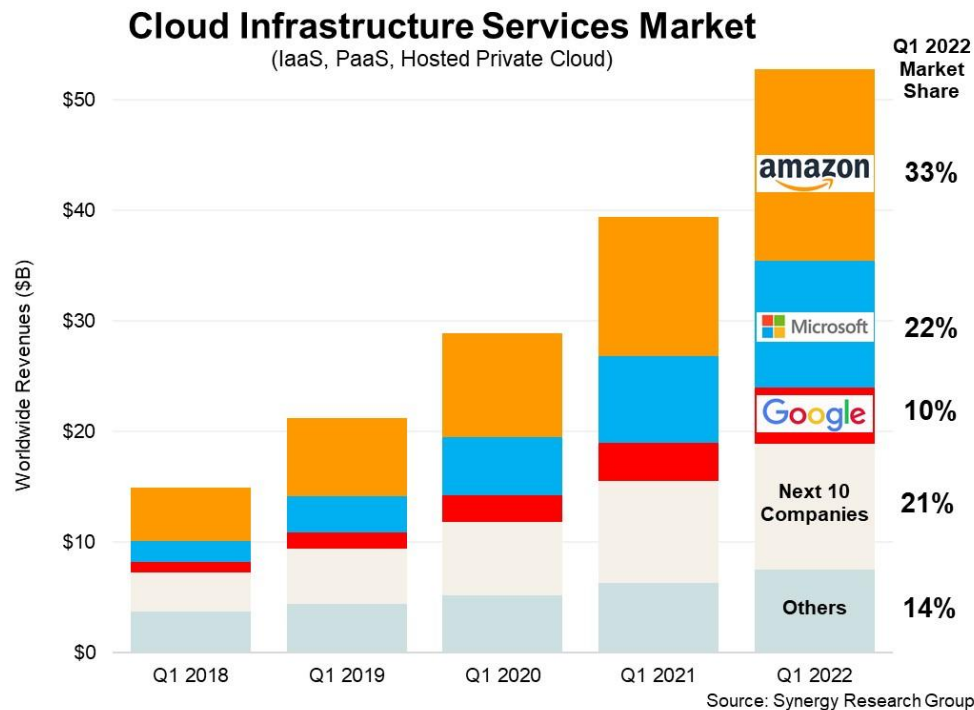


Figure 20: Cloud infrastructure services market

Figure 20 represents the cloud infrastructure market share compared to the market share of the first quarter from 2018 to 2022: Platform-as-a-service (PaaS), hosted private cloud, and infrastructure-as-a-service (IaaS). IaaS is where users have control over their own operating systems, and PaaS allows users to build apps without hosting them on-premises, which means more flexibility but less control. The three global leaders are OTTs. One TSP from this research is in the “next ten companies” category with 21% of the market share (after the three OTTs), and all other TSPs are in the “others” category with 14% of the market share. TSPs with high value and international capabilities (e.g., AT&T, Verizon, Deutsche Telekom) are able to develop a strong cloud infrastructure (as a service model) but they are still not able to compete against market leaders (Figure 20).

The findings suggest that participants think there is not enough space to compete with OTTs and GCNs, but they consider that the best strategy is to create partnerships. This assumption is shared by authors such as Krämer (2019), Steingröver, Cardozo Larrea, and Zhelev (2019) and Awwad (2021). Others describe the win-win with TSPs competitors as an aligning strategy (Aidi et al., 2012). Sometimes a combination of partnering and aligning is the best choice; it depends on the type of service and the size of the business.

TSPs’ network resources are considered core competencies (with VRIO / VRIN characteristics) as presented in the conceptual framework but are not able to create the sustained growth that TSPs want to achieve. This inability is pushing TSPs to reconsider their competencies to ensure

they are creating competitive advantages that can lead to sustained growth. TSPs are undertaking this iterative performance process to evaluate their competencies and build new capabilities to achieve sustained growth. For TSPs, current growth is not in bandwidth (Appendix 7) or network-related services (Appendix 5 and Appendix 6). The size and the value of the TSPs explained in Appendix 1 and the network they own (fixed, mobile, national, or international and sub-sea routes) impact the revenue and profit, but this is temporary and not a long-term differentiating factor that can help to achieve sustained growth. The past collaborative partnerships and joint venture activities (Appendix 4) show that bandwidth centric resources are not enough for the success of the joint ventures and is not related to national or international coverage.

5.3 The influence of relationships and trust in collaborative partnerships

The findings indicate that participants consider collaboration a business activity that involves making a change in the relationship with clients and implementing a new engagement model. Especially global clients expect their providers to partner with them and show commitment to work together on common goals to achieve mutual growth. How TSPs start building relationships with their clients is linked to opportunity creation, where both the TSP and client see the value and benefits of collaborating. When they work together, succeed in developing more opportunities, and close more deals, they build trust. This trust can help them build a long-term strategy that can help achieve sustained growth.

This is value creation, and it is different from the focus on monitoring CSAT, which cannot lead to sustained growth because this is management of the bottom-line performance as presented in Symonds, Wright and Ott (2007) research. Additionally, other studies show that CSAT is an unreliable indicator and sometimes poorly conducted (Slater, 2001), which is also confirmed by the findings in this research. These studies do not neglect the importance of satisfied customers, but they also do not see the link to long-term loyalty and sustained growth. The growth strategies should focus on clients' potential growth and opportunities and not on measuring and collecting user experience details. In recent channel segmentations, TSPs have shown a different organisational structure by assigning low and medium growth potential to desk-based account management and focusing on clients with a high commitment by establishing new relationships around collaborations and the development of new ecosystems. This focused view is a new type of relationship, especially in the wholesale business, and a diversification of providers' revenue streams, which improves engagement with business clients and leads to more collaborative partnerships.

Changes in the relationships with can be made to improve the growth results, but service providers often go for quick wins rather than long-term results. TSPs can take business clients from a general relationship to a collaborative partnership. The participants noticed that global accounts have a greater willingness to collaborate, and much is about honesty to build an open and transparent conversation. TSPs prioritise their global business clients and assign more dedicated resources to maintain and develop the relationship. At the same time global clients are on the top of the TSPs market segmentation with a high business potential and big opportunities that require time to be discovered and developed. However, TSPs are not managed to achieve long-term profitability but are continuously looking for quick results. They are not organised to have an entrepreneurial approach to be dynamically capable (Teece, Peteraf and Leih, 2016). This short-term thinking and way of managing commercial targets have a negative impact on collaborative partnerships and the relationships with clients.

The choice to implement a short or a long -term approach is linked to TSPs ability to afford long or short sales cycle and the commercial approach they apply. TSPs with high value such as AT&T, Verizon, Deutsche Telekom, NTT (TSPs value in Appendix 1) can afford to focus on strategic accounts and global clients and services, while other TSPs are focused on local enterprise clients and national resellers (e.g., KPN, Proximus, Telefonica in Spain, and Telecom Italia in Italy). TSPs are using new knowledge to sell more on-demand services including AI and cloud computing capability. This automated way is aligned with the customer centric approach to build a good relationship with clients and meet the expectations because the way how clients consume digital service and products changed.

The findings show the importance of trust in building a strong relationship between TSPs and business clients, especially when thinking about long-term collaborative partnerships. TSPs believe that trust becomes more important when the level of uncertainty is high because business clients want to find a trusted provider with whom they can do business. This is what was shown by Sheth and Parvatiyar (1992) when they stated that successful collaborative partnerships require a high level of trust between partners. To reach a high level of trust, TSPs should take care of their brand, services, and products, as well as how their clients' experiences are managed. Trust is a combination of different factors, and participants see that trust and cultural differences are difficult to achieve or influence when dealing with various clients from different businesses in all regions of the world.

These cultural differences are visible between US TSPs such as AT&T and Verizon, European providers (Orange, Vodafone, and Telefonica), and Asian providers (e.g., NTT). The differences are shown in the TSPs size and shareholders (Appendix 1) and in the past

collaboration activities (Appendix 4) and the journey they made after the privatisation (Appendix 2). The different results of partnerships and joint ventures and the position of national business compared to the international coverage is visible in the way how TSPs build the relationships and collaborate with business client.

Fear and cultural differences are challenges to building successful collaborative partnerships, which was mentioned in Section 4.3.6.3 (Participant 8 quotation as example). Different organisational cultures on top of local national cultures might be an important source of barriers to collaborative practice between TSPs and business global clients who are also facing similar challenges.

Collaboration and relationships with clients are partially about legal and commercial conditions but also includes what Batt and Purchase (2004) call the social factors (trust, communication, and culture). The findings illustrate that these factors are essential to building a successful collaborative partnership that can achieve the agreed goals and create competitive advantages. Furthermore, the findings show that collaborations sometimes end with the TSPs acquiring the partner when both see the importance of social factors and the positive impact on business after the takeover. Acquisitions can contribute to the growth of TSPs by adding more clients, revenue, and network coverage. However, TSPs acquisition and JV in the past were not always successful. They faced commercial challenges, and the business case was based on a different relationship model without focus on long term collaboration. Some JVs failed (e.g., Concert and Global One) and some TSPs bankrupted because of fraud and lack of trust (e.g., WorldCom).

The findings suggest that the commitment to collaborate is a result of a strong relationship and a high level of trust and is not only a commercial decision. Without trust, TSPs and business clients are unable to collaborate, create long-term relationships, and achieve sustained growth. The importance of a strong relationship and trust between collaborative partners is a condition for successful collaboration. This was partially reflected in some other studies (e.g., Vangen and Huxham, 2009) but in different contexts. The findings showed that the dynamic telecommunications industry and the relationship between providers and business clients (mainly global accounts) are different to those between individuals or small businesses from different sectors. The findings are now discussed in connection with partnerships and collaborative, innovative ways forward. Section 5.4 below discusses the collaborative partnerships.

5.4 Collaborative partnerships

5.4.1 Introduction

The findings illustrate that the participants' views are overly positive when it comes to collaborative partnerships, with little emphasis on potentially negative consequences. At the same time, TSPs are not reporting differently on collaborative activity results, and they cannot make the results tangible, but they see an increase in revenue and an overall better performance when collaborating and when they are focused on partnerships with business clients. Furthermore, it should be noted that TSPs lack the practical experience of long-term collaborative activities.

Collaborative partnership as a central theme is discussed in four sections:

- Reasons for collaborative partnerships: This section discusses the reasons why TSPs collaborate and how they develop the partnerships with the benefits and risks linked to any form of collaboration (alliances, joint ventures, acquisitions... etc).
- Collaborative ecosystems: This section discusses the ecosystems benefits for TSPs with some collaborative examples such 5G projects or AI developments.
- Collaborative partnerships in practice: This section discusses the advantages and disadvantages of TSPs collaboration with business clients and the TSPs competitors and their clients. The discussion presents and discusses the different results between TSP sand their competitors.
- Collaborative partnerships in growth: This section discusses the findings about the collaborative partnerships' contribution to growth.

5.4.2 Reasons for collaborative partnerships

Table 16 gives a summary of why TSPs create collaborative partnerships, how they create them, and what the benefits and risks are. What is listed in Table 16 are examples from the field of telecommunications.

Why Collaborative Partnership?	How	Benefits	Risks	Examples	Date	Source
Legal limitation	Partnership with TSP that owns the licences to offer ICT and telecom services, including emergency services.	Avoid legal complexity, ensure compliance and easy to deploy solutions	TSPs remain in control as the legal owner of the service and takes all risks	OTT providers and business clients (resellers) collaborate with TSPs because they are fully compliant. They just register as a service user.	July 2018	https://www.telserv.nl/news/coll-partners-with-telserv-to-extend-its-voice-presence-to-10-new-markets
Lack of resources (third party service)	Collaborative partnership to expand the footprint: Network access, voice capability, added value services such as intelligent network	Expand the network, coverage, add more services, and create access to off-net locations	Operational risk because the TSP is buying a service but do not own the network end-to-end. Commercially any off-net service means less margin.	Almost all TSPs are buying third party services from each other as no one has a global network everywhere.	July 2015 July 2018	https://www.orange-business.com/en/press/orange-business-services-partners-with-tata-communications-to-expand-its-network-presence-in https://www.telserv.nl/news/coll-partners-with-telserv-to-extend-its-voice-presence-to-10-new-markets

Client requirements	Client requirements may push TSPs to collaborate and create a new partnership to serve their clients.	Able to make a customised offer, including third party services	It is a customised solution and may not fit for other clients. The costs should be absorbed in one partnership business case.	Business clients asking for special network features or a service in a country outside the TSP footprint such as the SD-WAN design and delivery done by Axians for Colt Technology Services	October 2021	https://www.capacitymedia.com/article/29otdn0ylukn01pl6tfy8/news/colt-partners-with-axians-to-expand-sd-wan-offering
Low costs (To share investments)	Network expansions, submarine cables, and optical fibre long-distance network are expensive projects. TSPs usually partner with some business clients (usually the global OTTs) to share the costs.	Low costs and shared risks	Long-term investments without a commitment for sales and revenue growth	25-year contract between Colt Technology Services and Getlink to build and manage fibre infrastructure in the Eurotunnel (UK–France tunnel)	September 2021 September 2021	https://www.colt.net/resources/colt-and-getlink-sign-exclusive-agreement-to-install-and-operate-a-new-fibre-optic-network-through-the-channel-tunnel/ https://www.capacitymedia.com/article/29otdhk3j2ycxuml0m0hs/news/colt-wins-25-year-deal-for-uk-france-tunnel-fibre-link
New products and services	Collaborate to create new services or products.	Create more opportunities and chance to win more business.	No or limited commitment from other clients to buy the new services	Colt Technology Services partnered to expand voice services in Asia, US, and some Eastern European countries (SIP – Global SIP services)	February 2022	https://en.prnasia.com/releases/apac/colt-launches-global-sip-trunking-service-in-south-korea-expands-offering-in-the-us-309014.shtml

Business expansion (international coverage)	TSPs collaborate with international clients to expand their portfolio to Asia, US, or some countries in Eastern Europe	Keep business clients on board and win more business	TSPs may face issues operating in new locations and markets they do not know	Vodafone introduce VPN, network services, and resell some fixed voices services to keep their business clients (global enterprises) who are buying only mobile services.	June 2022 (Similar projects started in 2015)	https://telecomtalk.info/vi-vpn-extended-connect-is-here-to/522531/
Expand end users by offering more content (sell more)	TSPs collaborate to add more content to their portfolio	Sell more services (solutions instead of single connectivity)	New business for TSPs means a risk	Proximus in Belgium collaborate with Netflix. Vodafone in the Netherlands start to have social service for live football matches.	September 2014 December 2014 October 2021	https://www.reuters.com/article/belgacom-netflix-idUSL6N0RU29H20140929 https://www.muvi.com/industry-updates/belgacom-adds-netflix-to-proximus.html https://www.vodafoneziggo.nl/en/nieuws/exclusive-benefits-customers-vodafoneziggo-launches-priority/
Offer complete customised solutions.	TSPs are collaborating in and closing new partnerships to be able to offer advanced security services	Be capable of addressing clients' demand by offering more cost-effective security services.	Security is running on third party platform and managed by external providers.	TSPs partner with security providers, such as Zscaler and NTT Communications, or between Zscaler and Telefonica	June 2019 March 2022	https://www.zscaler.com/press/zscale-partners-with-ntt-communications-in-web-security https://www.telefonica.com/en/communication-room/telefonica-tech-partners-with-zscaler-for-new-security-edge-offering/

Learn and acquire new knowledge	TSPs acquired considerable knowledge about software-defined networks and partnered with global clients to deploy and test new services.	New technology, cost effective, quick to implement and maintain	Difficult start and no volume yet. Clients should trust the new service before doing the emigration to software defined platforms.	Telefonica projects to implement SD-WAN with clients and partners such as Fortinet	October 2021	https://www.telefonica.com/en/communication-room/telefonica-tech-and-fortinet-launch-global-secure-sd-wan-service-to-secure-and-connect-work-from-anywhere/
Efficiency and cost savings	TSPs partner with business clients for more efficiency using blockchain technology.	Quick delivery and service assurance service (SLA monitoring) and fast number portability management	Fast delivery, more automation, and quick lead times	Colt Technology Services started a proof of concept with PCCW global to automate wholesale international services through the use of blockchain	May 2018	https://www.colt.net/resources/colt-pccw-global-expand-blockchain-trial-carriers-join-initiative/
Create new opportunities and increase sales	TSPs partner to make swap deals with global clients	Easy and quick to create win-win deals	High volume and short-term deals (quick wins, not sustained)	Many swap deals are created between TSPs and their clients to send each other traffic for termination (national, fixed, and mobile), especially for voice services	February 2015	https://www.businesswire.com/news/home/20150219005027/en/Deutsche-Telekom-and-Colt-Announce-Five-Year-Partnership

Quick go-to-market actions (launching new services and products)	TSPs use collaborative partnership to improve the customer experience	Better customer experience and digital efficiency	Risk of wrong deployment as digitalisation is not about tools and systems only but related to people and their willingness to change	Telia partnership with Celonis to accelerate the digital transformation of their customer experience	February 2022	https://www.celonis.com/press/telia-celonis-digital-transformation-improve-customer-experience
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Table 16: Reasons for collaborative partnerships

One of the important reasons for creating collaborative partnerships with TSPs is the legal aspect. TSPs have been licenced and fully compliant operators since their start as service providers. They are allowed to provide all types of telecommunications, while new players such as the global cloud and content providers are still facing licence limitations.

