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**TITLE: Conflict over Entrepreneurial, Intrapreneurial
Sensemaking of Business Model Change Initiatives**

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ABSTRACT.

Purpose of the Paper & Literature Addressed

This paper explores the often very difficult task of changing business mindsets of the dominant business entrepreneur. Often, these changes are being driven by the dramatic increase in ambiguity and uncertainty in the enterprises' current marketplace, forcing them to seek help from business advisors, or taking up opportunities to work with Higher Education Institutions on Knowledge Transfer Partnerships (KTPs). The key focus of this paper is around evaluating the approaches to guiding business entrepreneur's to change their business model, and evolving their enterprise towards being entrepreneurially and enterprise-driven.

Existing literature on entrepreneurial mindsets often talk about the challenges to their values, attitudes and behavior (Brown and Proudlove 2008), and how this can both act as an enabler and barrier to change (Herbert 2000). The challenges to change mindsets is often down to two factors; convincing the business entrepreneur that the marketplace dynamics have changed (Laczniak and Lusch 1997), and that adopting a new business model is important for survival and growth of their enterprise (Pina e Cunha, da Cunha et al. 2001).

Research Method

A case study approach is used to investigate the issues identified above. Six case studies were chosen to exemplify the key enablers and barriers to delivering value from Knowledge Transfer Partnerships. The study draws on data collected over ten years of working with Small- to Medium-sized Enterprises (SMEs) on knowledge/technology transfer projects, often over several years.

Research Findings

The level of success achieved from these knowledge/technology transfer projects can be directly linked to the correct identification of the business entrepreneurial mindsets and the enterprises' current business model and strategic orientation. The findings reveal the challenges when entrepreneur and intrapreneur mindsets towards business model changes diverge, and are unreconcilable.

Key Contributions

This paper seeks to contribute to knowledge in the field of entrepreneurial mindsets and the transition of enterprise business models from a traditional non-collaborative to a collaborative and coordinated business model, more flexible and adaptive to future internal and external environmental challenges.

Keywords: entrepreneurial mindsets, market orientation, strategic marketing

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INTRODUCTION

Small- to Medium-sized Enterprises (SMEs) are increasingly operating in marketplaces that are uncertain, ambiguous and highly complex (Chaston, Badger et al. 2001; Mikkola 2001), where shorter product life cycles, more fickle customers, and quicker and more adaptable competitors are 'hard' realities of doing business. SMEs, like larger organizations, are being pushed into undertaking innovative initiatives, acquiring new knowledge and technology from outside their existing networks (Garcia, Calantone et al. 2003), to stimulate the creation or modification of customer-valued products, or services. These initiatives are being pushed or pulled by business entrepreneurs needing to acquire further 'lateral knowledge' and 'deep knowledge', to better analyze a given environmental opportunity or threat, and this creates tension. This creative tension between lateral and vertical thinking is often both overt and observable. Yet an excess of either one of these knowledge areas may be detrimental to the business and its strategic orientation.

Burgelman (1984) suggested that individuals, and communities, who are attempting to extend the firms' 'domain of competence' through internally generated innovation, are engaged in 'corporate entrepreneurship' (Burgelman 1984). These internal entrepreneurs, 'intrapreneurs' and 'entrepreneurs', enact the new opportunities they perceive, or acquire, and drive the development of new resource or knowledge combinations to stimulate new learning. This mobile learning and associated collective actions by the entrepreneurs and intrapreneurs, thinking and acting both inside and outside the box, prompts a need for additional sensemaking (Weick 1995). Sensemaking is the process of constructing a link between future actions and past experiences, providing the decision-maker with guidelines of when not to act, and how and when to act (Conrad and Poole 1998). These entrepreneurs and intrapreneurs actively pursue and create linkages with external knowledge bases, like universities, research institutions and other Communities-of-Practice (CoP), and therefore surmount, or augment, the inevitable shortfalls associated with internal mindsets, resources, and skills (Freel 2000).

To facilitate this intrapreneurship, SMEs, traditionally driven by their founding entrepreneurs, are forced to relinquish their 'control oriented' management styles and collaborate with these intrapreneurs. The collaborative effort between the business entrepreneur and these intrapreneurs, is potentially beset with problems, issues and conflicts, one of which is acknowledgement of these intrapreneurs as 'strategists' (Burgelman 1984) and the importance of their role in the strategic process of changing business models.

Entrepreneurial literature (Burgelman 1984; Russell 1999) suggests that 'all entrepreneurial events originate in the creative acts of individuals', but the development of these creative acts needs supporting systems that can provide resources, autonomy and emotional support. The resulting innovation communities or partnerships, and the entrepreneurs and intrapreneurs within them, share collective sensemaking of their social world (Marshall and Rollinson 2004), one constructed from their interpretations' of organizational events, innovative outcomes, and their own, and others' collective actions. This sensemaking draws from their experiences, and training (Dougherty 1992), of how to create, develop and deliver superior customer-valued products, and services. These innovative partnerships create thought worlds and interpretative systems relating to their symbolic interactions surrounding the innovative initiative activities (Weick 2001). these are highly subjective actions and are driven by an agreed set of super-ordinate goals (Sherif 1975). These goals are the very reason for the partnerships' existence, and link their desired value orientations, and therefore the standards of conduct, or behavior, expected of others (Bates and Chen 2004), with their interpretation of the enterprises' values. It is these symbolic interactions, part of the rationale behind the intrapreneurs' membership of these innovative partnership, that suggests the potential for cognitive conflict between business-owner entrepreneurs', and intrapreneurs', already in the enterprise or brought in on a specific project, over current and future business model changes.

