# The Polycontextual Workplace Model: the Progression from Traditional Activity-Based Working



Hassan Shaikh (15071909) April 2025

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#### **Preface**

The roots of the phrase "Nothing about us without us" started in central Europe in post-communist regions. It was originally written in Latin as "Nihil de nobis sine nobis" and emphasised the value of including all the different parties in the decision making process for new democratic policies. The English phrase, "Nothing about us without us", as seen in Figure P.1 below, is currently adopted by the many other marginalised groups underlining the same need for inclusion in decisions taken on behalf of any of these groups (Weigel, 2019).

Similarly, embracing this inclusive mindset is no different within modern corporate real estate in the pursuit of creating more human centric workplaces.



Figure P.1. "Nothing about us without us" graffiti wall in Nairobi, Kenya. Source: Africa Fire Mission (2020)

#### **Abstract**

The traditional concept of a workplace, typically a designated area within an office building for task execution, has evolved. Modern offices often adopt activity-based workplace models which focus on specific actions within operational environments. However, the COVID-19 pandemic has highlighted the limitations of this model, particularly its lack of consideration for the human element and hybrid working. Humans, being complex and diverse, require accommodation across various contexts, especially in workplaces. This raises a critical question: Could a novel context-based workplace model, transcending a focus on activities alone, foster a more equitable, inclusive, and diverse workplace environment?

The aim of this research is to develop and validate a novel context-based workplace model that addresses inclusivity, diversity, and human-centric needs beyond the limitations of traditional activity-based models. Through a comprehensive literature review, revealing that existing activity-based working models lack the ability to provide robust inclusive, diverse, and human-centric work environments. The study then progresses with surveys, interviews, and a corroboration workshop, concluding that while the current activity-based workplace model offers some value and should not be entirely discounted, an evolution is necessary to create environments that truly support inclusivity, diversity, and human needs.

The research critically examines the existing activity-based workplace model, Smart Working Plus, within a global organisation. Insights from data analysis informed the development of a novel context-based model, the Polycontextual Workplace (PCW) as a progression from activity-based working. This model represents a timely evolution of global workplace strategies, delivering benefits beyond those offered by activity-based models. The PCW framework is built on key metrics, including global organisational, sensory processing, interpersonal connection, mental well-being, and physical wellness. The impact of this research lies in introducing the PCW model as a strategic framework for global organisations to design adaptable, inclusive, and human-centric workplaces, thereby enhancing employee well-being, equity, and hybrid work integration.

Keywords: polycontextual workplace; workplace strategy and design; space models; future of work; activity-based working; diversity, equity, and inclusion.

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I would like to express my gratitude to my professors, Dr. Gabriel Barros dos Santos & Prof. Silvio Carta (RIP) for their invaluable guidance, support, and encouragement throughout my PhD journey. Also, an additional thanks to Prof. Ljubomir Jankovic for the time he also supervised me and acknowledge Dr. Beniamino Polimeni for his support in finalising the thesis. Their collective expertise, insightful feedback, and unwavering dedication have been instrumental in the completion of this thesis. I am truly fortunate to have had the opportunity to learn from such distinguished academics. A heartfelt thank you to all the participants who generously contributed their time, insights, and experiences to this research. Your openness and willingness to share made this study possible and enriched its findings in ways that data alone could never achieve. This thesis is as much yours as it is mine.

I am profoundly grateful to my family, friends, and work colleagues for their relentless support. To Aziz & Fawzia Shaikh, my father and mother (RIP). Thank you for the unconditional love and care that moulded me. I hope I have made you proud and honoured our family legacy. A huge thank you to Noah & Lopke Shaikh for giving me the love, space, belief, strength and support from the start. A special thank you to my sister, Rashida Anath, and old friend and brother, Shahir Chundra. All of you have contributed to encouraging and believing in me and being a foundational source of strength and have provided me with the motivation to persevere. I love you all.

And last but by no means least, to myself. Thank you for your unwavering dedication and perseverance throughout this PhD journey. Despite the challenges and even the moments of doubt, you remained committed and resilient. You relentlessly putting in a minimum of 2 hours every day, 7 days a week while holding down a full time job and moving to a different country. It was worth it, and you knew it from the start. This achievement is a testament to your hard work, growth, and unfaltering strength. Congratulations on believing in yourself and never giving up. This is one of the most significant achievements of your life and you have every reason to be proud of it.

#### **Dedication**

To my beloved son Noah,

Your birth and presence in my life has been a most profound source of inspiration. Through you, I have come to better observe & understand the critical importance of diversity and inclusion in the workplace. You have shown me that creating environments where everyone is valued and can thrive is not just beneficial for those who have been overlooked, but it enriches the entire community.