The legal and regulatory aspects have become more important after the European Parliament's decision in July 2022 to approve two proposals to minimise the influence of global US cloud and content providers (Wooden, 2022a). The Digital Services Act and the Digital Markets Act were designed to regulate global providers operating out of the US. The two acts were bundled under the Digital Services Package.

Global cloud and content providers are not allowed to use unfair practices because of their dominant position. The regulation creates new opportunities for TSPs to compete with the OTTs and makes it easy for clients to switch over to other providers who can offer similar or better services. However, since the regulation of the telecommunication markets years ago, the national TSPs (old monopolists such as KPN, Proximus, Telia, and Deutsche Telekom) are still leading the business in their home market. The regulation guarantees fair access to the network, but TSPs need the ability to compete against the global provider if they want to win new business clients.

The transition that traditional providers are making by moving from telecommunication providers selling standard services to technology and communication enablers focused on cloud services is still ongoing. In 2022, Vodafone announced a partnership with Altice to create FibreCo, a joint venture company that rolls out fibre networks in Germany. They share the risks and rewards of a network expansion in which they invest €7 billion.

Telenor, another TSP, agreed to sell 30% stake in its multi-billion-dollar passive fibre infrastructure business to an investment group. With this deal, Telenor wants to sell the network, which is currently not in use (passive) and invest in other growing areas.

The same was done by AT&T when they aimed to create a partnership for a faster fibre rollout. The fibre joint venture would be valued between US\$10 billion and US\$15 billion. Surprisingly, AT&T was busy transforming the business to be a media and content provider (after the acquisition of Warner Media and the combination with Discovery), but now they want to concentrate on fixed broadband and mobile services with the assumption that the demand for connectivity after the pandemic is not declining again. However, this assumption is not supported by the 2022 consolidated financial results of the revenues as published by A&T in their annual reports: in Q1, they had a decline of 13.3%; in Q2, they had a decline of 17.1%; and in Q3, the revenue declined by 4.1%. Other TSPs faced the same results.

The reasons for partnerships summarised in Table 16 are related to legal considerations (license to operate), network resources, and costs (buy and collaborate instead of making, as stated in TCE factors in Table 7), but these are not long-term partnerships. They are driven by a short-term need for more capacity and not by long-term shared investments. The interview and focus group data on the previous sections (4.3 and 4.4) showed that resources and network capacity cannot create competitive advantages and sustained growth. The examples mentioned above can be developed by the TSP and the business clients into a successful collaborative partnership (Hord, 1986; Winer, 1994). Otherwise, the relationships stay at network level, cooperation level, or coordination level, as shown in Figure 6.

The examples of collaborative partnerships mentioned in Table 16 show the benefits achieved by the TSPs and their clients. The benefits achieved when TSP acquire more resource, new knowledge, network expansions, bundled customised solutions, and partnerships to reduce costs. More benefits are also achieved by developing new services, such as SD-WAN and security features and by improving the service delivery and service assurance processes, especially when adding new AI capability. The risks are also mentioned and both TSPs and business clients will try to minimise the negative impact on their partnerships. Collaborative partnerships, M&A, JV activities can fail and TSPs will face challenges to control the costs, exit the new market (e.g., Colt Technology Services exists the managed IT services) or consolidate the global business (e.g., BT, Vodafone, Telia)

Most TSPs believe in a more proactive approach to find collaborative partners and develop the business together. There is an increase in awareness that partnerships should be done in a dynamic way with a long-term approach and well-defined goals. Even with the calculated risks, TSPs see a positive impact of collaborative partnerships on their sustained growth.

The examples shown in Table 16 may start as networking relationships and grow over time to become cooperation and then coordination of activities before they reach a high level of improving the partners' capacity and benefits (collaborative advantage in Figure 6). Depending on the reason for collaboration and the urgency of achieving the common objectives, both partners decide the type of relationship before they share resources and capabilities. This joint decision making creates core competencies and helps TSPs achieve competitive advantages, as mentioned in the conceptual framework (2.7). However, not all types of relationships between TSPs and business clients and not all reasons for collaboration are finally converted to a full collaborative partnership as defined in the literature review (2.4). Depending on the client's needs, and TSPs size and collaborative history, both partners may contribute and share

resources, provide leadership to achieve the defined goals, or just keep the relationship for short-term sales activities.

5.4.3 Collaborative ecosystems

An ecosystem is a community of TSPs, clients, and other partners who interact and collaborate to achieve mutual benefit. Exploring this eco-system in light of some joint activities, such as network resources, knowledge, AI, cloud computing, and 5G applications, helps with understanding the impact of collaboration on the TSPs' performance.

TSPs with different services, such as fixed, mobile 5G, broadband, cloud, and virtualisation, see the telecom industry undergoing significant and important change. Competition, digitalisation, technological development, and traditional business models are shaking up the business market (as explained in Chapter 1 under 1.1.1, 1.1.2, and 1.1.3).

In the focus group discussions, key decision makers from different TSPs questioned how to redefine the connectivity business, reimagine cloud services, and make themselves relevant by transforming and reinventing the telco business. This is the key theme that different TSPs discussed at the Telco Cloud event in Amsterdam (Telco Cloud, 2022). The same challenges were discussed in the International Telecoms Week (ITW) in Washington, DC, USA, in 2022, and global connectivity reimaged was the theme in 2023 (ITW, 2023). Some panel discussions led by one TSPs' CEO called for collaboration across industries in telecommunications and a reimaged purpose for telecommunications.

There was considerable focus on collaboration and a clear goal: TSPs should do business as one network, one community, and one industry rather than independent and competitive providers. However, one CEO mentioned that they should stop trying "to maintain control of a commercial environment that no longer exists." There are already some "amazing" collaborations taking place in the telecom business but not enough to achieve sustained growth. The scalability of the TSPs' operating model is limited, and only through more collaborative partnerships can they create value and competitive advantages.

Creating value is the logical next step if TSPs take on the challenge of balancing the power position with hyperscalers (OTTs, GCNs, and other global cloud providers) instead of just enabling them by providing connectivity (aligning strategy mentioned in the literature review under 2.3 Sustained competitive advantage and growth in fast moving market)

TSPs discussed the importance of their investments in more collaborative partnerships and developing skills enhancement programmes. They are competing against the OTT global providers, who own two-thirds of all international subsea traffic, up from 6% in 2010 (Clark,

2022). The potential addressable market for third-party wholesalers (TSPs) on the Atlantic route is around 13%. The prices are declining (e.g., from 2018 to 2021, the price of a 100G wavelength was down by 7% on the LA–Tokyo route, 12% on the London–Singapore route, and 17% between Miami and Sao Paulo). Recent communication from one TSP participant shows that national bandwidth tariffs in the UK have declined by 50% (Colt technology Services, 2022).

This decline is the challenge that TSPs are currently facing and trying to address in a collaborative ecosystem by creating long-term partnerships with their clients to ensure they add value to the business and succeed in creating competitive advantages. Global clients, such as IBM, are organising an annual “Think Conference,” where they bring together their eco-system partners around the world to discuss market changes and challenges. They want to show “how the company is co-creating with an expanding eco-system to make progress on the most pressing issues enterprises and society face today” (IBM Communications, 2022).

Providers’ ecosystem partners are playing a crucial role in the co-creation of solutions that aims to help them overcome their business challenges. IBM is an example of how a traditional and old company can transform and stay a leader in what they are doing. However, TSPs are still trying to transform from traditional providers to software and IT-focused providers. They see how global GCNs, and OTT providers benefit from the use of their network and win more business without being TSPs. The same is still happening for 5G network deployment, where TSPs own the network but should transform their business models to offer 5G services. The shift into the technology and ICT space is not easy for TSPs. Services such as IoT, smart vehicles, smart cities, and remote device control are new for traditional TSPs, and they risk losing opportunities related to these new technologies to new players in the same way that they lost similar competition with GCNs. Mobile TSPs started with 5G services in different sectors, such as healthcare, education, agriculture, and the car industry, but the volume is still low, and the massive communication as a service is not yet in place.

Telefonica has mentioned “services combining 5G Connectivity, cloud edge, business applications and devices”. In Spain, in 2022, they presented some projects in collaborative partnership with business clients:

- The police services offered efficient urban mobility management based on 5G technology (5G video transmissions with the police control centre).
- The University of Malaga offered students immersive educational experiences and remote access to laboratory equipment.

Vodafone, another mobile TSP, have developed and tested some user applications in their 5G Hub. These tests were ongoing in 2020 and 2021. They undertook some tests with connected cars, partnering with Ford to enable their manufacturing processes for electric cars with 5G. They continue to develop predictive maintenance and adaptive control with 5G, which has the potential to transform the manufacturing industry.

KPN, another mobile TSP in The Netherlands, are undertaking similar tests with 5G and want to offer film streaming, cloud gaming services, and other applications in the security and healthcare sectors, but they are still implementing the 5G network.

The examples above are showing that telecommunications business is evolving, and TSPs are trying to use technology developments such as 5G to move and be a new modern technology provider, but they do not have the expertise, operating model, or business model for AI, 5G, managed IT, or cloud services. Some services, such as 5G, are still in the spectrum auction phase in some countries and are just beginning to roll out. All these challenges are pushing TSPs to create more collaborative partnerships and act as one network against their global competitors. However, TSPs know they do not have the size and power of global GCNs.

The market dynamics, the future revenue streams (via 5G or other cloud content-based services) and the reimagined telecoms are three topics that were discussed in a telecom conference in London (November 2022). TSPs are exploring how they can cope with market changes and develop collaborative partnerships with their business clients to create an ecosystem and ensure the co-creation of competitive services. TSPs will continue to face challenges if they act alone in a changing environment led by global cloud service providers.

The ecosystems improve and increase the partnership synergy factors such as resources and relationships (Figure 4). In addition, ecosystem partnerships can help TSPs to reduce costs through collaborations with other providers (Kobylko, 2020) but cannot create a differentiating factor and make TSPs services and products unique.

Ecosystems can help TSPs building more capabilities and gain the resources they need to develop their core competencies. However, the ecosystems relationships and the shared investments required to develop collaborative opportunities is related to TSPs size and capability to invest and share resources, define common goals, and exchange knowledge with ecosystem members. The global and large TSPs (e.g., AT&T, Verizon, Orange, Vodafone, NTT) are usually more capable to consider a finance collaborative deals than small or medium TSPs. In the findings, some difficulties and potential dangers of collaborative partnerships were presented (e.g., in 4.3.6.2 and 4.3.6.3), but most of the study participants expect more benefits

when collaborating, and they see collaborative partnerships as having a positive impact on TSPs' sustained growth.

5.4.4 Collaborative partnerships in practice

This section discusses different cases showing how TSPs build collaborative partnerships and why they try to create long-term relationships with business clients. These examples can help explain the collaborative activities in the field and link this explanation back to the research objective: Explore why and how TSPs collaborate with business clients.

Furthermore, this section presents some examples of collaborative partnerships between business clients and TSP competitors to show what TSPs are missing compared to global cloud platforms and global content providers. The lessons learned from the practical experiences when building collaborative partnerships, especially the successful competitors' partnerships, should help TSPs review their strategy. This is a chance for TSPs to learn from their own projects and their competitors and show their adaptive capability of creating competitive advantages. The presented examples are from TSPs included in this study who participated in the semi-structured interviews and the focus group sessions.

Telefonica, as a big TSP provider, announced a strategic partnership with a US-based software company because they want to offer enhanced digital threat protection to consumers and SMEs (Telefónica, 2022). This solution enables threat anticipation and protection, which are not typical TSP services but require more IT and advanced technology developments that are required for TSP clients. The TSPs focus on SMEs was a reason for BT in the UK to build a collaborative partnership with the Federation of Small Businesses (FSB) to deliver extra benefits across broadband, mobile, digital marketing, and other forms of support to grow businesses. BT offers a digital platform to all FSB businesses and hopes to create a solution where everyone benefits.

Another example of collaborative partnership was created between NTT, a TSP, and Yokogawa Electric Corporation as a business client (Yokogawa Electric Corporation and NTT DOCOMO, 2022). This partnership was a proof-of-concept (PoC) to evaluate a remote-control technology for industrial processing. The PoC makes use of an autonomous control AI and the factorial kernel dynamic policy programming algorithm developed by Yokogawa and the Institute of Science and Technology in a cloud environment with 5G, provided by NTT. This PoC project is a prototype developed by both partners technologies. This partnership is a follow-up on the agreement between the two companies made in April 2021 to collaborate on the use of 5G. This example shows that collaborative partnerships take time, this is why short-term performance

management on monthly and quarterly basis is a challenge for TSPs, as some participants mentioned during the individual interviews.

In order to win time (go to market), NTT plans to set up a new company for the industrial metaverse. The metaverse is a virtual world where people can contact each other. NTT Vision wants to implement a diversification strategy using non-telecom services, which should account for half of their revenue over 3 years. This is a shift that NTT, as a TSP, is trying to make so that they can compete with other global cloud and IT providers, such as Google.

TSP competitors, such as Google, announced that they want to expand their market share by implementing an end-to-end channel strategy to be the most open cloud computing company in the world. Google implemented this strategy in a collaborative partnership way, where they combined the channel partners, their technology ecosystem partners and their sales team to act as a “co-pilot” for the client. Google cloud solutions offer not just Google products but also channel partner solutions and third-party services (Haranas, 2022).

To improve the competitive capabilities, Vodafone announced a collaborative partnership with Google in July 2022 that was described as a substantial outcome in AI booster (Wooden, 2022b). Vodafone launched an AI platform into their network that was able to manage thousands of AI models per day, covering eighteen countries. Vodafone and Google will collaborate and invest together for 2 years to develop predictive capabilities, optimise customer experiences, and improve network performance using AI and machine learning (ML) connected to Vodafone operations. It is new to see TSPs having a global function in the organisation that takes care of this type of collaboration to develop the next-generation AI/ML platform.

This shift from TSP traditional services to the advanced intelligent cloud platform could not be done without partnerships with Google Cloud and a UK-based software company that can help Vodafone move to the cloud. and consolidate more than a hundred separate network performance management tools into one cloud application. This intelligent technology and the migration will help Vodafone achieve full automation by 2025. This collaboration is an example of how TSPs and OTTs complement each other to create intelligence and add value to the business.

This collaboration is what TSPs tried to develop when making the shift to be cloud, IT, AI, ML, and metaverse providers instead of traditional bandwidth providers offering access between business clients and the third-party data centre where clients’ systems are hosted.

According to a report made by Accenture, 20% of UK business leaders expect that metaverse will have a “transformational impact” on their organisation, and two out of three UK business

executives believe that metaverse will have a major positive impact on their business in the future (Poloni, 2022).