This paper reports on the research into the **Tri-partnership collaboration of business-owner entrepreneurs, intrapreneurs and academics of enterprise-wide innovative initiatives**, usually conducted over a six to twenty-four month period. The study focuses on the perceived and desired collaboration of these business-owner entrepreneurs and intrapreneurs, mentored by university academics, and the conflicts resulting from their collective sensemaking of their

knowledge/technology transfer activities. These activities result in the need to change business models, and more importantly the entrepreneurial mindsets driving this. The research outcomes should inform academics and practitioners of the difficulties of managing creative tension and the importance of developing some collective sensemaking between entrepreneurs and intrapreneurs.

EVOLUTION OR REVOLUTION IN BUSINESS MODEL CHANGE

There are three factors driving SME success and failure: the effectiveness of the existing business model; the dynamics of business entrepreneur's and intrapreneur's mindsets; and the strategic orientation of the enterprise.

Business Models

Business models are a 'description of the roles and relationships among a firm's consumers, customers, allies and suppliers that identifies the major flows of product, information, money and major benefits to the participant pp.1' (Owens 2006). The components of the business model are the value creation, development and implementation activities of the enterprise. The business model constructs builds on this premise of value delivery by the integrated strategy and positioning of the enterprise's products and services within the network of suppliers, partners and customers (Morris, Schindehutte et al. 2005). Research has suggested that at the heart of every entrepreneurs' business model are six questions:

1. How does the enterprise create value?
2. Who does the enterprise create value for?
3. What is the source of competence?
4. How does the enterprise competitively position themselves?
5. How does the enterprise make money?
6. What are the enterprises time, scope and size ambitions?

The business model, defined by the answers to the six questions above, has to deliver three principal outcomes – it must fit the enterprise and its customer base (current and future), it must be sustainable and it must evolve. The last two of these criteria for a successful business model are the key challenges for a business entrepreneur in driving continued value creation, development and implementation strategies. Business entrepreneurs look outside their enterprises for ideas of how to drive sustainability and evolution in their business model, hence the search for knowledge and technologies.

The UK business marketplace is more complex than it was twenty years ago, the simple linear model of "market pull" and "technology push" are insufficient to both, basis a enterprises' strategy on, or induce the critical movement of knowledge and technology throughout the economy (Etzkowitz and Leydesdorff 2000). At the heart of this knowledge and technology transference revolution are the academic institutions, those same institutions that are heralded as the principal source of future entrepreneurs, innovators and leaders, they also hold the key to national economic development. In the UK the government has spearheaded a tri-partnership between industry, universities and themselves, the scheme the "Knowledge Transfer Partnerships (KTPs)" has been aimed at enterprises needing new knowledge and technology to move their business models onto the next level of growth and development. These KTPs are one mechanism by which the UK government hopes to transform both business and universities, the intention being to:

- establish government/enterprise/university relationships at a strategic level, where all partners are working towards a valued-solution;
- profit from the exchange – taking that from the individual partners perspective;
- that knowledge and outcomes can be flexible and adaptable;

- develop further the human capital factor (Ucbasaran, Westhead et al. 2009) – supporting the concept of a knowledge intensive economy;

Entrepreneurs' and Intrapreneurs' Mindsets

Entrepreneurial and intrapreneurial mindsets is a new way to look at the highly complex problem of understanding the entrepreneurial process within enterprises. The process largely depends on internal and external factors such as change, luck, marketplace dynamics, enterprise issues; all of which are difficult to control and perceive (Karp 2006). So it is easier and better to focus on the entrepreneurs' and intrapreneurs' sensemaking, their perceived understanding and interpretation of the enterprises' world, and the context to any business model change.

Both of these types of entrepreneur/intrapreneur can be separated into two groups of active and passive. The passive entrepreneurs are unlikely to encourage or propose market leading actions, instead feel more comfortable to follow the competition, and are decidedly risk averse. These passive entrepreneurs are apt to play safe, are not comfortable with experimenting or exploiting market opportunities. Their respective businesses tend to be conservative, adopting a defender or reactor strategy and are largely reactive in their business/market strategies and actions (Avlonitis and Salavou 2007). Active entrepreneurs are quite the opposite, inclined to initiate actions in the market, they are often proactive and bold with their business/marketing strategies. They are pre-emptive and encourage this in their personnel too, often seeking to redefine how the market is driven. Their businesses are open prospectors, being both pioneering and proactive enterprises (Miller and Friesen 1982; Avlonitis and Salavou 2007).

Importantly entrepreneurs' and intrapreneurs' roles, associated with innovative initiatives, are ultimately driven by their interpretation of how to create, develop, and deliver superior customer-valued products, and services. (Cravens, 1998) These roles are influenced by their sensemaking of the internal and external environment, the innovative behaviors of the different sub-cultures, and the resulting innovative outcomes.

Enterprise Strategic Orientation

Research in the 70's suggested that problems in enterprises are most often rooted in past decisions rather than any present marketplace dynamics or events (Miles and Snow 1978; Greiner 1998; Aragon-Sanchez and Sanchez-Maron 2005). Research by Miles and Snow presented a typology that linked strategic orientation to those enterprises' evaluation of internal and external environmental factors, and that these triggered changes in their strategic orientations – management style, structural, cultural and process orientated. The research suggested that these strategic orientations result from the business entrepreneurs' and the enterprises' analysis of internal and external environmental factors (competitiveness, marketplace uncertainty and ambiguity, market orientation, economic growth). They represent a natural reaction to the business entrepreneurs' thought worlds, his habits and perceived opportunities:

1. **Defenders** – these enterprises often focused on a narrow or limited product market, creating a niche for themselves where they have subsequently developed a leading position. These enterprises fall into a strategy of trying to protect their market share and revenues/profits;
2. **Prospectors** – these enterprises often start with a single successful product, but then steadily grow their product/service portfolio by their continuous search for new market opportunities by applying their knowledge and know-how to innovate and develop superior customer-valued products and services;
3. **Analyzers** – these enterprises can act both defensively or prospectively depending on their analysis of the environmental challenges and the perceived innovation-resources that would be required;

4. **Reactors** – these enterprises are characterized by perpetual instability and inconsistency in their strategies, predominantly because of their incapacity to respond effectively to environmental changes.