I remember a particular day when you came home from school, your eyes sparkling with excitement. You couldn't wait to tell me about the comic book group project you had worked on with your classmates. Each of you had different strengths and perspectives. You were great at drawing, another's excelled the different elements required to put it all together, and you all brought your own unique creativity and enthusiasm. Together, you created something truly special and that you all were proud of that project that was richer and more innovative because of your diverse contributions.

As you described how everyone's unique talents came together to solve problems and create something beautiful, I realised how powerful diversity can be. It was a vivid reminder that when we embrace each other's differences, we can achieve extraordinary things. That moment crystallised for me the importance of fostering inclusive environments where everyone feels valued and empowered to contribute their best.

This research is dedicated to you, with the hope that it will contribute to building workplaces that are inclusive, supportive, and empowering for all. May it serve as a step towards a future where you and everyone else has the opportunity to flourish. I love you.

"Diversity is not about how we differ. Diversity is about embracing one another's uniqueness." - Ola Joseph

With all my love and eternal gratitude,

Papa

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# **List of Abbreviations**

PCW	The Polycontextual Workplace
RQ	Research Question
DEI	Diversity, Equity and Inclusion
UH	University of Hertfordshire
WS	Workstations
WO	Working Options
ABW	Activity-Based Working

#### **CHAPTER ONE: INTRODUCTION**

# 1.1 Background

In the global commercial real estate market, there has been exponential progress in the thinking on how organisations could maximise the use of their physical workplace environments (Wall Street Journal, 2022). The profession of workplace strategy and design is constantly adapting and evolving spaces to create environments where flexibility is ubiquitous. The acceleration trigger for the recent impactful need for progression has been stimulated by the COVID-19 pandemic (Hogan, 2022). In reaction to the pandemic there was a flurry of proposals as well as pilot implementations of workplace solutions for the way organisations and their people ensured business continuity (Le and Nguyen, 2022). These solutions were aggressively adopted and since their inception they have been continuously iterative, mainly due to the lack of global experience for organisations operating under these unique circumstances. Hybrid working (Hogan, 2022) became the preferred working model where people work partially from an office and partially remotely (Wang et al., 2021). The expectation for hybrid working by organisations has been high and the specifics for finding the right balance of hybrid working ratios are regularly being defined and refined. These ratios are also customised to each organisation and can be adapted as their occupants mature in this type of working model to remain effective. Efforts to ensure business continuity were also executed somewhat successfully considering that there was a complete shift from traditional ways of working (Martens et al., 1999). This was generally assumed to be a five-day week, with working hours from 8am to 5pm, people commuting to work at a physical office in a city centre or similar, and with physical presence being mostly mandatory for everyone (Hobsbawm, 2022). There was limited preparation and testing by most organisations before the pandemic for alternative ways of working, and in the shift to hybrid working during this time, some organisations and their people thrived, and some did not.

The COVID-19 pandemic also presented an opportunity for organisations to rethink the relationship between people and space relative to their commercial real estate portfolios with the focus on the advancement toward a more human centric environment (Gartner, 2022) when developing and designing their physical workplace in a hybrid world (Puybaraud, 2017). Having an activity-based working (Veldhoen + Company, 2020) that provided different spaces to perform different

activities may have been sufficient pre-pandemic, but this workplace thinking has highlighted shortfalls during the pandemic (Moss, 2022) related to societal issues for those very things that makes us human, like the need for social and professional connection, our different diverse requirements as a global community, health, and mental well-being. These shortfalls reflect the lack of inclusive spaces within a human centric workplace environment (Gartner, 2022) and the acknowledgement that what is now required is more than just spaces for activities. The workplace has great potential to be designed as a healthy and inclusive environment, to accommodate for many diverse occupants, and thus providing equity for anyone that chooses to use it. Workplace strategy and physical space models need to deliver more for the users in response to the pandemic. It must also consider evolved societal needs and the new future of who and where people work. A progression is required from activity-based working to a workplace model that provides for higher inclusivity, allows for more diversity, and truly creates places for people to thrive in.

#### 1.2. Research Questions

The two research questions were explored to further guide the study. These questions are:

Research Question 1 (RQ1): In the context of a global organisation and the user experience, how effectively does an activity-based model continue to contribute to post pandemic workplaces?

RQ1 is addressed via the literature review assessing the effectiveness of the Smart Working Plus model. The assessment and effectiveness of the Smart Working Plus model (see Figure 3.3), which is the foundation of the activity-based model being reviewed and analysed.