Production consolidation and the digitalisation of processes are another reason business clients such as the Procter & Gamble Company (P&G) chose to sign a multiyear collaboration with Microsoft to leverage cloud services to create digital manufacturing at P&G.

P&G chose Microsoft to integrate data from more than one hundred manufacturing sites around the world and enhance its AI, ML for real-time visibility. TSPs do not have the capability to help P&G and provide similar Microsoft services.

Growth is not anymore about the bandwidth access only, where TSPs have a network and are still investing to expand the network coverage where they think they have a profitable business case. Instead, it is about the content and application of new technology, such as 5G, AI, and ML. Lumen, a TSP from the US, collaborated with Disney streaming (in April 2022). They want to standardise the content delivery networks to produce configurations and application programming interfaces for the streaming video industry. The Lumen and Disney example is another multiyear collaboration made between a TSP and a business client. They participated in the Streaming Video Alliance, which is a consortium of several hundreds of businesses in the video industry collaborating together to improve the streaming experience (Lumen Newsroom, 2022).

Geisinger Health System is a health system business which chose AWS for cloud, ML, and AI technology (this was in May 2022). Geisinger Health System's entire digital portfolio of more than four hundred applications migrated to AWS, which is one of the largest health system migrations to its cloud platform. The collaboration between Geisinger Health System and AWS is another multiyear collaboration that creates a mutual benefit between the service provider (AWS) and business client (Geisinger) that can improve efficiency, save costs, and invest more to improve performance. TSPs could help Geisinger by delivering bandwidth access and limited data centre colocation services but not by supporting the entire solution for a specific industry such as healthcare systems. Global TSP competitors (e.g., AWS, Microsoft, and Google) provide a full set of cloud computing and advanced intelligent technology to companies working in the healthcare system. Amazon launched "AWS for Healthcare," which is an ecosystem created by AWS and several partner solutions for healthcare and pharmaceutical services to collaborate and expand the healthcare business. TSPs are not capable of doing the same (offering a full set of services based on IT and advanced technology).

Other TSPs focus on the financial market, and they succeed in offering low-latency connections and a real-time web-based portal to configure the access services (bandwidth in demand), but this is not comparable with the IT solution offered by TSPs' competitors, such as AWS.

In 2015, Colt Technology Services, a TSP operating in Europe, the US, and Asia, focused on the financial market by introducing the extranet Colt PrizmNet, which connected providers of financial content – including market data, research, and other services – to capital markets firms. This collaborative ecosystem is similar to the new joint venture partnership agreed between Orange as a TSP and Capgemini as an IT company to create “Bleu” as a new entity that offers “trusted cloud” services in France based on IaaS, PaaS, and SaaS (software-as-a-service). However, this trusted cloud services are specific to French organisations, limited in scope, and does not have the capability to compete against the global cloud providers unless they expand this service and decide to become a global player, which is difficult for Orange and all other traditional TSP providers.

This section showed the importance of collaborative partnerships between TSPs and their business clients and the reasons why they collaborate. The section has shown some examples of the gaps that TSPs have in their portfolio that can be addressed by collaborating, partnering, and investing with other companies to develop new services and enhanced features that can add value to the business. The above-mentioned partnerships and benefits to the TSPs show the link between collaborative partnerships and growth and whether this can be sustained over the long term. The advantages presented in Table 17 illustrate that TSPs, when collaborating with business clients, can grow the business, improve their capability to win more clients, and develop new products and services.

TSP Provider	Business Client in the Collaboration	Reason for Collaboration	Advantages for TSPs
Telefonica	Software company	To offer enhanced digital threat protection	Improve TSPs' ability to serve more clients
BT	FSB	To deliver extra services	Grow the business by creating a digital platform for FSB business clients
NTT	Yokogawa Electric Corporation	PoC to create remote-control technology	Develop new technology to win new market shares and reduce costs
Lumen	Disney streaming	To improve the streaming experience	Add content to the standard TSP services

Colt Technology Services	Clients in financial industry	To introduce Colt PrismNet extranet platform dedicated for financial business clients	Develop new capability of building customised solutions, and win more business from the capital market industry (capital markets ecosystem of 100+ exchanges)
Orange (OBS)	Capgemini	To offer IaaS, PaaS, and SaaS	Win more business clients, and expand the market share in France

Table 17 : Collaboration between TSPs and business clients

TSPs are losing business and are unable to deploy advanced cloud technology or AI and they are not the preferred choice when it comes to ICT and pure cloud services to host clients' systems. Connectivity services can be offered to business clients by the cloud providers, not by TSPs. Traditional TSPs tried to make the shift to the cloud, and they proactively connected all key data centres and cloud interconnect points. However, this shift to the cloud has not changed the TSPs' core business as a provider of network access services.

Table 18 below presents competitors' activities that TSPs can investigate on a case-by-case basis to see if they can win new business when they collaborate and develop new partnerships. All the examples mentioned in Table 18 is showing that collaborative partnerships, by global cloud providers, are developed because of some key drivers and capabilities that TSPs do not have.

Business Clients	Collaborating with Non-TSP	Reason for Collaboration	Disadvantages for TSPs	Date	Source
XPO Transport (business client)	Google	To migrate to the cloud platform	TSPs are unable to support clients with large scale projects to optimise the supply chain	2022	https://www.prnewswire.com/news-releases/xpo-and-google-cloud-enter-into-multi-year-partnership-to-build-faster-more-efficient-supply-chains-301561712.html
Procter & Gamble Company (P&G)	Microsoft	To create digital manufacturing	Consolidate resources and improve processes with competitors services. TSPs have no resources to do this, they can only facilitate the connection between P&G offices and the cloud platform	2022	https://news.microsoft.com/2022/06/08/pg-and-microsoft-co-innovate-to-build-the-future-of-digital-manufacturing/
Geisinger Health System	Amazon	To migrate more than 400 applications to the cloud	Use AI and ML. Consolidate, improve efficiency, and save costs. TSPs cannot offer AI and ML technology	2022	https://www.geisinger.org/about-geisinger/news-and-media/news-releases/2022/05/24/12/12/geisinger-selects-aws-as-strategic-cloud-provider
Red Hat	SAP and Oracle could	To manage modern workloads and add more efficiency	Moving more managed services to smaller cloud providers.	2023	https://techcrunch.com/2023/02/01/new-red-hat-partnerships-with-sap-and-oracle-could-bode-well-for-owner-ibm/
Airbus Defence and Space	Google	To have access to satellite imagery for Airbus customers using Google Cloud Platform	Global business clients see TSPs as preferred cloud providers to support their network services only	2020	https://www.airbus.com/en/newsroom/news/2016-10-airbus-defence-and-space-selects-google-cloud-platform-as-preferred-partner

Table 18: Collaboration between TSPs' competitors and business clients

Some small TSPs with national or regional focus (e.g., Telia, Proximus, KPN) may not have enough resources or international coverage to consider global partnerships as mentioned in Table 18. Other TSPs are collaborating to add more capabilities related to data security, focus on new client segments, and introduce advanced technologies, such as AI (as presented in the introduction under 1.1.3). The digitalisation of clients' platforms, systems, and processes and the move to the cloud are other reasons why clients want to collaborate with their providers and enter into a long-term relationship. Especially in global business, clients and providers are being pushed to think more about a complete end-to-end strategy where standard services and solutions are bundled together. To ensure these packages are complete and address clients' requirements, providers are seeking industry-specific partnerships (e.g., healthcare, education, media... etc).

The examples mentioned in this section show the importance of TSPs building dynamic capabilities and the benefits they can achieve when developing these capabilities in collaborative partnerships with clients. For the new technological changes, TSPs need ecosystem partners and a client's commitment to work together towards long-term solutions. This commitment would create competitive advantages and can contribute to the TSPs' sustained growth.

5.4.5 Collaborative partnerships and growth

The interviewed TSPs mentioned that effective partnerships are key to success and that they must be dynamic and flexible to compete successfully. At the same time, it is still difficult to understand the business' needs, especially for large companies because they are complex, and their requirements are continuously changing. Service providers are facing challenges in enhancing collaborative partnership practices. The challenges are a lack of specific skills, short-term thinking, the ability to understand the business market, and the competitive landscape.

Some providers describe collaborative partnerships as a key to success and important but under the precondition that the whole organisation is aligned behind this strategy and not just one business unit. They state the need for proper partnership qualification before investing and deciding to use resources because business clients accept collaboration if they see the value, or what they perceive as the value, of investing to get the solution that satisfies their business needs.

The findings provide empirical insight into the link between collaborative partnerships and sustained growth. The findings show that the study participants see a direct correlation between

a collaborative partnership with business clients and sustained company revenue growth. However, this link is not tangible and is currently difficult to measure or quantify.

The individual interviews and focus group sessions illustrated the importance of a long-term strategy, the impact of the collaborative partnerships on the TSPs' performance, and the sustained growth that a provider can achieve. At the same time, the participants questioned sustained growth and whether it was still possible for TSPs to achieve it in such dynamic and changing market conditions.

The discussion with the participants showed that TSPs who succeeded in achieving growth were unable to maintain this for a long period (two or three years). The results from the field indicate that TSPs can achieve temporary growth or the renewal quest that recognises the temporary nature of competitive advantage, as called for by Tanriverdi, Rai and Venkatraman (2010). In recent years, TSPs have often incurred temporary competitive advantages, which require a high level of absorptive capacity to deal with external market changes and a high degree of adaptability to make the necessary changes and implement them on time. These advantages are partially working for some TSPs (e.g., Deutsche Telekom international expansion and the acquisition of Sprint), but the findings show that traditional providers are struggling to cope with these changes (e.g., Telecom Italia was unable to adapt and finally decide to sell their network, KPN decided to stop all international activities and sell them to GTT, another TSP provider)

Furthermore, the discussion with the participants demonstrated that achieving strong and long-term contact with business clients contributes to achieving a competitive advantage. However, this strategy is better suited to global business clients (e.g., Business clients as mentioned in Table 18) and requires a long-term investment. It is not a quick and short-term strategy that TSPs use since all providers are selling standard services and products in a monopoly telecommunications business environment. The network resources cannot make the difference and be the differentiator factor in creating the competitive advantages and achieving growth. TSPs know that assets and network expansions are not survival strategies that can help achieve sustained growth. It is even a threat for them to keep selling low-profit services and operating in a declining business. TSPs started to offer IaaS, PaaS, and SaaS, which means that some changes were made in the business model and a certain level of dynamism was achieved.

The findings from the discussion suggest that engagement and collaboration with business clients have positive impact on growth, which differs to the findings of Feng, Sun and Zhang, (2010), Field et al. (2006), and Christensen and Bower (1996), who stated that customer

involvement can generate negative results and fail to adopt critical technology or unachievable targets.

The participants' view is that collaborative partnerships contribute to growth and the creation of new revenue streams. Participants see the collaborative partnership results in selling higher-value international services and increasing the average order value and revenue.

Although no concrete evidence or separate financial figures for collaborative partnership activities exist, it is worth collaborating because business clients expect their service providers to do this. Some providers stated that they do not see any financial evidence as they are not reporting specifically on partnership activities (e.g., Orange, Proximus); they said that CP is not emphasised, but they stated that it is worth collaborating because they see the growth in the business forecast and number of orders (e.g., Colt Technology Services). Financial results are the only tangible component of business value; others nontangible components include the amount of risk removed when collaborating and sharing resources, learning more about customised solutions, and gaining experience in how to create services and products.

How TSPs are reporting on business performance does not allow for a split between revenue because of the collaborative partnership and other business. During the pandemic, TSPs started labelling orders as "COVID-19" so that they would know the impact of the high demand during that period. They could try to label orders in relation to collaborative partnerships, but this would not be accurate all the time because these orders can be mixed with other businesses, and, financially, TSPs' reports cannot support this. TSPs are unable to report on collaborative partnerships separately unless they change the commercial model.

Furthermore, the participants indicate that collaborative partnerships with business clients are a precondition for growth, but they do not see the value of creating collaborative partnerships and other alliances and joint ventures with small business clients with low potential revenue. They are convinced that collaborative partnerships with business clients can improve the growth rate and contribute to sustained positive results, especially when it is done with global business clients who are willing to invest in the long-term relationship. These large clients are usually part of the wholesale units and not the enterprise divisions. One participant stated that "wholesale is only about collaboration, with collaboration we attract more clients, and you can provide services that we cannot provide alone." These findings are supported by the dynamic capabilities' framework, as developed by Teece, Pisano and Shuen (1997), who stated that firm performance depends on the ability to react and reconfigure the business to adapt to market changes and not only because of the physical assets or other internal resources. The importance of resources, capabilities, knowledge, and external market factors as mentioned in the

conceptual framework (2.7), is recognised by the participants. However, they see that collaborative partnerships are unique to each business client and closer to meeting their business requirements and achieving growth. Viewing the findings from my study in this way allows for a connection to earlier research on collaborative practice (Teece, Pisano and Shuen, 1997; Brown, 2019) and supports the argument that collaborative partnerships work to the benefit of all partners.

Factors such as value (market capitalisation), size (network and geographies), market focus (local vs. global), client's type (enterprise vs. wholesale), monopolist position (state owned vs. privately owned providers), strategic priorities (short term vs. long term approach), and past collaborative partnerships activities influence the collaborative practices and outcomes.

Collaborative partnerships can help TSPs transform and grow, but a high level of dynamism is required. In this study, changing the core business from traditional TSPs to cloud and content providers is a long-term choice and will take time to be implemented and see if TSPs are able to adapt and successfully change the business. The common and shared understanding among the study participants was that TSPs perform better and achieve more growth when applying a successful collaborative partnership strategy.

However, applying this strategy is difficult for TSPs, and they are not changing their business completely to reach sustained growth and a high financial performance similar to or close to what their competitors are doing.

5.5 Competitors' partnership and performance

Collaborative partnership is not limited to TSPs as a new strategy to survive and achieve sustained growth. It is a new model which is applied by TSP competitors and other players in the ICT and telecommunications markets. This collaboration model is developed because of the importance and the results of the organisation's performance. It is developed from single-case practices between TSPs and specific business clients to be the central activity of a whole ecosystem of multiple partners. This section presents the way different providers are using collaborative partnerships in practice, which helps to understand why some cloud providers succeed in creating a competitive advantage.

Collaborative partnerships have become a telecom and ICT industry business model through the creation of a partner ecosystem. Collaborative partnerships refer to a network of cross-industry partners collaborating to develop solutions and create opportunities. Here are three practical cases showing examples of collaborative partnerships and the results achieved through their use:

1. Huawei, a TSP supplier, and partner announced their cloud industry strategy to improve their core competitiveness by creating a win-win situation with ecosystem partners. They want to focus on digital transformation, cloud computing, and business innovation and build the best B2B services to continuously create value for customers. The strategy results in 2021 show that Huawei cloud partners increased by 90%, with partner revenue growth of 150% (Telecomreviewasia.com, 2022).
2. Google Cloud launched a “Zero channel conflict” strategy by involving channel partners in every single customer engagement. They are growing sales by co-selling with their ecosystem partners. Partners know that Google will not compete with them and that they do not behave as a service provider. Every customer receives an offer to work with Google partners, regardless of whether the partner plays a role in driving the deal or closing the customer opportunity. This partnership engagement is a default rather than on a case-by-case basis or only when there is a need for customised solutions. The Google Partner Ecosystem is enabled automatically for every customer. Partners collaborate with clients to bring them to the cloud. Google technically facilitates this engagement but shares the revenue with the engaged partner.

Partners always co-sell with Google. One partner stated that their partnership with Google is “extremely collaborative in almost every engagement.” Google Cloud revenue rose 44% year-over-year to \$5.82 billion during the first quarter of 2022 (Hof, 2022). Google made an organisational change to put all resources closer to their customers, including partners of Google (ecosystems).