The real challenge for enterprises that have stretched most of the value of their original product/market concept is where to go next? These enterprises are eager to adopt new innovative initiatives, developing new product and/or markets where they can leverage their new found or modified core competencies and experiences. The management of these innovative initiatives ultimately falls on two types of individuals and groups within an SME, the business-owner entrepreneur and the intrapreneur, sometimes brought in from the outside.

Sensemaking

Enterprise research has suggested that individuals, entrepreneurs and intrapreneurs, analyze the action-outcome relationships associated with specific enterprise processes, and then create cognitive maps (Alexander 2004). These individual cognitive maps ascribe specific interpretations to observed collective actions, enterprise events and innovative outcomes, and it is the reinforcement and modification of these that supports, or amends, their future actions. This sensemaking process has some hierarchy, a proposed a taxonomy of sensemaking is presented below (Brown 2006), see figure 1.

A Taxonomy of Sensemaking

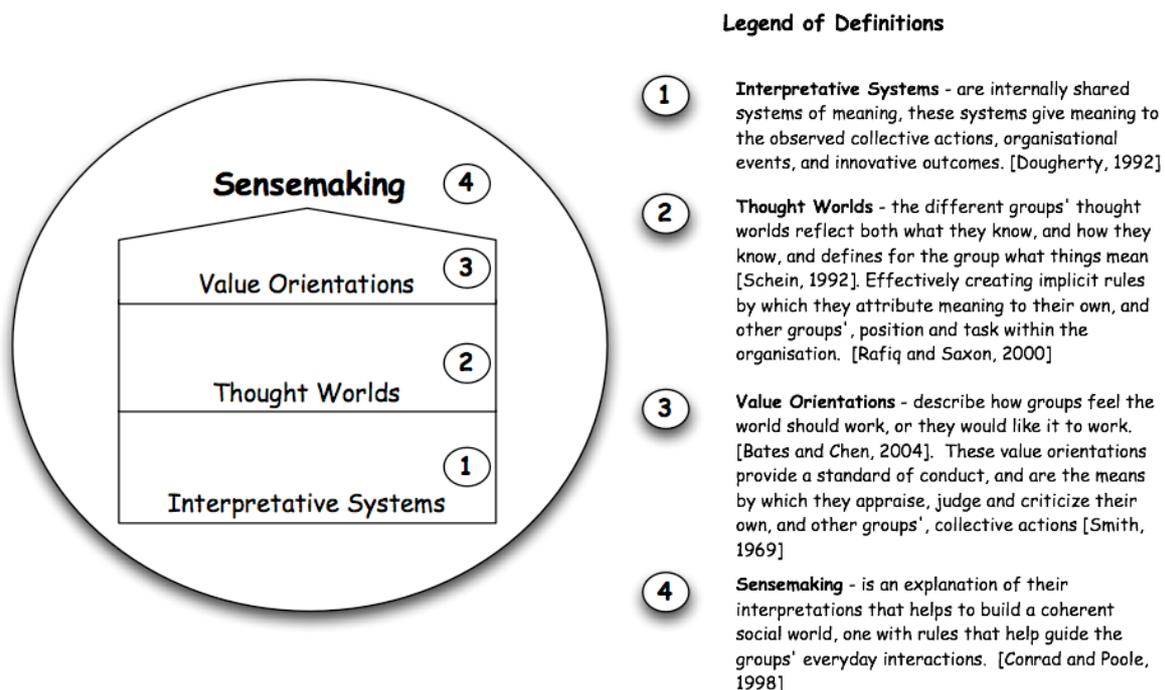


Figure 1. – A Taxonomy of Sensemaking (Source: Brown, 2006)

The entrepreneurs' or intrapreneurs' interpretative systems are their internally shared 'systems of meaning' (Dougherty 1992), and these are used to give meaning to the observed collective actions, their own, and other sub-cultures', organizational events, and innovative outcomes. Dougherty's (1992) research suggested that these individuals organize their thinking and actions around this interpretative schema, and that over time these can create major barriers to relationships and collaboration between the individuals, sub-cultures and collaborative partners.

Overlying this are the entrepreneurs' or intrapreneurs' thought worlds, these reflect both what they know, and how they know, defining unique meanings to the social/business world, based on past experiences, and their professional training. Recent research on business entrepreneurs and their experiences has suggested that beyond a certain level of business experience, type of businesses and functional roles, they exhibit a dip in their ability and propensity to identify opportunities (Ucbasaran, Westhead et al. 2009). It is these entrepreneurs' or intrapreneurs' thought worlds that help attribute meaning to their own, and other sub-cultures', position and task within an enterprise (Rafiq and Saxon 2000), especially associated with any innovative initiative (Brown 2007).

These entrepreneurs' or intrapreneurs' thought worlds directly influence their value orientations, both how they perceive the social world to work (perceived value orientations), and how they would like it to work (desired value orientations). These value orientations provide a standard of conduct for, their own, and other sub-cultures or individuals, and is the means by which they appraise, judge and criticize their own, and other sub-cultures' collective actions (Smith 1969). It is this 'hierarchy of meaning' that facilitates their sensemaking of the social/business worlds, creating a coherent world, and one where they can develop mutual expectations associated with any enterprise-wide innovative initiative.

Lastly, these innovative initiatives often create artefacts, a realization of assumptions and values of the entrepreneur or intrapreneur (Hatch 1993). The entrepreneurs', or intrapreneurs' interpretation of the actions and outcomes in the enterprise, and their view of these artifacts as the visible, tangible and audible results of collective actions associated with the innovative initiative (Schein 2004). The entrepreneurs' or intrapreneurs' retrospective sensemaking of these artifacts creates symbols, conferring on these action/outcomes additional information and meaning. Hatch (1993) suggested that artifacts must be translated into symbols if they are to be comprehended as culturally significant events by the entire enterprise, and an innovative initiative in the form of a knowledge transfer partnership project is just that. Cohen and Bailey's (1997) definition of symbols alludes to the significance of the subjective meaning attributed by those who use them:

'...more than merely stand(ing) for or represent(ing) something else.. they also allow those who employ them to supply part of their meaning' (Cohen and Bailey 1997)pp. 14

It is the additional meaning that different individuals confer on these symbols, like a "knowledge transfer partnership", that suggests the importance of symbolic interpretation in shaping entrepreneurs' or intrapreneurs' interpretative systems, and the thoughts worlds and sensemaking that result.