Research Question 2 (RQ2): Why would the "Polycontextual Workplace" model be effective in enhancing current workplace strategy and design for diversity, equity, and inclusion in global organisations?

RQ2 is addressed through an online survey and leader interviews. The survey, gathering both quantitative and qualitative data, provides a comprehensive understanding of user perspectives and experiences, thus directly responding to RQ2.

The leadership interviews, using the same questions as the employee survey, offers detailed insights into organisational dynamics from a leadership standpoint. This comparison identifies disparities in the alignment and consensus between the perceptions of employees and leadership. These differences could potentially influence the efficacy of the novel context-based model in enhancing the workplace environment with respect to diversity, equity, and inclusion. The metrics for this research study are global organisations, sensory processing, interpersonal connection, mental well-being, and physical wellness. A workshop disseminates the findings from survey and interviews and introduces the proposed the novel context-based model. The interactive workshop encouraged a robust and collaborative session discussing the model's solutions and challenges concerning diversity, equity, and inclusion metrics. Participants propose suggestions for refining the model further underlining the model's capacity to bolster diversity, equity, and inclusion in the workplace. See methodology for details in Chapter 3.

# 1.3 Aim and Objectives

#### 1.3.1. Aim

This research aims to analyse a global organisation's primary workplace strategy and its activity-based workplace model, Smart Working Plus, to evaluate its effectiveness in supporting diverse and human-centric work environments. Building on this analysis, the study seeks to develop and propose a novel context-based model which transcends activity-focused spaces by fostering inclusivity, diversity, and equity.

The proposed model should address the limitations of traditional activity-based working by incorporating human-centric principles that prioritise community, health, and well-being, while supporting both individual and team needs. Through this approach, the research intends to provide a strategic framework that enables organisations to create workplaces that are adaptable, inclusive, and aligned with the evolving demands of hybrid work and global diversity.

# 1.3.2 Objectives

The objectives (see Figure 1.1) of the research are:

- Review and analyse the academic literature to examine the evolution of workplace design, with a focus on the role and limitations of the activity-based working model.
- Identify shortcomings of the current activity-based working model, Smart Working
  Plus, within a global organisation, particularly in its ability to accommodate
  diversity, equity, and inclusion. Exploration of a theoretical model informed by the
  literature review to assess the potential of a novel approach.
- Collect and analyse empirical data through the selected research design methods to evaluate the performance and human-centricity of the existing model.
- Develop a novel context-based model that serves as a strategic guide for designers and real estate professionals to create inclusive, diverse, and accessible office environments.
- Corroborate and refine the novel model with participant feedback, ensuring practical applicability and alignment with real-world needs.

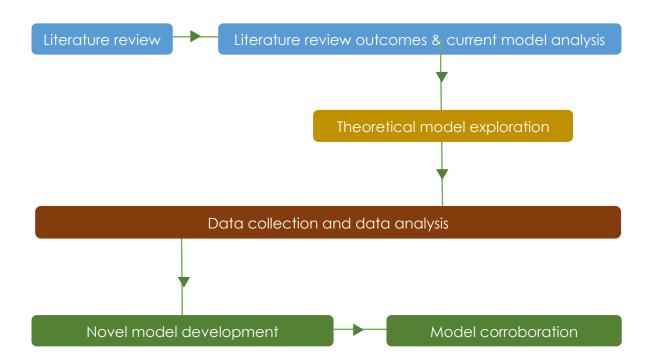


Figure 1.1. Methodological objectives

#### 1.4 Thesis overview

While activity-based working has demonstrated advantages over traditional workplace models, it does not fully achieve a workplace environment where people are at the core of the value proposition. The focus of this research is the proposal of a context-based workplace model that promotes defined metrics for diversity, equity, and inclusion (Ideal, 2022). By progressing current space models from activity-based to a new context-based model, workplace designers would be able to develop physical workplaces that satisfy the fundamental requirements of aesthetics and function, but also provide more humanised workplace settings. Human centric workplaces environments (Gartner, 2022) provide inclusive environments that foster a sense of community and belonging within an organisation (Holt-Lunstad, 2018). The proposal for a context-based workplace model has the potential to transform how organisations and occupants perceive and use their physical workplaces, leveraging it as a tool to attract and retain talent for people from different backgrounds, generations, and genders. Diverse and inclusive workplace environments have been shown to strengthen an organisation strategically and reinforce the human centric value proposition (Edwards and Cable, 2009) offered by organisations, and in doing so, positioning them as a preferential employer.