TSPs are already partnering with Google. As example, Vodafone and Google signed a 6-year strategic partnership to build a new global data platform and distributed system for Vodafone. This partnership supports the creation of new digital products and services for clients (Vodafone, 2021).
3. Tele2, a TSP, launched a collaborative partnership with AWS in the Nordics to enhance the cloud services and cloud management portfolio for Tele2 customers by enabling access to the cloud. Through this partnership, Tele2 joined the AWS Partner Network and combined its network connectivity, security, encryption, and managed services with the broad portfolio of secure AWS capabilities to offer customer solutions. Tele2 used AWS for its own clients’ IT transformation, analytics, and database capabilities for several years, and now they have expanded the collaborative partnerships to offer a combined solution based on their partner’s services. This example illustrates how TSPs

can collaborate with OTT, expand their portfolio, and create new revenue streams, instead of competing with global OTTs.

Cloud services continue to grow; AWS revenue in Q1, 2022 grew by 37% and was considered 16% of Amazon's total revenue (AWS financial reports). Therefore, there is still potential for further growth and expansion of cloud services.

During the Digital Transformation World in 2022, some TSP representatives stated that the cloud hyperscalers (e.g., Microsoft, Amazon, and Google) should be viewed as customers and partners and not as threats and competitors. The industry must step back from a telco-centric view of the world and embrace global hyperscalers as fundamental partners in the digital transformation process (Scott, 2022). However, there is a risk for TSPs to focus on global cloud providers because of the load they can put on TSP providers, especially the small ones. GCNs and OTT providers are demanding, they do not give TSPs any commitment to buy specific network access, and they push TSPs to renew the tariffs regularly or they stop the purchasing activities. Other risks for TSPs are that GCNs are creating their own international network and investing in the sub-sea capabilities and consuming the most bandwidth capacity.

The competition and continuous market changes forced the national regulatory authorities to set new rules and define new standards related to ICT and telecommunication services. They are another reason for TSP to consider them when collaborating. Market changes and other external influencers, as mentioned in the conceptual framework, have a direct impact on the competitive landscape. New providers may benefit from new legislation, but TSPs are often missing revenue and facing the challenge of higher operational costs. Examining the competitors' performance and the way they do business, especially the collaborative partnerships, illustrates the opportunities in the market.

The competitive market space is an indicator for TSPs to see where growth is achieved, and which services are declining. Furthermore, examining the competitive market can help TSPs evaluate the business model and the way they are selling, the need for ecosystems, co-creation requirements, new knowledge, and how they can achieve growth by collaborating with business clients. Table 19 presents the growth rates based on the official revenue results from the annual reports. The OTTs consistently achieve double-digit rates, and the TSPs' rates are between -6% and +6%. The average growth for both AT&T and Verizon between 2018 and 2021 was 1%. For the same period, the average growth rate for Amazon was 28%, Microsoft was 14%, and Google was 24%.

The table, based on official annual reports, shows the difference between the OTT and TSP growth rates and growth potential for the future, where IT and cloud-based providers' businesses are growing, and TSPs' revenue is declining.

	2018	2019	2020	2021	2022	2023
AT&T (TSP)	6%	6%	-5%	-2%	-9.9%	1.4%
Verizon (TSP)	4%	1%	-3%	4%	2.4%	-2.1%
Amazon (TSP)	31%	20%	38%	22%	9.4%	12%
Microsoft (OTT)	12%	14%	14%	18%	10.3%	11.5%
Google (OTT)	23%	18%	13%	41%	9.78%	8.68%

Table 19: Revenue growth rate (OTTs vs. TSPs)

To have a full picture, Table 20 illustrates the major OTT cloud and content streaming providers with whom TSPs started to collaborate. The collaboration is shown in the integration of Netflix and Spotify streaming in TSPs media and TV packages (e.g., KPN, Proximus and NTT), or in the acquisition and JVs (e.g., Warner Media was acquired by AT&T).

OTT, Social Network, and Communication Cloud Platforms	Year Company was Founded	Year Company Enters Cloud and Becomes a Content or OTT Provider	Current Activities
Amazon (AWS)	1994	2006	Global cloud provider
Microsoft	1975	2010 2008: Initial Microsoft Azure Platform. 2013: Becomes a cloud provider	Global cloud and communication provider
Google	1998	2008 (Google Cloud Platform)	Suite of cloud computing services
Oracle	1977	2016 (Oracle Cloud Infrastructure)	Cloud, compute, storage, and networking services
Apple TV+	2019	1976	Films, series, dramas, and documentaries streaming

Netflix	1997	2008 (migration to the cloud completed in 2016)	Media content production and live on-demand streaming provider
Disney+	1923 (Disney)	2019 (Streaming via Disney+)	Film and TV streaming (library of content from Disney)
WhatsApp	2009	Acquired by Meta in 2014	Global communication platform
Twitter	2006		Global social and communication network platform
Facebook (Meta)	2004		Global social and communication network platform (including messaging)
Hulu (partially owned by Disney)	2007		Film and TV streaming
Spotify	2006		Music and media streaming
ESPN+ (80% owned by Walt Disney Company)	2018		Focus on live sports video streaming
HBO Max (offers content from Warner Media)	2020 (Warner Media was acquired by AT&T in 2018)		Video on demand. Offers access to movies that are still in theatres at no additional cost

Table 20: OTTs and content providers (data from official providers' pages)

The collaborative partnerships, acquisitions, and mergers between TSPs and content providers have been ongoing for a few years. Comcast, a large TV cable, internet, and telecom provider in the US, merged with AT&T's broadband division in 2002 (TSP division), which was later rebranded under Xfinity (an OTT service provider). Furthermore, Comcast Corporation acquired other content, network, and telecommunications service providers, as summarised in Table 21. The growth was achieved after the acquisitions of some content providers but also from Comcast's strategy to build collaborative partnerships with other TSPs, as they did with Verizon Wireless (Munson, 2016). They launched a Mobile Virtual Operator where they combined Wi-Fi and Mobile services. This partnership allows Comcast to offer bundled products by adding services such as the internet, phone, cable TV, and home security.

Acquired Company	Type of Business	Acquisition Date (Completion)	Value	Source
Masergy	Managed SD-WAN, UCaaS, CCaaS and Managed Security solutions	August 2021	\$900 million (estimated)	https://business.comcast.com/about-us/press-releases/2021/comcast-business-to-acquire-masergy
AT&T Broadband	Broadband services	2002	\$47.5 billion	https://corporate.comcast.com/press/timeline
XUMO	Online video streaming	February 2020	\$100 million	https://corporate.comcast.com/stories/comcast-acquires-xumo
Sky	Broadcast and telecommunications	September 2018	\$39 billion	https://www.cnbc.com/2018/09/22/sky-comcast-fox-36-billion-takeover-auction.html
DreamWorks Animation	Animation studio	August 2016	\$3.8 billion	https://www.cmcsa.com/news-releases/news-release-details/nbcuniversal-completes-dreamworks-animation-acquisition
NBCUniversal	Mass media	Jan 2011 (51%) Feb. 2013 (49%)	\$22.9 billion	https://www.financierworldwide.com/comcast-completes-early-acquisition-of-nbcuniversal#.YuFdlaBBzIU

Table 21: Content providers acquired by Comcast

Comcast lost some subscribers and faced a 10.46% decline in annual gross profit in 2020 (vs. 2019), but they achieved double-digit growth in the upcoming years: a 16.58% increase year-over-year in 2022, and a 13.34% increase in 2021 (vs. 2020). The financial results in the official annual reports show growth, but the focus in this study is not on the company's performance but on the collaborative partnership's ability to transform the company from a national cable TV provider to a content and media provider and the positive effect the partnership has on Comcast's growth.

Content providers are still growing. In 2019, the OTT market was valued at \$56 billion and expected to grow by 18.6% until 2027 (Zype.com, 2022). This means that OTT streaming service revenue has more than tripled in 10 years (since 2017). In 2021, AT&T, as a global TSP, lost over a million customers, while Disney+ gained over 54 million.

The TSPs' revenues lost to OTT players pushed many international agencies, such as the International Telecommunication Union (ITU), to call for more collaboration and co-investment between OTTs and TSPs in the network infrastructure and find a trade-off between content usage and the telecom network infrastructure:

OTT providers and telecommunication operators need each other, so these two stakeholders should explore different models of partnerships and agreements, including investments in network infrastructure, and provide insight into these partnership agreements to regulators (ITU-D study groups, 2019, p. 21).

The TSPs are in a unique position as the primary providers of the infrastructure, but they cannot maintain the network for the OTTs' content. The collaborative partnerships may help to find the balance, or the trade-off, as it is called by the ITU.

There are enough opportunities in the ICT market and TSPs' competitors succeed in achieving sustained growth. Other cloud and content providers achieve double-digit growth, and they outperform TSPs. This result helps clarify why some companies succeed in growing and some, such as the traditional TSPs, do not. It is important to understand whether there is still demand in the telecommunications market and if business clients are still buying or if there is a shift from traditional connectivity services and products to more cloud and IT-based services. The shift requires new knowledge and less focus on traditional resources and network assets. New knowledge combined with dynamic and adaptive capabilities and customer centricity will help to create competitive advantages and achieve sustained growth. TSPs' competitors experience shows that decisions to buy (from TSPs) or to build own content resources, and collaborative partnerships in ecosystems are key factors for commercial success in the ICT and telecommunication sectors.

The next chapter, Chapter 6, reflects and draws important conclusions, in terms of technical and managerial collaboration for sustained growth, from the whole paper, and notes the potential of the fulfilment of the paper's research objectives throughout, also focussing on the issue of personal contact and trust. It infers meaning and future development and research in the dynamic telecommunications and ICT industry and underlines the significance of collaboration and various types of partnerships, both present and anticipated. It clarifies the important contributions it makes to the industry, particularly focussing on the relationship between TSPs and their clients integrating, building, and re-structuring resources and competencies which can help to develop new advantages and give much-needed impetus to future research projects and studies – notably the issue of OTT, and the need for ecosystems and collaboration to combat new entrants to the market that seek to bundle various competencies, including cloud-based features and dominate the market.

6 Conclusions

6.1 Introduction

The beginning is to present the context (as already indicated in Section 5.5), the market issues, and focus on why TSPs collaborate with business clients and how this collaboration might help them achieve sustained growth. Three vital objectives of this paper, for both research and managerial purposes, were as follows:

1. Critically evaluating the existing theories and empirical studies related to collaborative partnerships between TSPs and business clients to establish the current thinking about the research problem.
2. Exploring why and how TSPs collaborate with business clients.
3. Exploring the benefits and challenges of collaborative partnerships (between TSPs and business clients) in relation to achieving sustained growth.

Aspects needing critical investigation were the difficulties in growth, the situation of decline, clients buying behaviour, and which products business clients use, or will need in future.

Regulation, globalisation and deglobalisation problems have forced certain TSPs, especially the traditional ones, to re-think their home markets, their activities, their consolidation or their growth organically through JV and M&As. The role of technology, such as AI and cloud computing has pushed TSPs to discover new approaches and products, often through partnerships. They face considerations regarding internal and external resources and growing products and demands, which imply customer-centric thinking, dynamism and adaptation in order to be competitive and address industry and market challenges.

Theoretical and managerial background, the findings, and the discussion are also investigated. and suggestions for future studies (a nuanced view taking TSPs differences into account). Examples of successful partnerships and JVs with OTT, as well as some less than successful attempts, have been described.

It is hoped the findings and discussion will assist researchers and practitioners in developing effective improvement of collaborative partnership outcomes.

6.2 Contributions

One of the major contributions of this research is that it is the first study to explore the impact of collaborative partnerships between TSPs and business clients on the TSPs' sustained growth. This is in the context of a very dynamic market and focuses on TSPs adaptive and dynamic capabilities, resources, knowledge, and absorptive capacity to cope with external changes. The

context considers the differences between TSP values, the markets they operate in, but also their past collaborative activities in creating partnerships, joint ventures, and other type of alliances.

Although several studies have tried to apply different theories and approaches to understand the collaborative impact on company performance, only a few have investigated how it works for TSPs in a highly dynamic market and turbulent business space such as ICT and telecommunications. The research provided empirical evidence by sharing the participants' beliefs that collaborative partnerships have a positive impact on sustained growth. Furthermore, it clarified the role those collaborative partnerships play in the creation of unique competitive advantages and under which conditions this can lead to TSPs' sustained competitive advantages. Additionally, the study clarified the role and impact of resources on TSPs' performance and whether the core network assets can create competitive advantages and increase performance. Resources include assets based on TSPs network by making or buying resources as presented in 2.6.2 (transaction cost economics) or resources from the ecosystems and aggregations capabilities (as presented in 2.5) but also the knowledge-based view (intellectual resources) and the importance of business clients to achieve growth.

Furthermore, the findings support the claims of past research that dynamic capabilities themselves are not a source of competitive advantage and are not enough to provide the ability to address rapidly changing environments. Competitive advantages are linked to the way dynamic capabilities are implemented to create new knowledge and achieve sustained growth. The ability to integrate, build, and reconfigure resources and competencies can help to develop new advantages.

Overall, this empirical research serves as an important contribution to future studies exploring collaborative practices that lead to sustained growth. Sustained growth in a highly dynamic market becomes a debatable approach in the ICT and telecommunications business, and more precisely in the relationship between the TSPs and clients.

The study results have theoretical and managerial implications that add value and make a relevant contribution to the literature on competition and company performance. The theoretical and managerial contributions are stated in the next two paragraphs.

6.3 Theoretical implications

The findings make a significant contribution to what scholars already know about collaborative partnerships and the extent to which firms can adapt and be dynamic when they are competing and trying to create competitive advantages in rapidly changing markets.

This study highlighted the need for a deep investigation of the link between collaborative partnerships with business clients and TSPs' sustained growth. The empirical findings of the study generate positive relationships between engagement with business clients and the TSPs' performance. Even if TSPs are unable to make this impact tangible, they still see an overall positive performance in growth as a result of collaborative partnerships with business clients. TSPs are not reporting specifically on the results of collaborative partnerships with business clients but they evaluate the relationships and look to the business, order intake, churn rate (cease of services), and the total revenue growth per client.

Telecommunication business executives' attitudes are positive regarding the effects of collaborative partnerships on sustained growth, which contradicts Feng, Sun and Zhang (2010) and Field et al.'s (2006) research. This contradiction may be related to the differences in the nature of business, the geographies where participants in different studies operate, and the time when the studies were conducted (the rise of OTTs providers since 2010).

Additionally, collaborative partnerships are a long-term business development and may not show a ROI by offering customised solutions to just a few clients. Usually, the shared investment of TSPs and clients in partnerships creates solutions that can also be offered to other clients, which is another reason TSPs cannot include all investments in one client business case or make the collaborative results tangible at the client level.

The right engagement with clients helps achieve sustained growth, as mentioned by some scholars (Dietz, Pugh and Wiley, 2004; Freng Svendsen et al., 2011). This study showed that focusing on CSAT is not enough to create a competitive advantage and this finding is aligned with Symonds, Wright and Ott (2007). Satisfaction indexes and reports are short-term measurements (Haumann et al., 2014) and not always reliable (Slater, 2001). Furthermore, the results showed that measuring clients' satisfaction is only an indicator that can give feedback on the possible impact on churn where clients may decide to switch to another provider. It does not have a real impact on TSPs' performance. To achieve growth, TSPs should collaborate with their clients (Connor, 1999) and not be afraid to understand and address their needs or escape from the tyranny of the served market, as Hamel and Prahalad (1994) call it.

This empirical study has shown that investing in new client engagement models such as collaborative partnerships, knowledge-based capabilities, dynamic ecosystems and building strong long-term relationships can have a positive financial impact on TSPs. Other scholars confirmed the same effect of investing in clients (Rust, Lemon, and Zeithaml., 2004; Venkatesan and Kumar, 2004).

The findings are showing that TSPs apply a similar approach to manage client's relationships. The old national incumbents like KPN and Proximus have almost the same view as global providers such as AT&T and Verizon about the focus on growth instead of customer satisfaction only. TSPs do not have the same type of business clients, some serve local national clients (e.g., Proximus, Telia, KPN), others focus on global clients (e.g., NTT, Verizon, AT&T, Orange), but the findings show that TSPs should invest more in their engagement with business clients, and not just looking to their current values or revenue results.