Sensemaking then is an integrative process of communicative sharing of relevant information pertaining to the challenge; interpretative act of directing and shaping of that information; and then interpreting it (Neill, McKee et al. 2007). Through this sensemaking activity entrepreneurs close the loop of their understanding and interpretation on action/outcomes differences.

Linking Business Models, Sensemaking and Mindsets to Environmental Drivers

In the challenge to react to marketplace dynamics, competitiveness, customer need changes, economic drivers; business models, strategic orientations and business entrepreneurs' mindsets are being questioned.

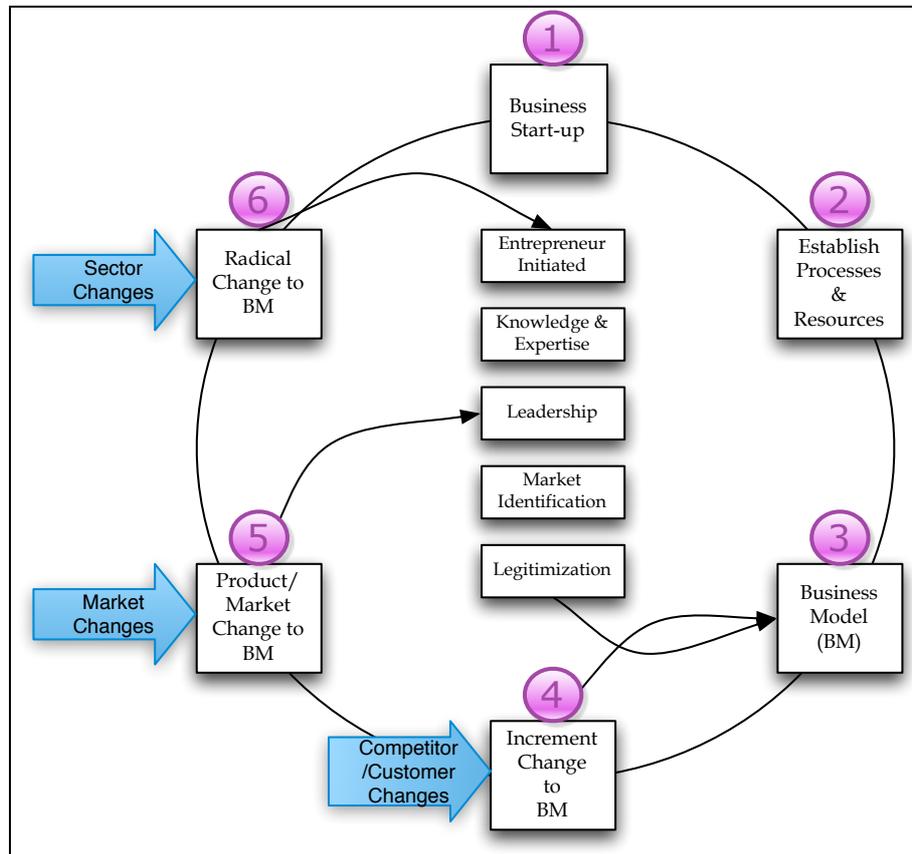


Figure 2. – Business Model Change Cycle (BMCC)

SMEs will generally start out with a prospector strategy, developing a single product/service, and then steadily growing its market position, securing sustainable revenue/profit streams. Some SMEs will then adopt a more conservative position – either attempting to defend its current marketplace, or others who react to changes in marketplace – sometimes too late. Other SMEs instead take a more active role, some analyzing the marketplace dynamics carefully and changing their strategies, first defensive, and then prospective, carefully weighing up the benefits and costs of any change; prospectors take a more aggressive and proactive stance, continuously searching for new opportunities and ways of challenging the status quo.

Establishing a business model is one problem, understanding how, when and why it should change is another; previous research has indicated some inter-relationships between entrepreneurial mindsets, business models, strategic orientation and environmental factors:

Environmental vs. Strategic Orientation vs. Business Model – generally SMEs have less information about marketplace changes and therefore are slower to respond strategically (Aragon-Sanchez and Sanchez-Maron 2005), and this is particularly so for passive entrepreneurially led SMEs. Research has established strong links between strategic orientation and innovation, especially where opportunities and threats create a marketing changing scenario (Laforet 2008). Research on environmental uncertainty and entrepreneurs' mindsets to perceive this positively or negatively, links this to the entrepreneurs' orientation and to the enterprises' business model (Weaver, Dickson et al. 2002);

Environment vs. Entrepreneurial Mindsets vs. Strategic orientation – research has suggested that strategic orientation is linked indirectly to entrepreneurial initiation of change, suggesting that prospective and defender strategies are driven by business entrepreneurs' initiation of change – bringing or instigating new product or market concepts (Laforet 2008);

Conflict and Contradiction between Thought Worlds vs. Strategic Orientation – research has suggested that entrepreneurs' thought world, particularly their knowledge and expertise, dictate certain propensities for strategic orientations (Fiol 1995), the involvement

of contradictory entrepreneurs/intrapreneurs is necessary to move them away from their defensive positions (Deep and Narrow) towards deep and broader based;

Existing research provides some individual insights into the importance of: entrepreneurial traits, styles and vision; the links between strategic orientation and management styles and professional skills; and the importance of business models and innovation (Hermann 2006). Yet, this research does little to illuminate the important interaction of these three factors and particularly the importance of the entrepreneurial mindsets and its impact on strategic orientation and business model changes.