The chapters to follow include the literature review, research methodology, finding and analysis, and the discussions and outcomes. Through the literature review, the history of the workplace (Zuljevic and Huybrechts, 2021) is explored and examines how spaces have evolved over time, starting with the thinking of Fredrick Taylor's scientific management theory (Wooster, 1997) through to the current, globally accepted activity-based working (Veldhoen + Company, 2020). As space models for office design and planning have evolved to the current activity-based model, they have shifted the focus from efficiency to activity. The COVID-19 pandemic has also influenced a change in occupant behaviour and how they engage with the physical workplace, and this has prompted for additional refinement to a move from a traditional workplace thinking, based on place and attendance, to a hybrid working model (Hogan, 2022). The pandemic has also pushed diversity, equity, and inclusion (DEI) topics i.e. global organisations, sensory processing, interpersonal connection, mental well-being and physical wellness, to the front of the human resource agenda (Kramar, 2013) for many organisations and highlighted the value of the physical workplace as a tool to better support the people in an organisation (Puybaraud, <u>2017</u>). With hybrid working fundamentally being an extension built on the strong foundation of activity-based working for physical spaces, there is a need to shift the focus from providing spaces for people that are related only to the activities they perform at the office to a context-based model that considers modern day, human centric needs to further refine the workplace in preparation for the future of work. There is however a lack of evidence-based solutions for space models that support the development and progression from activity-based model to a context-based workplace model. Following the literature review, a robust research methodology was employed which comprised of a survey, interviews, and a corroboration workshop. These methods were carefully selected to provide a comprehensive and multifaceted understanding of the current activity-based workplace model, Smart Working Plus.

The survey was distributed to a diverse group of employees to gather both qualitative and quantitative data on their experiences and perceptions of the existing workplace model. The survey included questions about task efficiency, operational functionality, and the extent to which the workplace supports their mental and physical well-being. The data collected provided a broad overview of the strengths and weaknesses of the Smart Working Plus model. Interviews were conducted with leaders from different departments within the organisation. These interviews allowed for in-depth qualitative insights into the personal experiences of leaders and their teams, highlighting specific areas where the current model succeeds and where it falls short. The interviews revealed nuanced perspectives on how the workplace environment impacts daily work life, mental health, and social interactions. The corroboration workshop included participants that were part of the survey and the interviews. Some of the participants did not participate in both the survey and interview and were intentionally included in the workshop following the research principles of respondent corroboration (Birt et al., 2016). The workshop provided a platform for corroborating the research findings, the proposed context-based model. This ensured that the proposed solutions were grounded in the real-world experiences of the organisation's members.

The outcomes section suggests theoretical, practical, and future implications of the research and includes a cost benefit analysis. The theoretical outcomes suggest that the PCW model enhances workplace design by integrating flexibility, inclusivity, and employee well-being, (Gerardina and Bergefurt, 2023) building on activity-based working principles. It introduces spaces like Inclusive, Diverse, Equitable, Accessible,

and Leverage Spaces, promoting diversity and collaboration while addressing various needs, from teamwork to individual tasks. Emphasising mental health and wellness with areas for relaxation and sensory processing, the model's flexibility supports adaptation to changing requirements and hybrid work (Hunter, 2024). The practical outcomes suggest that implementing the PCW model requires a comprehensive change management program (Payne et. al., 2023) and continuous development. The design and development focus should be on creating zones, ensuring flexibility, inclusivity, and well-being, and incorporating technology for enhanced functionality. Implementation starts with pilot programs, comprehensive training, and maintaining open communication. The future outcomes suggest that the PCW model opens avenues for research on its long-term impacts on organisational performance and employee well-being. Real-world application testing through pilot programs can validate theoretical benefits and refine the model. These efforts aim to create inclusive, flexible, and supportive work environments, evolving workplace design principles for more human-centric workplaces.

# 1.5 Summary

Activity-based working offers advantages over traditional workplace models, however it lacks a strong focus on people. Transitioning from activity-based to context-based models could enable workplace designers to create environments that are not only functional and aesthetically pleasing but also human-centric. Such workplaces foster a sense of community and belonging, helping organisations attract and retain diverse talent.