Additionally, the literature review showed critique and concerns about the role that resources can play in measuring the competitive power of a firm or evaluating its value proposition in light of competition (Eisenhardt and Martin, 2000). However, in this study, TSPs' resources, with the decision to make or buy them according to the transaction costs economics factors Williamson (1979; 1981), were not viewed as a source of competitive advantage.

In this case, the finding contradicts the resource-based theory, especially the static view of resources. TSPs resources are not the same, some are limited to national level and others are global or regional (focus on Europe like Colt Technology services, focus on US like AT&T and Verizon), some focused on business services (high speed and subsea cables) and other are more consumers driven (fibre to the home and bundled offers). These difference in resources have impact on the revenue, margin and the investments required but they are not making TSPs resources as a source of competitive advantages to achieve sustained growth.

The telecommunications business is moving too fast and requires a high level of adaptability and new decisions to know where to invest to achieve sustained growth. This finding confirms what some scholars have said about the need to create new knowledge related to resource configurations and organisational behaviour, not just the capability of reconfiguring existing resources (Eisenhardt and Martin, 2000). Knowledge is considered as a fundamental strategic asset (Chung, Yang and Huang, 2015) and can create competitive advantages for organizations (Gonzalez and Martins, 2017). However, the participants stated that they do not see how to identify a generic capability and apply it in all situations, as Birkinshaw, Zimmermann and Raisch (2016) concluded in their research.

At the same time, the participants in this study were unsure about the extent to which TSPs can adapt and succeed to transform the business and create sustained growth because it is difficult for TSPs to change their core business and stop selling declining products.

However, the study participants stated that this is achievable through collaborative partnerships and the use of dynamic ecosystem capabilities. The ecosystem helps TSPs to reduce costs (Kobylko, 2020) but the journey to sustained growth requires the usage of new knowledge

(Curado and Bontis 2006) and more knowledge based dynamic capabilities (Bogdanovska Djurovic, 2013). The challenges remain during the whole transformation of TSPs because collaboration is a long-term and a complex process (Huxham and Vangen, 2005), especially with the current TSP business models in place or what participants called the short-term thinking of TSP business leaders.

Growth in a highly dynamic market requires continuous co-evolution, reconfiguration, and renewal (Tanriverdi, Rai and Venkatraman, 2010). This requires a wider collaborative partnership of stakeholders, especially with business clients (Bocken, Rana and Short, 2015). The nature of TSPs' business and the results of current competitive advantages do not indicate that long-term, sustained competitive advantages are achievable. Therefore, for some studies, sustainable growth and high performance are unreasonable targets for TSPs (D'Aveni and Gunther 1994, McGrath, 2013; Wiggins and Ruefli, 2002). The highly dynamic and fast-moving market pushed some providers and clients to question the sustainability of their strategy (collaborative, ecosystems, resources, or knowledge based).

To the researcher's knowledge, this is the first study that has explored the link between collaborative partnerships with business clients and sustained growth for TSPs by examining the results from different resources and capability components (TCE, RBV, knowledge, DC, adaptive capability, and absorptive capacity). The findings indicate that TSPs should build dynamic and adaptive capabilities so that they can make all necessary changes on time. However, these skills are not a source of competitive advantage; instead, TSPs should use the skills to reconfigure the resources (Teece et al., 1997) in line with the changing environment (Wójcik, 2015) and other external economics and regulatory factors. External technical, commercial, and legal influences are beyond TSPs control but can affect their operations and success. The influences can create opportunities or be a threat for TSPs business (e.g., regulation or deregulation of services and network access).

6.4 Managerial implications

This study explored TSPs' collaborative partnership with business clients and expanded knowledge about the collaborative partnerships' contribution to TSPs sustained growth. It investigated the impact of relationships with business clients and how to change these relationships from short-term to long-term partnerships.

The findings provide several guidelines and recommendations for practitioners, managers, and policymakers, particularly in the telecommunications industry. Furthermore, they show the importance of collaborative partnerships and the necessity to develop dynamic capabilities to

improve TSPs' performance and achieve sustained growth. This research, therefore, offers a comprehensive overview that can be used by managers, particularly in ICT and telecommunications businesses. In addition, the findings show why TSPs collaborate, what the benefits, risks and how they develop collaborative partnerships (Table 16).

Also, managers will see the past collaborative activities, the reasons for partnerships and joint ventures and the lessons learned (Appendix 4). The past experience is valuable for all managers, particularly the insights gained from joint ventures involving TSPs such as BT, Verizon, AT&T, and Orange. Examples include Concert, Global One, and Unisource. Additionally, other joint ventures like Telefonica and Liberty Global, or local ventures such as Vodafone Ziggo (Liberty Global) in The Netherlands, provide significant knowledge. Furthermore, lessons from major global alliances like WorldPartners are also important such as different partner strategies and goals, cultural differences, control and governance issues, financial resources, and failure to plan for changes or exit strategies.

This study provides managers with a view of TSPs' resources and whether they are enough to differentiate the service provider from its competitors. Managers can use the finding suggestions about the TSPs' resources to develop their future growth strategy, keeping in mind the static nature of their network assets, which are unable to create competitive advantages. Managers and decision makers should not count on their network assets as the most important factor in creating competitive advantage and achieving growth. Network resources may help TSPs make more profits (using own network means more margin), but winning more opportunities is not limited by network ownership, especially when prices are declining. Static resources are no longer a unique asset; other TSPs may have the same or even better network coverage, or they might be connected to other cities and buildings where they can serve different business clients. Furthermore, off-net resources (offered by TSPs' competitors) are available for all providers and cannot be considered a unique proposition.

However, the position of network resources and the impact on the profit of the company is not the same for all TSPs. Some TSPs, particularly those with historical monopolies, continue to generate up to 75% of their revenue from consumer services. Examples include Orange, Telefonica, and Telia, who maintain access to a substantial subscriber base. Meanwhile, the revenue derived from business services accounts for approximately 30%, as illustrated in Table 22, with KPN at 33% and Telecom Italia at 29%. The revenue related to business services is often growing and with higher margin than consumer business but can be more sensitive to external economic and regulatory changes. TSP resources related to consumers and content-based services like TV may offer an opportunity to make the change from static based resources

view to more dynamic and knowledge-based view. It should be noted that some TSPs only serve business clients (e.g., Colt Technology Services), while the revenue of some other TSPs is for about 40% from business services (e.g., BT, Deutsche Telekom, and Proximus).

The benefits of collaborating with business clients are not the same for all TSPs, it depends on their market share and specifically the revenue and profit they are making from serving business clients (e.g., NTT and Proximus).

The difference in TSPs values (as in Table 22), source of revenue (consumer or business services), and the net profit results they achieve are important factors for their strategy and how to decide on the network resources. The net profit of some TSPs is declining for few years (e.g., Telecom Italia) which is likely the reason why they decided to sell the entire fixed network, while other providers are reducing their global services and consolidating their activities (e.g., BT and Vodafone). Lumen has sold its U.S. fixed consumer fiber division, which includes Quantum Fiber, to AT&T for \$5.75 billion. Meanwhile, Colt has divested six European data centres that it previously acquired from Lumen.

At the same time, Swisscom is acquiring Vodafone Italia for \$8 billion. Additionally, Verizon acquires Frontier Communications in December 2024 for \$20 billion, and Charter Communications is set to acquire Cox Communications in 2025 for \$34 billion.

Additionally, managers should think about expanding their capability by developing new external partnerships or joining the ecosystems of OTTs, GCNs, and other cloud providers. Managers should know that business clients cannot be served by services or products based only on TSPs' own resources. Section 2.5 highlighted the importance to prioritise customer needs, to adapt, and to innovate in response to changing client's behaviours and market dynamics (Akbar, 2024). The partnership with competitors in the telecommunication operator's ecosystem helps TSPs to reduce costs through collaborations (Kobylko, 2020) and allow them to innovate and improve their resources and capabilities. Generally, large TSPs with high revenue and global clients are more able to consider long term collaborative partnerships than small providers serving consumers or SMEs (e.g., AT&T, Verizon, Deutsche Telekom, NTT, and Vodafone). However, ecosystems are important for all TSPs independently of their values and revenue mix (consumers, business, wholesale, and other services). Nevertheless, TSPs with a local focus are prioritising the expansion of local fibre-to-the-home services over establishing collaborative partnerships for international connectivity with global clients, as done by companies such as KPN and Proximus.

To create value and remain relevant for clients, managers should stay dynamic and try to adapt to the different changes in the market. This can be done by deploying new commercial models

or a new approach for faster delivery, including process automation using new technology such as AI as highlighted in 1.1.3. AI goes beyond being just a technological change and is widely implemented, especially by IT and cloud providers. For example, Sales Force adopted AI agents to automate internal processes and cut its workforce by 44%. Furthermore, due to geopolitical changes, some TSPs—particularly traditional local incumbents—have implemented digital sovereignty strategies to decrease reliance on foreign services.

These changes can be strategic, deciding what to offer, to whom, and how, or operational, aiming to reduce costs, increase margins, and boost ARPU. Making these changes means maintaining a strong and good relationship with clients and building mutual trust.

Participants stated that the TSPs are aware of the changes in the market, the level of dynamism required, and the turbulence in telecommunications and IT in general. However, they lack the ability to adapt and address the challenges, especially to increase revenue and make profit.

The knowledge of what should be done is not translated into concrete action because it is difficult, and traditional TSPs have not managed to make big transformations and change the core business. This incapability makes the role of managers even more difficult, as they struggle to grow the business with the same resources, services, and products they have always had and almost the same way they run the business, set the targets, and monitor performance. The space for managers to make changes and adapt is limited, which is forcing them to focus more on their clients to develop a strong relationship.

Participants confirmed the difficulties to adapt and change what they consider as core business, especially for global and large TSPs due to the complex decision-making process (e.g., Verizon, AT&T, NTT, and Deutsche Telekom). However small TSPs are also suffering from the challenge to be dynamic and make resources reconfigurations to create competitive advantages (e.g., KPN, Proximus, and Telia were mentioned during the focus group sessions). The challenges of adaptation vary among different TSPs. These variations depend on factors such as the size of the TSP (those with high market value are typically more capable of investing in new partnerships), the target groups they serve through direct or indirect commercial channels (whether consumers or business clients), and their previous experiences with partnerships. Furthermore, these challenges are compounded by external market factors like regulatory changes, technical developments, and competition.

The findings show the importance of building new and different relationships with business clients (e.g., long-term instead of short-term relationships and quick benefits). Managers and decision makers should develop collaborative relationships and revise commercial models to view clients as partners rather than buyers. For example, adopting a customer-centric approach,

allowing for more customised services, and offering solution-based options with flexible commercial and financial payments for CapEx. Trust is crucial in these relationships, and managers can utilise this to invest in long-term projects where TSPs and business clients share common goals. This successful relationship is how practitioners can influence buying behaviour instead of focusing on creating buyers for what they offer as standard services and products or repeat transactional business (standard and can be automated) that can be fully automated. Solutions and complex offer require a mode that supports customised services instead of one standard package that may not satisfy all business clients' needs and instead adds to their challenges. TSPs experience an increase in win rates when they include a security package from one of their ecosystem partners, such as Zscaler, Fortinet, or Palo Alto Networks. Cyber-attacks in 2025, including AI-generated phishing and malware, demonstrated the need for cooperation with cyber security providers to safeguard customers and maintain the security and resilience of TSPs' production systems.

Managers in the telecommunication fields know that current declining revenues still come from standardised services, but they also see that the fastest growing products and services are not on the list of transactional businesses (e.g.: More security services, AI enabled services, New On-demand services).

In 2020 and 2022, SD-WAN emerged as the fastest-growing product, surpassing IP-VPN. As we move into 2023 and 2024, traditional TSPs had primarily a single product—IP access often integrated with security features—that continues to grow and generate new business opportunities. This shift from legacy to new services and from point-to-point bandwidth to software-defined services requires better and more partnerships to ensure security and automation. Therefore, TSPs must collaborate with other providers to improve the ecosystem for a combined service: SD-WAN network, security, and managed network services. This solution is what business clients want their providers to offer, which is why some participants mentioned that the SD-WAN network service is growing by 38%. However, according to some participants, the most of TSP revenue is still coming from traditional products like Ethernet (declining). This is for business client products and services, and for consumers the results may be different per TSPs. For instance, Verizon and Telefonica generate over 75% of their revenue from services provided to consumers and retailers).

Managers know which services are growing and require a collaborative partnership because TSPs are unable to offer the whole package, and they know the declining services.

It is a challenge to compensate this decline without new knowledge and more capabilities to adapt and create competitive core competencies as mentioned the conceptual framework (Section 2.7), especially the competencies taking clients position into account.

TSPs were managing vendor relationships but just to buy standard network services and not as a partnership to co-creating customised solutions for business clients. The changes in clients' buying behaviour (solution instead of standard products) and the shift in bandwidth demand (to access on-demand cloud-based applications) are creating more opportunities for TSPs.

Bandwidth demand is shifting, and the way TSPs and clients are doing business requires more collaborative partnerships and the creation of new dynamic ecosystems.

The findings can assist managers in compensating for the decline by showing them the benefits of collaborating and focusing on the fastest-growing services. The growth they may achieve may not be sustained growth for a long time due to the quick changes, but TSPs' adaptability and their ability to absorb external changes allow them to perform better and create competitive advantages.

Access to TSPs' network resources is still a critical point in the competition with traditional providers (former state-owned providers). Network access is partially regulated to encourage competition and avoid the dominant position of some providers. However, the competition with the new OTTs and global content providers has made access services less relevant and moved the focus to the application and content layers. This shift from access-centric services to cloud-based content and the value of network access to create competitive advantages and growth is important for policymakers.

The findings of this research are a valuable contribution to the field. The results can influence the relationships among business clients, TSPs, and other global competitors. Collaborative partnerships and the importance of ecosystems within the telecommunications industry are also highlighted.

The creation of one European market in order to increase the global competition (Hartmann, 2024) is one example that should be considered by managers and policymakers. The findings show that, to promote and stimulate competition and the further development of digitalisation, a new regulatory framework is needed to move from asset-based competitions to more collaborative partnerships and from competing with new players to liaising with and partnering with them.

The findings showed a positive link between TSPs collaborative partnerships with business clients and the competitive advantages they can create and the sustained growth they can achieve. The market conditions will continue to change and TSPs should stay dynamic, develop

new knowledge-based resources and capabilities, and take into account the differences between TSPs (Table 22) and the performance of the competitors in the ICT, cloud business, and the telecommunications industry.

The differences in values, past collaborative activities, source of revenue, national position related to regulatory rules, and the geographies mean that the findings may not be uniformly applicable across all TSPs. The diversity in the telecommunication sector, especially for the traditional providers, means that managers need to adapt their strategies when collaborating with different business clients to reach sustained growth. Resources, made or bought, are not the same for all providers.

The ability to adapt, to be dynamic, and absorb external knowledge to develop growth strategies is higher with TSPs who invested in their core competencies. TSPs that concentrate on business clients face competition not only from GCNs and OTTs but also from emerging, privately-owned entities that demonstrate greater agility in adaptation, such as Zayo, euNetworks, and EXA Infrastructure.

The findings highlight the changes in the telecommunication landscape and the recent development in the TSP market consolidation related to global services. In Germany, Deutsche Telekom has announced the establishment of global services. Similarly, in Belgium, Proximus has merged three entities to establish a unified global service unit. Meanwhile in UK, BT has decided to focus on local business operations rather than global services. The market changes and the differences between TSP resources and capabilities must be considered by managers to adapt different collaborative approaches and implement different growth strategies (different services and products and different commercial models depends on clients' demand).

The study results will help managers and practitioners to make more effective decisions to make or buy the resources they need, to learn how to adapt and create new knowledge together with ecosystem partners, and to show how collaborative partnerships can help to achieve sustained growth.