RESEARCH METHODS

A case study approach to data collection was chosen as the principal form of ethnographic study because of its ability to provide information, internal and external, concerning the internal dynamics of the enterprise and the related environmental context. The businesses were chosen from over twenty-five enterprises that had, or were currently, engaged in a Knowledge Transfer Partnership (KTP) with the university.

The data collection was achieved through a series of semi-structured interviews, observations – regular once weekly meetings were carried out with both the associate and enterprise supervisor, and project meetings conducted with other enterprise employees. This methodology provided maximum flexibility and adaptability in exploring the changes happening in the enterprises business model, entrepreneurial mindset changes and recording internal and external environmental factors. All observations and interviews were recorded with fully scripted hand-written notes. The transcripts of these were entered into a key category analytical tool, NVivo, and core and axial codes were developed from this. Cognitive mapping was used then to link together the themes and sub-themes from the coding schema.

It is recognized that the results from this ethnographic inductive case study approach cannot easily be generalized and extrapolated to the broader SME sector, this is a weakness of this approach. However, attempting to apply large organizational-developed models and frameworks to these SMEs is equally weak in that the management theory concepts seldom reflects on the important dynamics of entrepreneurial mindsets, business model change and strategic orientations interactiveness.

SIX BUSINESS CASE STUDIES

The six businesses were chosen out of thirty businesses studied over the last 5 years. Table 1, provides some background information about their operations and characteristics, and initial reasons for undertaking a Knowledge Transfer Partnership (KTP).

Table 1. – Six Business Case Studies

Firm Characteristics	Strategy	Management Team/Style	Market Dynamics	Reasons for KTP
Enterprise A <50 employees	Differentiation	Business Owner	Regional Limited Sectors	Diversification
Enterprise B <100 employees	Differentiation	Partnerships (2) Designer/Sales	European Hospitality/Distribution	Improved Effectiveness and New Markets
Enterprise C <50 employees	Cost Leadership	Partnership (2) Trainer/QA	Regional Social Care Training	Improved Effectiveness and New Markets
Enterprise D <100 employees	Market Entry	Partnership (3) Operations/Sales/Designer	International Safety Equipment	New Market Entry
Enterprise E <20 employees	Differentiation	Partnership (2) Scientist/Accountant	European Pharmaceutical	Market-orientation
Enterprise F	Diversification	Business Manager	European	Improved Market

150-200 employees		Leadership PLC	Retail Technologies	Diversification and Product portfolio management
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Enterprise A

This enterprise operates in a fragmented medium-value manufacturing sector, servicing its business client with high quality products.

Table 2. – Enterprise A Entrepreneurial Mindset, Strategic Orientation and Business Model Changes (Started¹ and Finished²)

Perceptions of needed Business Model change	Environmental Factors	Prospective Business Model Changes	Strategic Orientation	Expected and Actual Impact
Enterprise A Entrepreneur	Sector uncertainty – falling sales ¹	Develop new markets and increase share of existing ¹	Reactive ¹	Previous success based on quality of product delivered – not turning into revenue/profit streams? ¹
	How to engage these new customers ²	Marketing best practice to existing markets ²	Analyzer ²	Slowly changing value orientations from being process-driven towards being market-oriented ²
Intrapreneur	Understanding business model ¹	Identify new market sectors ¹	Prospective ¹	Changing business entrepreneurs' mindset model ¹
	Delivering value through tactical marketing plans ²	Legitimize the changes in market orientation through B2B research ²	Analyzer ²	Changing business entrepreneurs' mindset model ²

At the beginning of the project the Business Entrepreneur (BE), the owner, had just taken back control of business development from a senior manager, who then subsequently left. The enterprise had just been through a very demanding eighteen months period where orders had dropped by over a third. Yet through this period the BE had remained active and positive. The nature of the business was both seasonal and non-repeat business, putting a strain on forecasting and developing any sustained relationship with key customers.

At the completion of the project, some fifteen months later, several important outcomes were noted. First, a market development plan was developed, highlighting potential sectors, lists of businesses likely to benefit from the enterprises' services, and strategy to contact and visit them. The BE's strategic orientation had changed from 'Reactive' to 'Analyzer', but he was still very reticent to change market sectors or delegate more authority to the intrapreneur, as a consequence he left.

Enterprise B

The current Managing Director (MD) founded this business with another colleague to provide an output for their creative efforts, both were trained as industrial designers. The enterprise had successfully developed retail sales of its products through some leading-name High Street stores, and had also successfully set up an European sales network of small distributors selling into electrical retail outlets and to property developers.

Table 3. – Enterprise B Entrepreneurial Mindset, Strategic Orientation and Business Model Changes (Started¹ and Finished²)

Perceptions of Needed Business Model change	Identified Current Challenge	Prospective Business Model Changes	Strategic Orientation	Expected and Actual Impact
Enterprise B	Stagnation in European Sales ¹	Develop new markets and increase share of existing ¹	Defender ¹	Quick solutions to market identification and sales

Entrepreneur	Managing the European Sales Network ²	Understanding how to drive sales efficiencies ²	Defender ²	inefficiencies ¹ Realization that the European Sales Network was not delivering full value ²
Intrapreneur	Sales and Marketing Management ¹	Market Application Knowledge ¹	Prospective ¹	Changing business entrepreneurs' mindset model ¹
	Sales and Marketing Management ²	Sales Management ²	Analyzer ²	Changing business entrepreneurs' mindset model ²

At a chance meeting of small business owners the university first met the MD of this thriving manufacturer, during this meeting the MD expressed an interest in conducting a project to look at one particular challenge they had. Their sales were predominantly through high street retailers, however this somewhat limited their sales to the domestic market and they were keen to develop further the commercial side. When the project started the MD was very passive in his business development activities, and because of this was unable, or unwilling, to provide firm leadership. Over the previous five years the enterprise had taken a very defensive position in regards to its product development plans and management of its European sales channels.