The COVID-19 pandemic underscored the need for inclusive spaces that support social connection, health, and well-being. This research examines the current activity-based model, Smart Working Plus, within a global organisation to understand its effectiveness. Findings indicate that a novel context-based model could significantly enhance workplace design by integrating flexibility, inclusivity, and well-being. The proposed approach aims to evolve workplace design principles toward creating inclusive, adaptable, and supportive environments that prioritise human experience.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

There are two main topics that have been explored during the literature review. The first topic is that of workplace strategy and design with particular focus on space analysis, utilisation, and activity-based working models. The aim of examining this topic is to create an understanding of the evolutionary role of workplace design for occupants and the value proposition of the current space model that is most widely adopted. This will help analyse the outcomes and opportunities during the progression phases toward an activity-based model and validate the need for the development of a context-based model that offers a human centric approach to workplace design. The second topic examines diversity, equity, and inclusion and explores what the criteria of diversity, equity, and inclusion are in terms of workplace strategy and design. In the context of global organisations, the value proposition of future workplaces is to provide for more community engagement, effective communication, and higher inclusion for their employees. This research will aim to demonstrate the alignment of physical space and diversity, equity, and inclusion objectives which are crucial in order for organisations to provide safe and productive environments that are relevant for their people. These types of organisations are the ones who thrive on diverse ideas that push innovation, and fundamentally leverage the physical workplace as a service, putting people at the core of continued business growth (Edwards and Cable, 2009).

The literature review was carried out by assessing various online academic journals, white papers, websites, and books. Recording of the sources for the reviewed literature was managed in ReadCube and arranged under two main categories which were 1) workplace strategy and design and 2) diversity, equity, and inclusion. By examining these categories, the literature review analyses foundational information starting with the history of the workplace, activity-based working, and the effects of the workplace from the pandemic. The analysis of diversity, equity, and inclusion focus areas provides to create an understanding and define the parameters for diversity, equity, and inclusion criteria best aligned to workplace strategy and design.

Criteria for exclusion/inclusion were:

- The date of the research papers reviewed. These were limited to the last five years but also did not exclude a small amount of earlier research if they were relevant and aligned to the timeline or subject matter being analysed.
- The reported outcomes in the research reviewed that were related to understanding the outcomes identified.
- The type of publications relevant to the subject matter of real estate, design, human resources, and psychology.

In this literature review chapter, there is a comprehensive exploration of the evolving landscape of work and design in the modern era. It begins by examining various ways of working, with a particular focus on activity-based working (Veldhoen + Company, 2020), which has gained prominence in recent years. The discussion then shifts to the societal changes that have emerged post-COVID-19 (Hunter, 2020), highlighting how these shifts have influenced workplace dynamics and design practices. The relevance of design in contemporary settings is scrutinised, emphasising how design thinking has evolved to meet the demands of the modern world. This section delves into the principles and practices that underpin effective design in today's context. Following this, the review addresses the importance of Diversity, Equity, and Inclusion metrics within multicultural organisations (Farndale et al., 2015). It explores how these metrics are essential for fostering inclusive and equitable work environments. The chapter also covers sensory processing (<u>Turjeman-Levi and Kluger, 2022</u>) and its impact on workplace design, interpersonal connections (The Changing Workplace, 2022), and overall mental and physical well-being (Leka and Nicholson, 2019). These elements are crucial for creating environments that support the holistic wellness of individuals. The chapter concludes with a literature review outcome, identifying areas related to this research to create an understanding for the progression of the activitybased workplace model.

#### 2.2 Ways of working and Activity-Based Working

Efficiency, productivity, and performance; That was the initial thinking for creating the most optimal physical workplace. Wooster (1997) refers to a mechanical engineer by the name of Fredrick W. Taylor who designed a methodology called scientific management theory, that was applied to factory workers to maximise their output,

and as a reward for increased output, they were remunerated accordingly. Those that adopted this new methodology of working found that it resulted in lower autonomy for them as workers and subsequently put the control in the hands of management who were primarily focused on performance and profits. <u>Taylor's (2020)</u> book called the "Principles of Scientific Management", first published in 1911, explained this thinking and it is important to acknowledge that its intention was to provide benefit to the industrial revolution and its relevance to the time period. And that it did. However, in later years, Taylorism made its way into workplace design and was used by managers to test different methods of workflows, and different spaces, to get a better understanding of productivity outcomes from the analysis of these tests (Wooster, 1997). The insights were based on people being present in the office as well as their activities while they were present. The basis for the review of Taylor's theory, is that there is evidence that the principles of scientific management set the stage for the need of efficiency in early workplace models and then subtly lingered into the progression of later models which have finally led up to the concept of the activitybased working (Veldhoen + Company, 2020). Each progression has had positive incremental improvements that have demonstrated a move toward benefiting the occupants that use the workplace, but ultimately seeking a defined outcome focused of performance, presence, and productivity as key metrics.