TSP	Total value (billion/\$)	Main source of revenue (percentage)	Main geographies	Ownership or Government shares
AT&T	134.3	52% wireless services, 17% business services and 17% equipments	US, Europe, and Asia	Mix of individual investors.
Verizon	122.3	76% consumers, 22% business	US, Europe, and Asia	Mix of individual investors.
Deutsche Telekom (including Sprint)	120.4	50% consumers, 37% business, and 10% wholesale	Germany, Europe, and US	30%
NTT	93.7	40% ICT business, 28% global solutions, 20% regional communication business	Japan, Europe, and rest of Asia	33%
Vodafone	69.8	26% business, 70% consumers mobile	UK, Europe	Privately owned
Orange Business Services	53.3	63% retail services, 25% wholesale	France, Europe, and countries in Africa	13.4%
Telefonica (Spain)	44	78% retailers and 22% wholesale	Spain, Europe, and south America	10%
BT Group	32	47% consumers, 39% business, 29% Openreach (network access)	UK and some global services	Owned by Public companies
Telecom Italia	17.4	65% retail and 29% wholesale	Italy + few countries in Europe	9.8%
Telia	8	23% business solutions, 36% broadband, 34% TV and fixed services	Sweden	41.06%
Proximus	6.5	52% consumers, 42% business, 5% wholesale	Belgium	53.1%
KPN	5.8	53% consumers, 33% business, 12% wholesale	The Netherlands	19.3%
Colt Technology Services	5.5 (estimated)	Only business clients: 85% network services and 15% voice for business	UK and Europe	Private

- The TSPs total value is based on public revenue figures from <https://companiesmarketcap.com/>.
- Revenue results based on official annual reports for 2023 (except for private TSPs – the revenue per segment is an estimation)

Table 22: TSPs values, revenue, and geographies

6.5 Research limitations

This study is subject to certain limitations that suggest possible avenues for future study. The researcher is aware of the growing number of studies examining TSPs' performance and how they can adapt to business changes and the uncertainty in the ICT and telecommunications markets. This research can serve as an initial step towards further studies on the impact of collaborative partnerships between TSPs and business clients and the providers' sustained growth. This study had several strengths but also some limitations.

The first limitation is the selected TSPs, which may reflect the global carriers' view more than the local TSPs' experience, which means a predominant view of a global and corporate service provider. The GCNs and OTTs providers were not included in this study because they are content, IT, and cloud providers and not TSPs with a full set of telecommunication services for business clients.

Furthermore, TSPs with global activities have a large market coverage across countries and serve many business clients. Therefore, the participants' experiences may differ from those of their colleagues working for the same TSP organisation but in different roles or different business units. Participants from the same TSP had different views to each other. Also, participants from old national incumbents (e.g., Proximus, KPN, Orange, Telia, and Deutsche Telekom) with past joint ventures experience may have different views than those working for private providers (e.g., Vodafone and Colt Technology Services).

Additionally, the study participants shared their own views and experiences based on their roles and how they were engaged to develop and grow the business through collaborative partnerships. This may not be the official TSP view and is not necessarily a reflection of the formal collaborative view as experienced at the corporate level.

Hence, this study can be criticised for not viewing a broader picture and just limiting the scope to the traditional TSPs (national and international coverage) and not the other global cloud providers, such as the OTTs and GCNs. The argument made in this study concerning this potential criticism is that to understand the current collaborative impact, traditional providers who are facing declining business cannot be mixed with other providers without telecom backgrounds who are successful as global cloud providers. In the future, the gap between old and new providers will become smaller, and new studies can consider using participants from TSPs as well as GCNs and OTTs. Traditional providers try to achieve growth by focusing more on cloud services, and the new players sell more telecommunications services, such as network

and data centre services. TSPs are making the shift to become digital and content providers, even whilst still making the most of their revenues from their old network business.

Furthermore, the period during which collaboration took place should be considered when examining the results. The participants' observations and understanding of collaboration should be analysed in the context and conditions of the telecommunications business when the data was collected. The market's dynamism may also influence the participants' views and their experiences with business partners. The global financial crisis (2007–2008), the recession in Europe, the pandemic (2020–2021), and the deregulation of more local markets because of the shift to more internet-based services are all events that impacted the telecommunications business and the way TSPs operate and compete. The impact was not the same on all TSPs; threats, uncertainties, and temporary high demand had mixed results on TSPs' performance (e.g., Growth during the pandemic due to high bandwidth demand and quick delivery for TSPs like Colt Technology Services, and consolidation and focus on local home market for TSPs like Telia, Proximus, and BT). All these changes should be considered and may indicate the need for longitudinal studies.

Another factor that may influence the research design and methodology and impact the interpretation of the study results is the cultural differences between TSPs in different geographies (Europe, Asia, and the US), participants backgrounds, and how they develop collaborative partnerships and build long-term relationships. Cultural aspects have a strong influence on the mindset and the extent to which TSPs can adapt and develop dynamic capabilities. Telecommunications is a global market, especially for TSPs serving corporate business clients, and this offers a common ground to study collaborative partnerships and their impact on sustained growth as an embedded single-case design (one context and different participants).

However, the limitations do not prevent the qualitative study from providing a rich understanding of collaborative partnership phenomena, but they should be considered when analysing the data and presenting the findings. The business conditions are not static and collecting data from a highly dynamic environment is a challenge. To enhance the reliability of the research, enough interview questions were designed, and participants who were familiar with the topic were selected. Additionally, pilot interviews were conducted before the final successful interviews and focus group discussions.

As the findings were grouped and summarised, they formed a body of knowledge, outlined in 5.4 and 5.5, that points to the future, and this has led to the next section, Section 5.11, which

follows. Tracing the progression of this research has shone light on future opportunities for exploration.

6.6 Suggestions for future studies

Other future studies may take another approach to answer the research question and choose an in-depth multiple-case design with single or multiple units of analysis. The data collection for this research was difficult, but future studies may choose a different methodological framework using statistical data with a focus on a smaller number of providers (e.g., corporate listed companies). The research design and methodology focused on one phenomenon (single case) and one context, but with multiple TSPs, which increases the analytic benefits and the generalisation of the findings.

The generalisability of these research results is limited by the selected industry and the providers who are not fully owned by the national states. Some national governments still own the golden shares and have some regulatory frameworks and rules to protect national TSPs against the acquisition by other foreign companies.

However, new studies that want to focus on the whole ICT business and expand the selected TSP list to include more non-liberalised providers may show different results. For this reason, further research is suggested to explore more collaborative models that can enhance partnerships and contribute to TSPs' high performance and sustained competitive advantages. Moreover, future studies can take the position of the business clients to see if the collaborative partnerships with their TSPs or ICT providers in general can help them achieve a competitive advantage and grow the business. Furthermore, future studies may take a set of TSPs and business clients, examine some specific collaborative partnership projects in more detail, and study the same effects on both the provider and the business clients.

This study has shown the challenges for TSPs regarding growth and demonstrated the impact of collaborative partnerships with business clients. Importantly, this research also showed the TSPs' view about their competition and whether they choose to compete with other cloud players, such as OTTs and GCNs, or collaborate with them and be part of their partners' ecosystems. Future studies can extend these findings and investigate more about TSPs' collaboration with business clients.

7 Reflections

For this chapter, the reflective cycle of Gibbs (1988) was chosen as the framework because it helps develop a complete and balanced learning experience, is easy to use, and is well known. This reflective model outlines a journey that has been an exploration, a great learning experience, an academic challenge, and an achieved goal. Gibbs' Model suggests six stages: description, feelings, evaluation, analysis, conclusions, and an action plan for managing similar activities in the future. I have used these to write this section.

My study was centred on the TSPs' collaborative partnerships with business clients within the area of competitive advantages and the co-creation of business value to achieve sustained growth. To explore this subject, I conducted an empirical, multimethod, qualitative study. As a practitioner in the telecommunications field with business clients for more than 20 years, starting an academic study at the DBA level was new and challenging.

With a full-time job and managerial responsibility in Europe, I started with the study proposal, then read about the topic extensively and carried out a literature review. My DBA proposal was officially approved, and I completed related ethical approvals. I successfully completed the first year (first progression), then continued and got the second progression also approved. Following this, I completed the data collection, analysis, and results, and then the writing phase. The process of writing this thesis was an explorative journey with special feelings and emotions about how to enter the academic field as a practitioner coming from a private business environment. The periodic progress evaluations gave me more self-confidence and trust to continue this experience and gain more knowledge.

We, as decision and strategy makers in TSPs, are used to analysing data and examining trends and what competitors were doing, but we did not start new academic doctoral research to explore the impact of collaborative partnerships with business clients on TSPs' growth. Doing a deep-dive investigation with different TSPs and not just a short-term data analysis was a new experience, and it was a challenge to switch between the practical way of doing business and the academic requirements for this study. However, combining both skills and investigating the research question from an academic as well as a practical business perspective is a unique position. Additionally, it was exciting to conduct the research and have the chance to influence the TSPs' strategy accordingly.

It was a positive experience to meet different TSPs and talk to decision makers, especially people who were involved in business developments and collaborative partnership activities. At the same time, it was difficult to access key executives and interview them on a subject that

some considered confidential and sensitive and felt they could not share easily. The start was difficult, not only because of the time pressure (due to also having a full-time job) but mainly because of the shift from pure commercial business to an academic context and way of thinking. It was exciting during the pandemic to study the impact of collaboration with clients in a dynamic and turbulent business and see how TSPs were confronted with the quick and complex changes in clients' unexpectedly high demand. Some of the interviews were completed online during the pandemic period and not face-to-face. The same applies for the DBA weekends (four times a year), during which we attend at least two guest lectures, present a research update, and share the experience with other researchers. This was face-to-face for at least 3 years, then switched to online sessions during the weekends.

Another positive learning experience started with teaching collaborative governance to the master level students. It was a chance to share the preliminary findings with them. The students were practitioners from the field, especially the healthcare sector in the UK, and were seeking some best practices in the field of collaboration and partnerships, especially during the pandemic. I combined what I learned from my own study with what we did in practice as TSPs, and I collected other successful collaborative partnerships from different countries. This was a synchronous and asynchronous online learning experience that was also impacted by the lockdown during the pandemic. However, the online teaching gave many students the chance to join in online, and this was the same for other guests who were representing the public sector. After the individual interviews and when the preliminary findings emerged from the data, I started planning the focus group sessions (see 3.9). It was difficult to group several participants together to discuss the five proposed themes and to, at the same time, have an open conversation without any limitations. It was a challenge to synchronise the agenda of all participants; some changed roles or even started working for other companies and for TSP competitors. They gave an interesting view on how they experienced their old activities when they were working for TSPs and what the difference is with OTT providers. This relates closely to some of the sections in Chapter 5.

After the analysis of all interviews, I concluded that another round of data collection was necessary to confirm the findings. I had never interviewed participants for research purposes before. Interviewing participants was new and quite challenging, especially when moderating a focus group discussion. However, the first round of interviews gave me confidence to run the focus group conversations.

The participants were focused on the collaborative partnerships and how TSPs' competitors are implementing this as a strategy to win more business. I learned how TSPs notice market changes

but are unable to adapt quickly (see 5.4.5). They see how new providers are growing and how traditional TSPs are declining but not able to adapt and change their business.

The telecommunications market is a highly dynamic and fast-moving business see DC, in Section 2.6.5, and 4.4.3). Therefore, future studies may benefit from a new selection of TSPs covering different regions and serving different types of business clients. This may include some current TSP competitors, as they are making the shift to be combined providers of both cloud-based content and traditional network access services. This *modus operandi* has already been suggested in Chapter 4 (4.4.7).

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Appendices

Appendix 1: TSPs value and shareholders

TSP	Total value (billion/\$)	Home market	Ownership (national government shares)
AT&T	134.3	US	Shares are owned by a mix of institutional, retail, and individual investors.
Verizon	122.3	US	Shares are owned by different public and private companies and institutions
Deutsche Telekom	120.4	Germany	30%
NTT	93.7	Japan	33%
Vodafone	69.8	UK	Privately owned
Orange Business Services	53.3	France	13.4%
Telefonica	44	Spain	10%
BT Group	32	UK	Owned by Public companies and individual investors
Telecom Italia	17.4	Italy	9.8%
Telia	8	Sweden	41.06% (State shareholdings as of December 31st, 2023)
Proximus	6.5	Belgium	53.1%
KPN	5.8	The Netherlands	19.3%
Colt Technology Services	5.5 (estimated)	UK / Europe	Private (owned by Fidelity Investments from US)
Sprint	26	US	Acquired by Deutsche Telekom in 2020

The TSPs total value is based on public revenue figures from <https://companiesmarketcap.com/> . For private TSPs like colt Technology Services the value is estimated based on the total revenue. For Sprint, the 26 billion is the cost of acquisition paid by Deutsche Telekom.

Appendix 2: Privatisation and liberalisation in Europe (Pennings, Kranenburg and Hagedoorn, 2005)

Year	Partial privatization	Complete privatization	Liberalization
1984	United Kingdom (52,4%) ⁷		
1987	Spain (66,8 %)		
1991	United Kingdom (78,2%)		United Kingdom
1993		United Kingdom	Sweden
1994	Denmark Netherlands		
1995			Finland
1996	Germany (26 %) Portugal (49 %)		
1997	Austria France Italy	Spain	Denmark
1998	Switzerland (49,99 %) Finland (22,2 %)	Denmark	Austria Belgium France Germany Ireland Italy Netherlands Norway Spain Switzerland
1999	Finland (42,4 %)		
2000	Austria (55,6 %) Finland (47,2 %) Norway (22,3 %) Sweden	Portugal	
2001			Greece
2002	Belgium (50 % - 1 share) Switzerland (40 %) Finland (19,4 %) ⁸	Italy	
2004	Greece (66,3 %) Switzerland (33,9 %)		

Appendix 3: Mobile network generations (sourced from Ahir, 2023).

Generation	Introduced	Advantages	Theoretical average Speed	Applications
First-generation	1979	Automatic analog cellular systems	Up to 56 Kbps	analogue devices such as telephone, modem, or fax machine
2G - Second-generation	1991	Multimedia messaging and short messages services (SMS and MMS) and internet access	64 Kbps	Voice calls and short messages
3G - Third-generation	2001	High security and international roaming	8 Mbps	Video conferencing, mobile TV, and GPS
4G - Fourth-generation	2009	high-speed wireless communication and global mobility	50 Mbps	High speed applications, mobile TV, and wearable devices
5G Fifth-generation	2018	Online gaming, augmented and virtual reality, autonomous vehicles, IoT, and critical communication services	400 Mbps	Video streaming, robots, and remote control of vehicles
6G Sixth - generation	Expected between 2028 and 2030	Faster speeds, lower latency, and more reliable internet connections	100 Gbps tested (up to 500 times faster than 5G)	Drone systems, autonomous cars, and advanced industrial automation

Appendix 4: Past collaborative activities and the reasons for joint ventures

	History	Collaborative Partnerships, Alliances and Joint Ventures	Reason for partnerships and Joint Ventures
AT&T	➤ Service provider with a long history since 1880 and a strong presence in US ➤ They did two major acquisition last decade (one TV cable and one media company)	➤ Joint Venture with BT in 1999 and continue the services delivered by Concert Communications Services (the JV ended in 2002). The JV was originally created by BT and Verizon ➤ Several joint ventures created: Gigapower with BlackRock in 2022, Cybersecurity with WillJam Ventures in 2023 ➤ In 2024, AT&T extend joint venture for business services support with China Telecom	➤ To deliver international end-to-end connectivity to global customers with additional service management (improved SLA's, security, and other added value features) ➤ To provide a best-in-class fiber network to internet service providers (ISPs) ➤ Offer security software solutions, associated managed security operations, and security consulting resources ➤ Continue to serve the interests of multinational companies doing business in China through development of new services
Verizon	➤ Established in 1984 and went through a lot of changes, acquisition activities, and network expansions ➤ Global network and a strong presence in US	➤ Joint Venture with BT in 1994 to create Concert Communications Services (JV ended in 2002). This was done with MCI which was sold to WorldCom and later acquired by Verizon ➤ In 2013 Verizon purchased Vodafone's 45% stake in Verizon for \$130 billion ➤ Created several joint ventures in the film, video and game industry https://future-ideas.fandom.com/wiki/Five_Major_Media_Companies/Joint_Ventures	➤ Network expansion, serve global customers, and improve product portfolio (fixed, mobile network and cloud-based services) ➤ Create content based joint ventures and collaborative activities with clients and market leaders in other industries such as Alphabet, Comcast, Sony, and Roku (streaming services)