At the completion of the project, some nine months later, several important outcomes were noted. A tactical marketing plan was generated showing the key territories and applications where growth was possible, and suggested communication strategies to drive this. The MDs' strategic orientation had remained unchanged, very unwilling to change his thought worlds on how to drive more revenue/profit from his existing sales channels. Equally, unwilling to provide leadership on the search for new opportunities (market and product). During the project increasing conflict arose between the MD, intrapreneur and the university mentor on the project value deliverables.

Enterprise C

The Business Entrepreneur (BE) came from the public sector skill training sector, starting a training enterprise, with a close colleague, focused on utilizing government funding opportunities for client enterprises to increase the skills and core competencies of their employees.

Table 4. – Enterprise C Entrepreneurial mindset, Strategic Orientation and Business Model Changes (Started¹ and Finished²)

Perceptions of Needed Business Model change	Identified Current Challenge	Prospective Business Model Changes	Strategic Orientation	Expected and Actual Impact
Enterprise C Entrepreneur	Growth into other sectors ¹	Develop new markets and increase share of existing ¹	Prospective ¹	New market sectors and needs analysis ¹
	Training market uncertainty ²	Increasing the value of training provision – accreditation with Universities ²	Prospective ²	New market sectors and needs ²
Intrapreneur	Communication strategies - clients ¹	Sector Needs analysis ¹	Analyser ¹	New market sectors and needs analysis ¹
	Communication strategies – clients/trainers ²	Alternate home market differentiation strategies ²	Analyzer ²	New market sectors and needs ²

As often the case, the university and BE met at a regular networking event held by the local business link. The enterprise was experiencing a particular uncertain period of less than impressive growth because of marketplace uncertainty and increased competition. The enterprise was looking to expand outside its traditional market sector, and develop a national coverage. When the project started the BE was very active and keen to provide strong leadership through frequent meeting with his trainers and clients. The enterprise had been very aggressive in developing a strong position in both in the social care sector, and as a training provider regionally.

At the completion of the project, some six months later, several important outcomes were noted. A tactical marketing plan was generated showing the market needs for training, pricing strategies and communication strategies. The BEs' strategic orientation had remained unchanged, but his mindset had changed, he was more aware of the importance of aligning his enterprise values to the new demands of the emergent sectors. One major challenge was a difficulty in communicating the legitimization of these changes to his business partner. Interestingly, the communications between BE and intrapreneur worsened over the duration of the project, they only communicated with each other via e-mails.

Enterprise D

The enterprise provides contract manufacturing to high-tech electronic manufacturers who need relatively low-volume manufacture, but high-quality and reliable service. The Managing Director (MD) was also the person who led the Management Buy-Out (MBO) only eight years previous.

Table 5. – Enterprise D Entrepreneurial Mindset, Strategic Orientation and Business Model Changes (Started¹ and Finished²)

Perceptions of Needed Business Model change	Identified Current Challenge	Prospective Business Model Changes	Strategic Orientation	Expected and Actual Impact
Enterprise D Entrepreneur	Concept of Market ¹	Understanding of the market demands and buyer needs ¹	Reactor ¹	Proof of Market and Product Concept ¹
	Concept of Market ²	Product technology evaluation ²	Reactor ²	Some proof of market ²
Intrapreneur	Concept of Market ¹	Understanding of the market demands and buyer needs ¹	Reactor ¹	Proof of Market and Product Concept ¹
	Concept of Market ²	Product technology evaluation ²	Reactor ²	Some proof of market ²

The MD approached the university to look for funding opportunities to evaluate the marketplace for a new product concept. The product idea was a new-market concept, the technology of which had been proven, at least on the lab bench. The MD was looking for specific knowledge and expertise in a new sector for them, requiring extensive market research and product trials. When the project started the MD was relatively passive, in that the product idea had been 'kicking around' between him and one of his senior partners for over three years. The product idea had been IP protected and released to the sector, and only a few interested parties had responded with a request for trial. The strategy to date had been very reactive, but like market research had been carried out and no resource committed to it.

At the completion of the project, some six months later, several important outcomes were noted. A product trial programme had commenced at two principal sites, a further four were planned around the world. Marketing materials had been generated from the trial data and detailed pricing and systems specifications had been written for purposes of selling and marketing the product. The MD had not changed his overall uncertainty and riskiness of the project, and therefore was unsure of the business value it could deliver. There was still no firm business model to support the project, and hence the MD was uncommitted to its continued funding. Interestingly, the communications between intrapreneur and MD were good, however, the relationship between the MD and his senior partner became strained.

Enterprise E

This enterprise was started by a husband and wife team, who gave up their previous salaried positions to start a new business helping companies to get regulatory approval for their products.

Table 6. – Enterprise E Entrepreneurial Mindset, Strategic Orientation and Business Model

Changes (Started¹ and Finished²)

Perceptions of Needed Business Model change	Identified Current Challenge	Prospective Business Model Changes	Strategic Orientation	Expected and Actual Impact
Enterprise E Entrepreneur	Market development ¹	Understanding of the market demands and buyer needs ¹	Analyzer ¹	Increase marketing performance ¹
	Market and product development ²	Product gaps and software development ²	Analyzer ²	Increased marketing performance ²
Intrapreneur	Market development ¹	Understanding of the market demands and buyer needs ¹	Analyzer ¹	Marketing Communication Effectiveness ¹
	Market and product development ²	Product gaps and software development ²	Reactor ²	Increase Sales and Marketing Performance ²

Like most of the previous enterprises discussed earlier, the opportunity to work with the university came from a chance meeting at a regional business engagement workshop. The MD, the technical half of the partnership, was looking for specific knowledge and expertise to improve their market position, and to develop partnerships that would provide further opportunities for product/service developments. When the project started the MD was relatively passive in his business development activities, having instead spent much time on developing effective and efficient processes for undertaking the contract work. The key challenge for the business was to get more companies to use their services, to speed-up and electronically submit, for product approval requests. The past strategy to increase awareness of the products and services had limited success.