Appel-Meulenbroek et al. (2011) studied the experience that people had in activity-based working. This analysis reviewed a typical commercial office space that had activity-based working principles implemented in the design of the space. At the core of activity-based working principles are the choice that occupants have in selecting a space in the office that is aligned with their tasks that they are performing for that specific period of time. Importantly, it is noted that in order to achieve success in this model, there is a need for occupants to have a high level of self-management as the concept is based on a philosophy of trust. The trust philosophy works on the fact that organisations that implement activity-based working models, trust that employees are able to and will make the best decision for the choice of spaces they require related to their activity. The study suggests that the activity matrix for this model comprise of spaces that accommodate for social, physiological, job related, individual, group, planned and unplanned activities. Essentially, this matrix either accommodated for interaction or privacy for occupants (Bunga et al., 2022). Each space setting had its pros and cons, and these were confirmed to differ from organisation to organisation

and between different departments. What they found was that if the concept was not used as the model intended, it led to user dissatisfaction, illness and even a loss in productivity. This highlighted that it was difficult to accommodate for the needs of all occupants to satisfy privacy and interaction requirements and that providing strict "ways of working" policies would help improve the usability. This policy addition however also contradicts the trust-based thinking of the trust philosophy and concluded that there is a need for an in-depth review of the activity-based working model which may better serve all occupants with little, or no policy interventions required. Supported by the outcomes of this study, the gap for the development of a new people centric space model is evident. The emphasis on only providing spaces for activities, stereotypes occupants and their needs in the workplace. It is relevant at this point to acknowledge that the activity-based model was developed in the late 1990's, and what may have worked well for an extended period of time, may not necessarily be completely relevant now.

To get a better understanding of this, a reflection on the shift in societal needs is required to assess the current situation and the likelihood of revised needs of occupants. Such instances of societal shifts generally signal an evolution of the needs of people and this evolution is also translated into progression required for improved workplace strategy and design.

#### 2.3 Societal Shift

December 2019 signalled the start of one of the most impactful moments in recent human history. The COVID-19 pandemic (Hunter, 2020) brought countries and cities to a standstill, with movement as well as contact between people being restricted to try to control the spread of the virus. This had an instant impact on how work was done and also where it was done. Almost everyone, except for essential workers, had to start working from their homes to allow for business continuity and most workplaces were left abandon. Regodón et al. (2021) analysed the impact of the space usage from the results of a post occupancy evaluation study in an activity-based enabled workplace. Though the limitation was that the study was designed pre-COVID, there is acknowledgement that the outcomes could provide insights on how the collection of occupancy data could provide an understanding of the usage of spaces in a post-COVID workplace and highlight the types of spaces that seem to be best utilised.

These insights were a significant reflection point for this research topic and confirmed the value of data collection that a longitudinal survey could provide to help understand how current occupancy at the workplace is affected by the pandemic and aligned with the effect on people and their spatial preferences in a workplace post pandemic (Halldorsson et al., 2022). Further exploration of the areas highlighted in the limitations would create a better understanding of user profiles or personas for a global organisation and how these could influence a new context-based workplace model. From this occupancy study, it's worth acknowledging that occupants preferred spaces that were safe, both physically and psychologically (Mahmoud et al., 2021), more community and collaboration focused, supported their well-being, and made movement between spaces required for interaction easy. The impact of the COVID-19 pandemic triggered a global societal shift and brought human-centric, societal issues to the fore. While organisations acknowledge the drawback of a typical one size fits all activity-based working model, (Marzban et al., 2022) now there is pressure on them to revise workplaces to provide a more considered model where people, context and interpersonal connection take precedence over activity.

According to the <u>Edelman Trust Barometer (2022)</u>, business is the most trusted institution and organisations are committed to taking care of the people that take care of their customers. Encouragingly, the drive from organisations to improve and adapt the physical workplace is high and there is a lot of emphasis on championing diversity, equity, and inclusion.

### 2.4 Time relevance in design

Agreeably, the concept of activity-based working was a significant development in workplace strategy, focusing on providing employees with a variety of workspaces to choose from based on their tasks and needs (Veldhoen, 1994). However, with the changes after the COVID pandemic and user needs evolving, it is essential to reconsider the foundations of activity-based working and to explore a more inclusive and collective approach to workplace strategy. Workplace strategy has traditionally started with the concept of personas, which are archetypal representations of different employee types and their needs (Smith and Pitt, 2018). This approach is closely linked to Maslow's hierarchy of needs, as it focuses on addressing individual

needs to create a supportive work environment (Maslow, 1943). However, this individual-centric approach may not be sufficient to address the complexities of modern workplaces, where diversity and inclusion are critical factors for success of many organisations.