Deutsche Telekom	German national telecommunication company (largest telecommunication provider in Europe)	➤ Mergers & Acquisitions list: https://www.telekom.com/en/investor-relations/company/mergers-acquisitions ➤ In 2016: Deutsche Telekom and Orange S.A. have sold their U.K joint venture E.E. (Everything Everywhere) for £12.5bn to BT Group. This transaction created the UK's first integrated telecommunications provider	➤ Change the focus by selling EE to BT but receiving 12 percent in BT's share capital ➤ Continuously looking for new technology and product partners in order to develop a wider range of products and services ➤ Add more content-based services by expanding partnership with companies like Netflix (2024) and Viaplay streaming entertainment offering (2023)
NTT	➤ The roots go back to 1870, but NTT brand was set up in 1952 to promote the use of telephone services in Japan as a state-owned special corporation ➤ NTT was privatised in 1985	➤ Several partnerships and joint ventures with companies from different industries like ICT, system integrators and car manufacture (e.g., BMW, Fujitsu, and NEC) ➤ In 2023, NTT signed a collaboration agreement with AI Specialised start-up for the R&D of AI	➤ Develop industry-leading communications platform products and provide customers with highly competitive products. ➤ Develop and adopt new technologies (AI, generative AI)
Vodafone	Global mobile operator, founded in 1982 and headquartered in UK	➤ Vodafone acquired a lot of local mobile entities in different countries and rebranded them to Vodafone (e.g., Eircell in Ireland and Libertel in The Netherlands) ➤ Vodafone created some joint ventures in some other countries (e.g., Vodafone-Ziggo in The Netherlands in 2016) ➤ In 2018, Vodafone agreed to acquire Liberty Global operations in Germany, the Czech Republic, Hungary, and Romania for €18.4 billion	➤ Expansion of business and international network coverage (Europe, Middle East, and Africa) ➤ Consolidation, add fixed services on top of mobile capability and focus on UK market ➤ Exit Egypt, New Zealand, Ghana, Hungary, Qatar, and Malta: Strategy to focus on specific investments ➤ Exit Spain, Italy: Reshape European footprint and focuses on growing

		➤ In 2023, Vodafone announced the merge with Three UK to create the largest UK mobile operator ➤ End 2023, Vodafone decided to sell Spanish business to Zegona Communications for \$5.30 billion. Private investors are known with their strategy to “Buy-Fix-sell” ➤ In 2024, Vodafone sold their business in Italy to Swisscom for €8 billion	markets, with strong positions and local scale ➤ Strategy is focused on sustainable growth to drive returns ➤ Acceleration of transformation to commercialise operations and accelerate growth (e.g., Partnership with cloud and ICT consultancy firms like Accenture)
Orange Business Services (OBS)	➤ French national provider owned by France Telecom ➤ In 2006 different business entities were grouped under Orange Business as one global communication providers	➤ In 2000, OBS bought out Sprint Nextel and Deutsche Telekom stake (Global One joint venture) and acquired a 53% in Dutch-based network operator Equant. ➤ In 2024, they merge Orange business in Spain with Spain’s MASMOVIL ➤ Partnership with firms in specific business such as security (e.g., Palo Alto Networks), Network vendors (e.g., Infinera), and data centres and cloud services (e.g., Equinix)	➤ Expand and create a global communication and IT service provider ➤ Collaborate with specific partners to add more resources and capability to serve customers and offer total solutions ➤ Partner to create the country's biggest mobile operator as in Spain
Telefonica	➤ Spain national incumbent telecom provides until 1997. ➤ Strong presence in Spain, Latin America, and few European countries	➤ In 2005, Telefonica acquired UK mobile operator O2 for £18 billion ➤ In 2013: Telefonica in Germany acquired mobile operator E-Plus for €5 billion. ➤ In 2020, VMO2 a Joint venture in UK was created between Telefonica and Liberty Global	➤ Focus on home market and specific growing geographies (Latin America, Germany, and UK) ➤ Telefonica strategy is to build a scalable platform for sustainable growth and returns ➤ Develop end to end solutions using their eco-systems partners

		➤ In a dynamic partner eco-system, they partner with more than 300 technology partners	
BT Group	➤ The origins date back to the founding of ETC in 1846, then BT group started in 1912 as the monopoly telecoms supplier in the UK and was privatised in 1984 (50% shares sold to investors) ➤ The Government sold its remaining shares in 1991 and 1993	➤ In 1994 BT and MCI Communications launched Concert Communications Services, a \$1 billion joint venture. Later became a joint venture between BT and AT&T in 1999 and was ended in 2001 (assets were split between BT and AT&T) ➤ BT created an expert ecosystem that brings together different solutions, services, and products in one place https://business.bt.com/about-us/partnerships/ ➤ BT signed several partnership agreements with global and large cloud platforms: In 2023 with AWS, in 2021 with Microsoft and in 2024 with Zscaler	➤ The Concert joint venture was created to provide data communications global and largest multinationals, but it was not successful (decrease in sales and making losses and negative rate of return) ➤ Other partnerships were signed to collaborate on new technology, build customised solutions, security, AI implementation, and 5G edge computing ➤ Collaborate with special partners such as ECI Telecom for BT broadband network Openreach (created in 2006 as a business division and in 2017 becomes a separate company in BT group). New partners helped BT to offer more integrated and competitive network using next-generation access network
Telecom Italia	➤ The Italian largest telecommunications company owned by the TIM Group. Founded in 1994 after the merger of several state-owned telecommunications companies (originally was founded in 1925 and went	➤ In 2023, Telecom Italia announced a partnership to sell its fixed-line network to US private equity firm KKR for €18.8 billion ➤ In 2021, Telecom Italia acquired the business unit of BT in Italy ➤ In 2019, Telecom Italia partnered with Vodafone and created the Network Sharing Partnership	➤ Telecom Italia is the first telecom provider in a major European market who decided to sell its landline network. The sale is part of TIM's strategy to reduce the debt and restore financial stability. ➤ Telecom Italia acquired BT in Italy because of their 'Beyond Connectivity' strategic plan, to expand digital services

	through a lot of changes and rebranding) ➤ Telecom Italia has a strong presence in Italy but also in countries such as Brazil and Argentina ➤ In 2007, a consortium between Telefonica and Italian banks acquired Telecom Italia. ➤ In 2013 Telefonica announced the intention to buy all shares of Telecom Italia but this acquisition was rejected because of regulatory rules in Brazil	➤ Telecom Italia created several partnerships, joint ventures, and agreements with specific content companies such as CANAL+ for films and TV series (in 2017), with DAZN for video streaming services (in 2022), and with Warner Bros for sport content (in 2024)	for the public administration and strengthen the offering of SME customised solutions ➤ Network Sharing Partnership joint venture was created to enable faster deployment of 5G technology over a wider geographic area and at a lower cost. ➤ Collaboration with content providers enabled Telecom Italia to expand its portfolio and to win new customers by adding new cloud-based services
Telia	➤ Owned by Swedish investment companies ➤ In 2002, Telia from Sweden merged with Sonera from Finland. In 2016, they rename it Telia Carrier and in 2020, Telia company decided to sell Telia carrier to Polhem Infra for \$1 billion ➤ In 2022, Telia carrier rebranded to Arelion	➤ Telia Merged with Sonera from Finland ➤ Telia continue to partner with global Vendors and software partners ○ In 2023 with Ericsson ○ In 2022 with ServiceNow ○ 2021 with VMware Telco Cloud Platform ➤ In 2023, Telia today announced the agreement to sell 100% of its operations and network assets in Denmark to energy and telecommunications group Norlys for \$919.95 million	➤ The combination of the companies (Telia and Sonera) created a leading telecommunications group in the Nordic and Baltic region ➤ Telia and Ericsson launched NorthStar, a 5G innovation program for industrial enterprises, for the development of new digital solutions ➤ Telia collaborated with different technology partners to help clients modernize infrastructure, deliver a self-service experience for developers with consolidated VMware single platform, and provide resiliency and security.

			➤ The transaction to sell Danish business, announced in April 2023, is part of Telia strategy to focus on markets where they can reach a leading position
Proximus	➤ Founded in 1930 as the national Belgium telecommunication provider. It was renamed to Belgacom in 1992 and to Proximus in 2015 ➤ Active in Belgium Netherlands and Luxembourg or via BICS (International wholesale carrier unit created in 1997)	➤ In 2023, Proximus created clarence, a joint venture with LuxConnect ➤ In 2021, Proximus and Eurofiber created a new joint venture, and they name it Unifiber ➤ In 2020, a joint venture between Proximus and Orange Belgium was created.	➤ The joint venture with Orange was created to enable the network coverage and to have a faster 5G roll-out ➤ In 2019 Proximus announced the de Shift-to-digital strategy to expand and update the access network ➤ The Creation of Unifiber enables Proximus to roll out a new network, especially in South Belgium ➤ The creation of clarence joint venture in 2023 was a result of a collaboration between both companies to offer new proposition to businesses and ensure the autonomy and security of their cloud access network
KPN	➤ Dutch national telecommunication carrier. The consolidation of state-owned entities started in 1893. ➤ In 1994, kpn was privatised. The state owns a minority of the shares but still have the golden shares (to approve or reject acquisitions of kpn)	➤ In 2001, both Belgacom from Belgium and Telefonica from Spain tried to acquire kpn, but it was rejected by the state ➤ In 1999, kpnQwest was created as a joint venture between kpn and Qwest communication from US but it was bankrupted later in 2002 ➤ kpn created other joint ventures with TDC from Denmark and Swisscom.	➤ Kpn started to expand their activities in the region as in Germany and Belgium and to service international clients through partnerships with other providers ➤ Kpn decided to collaborate with some network resellers and to acquire them later to expand their customer base (e.g., Kabeltex and Primevest in 2023)

		➤ KPN, Swisscom, and Telia started the Unisource Alliance in 1990s. Later, AT&T-Unisource Communications Services was created and owned by Unisource (60%) and AT&T (40%). ➤ In 2007 kpn worked with and later acquired Getronics, a Dutch ICT company (same size as kpn) ➤ In 2019, kpn sold all international activities (kpn international unit) to GTT ➤ In 2013, America Movil, a Mexican telecom provider, tried to acquire kpn but the state rejected their offer. ➤ In 2020 EQT, Swedish investment tried to acquire kpn, but it was rejected ➤ Kpn signed several local partnerships to expand their fixed and mobile offer such as CGN fibre in 2024 and Youfone mobile in 2023.	➤ Kpn created joint ventures with focus on next generation fibre network (fibre to the home projects), 5G network, internet of things and cyber security services ➤ Kpn consolidated their operations and sold kpn internationals and focused on local market in The Netherlands, but they are the second largest operator after VodaoneZiggo
Colt Technology Services	➤ Private telecom carrier founded in London in 1992 to service the financial market ➤ Expanded operations to almost all European countries, Asia, and US through organic and non-organic growth (acquisitions)	➤ After 1992, Colt decided to acquire telecommunications companies in Europe, ➤ In 2014 colt acquired KVH, a separate entity in colt group with business in Asia ➤ In 2016, colt decided to exit the IT cloud managed services and sold the unit to Getronics. This was done after an advice of consultancy and accounts agencies in 2015 (e.g., Deloitte) ➤ In 2021, colt partnered with Atlas Edge and sold their data centre business unit	➤ Colt expanded the business globally because they see the growth and they want to service multinational clients (e.g., in 2024 they announced a new expansion to six new countries in Asia with 100 million Euro investments) ➤ Colt exists the managed IT services because it is not a core business, and they were profitable when competing with IT providers ➤ Collaborating with Infosys will help to accelerate Colt's digital transformation

		➤ In 2023 colt announced the acquisition of Lumen EMEA ➤ In 2024, colt announced a new collaboration with Infosys to accelerate its Digital Transformation Program (colt cloud strategy) ➤ Colt will continue to collaborate with partners from the cloud eco-systems. Partners like Zscaler, AWS, Eurofiber, and other global cloud platforms.	program, which will automate and simplify services, systems, and processes and enable colt to respond to changing market dynamics
Sprint	➤ The original provider was founded in 1899 then faced a lot of changes until 2005 when Sprint merged with Nextel communications. ➤ In 2013 Nextel closed the network and Sprint was acquired by Softbank from Japan for \$20 billion (largest acquisition in Softbank history) ➤ In 2020, T-Mobile US completed the acquisition of Sprint (T-Mobile is part of Deutsche Telekom)	➤ Sprint buy 50.1% shares in Nextel and later merged with Nextel communications in a \$35-billion deal (was called a merger of equals)	➤ Sprint merged with Nextel to be the third provider in US, behind AT&T and Verizon. ➤ Sprint-Nextel faced technology problems, strong competitors, and cost-conscious customers. ➤ Softbank, Japan's third-largest mobile provider acquired Sprint to expand the international business, and they sell it later to reduce debt and improve profitability

Appendix 5: TSPs revenue growth

	2017	2018	2019	2020	2021	2022	
BT	24,066	23,723	23,428	22,905	21,331	20,900	GBP - Mill
AT&T	160,116	151,815	147,694	143,050	134,038	120,741	\$ (Millions)
Verizon	126,034	130,863	131,868	128,292	133,613	136,800	\$ (Millions)
Vodafone	47,631	46,571	43,666	44,974	43,809	45,580	€ (Millions)
Telefonica	52,008	48,693	48,422	43,076	42,839	40,000	€ (Millions)
Telecom Italia	19828	18940	17974	15805	15316	15790	€ (Millions)
OBS	41,100	41,400	42,200	42,300	42,522	43,470	€ (Millions)
Deutsche Telekom	74,947.00	75,656	80,531	100,999	108,800	114,400	€ (Millions)

* Source: Official TSPs financial annual reports

Appendix 6: Revenue decline from 2002 to 2023

	2002	2005	2010	2020	2021	2022	2023
Telecom Italia	€ 30.400	€ 29.919	€ 27.571	€ 15.805	€ 15.316	€ 15.790	€ 16.296
KPN	€ 12.784	€ 11.811	€ 13.398	€ 5.275	€ 5.271	€ 5.374	€ 5.480
Proximus	€ 6.422	€ 5.696	€ 7.040	€ 5.479	€ 4.347	€ 5.909	€ 6.050

*Source: From TSPs annual reports

Appendix 7: Bandwidth price evolution (Data in Euro/ Megabit per second)

	2019	2020	2021
Off-net	304	285	207
On-net	92	46	49
Total	193	158	124

*On-net: Services using TSP own network

**Off-net: Services using other TSP network (Other Licensed Operators)

*** Data is based on four main products: IP VPN, Internet access, Optical and Ethernet.

Source: Data shared by one TSP from their own data.

Appendix 8: Interview guide

Research objectives	Questions	Link to conceptual framework
Critically evaluate the existing theories and empirical studies related to collaborative partnerships between telecommunication service providers and business clients in order to establish the current thinking about the research problem.	1. Tell me about yourself and your job	Resources and capabilities: - Resource based view - Dynamic capability - Absorptive capacity - Adaptive capability
	2. How do you (as Telecom service provider) react to competition and constantly changing market conditions? a. How does your organisation respond to declining revenue? b. How does your organisation manage strategic customer experience programmes)?	
	3. Are current internal resources sufficient to address changing conditions? a. Do you think that your own internal resources are enough to grow the business? b. Do you think that you need external resources (e.g., collaboration and partnerships) in order to compete successfully? c. Will collaborative partnerships compensate for the lack of internal resources (if applicable)?	

Explore why and how telecommunication service providers collaborate with business clients.	4. How are business clients engaged with your organisation? Customer engagement means good relationship instead of one-off sales. a. Can you describe how you get business clients from a general relationship to collaborative partnerships? (Collaboration partnership: relationship where all partners contribute resources and share rewards and leadership to achieve the goals and outcomes for the entire partnership benefit). b. Do you experience any challenges in convincing your business clients to collaborate?	Collaborative partnerships with business clients: - Engagement model (common goals) - Partnership (joint activities) - Results
	5. How is partnership developed? a. Is there a plan, a process or has it emerged from other types of activities? b. Are collaborative partnerships supported as a regular activity or funded as a solution or exception? c. Do you feel that changes in the relationships with your business clients can be made to improve the growth results?	