At the completion of the project, some twenty-four months later, several important outcomes were noted. Generally sales leads had increased by over 100%, a comprehensive marketing strategy had been developed and the communications part of it had been implemented, with agreed Key Performance Indicators. The MD was a very analytically driven entrepreneur, requiring detailed analysis on any proposal suggested, and a clear indication of the performance expected and the tools to measure this. The MD was willing to initiate change but unable to provide clear leadership on how to research and legitimize this change. Openness between entrepreneur and intrapreneur was evident, and this led to strong mutual understanding, trust and respect for their relative contribution to business model change.

Enterprise F

This enterprise is a very different type of business having been a family run affair for over fifty years. The enterprise was an important system integrator for the retail sector, bringing together products and services to provide solutions that delivered value for its clients, and their customers. The enterprise was split into three separate business units, run by a dedicated and very sales-oriented Business Manager (BM).

Table 7. – Enterprise F Entrepreneurial Mindset, Strategic Orientation and Business Model

Changes (Started¹ and Finished²)

Perceptions of Needed Business Model change	Identified Current Challenge	Prospective Business Model Changes	Strategic Orientation	Expected and Actual Impact
Enterprise F Entrepreneur	Integrated Product/market development strategy ¹	Understanding of the market demands and buyer needs ¹	Prospector ¹	Integrated Marketing and Product Strategy ¹
	Integrated Market and product development ²	Marketplace/Technology Roadmapping ²	Prospector ²	Integrated Marketing and Product Strategy ²

Intrapreneur	Integrated Product/market development strategy ¹	Understanding of the market demands and buyer needs ¹	Analyzer ¹	Integrated Marketing and Product Strategy ¹
	Integrated Market and product development ²	Marketplace/Technology Roadmapping ²	Analyzer ²	Integrated Marketing and Product Strategy ²

Interestingly, this enterprise had engaged with the KTP scheme previously when it was looking to improve its operational processes, specifically managing its diverse product and system development projects. When the project started the BM was active in development his business markets, looking for new product opportunities and market developments that would both increase revenue, and profit streams. The key challenge for the businesses was in developing an integrated approach to both the effective management of the product portfolio, and identification and evaluation of market opportunities. The somewhat eclectic nature of previous business development could not be sustained without some rationalization of the product portfolio and a more analytical approach to market/product sector evaluation and selection.

At the completion of the project, some twenty-four months later, several important outcomes were noted. Market and Product strategies were integrated, investment in product technologies and development of core skills and competencies was focused, delivering high improved revenue/profit streams. The MD was a prospective entrepreneur, requiring little analysis of a market/product opportunity to actually commit to it, this remained largely unchanged at the end of the project. The MD was quick to initiate changes in the business model, but was weak at legitimizing these based on medium/long term benefits, again unchanged by the end of the project. A healthy relationship was developed between the BM and the intrapreneur, but the relationship was too distant, not enough leadership was provided in more critically evaluating opportunities versus costs.

Emergent themes

The six enterprise cases above provided interesting insights into the problems that working in a Tri-partnership can deliver. Our research findings suggested that the three themes below were the most common reasons why business entrepreneurs did not full open up to the potential for innovation in their mindsets business models and subsequent enterprise business model, a fact supported by other research on workplace learning initiatives (Sadler-Smith, Gardiner et al. 2000). The analysis of the interviews, observations and notes taken at project meetings using cognitive mapping techniques helped identify common themes and links between the important three themes of entrepreneurial mindset, business model change and strategic orientation, and these are discussed in more detail below:

Entrepreneurial Mindsets

Confirming broad research findings on the significant link between mindsets and specific business processes, for instance internationalization (Nadkarni, Perez et al. 2006), our business entrepreneurs' mindsets showed that they were heavily influenced by environmental uncertainty. Ultimately, this was the common rationale for the business entrepreneurs' to engage in this tri-partnership, and specifically that of a Knowledge Transfer Partnership. Business entrepreneurs perceived this environmental uncertainty to present both opportunities and threats to their enterprise, and they naturally challenged their vision of their enterprise within its current marketplace, the values they had assumed were relevant and valuable, and ultimately the appropriateness of their practices.

Vision

Those business entrepreneurs who are more open and have complex perspectives of their relative marketplaces, and those that are either analyzers and prospectors, generally had a more diverse

knowledge base and more actively accepted new thought worlds from the intrapreneurs and academics.

Values

Like of other research on university-SME collaboration we also found cultural barriers (Hadjimanolis 2006) associated with the perception of business value, particularly around the conceptualization of the business model, and how business value is derived from the value creation, development and delivery systems. The Intrapreneurs' and academic mindsets were, on the whole, focused on achieving maximum output and reward from the innovative project. As previously mentioned, the projects were approved by the TSB on the basis of significant strategic change being a primary output. However, the entrepreneurial mindset around the value and motives of the project were heavily influenced by the current financial performance of the enterprise.

Practices

In other research on University-SME collaborations there has been significant mention of factors like structural and bureaucracy factors, but with the six targeted business cases this was not a significant issue. However, slightly more concerning was the level of market-related barriers which did directly input on the slowing down of two of the projects, where general economic downturn impacted on the available resources, but happily in both cases the project did continue, and successfully both projects resulted in the permanent employment of both intrapreneurs in some commercial role. Interestingly, it is this last point that highly one significant change in the entrepreneurs best practices, that they acknowledge the value of intrapreneur experience picked up during the project, and where keen to retain this expertise within the enterprise.