Workplace strategy can be defined as a comprehensive approach to aligning an organisation's physical work environment with its business goals, culture, and the needs of its employees. It encompasses the planning, design, and management of workspaces to optimise employee productivity, well-being, and engagement, while also supporting organisational objectives such as cost efficiency, sustainability, and adaptability to change (O'Neill, 2010). Based on this definition, a more aligned approach should be considered for the collective needs for the business functions, larger groups from the same business function, the organisation as a whole, and its employees, rather than focusing solely on individual personas. This collective approach, focusing on demographics rather than personas, can create a more inclusive and supportive environment that fosters collaboration, innovation, and employee well-being (Brown et al., 2019). By addressing the needs of diverse groups, a collective workplace strategy can enhance the overall effectiveness of the organisation and contribute to its long-term success. While a collective approach to workplace strategy is essential, it is crucial not to overlook the importance of individual needs. By addressing the unique requirements of different employees, organisations can create a more inclusive and supportive environment that enhances the overall collective solution (Smith and Pitt, 2018). This balance between individual and collective needs is key to developing a successful and sustainable workplace strategy that is human centric and flexible enough to cope with changes.

For time relevance, it is essential to consider the context of the time when evaluating the relevance of activity-based working today. In 1994, the world was a different place, with less focus on diversity and inclusion in the workplace. For example, the European Commission's directives on discrimination on the grounds of ethnic origin, Directive 2000/43/EC (European Parliament and Council of the European Union, 2000), religion or belief, disability, age, or sexual orientation, Directive 2000/78/EC (European Parliament and Council of the European Union, 2000), were not yet in place. Along with these, the directive that addresses the principle of equal opportunities and equal treatment of men and women in matters of employment and

Union, 2006), was also not in place as well. These directives have significantly impacted workplace policies and practice and were put in place after the development of activity-based working. This may have influenced the development and the bias of activity-based working and highlight the need for a more inclusive approach to workplace strategy in complex social environment of the modern workplace.

Further examining time relevance in design, the development of crash test dummies provides a compelling example of the importance of time relevance in design. Until 2012, crash test dummies primarily represented adult males, leading to inadequate safety measures for women and children (<u>Carter et al., 2014</u>). This oversight had significant consequences for the safety of these groups, illustrating the potential dangers of relying on outdated design principles. Similarly, workplace strategies developed in the 1990s may not adequately address the needs of today's diverse workforce, emphasising the need for a more inclusive and collective approach.

The time relevance of workplace strategies, such as activity-based working, is a critical factor to consider. The social, legal, and cultural context in which these strategies were developed has significantly evolved, necessitating a re-evaluation of their effectiveness and inclusivity. The introduction of anti-discrimination directives and an increased focus on diversity and inclusion in the workplace have reshaped the expectations and requirements of modern workplaces. The example of crash test dummies further underscores the importance of updating design principles to reflect current realities and needs. Just as safety measures needed to evolve to protect all passengers effectively, not just adult males, so too must workplace strategies evolve to support all employees, not just those represented by traditional personas. Therefore, a shift towards a more collective and inclusive approach to workplace strategy is needed. This approach should balance the needs of diverse groups within the organisation with individual needs, fostering an environment that promotes collaboration, innovation, and well-being. By doing so, organisations can ensure their workplace strategies remain relevant and effective in the face of changing societal norms and expectations.

# 2.5 Diversity, Equity, and Inclusion (DEI)

Diversity, equity, and inclusion is agreeably a wide-reaching topic and covers a range of critical areas of focus. In the recent years, especially post pandemic, the topic has gained acknowledgement to be of high value to enable further progression for a more integrated society and also for organisations and their workplaces as well. Movements like "Black Lives Matter" (Diaz et al., 2022), the "Me Too" movement (De Cesare, 2022), neurodiversity (Jefferies and Ahmed, 2022), and LGBTQ (Phillips et al, 2022), have created a required recalibration for awareness and mindset changes for an inclusive, holistic view of how we exist and operate as a society. To identify what diversity, equity, and inclusion means for the workplace in this research, will require clarification on the definition of each of the three terms and their particular metrics that are applicable to the new space model. The basic definitions of diversity, equity, and inclusion in Figure 2.1. below are from the global design consultancy, Gensler (2019).