	6. What are the results of your collaboration programmes? collaboration programmes and relationship: same as in 4.a a. Is there a specific programme you want to talk about? b. Where do you see the main challenges for enhancing collaborative practice in the near future?	
Investigate how collaborative partnership might help TSPs strategy to achieve sustained growth.	7. How do you evaluate collaborative partnership activities? Evaluation is looking at the final results and whether the defined goals are reached. a. What methods do you use to evaluate collaborations? b. In case no methods are used, how are you addressing the need for evaluating collaborative initiatives?	- Partnership Evaluation. - Creation of sustained competitive advantage. - Growth results: Profitability and overall performance
	8. Can you see any direct or indirect link between collaborative partnerships with business clients on company revenue growth? a. Is collaborative partnership making a difference? How important is that? b. Is it worth doing it again?	
	9. Is there anything else you want to add?	

Appendix 9: Interview questions

1. Tell me about yourself and your job
2. How do you (as Telecommunications service provider) react to competition and constantly changing market conditions?
 - a. How does your organisation respond to declining revenue?
 - b. How do you manage churn, and why are some clients leaving? (*Churn is when clients are ceasing the service and switching to other providers*)
 - c. How does your organisation manage strategic customer experience programmes (SCEP)? (*SCEPs are specific programmes to increase the focus on customers to improve their satisfaction, loyalty, and value*).
3. Are current internal resources sufficient to address changing conditions?
 - a. Do you think that your own internal resources are enough to grow the business?
 - b. Do you think that you need external resources (e.g., collaboration and partnerships) in order to compete successfully?
 - c. Will collaborative partnerships compensate for the lack of internal resources (if applicable)?
4. How are business clients engaged with your organisation? (*Customer engagement means good relationship instead of one-off sales*).
 - a. Can you describe how you get business clients from a general relationship to collaborative partnerships? (*Collaborative partnership: relationship where all partners contribute resources and share rewards and leadership to achieve the goals and outcomes for the entire partnership benefit*).
 - b. Do you experience challenges in convincing your business clients to collaborate? If yes, what are the challenges?
5. How is partnership developed?
 - a. Is there a plan, a process, or has it emerged from other types of activities (e.g., Mergers and acquisitions)?
 - b. Are collaborative partnerships supported as a regular activity or funded as a solution or exception?
 - c. Do you feel that changes in the relationships with your business clients can be made to improve growth results?

6. What are the results of your collaboration programmes? (*Collaboration programmes and relationship: same as in 4.a*).
- a. Is there a specific programme you want to talk about? (Possibility: *Name the participant specific programme – e.g., Vodafone CARE programme*).
 - b. Where do you see the main challenges for enhancing collaborative practice in the near future?
 - c. Are there some situations where collaborative partnerships are not the right thing to do (bad practice)?
7. How do you evaluate collaborative partnership activities? (*Evaluation is looking to the final results and whether the defined goals are reached*).
- a. What methods do you use to evaluate collaborations?
 - b. If no methods are used, how are you addressing the need for evaluating collaborative initiatives?
8. Can you see any direct or indirect link between collaborative partnerships with business clients on company revenue growth?
- a. Is collaborative partnership making a difference? How important is that?
 - b. Is it worth doing it again?
9. Is there anything else you want to add?

Appendix 10: Focus group questions and themes

The aim of this empirical research is to increase our understanding of why TSPs collaborate with business clients and how the collaboration might help to achieve sustained growth. This is achieved by critically evaluating the existing theories and studies related to collaborative partnerships to establish the current thinking about the research problem, explore and investigate how collaborative partnership might help TSPs to achieve a sustained growth. From the emerging findings based on the individual semi-structured interviews, four main themes were identified as the most important, and these are discussed in the focus groups. The group discussion goes beyond the individual views and goes deeper to provide more comprehension about the themes content and the different thoughts and practical experiences between TSPs. The focus group participants are reminded about the scope of this study and that collaborative partnerships between TSPs, and the business clients are relationship where all partners contribute resources and share rewards and leadership to achieve the goals and outcomes for the entire partnership.

1. Are TSPs dynamic and adaptive?

The TSPs are facing the challenge of knowing their client's requirement, their buying behaviour, and against whom they are competing. However, less is understood about the TSPs awareness of market developments, the absorption of external knowledge, and how quickly they can implement new services and products. What are your views on this?

How dynamic and how quickly can TSPs adapt their internal processes and succeed in creating value for customers? The telecommunications market is a complex and dynamic business, but is the internal TSPs' dynamism synchronised with the external market's dynamism? What are the reasons that can stop TSPs from being flexible and adaptive, knowing that ICT and telecommunications is one of the most dynamic markets?

2. Internal and external resources:

The emerging findings suggest that TSPs own resources are either not enough to create competitive advantages and achieve sustained growth, or they are enough but not the right resources that can create value for business clients (especially for old national TSPs who experienced the monopoly position for decades). Should the TSPs get more external resources through collaborative partnerships with business clients to compete successfully? Is this

necessary or just nice to have (case by case) for specific projects? Are TSPs able to grow without external resources such as third-party services?

3. Engagement with business clients and partnership development

Some TSPs seem to be engaging with business clients through the old sales approach (short term vision). At the same time, business clients are expecting their TSPs to collaborate with them. Does the current buying behaviour of business clients require a change in engagement with clients? Are business clients open to collaborative partnerships instead of a general relationship?

The preliminary findings imply that global accounts are willing to collaborate with their business clients if they see the value. What are the challenges? How do you think about the best way to deal with long-term collaborative partnerships and build trust? What are your general views about the relationships you have with your business clients? What are the key changes that might have a positive impact on the TSPs' performance and growth?

4. Collaborative partnership: Results and the impact on growth

The emerging findings show that many TSPs value the collaborative partnerships with their business clients (not vendors), but they are struggling to do this in a structured and sustained way. Are collaborative partnerships with business clients contributing to TSPs' sustained growth? Are TSPs able to evaluate collaborative performance?

What are the challenges that TSPs are facing that are limiting their collaborative capability? Are these related to the collaborative partnership strategy, which cannot be applied to all business clients?

TSPs consider the collaborative partnership as a capability that can create competitive advantage and sustained growth, but at the same time, the collaborative partnership can fail, the potential growth cannot be realised, some business clients are very demanding, and the partnership (investment) costs a lot of resources. What is your view on the risks of collaborative partnerships and their impact on TSPs sustained growth?

Appendix 11: NVIVO Coding

The screenshot displays the NVIVO software interface. On the left, the 'Data' tree shows 'Interviews' selected. The main window shows a list of interviews with columns for Name, Codes, and References. The interview 'CLEAN_5-Recording 143759-112619 Chr kpn' is highlighted. On the right, a detailed view of this interview shows a list of coded segments with their respective references and coverage percentages.

Name	Codes	References
Coded_1-Recording 140558-101719 Carl G v2 (2)	118	260
CLEAN_9-Recording 110518-122319 JR Prox	20	30
Clean_8-Recording 130259-121219 ch VF	26	45
CLEAN_7-XX_Recording 153546-120619 Lrdo TI	21	29
CLEAN_6-Recording 162038-112719 malcolm colt	24	29
CLEAN_5-Recording 143759-112619 Chr kpn	23	37
CLEAN_4-Recording 130658-112619 MSkpn	17	22
CLEAN_3-Recording 120545-112619 JONTT	15	17
CLEAN_2-Recording 170455-103019 ALmp3	18	30
CLEAN_28 - Recording 110752-042020 Ton_NT	22	41
CLEAN_27 - Recording 161057-041720 sonia bt	11	16
CLEAN_26-Recording 150744-040720 JBvz	17	26
CLEAN_25 - Recording 163613-040220 MKS_VGE	13	23
CLEAN_24 - Recording 130839-033020 JOS_TF	15	17

Autocoded Themes Results 14-12-2024 21:23

Files	References	Coverage
1: Files\Interviews\CLEAN_5-Recording 143759-112619 Chr kpn	3	1.30%
2: Files\Interviews\CLEAN_6-Recording 162038-112719 malcolm colt	1	0.33%
3: Files\Interviews\CLEAN_7-XX_Recording 153546-120619 Lrdo TI	3	0.53%
4: Files\Interviews\Clean_8-Recording 130259-121219 ch VF	6	0.44%
5: Files\Interviews\CLEAN_9-Recording 110518-122319 JR Prox	2	0.53%
6: Files\Interviews\Coded_1-Recording 140558-101719 Carl G v2 (2)	5	0.44%

Reference 1 - 0.33% Coverage

Chr KPN 9:49

So always you would always have to make a business case for for for getting resources.

Reference 2 - 0.53% Coverage

Mohieddine Messousi 12:10

Do you think that you need external resources like collaboration and partnership with business clients in order to compete successfully?

Reference 3 - 0.44% Coverage

Mohieddine Messousi 13:54

Will collaborative partnership compensates the lack of internal resources are easy to precondition to grow.

NVIVO

DBA Analysis_Cle....3).nvp

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Clipboard Item Organize Query Visualize Code Autocode Range Code Uncode Case Classification File Classification Workspace

Codes Search All Codes and Cases

Name	Files	Refer
1. Resources	0	0
External resources	0	0
External resources are a new way of thinking and doing	1	1
External resources like partnerships are necessary in order to compete	21	24
No need for external resources	2	2
Yes we need external resources	4	4
Internal resources	0	0
are not enough	9	16
Collaborative partnerships compensate the lack of internal resources	1	1
Enough but can be better	7	7
enough in numbers but not in skills and quality	5	6
not enough to grow the business	4	4
Now enough to maintain the business but not ready for the future gro	15	21
2. React adapt and compete	0	0
How to adapt to changing conditions and to competition	0	0
How to manage and react to competition	0	0
3. Customer experience and engagement with clients	0	0
Customer experience	0	0
Engagement and relationship with business clients	0	0
4. Trust is key to collaborate	12	15
5. Collaboration and the link to growth	0	0
5. Collaborative partnership	0	0
5. Growth	0	0
5. Growth and collaborative partnerships with business clients	0	0
5. Link between the relationship with business clients and growth	0	0

External resources like partnerships are necessary!

<Files\Interviews\CLEAN 10 -Recording 110319-012120 att david> - \$ 1 reference coded [0.19% Coverage]

Reference 1 - 0.19% Coverage

That's what my group does. So definitely, definitely, yep. w

<Files\Interviews\CLEAN 12 - Recording 160847-011520 JS Prox> - \$ 1 reference coded [0.18% Coverage]

Reference 1 - 0.18% Coverage

cit's our only way forward for the moment

<Files\Interviews\CLEAN 14-Recording 173552-021120 jul Spr> - \$ 1 reference coded [1.34% Coverage]

Reference 1 - 1.34% Coverage

Oh, for sure. Yeah. I mean, I, we have a lot of partners today. So it's providing solutions and I'm selling so you know, it's a straight up circuit or something. We can do it ourselves, but we're talking different technologies, different platforms, different requirements. And I think that that's how it can be a little bit more out of the box, you know, and we can partner with other people.

<Files\Interviews\CLEAN 15 - Recording 093237-021320 fab OBS> - \$ 1 reference coded [1.12% Coverage]

Reference 1 - 1.12% Coverage

of course. For us, it's becoming more than one ecosystem player. you partner with specific technology vendors or with other partners to really create a compelling event or a compelling story or compelling solution for your for your client

<Files\Interviews\CLEAN 16-Recording 110807-022020 NK Tsys> - \$ 1 reference coded [0.30% Coverage]

Reference 1 - 0.30% Coverage

Yes, yes, that's what we also like to accomplish with partners

<Files\Interviews\CLEAN 17-Recording 120136-021720 MAR IT> - \$ 1 reference coded [0.61% Coverage]

Appendix 12: NVIVO codes and sub-codes

NVIVO++
DBA Analysis_Cle...3).nvp

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Codes

Name	Files	References
1. Resources	0	0
External resources	0	0
External resources are a new way of thinking and doing	1	1
External resources like partnerships are necessary in order to compete	21	24
No need for external resources	2	2
Yes we need external resources	4	4
Internal resources	0	0
are not enough	9	16
Collaborative partnerships compensate the lack of internal resources	1	1
Enough but can be better	7	7
enough in numbers but not in skills and quality	5	6
not enough to grow the business	4	4
Now enough to maintain the business but not ready for the future growth	15	21
2. React adapt and compete	0	0
How to adapt to changing conditions and to competition	0	0
Adapt by technology change	3	3
Adapting by being cloud provider	3	3
by collaborating with customers	1	1
by innovative products	2	2
combination of...	2	3
Commercial approach	4	4
Competition	3	4
not clear against whom we are competing	3	3
Create and focus on different segments and sales channels	1	1
Customised and solution based offer	3	3
Digitalisation	1	1
Find the differentiating factors	1	1
Focus on own strengths and not on competition	1	2
Look for M&A	2	2
Looking for higher value and margin	1	1
Manage central capabilities and local competition	1	1
marketing intelligence	2	2
Thinking out of the box and be creative	1	1
Understand clients and they environments	2	2
Value proposition	2	2

NVIVO++
DBA Analysis_Cle....3}.nvp

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Codes

Name	Files	References
3. Customer experience and engagement with clients	0	0
Customer experience	0	0
adapt new technologies	1	2
Customer advisory board	2	2
Customer feedback , surveys and NPS	3	3
Customer forums to manage customer experience programmes	4	5
dedicated unit for customer experience - focus	1	1
Digitisation to increase customers satisfaction	1	1
Not very well managed	1	1
Service quality	1	1
Strategic customer experience by analysing data and understanding customer challenges	3	3
Taking commercial approach	1	1
Engagement and relationship with business clients	0	0
Ask the right questions and have the right conversation	1	2
be authentic	1	1
be empathic	1	1
case by case	1	1
create value	1	1
leadership	1	1
Long term relationship	6	6
Pure commercial engagement	1	1
Traditional sales is the way how to engage with business clients	12	14
4. Trust is key to collaborate	12	15
5. Collaboration and the link to growth	0	0
5. Collaborative partnership	0	0
Collaborative Partnership	0	0
Collaborative partnership challenges	0	0
Collaborative partnership type regular or not	0	0
Evaluation of collaborative partnership	0	0
Size of accounts interested in collaborative partnership	0	0
Ways of developing collaborative partnerships	0	0

NVIVO
DBA Analysis_Cle....3}.nvp

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File Home Import Create Explore Share Modules

Clipboard Item Organize Query Visualize Code Autocode Range Uncode Case Classification File Classification Workspace

Codes

Name	Files	References
5. Collaborative partnership	0	0
Collaborative Partnership	0	0
Collaborative partnership challenges	0	0
Collaborative partnership type regular or not	0	0
Evaluation of collaborative partnership	0	0
Size of accounts interested in collaborative partnership	0	0
Ways of developing collaborative partnerships	0	0
5. Growth	0	0
Churn	0	0
Churn is a problem	4	4
Churn is not a big issue, it is under control	8	8
Manage declining revenue	0	0
be agile	1	1
by adding value	3	3
by M&A and creating new services	2	2
by product diversification & reposition	7	7
by using new technology	2	2
Data analysis	2	2
differentiation	1	1
Focus on the most profitable segment or channel	2	2
Innovation	2	2
Investing	2	2
manage costs	5	6
not done very well	1	1
not focus on revenue but on margin and cash flow	2	2
strategy and business goals	2	2
5. Growth and collaborative partnerships with business clients	0	0
Collaborative partnership results are for the long term.	2	2
Collaborative partnerships with business clients contributes to growth	22	32
Hard to prove collaboration results	1	1
5. Link between the relationship with business clients and growth	0	0
Changes in the relationship with business clients contributes to growth	9	11
changes in the relationships with your business clients improve the growth	12	13