Business model changes

The research findings from studying our six business cases over the 18 to 36 month period of the KTP project suggested that business entrepreneurs inevitably focused on those parts of the business model that they perceived to be most affected by the environmental opportunity or threat that originally triggered the reason for the KTP. In terms of ranking of importance the business entrepreneurs focused on:

Market/Product Development

As previously indicated in the Business Model Change Cycle (BMCC), see figure 2 above, marketing and formation and development is a common concern for business entrepreneurs. In the initial stages of developing the KTP proposal application for government funding 2 out of every three applications are related to product/market development. Yet, 4 out of 6 of our business cases did not fundamentally change their market perspective as a consequence of the KTP project, open new markets or significantly can their market strategies. What they did was become better at communicating with their existing markets, and through the intrapreneurs develop stronger understanding of their brand propositions and market positioning. What held them back from making a bigger transition in legitimizing their business model was the lack of movement in their entrepreneurial mindset, this links very much with what was said in the section above. Supporting research (Willemstein, van der Valk et al. 2007) into the Bio-pharm sector suggests a strong link between the timing of shifts and the multiplicity of this shifts in business performance, especially associated with environmental threats, but does not link this to business entrepreneurial characteristics, why?

Knowledge & Expertise

As initially suggested in the discussions on the 'entrepreneur's mindsets' business entrepreneurs acknowledged the need to reach out for new knowledge and expertise. The six business case study interpretative schema, seen in all six tables, show the relative importance of knowledge and expertise acquisition to develop and grow their sometimes fragile and unsustainable business models. For all six of the businesses studied, the business entrepreneurs struggled to adapt to a new

more flexible relationship network, one that reached-out to the new markets that would bring longer-term growth and sustainability to their business models, an adapted one at that.

Research by others in start-up ventures (Nosella, Petroni et al. 2006) have suggested that success is dependent on managing these changing competencies through effective creation and development of relationship networks, yet stops at looking at the more important characteristics of the driving entrepreneur, and especially the ability to be open-minded to the need to change strategic orientation.

The other four themes associated with creating and building new mindset business models are important, already we have alluded to the important issue of attaining legitimization of the overall changed mindset business model, from others within the enterprise and more importantly from their supporting partners (family, business friends, solicitor, accountant, etc).

Strategic orientation

Our research certainly strongly supported that link between entrepreneurial mindsets and strategic orientation. Those business entrepreneurs who rightly identified the strategic significance of re-identifying the target market segments for their enterprises, also exhibited strong prospector or defender strategic orientations. Research (Morgan and Strong 1998) on market orientation has identified the strong link between businesses that are market orientated and those that have a proactive strategy towards opportunity identification, and we concur with this at the entrepreneurial-level too. Equally, we found that business entrepreneurs who had both extensive and diverse market/product knowledge had strategic orientations that were either highly reactive or defensive towards external environmental opportunities and threats.

CONCLUSIONS

This paper began by proposing that business model change initiatives, stimulated by Knowledge Transfer Partnership (KTP) schemes, was a systematic approach by business entrepreneurs' of understanding and interpreting their enterprises' challenging environment, and the impact this does/and will have on the current and future business model, and the subsequent rationalization of their strategic orientation (individual and enterprise). The findings from the six enterprises studied largely support this view: effective knowledge/technology transfer requires an appropriate openness, flexibility and adaptability of the business entrepreneurs to change first his mindset (thought world, values and overall sensemaking), and then change the enterprises' business model. This change in business model often necessitates a dramatic change in the enterprises' strategic orientation, the engagement of innovative networks and the opening up to both new tacit and explicit development of knowledge skills and expertise (Sexton, Barrett et al. 2006).

The knowledge that these SMEs are likely to absorb easily, and successfully, are those that most readily fit their current understanding and interpretation of their business model, and marketplace. Equally, they look for 'Quick Wins', knowledge that can be quickly and tangibly applied and realize direct financial and non-financial results, both in the short- and medium-term. Any knowledge, relating to either the marketplace or the internal analysis of business operations, that is too far removed from the business entrepreneurs 'comfort zone' was likely to be considered too risky, or require too much investment, to even consider a mindset business model change. Fiol's (1995) research on creative tension suggested some link between knowledge breadth and depth, and their propensity to change thought worlds.

The value of any knowledge/technology transfer partnership is therefore conditional on the business entrepreneur mindset, the level of business model change it requires, and the degree of collaboration/conflict over strategic orientation direction. On this basis, the authors would suggest the following approaches:

1. To derive more value from these Knowledge Transfer Partnerships, more evaluation is needed on the entrepreneurs' mindset and the degree of flexibility and adaptability of their business model;
2. Understanding the enablers and barriers to innovative initiative projects is imperative, this means evaluating the conditions for change – both its legitimization and the practical routes for its wholesale adoption.

The authors suggest that any knowledge exchange, either tacit or explicit, that is too far removed from the business entrepreneurs existing thought worlds of how the world/market operates is unlikely to be adopted or disseminated by them and therefore the enterprise, unless the business entrepreneur shows behaviour to suggest that receptive to both retrospective and prospective sensemaking, associated with the observable differences between their actions and enterprise outcomes. These business entrepreneurs are more likely to use such resulting interpretative systems to engage in prospective sensemaking by engaging and acting on future knowledge to actively change their business models, and so bring future business operational actions in-line with probable expected outcomes.

The practical deliverables of this study are the three important 'sensemaking' tools that we have identified. First, how by understanding our entrepreneurs' mindsets over the potential impact of environmental opportunities and threats and how this challenges their own mindset business model. Second, how they use and interpret this to change their business model. Finally, how they adapt their strategic orientation to drive and substantiate these changes to others, legitimization, and then bring others on-board.

FURTHER RESEARCH

This study focused on enterprises that had already engaged in a Knowledge Transfer Partnership (KTP), who largely through the inflexibility or flexibility of either the entrepreneurs' mindset or the evolved business model experience a degrees of success/benefit from the programme. We should have included other enterprise who had not engaged in such programmes, but who had sought external help/mentoring from other sources. Ideally, such a study should include longitudinal data to examine entrepreneurs' mindsets, their strategic orientations and business model changes over the entire project duration.

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