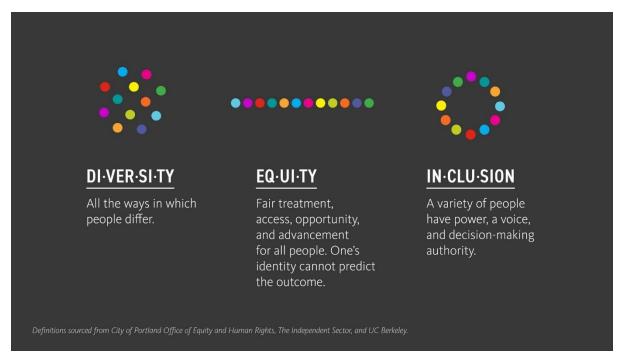


Figure 2.1. Defining Diversity, Equity, and Inclusion. Source: Inclusion by Design: Insights from Design Week Portland; Gensler (2019)

With diversity, equity, and inclusion being an expansive topic, the following five areas are defined as the most aligned with global workplace strategy and design and diversity, equity, and inclusion as a result of the literature review and will be expanded on (see Figure 2.2).

# They are:

- 1. Global organisation (<u>Farndale et al., 2015</u>).
- 2. Sensory processing (Häne and Windlinger, 2022).
- 3. Interpersonal Connection (Bunga et al., 2022) and (Schermuly et al. 2022).
- 4. Mental well-being (Leka and Nicholson, 2019).
- 5. Physical wellness (<u>Tánczos et al., 2022</u>).

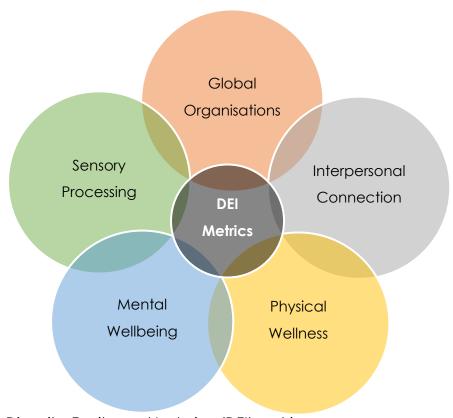


Figure 2.2. Diversity, Equity, and Inclusion (DEI) metrics

# 2.5.1 Global Organisations

Considering the context of global organisations, the fundamentals that need to be explored to support a new space model are gender, generation, and nationality (Farndale et al., 2015). The implications of the above-mentioned factors on workplace design are substantial based on how they influence space, communication, and behaviour. Further examination of more recent literature (Danielsson and Theorell, 2019) validates this and outlines that both men and women have different preferences for spaces in the workplace. In collaborative spaces, men had a higher resistance to collaborate in both small and large open plan spaces, but both genders were neutral in medium sized open plan. Individual work or focus work were neutral

to both genders, shared offices were not preferred by both genders due to the negative effect on productivity and choice but were deemed to be pleasant to occupy. Support spaces and ease of access to them also rated high for both, but men had a higher resistance to meet in shared spaces and small open plan spaces. Hot desking spaces were also agreed to be not acceptable by both. Generational requirements were a specifically higher determinant in men especially for individual spaces, and nationality seemed to have an overlap on both the gender and generation topics where there is a focus on regional specific preferences. From this analysis we can conclude that there is still a need for functional activity-based working spaces from an operational perspective, however there will need to be further refinement to activity-based working spaces to accommodate the global context for diversity, equity, and inclusion by deeper understanding the requirements of occupants in a space. To advance activity-based working thinking for the incorporation into a context-based workplace model will require the reframing of how the composition of these functional spaces are designed for different gender requirements, generation differences and nationalities. Equally as important, is effectively providing for easier access to support spaces for occupants while also ensuring that both functional and support spaces were adaptable and would be crucial to ensure longevity, sustainability, and flexibility for accommodating the dynamic human needs in the workplace.

# 2.5.2 Sensory Processing

The experience occupants have in a physical space can be positively or negatively influenced resulting from the stimulation to their senses while in the workplace. In activity-based working, occupants switch to different spaces dependant on their activity which is known as a mandatory shift. Occupants also switched space settings in a workplace voluntarily which was often a result of a mismatch between their preference and the space they were in (Häne and Windlinger, 2022). Voluntary shifts also took place as the result of the sensory influences from the physical environment which included sound transmission and absorption, distraction, as well as influences from the social environment which was the need to be close to other occupants (Holt-Lunstad, 2018). The reaction to all the disruptive input is broadly referred to as sensory processing (Turjeman-Levi and Kluger, 2022) and in these environments occupants are unable to process the inputs from the environment they are in which results in a poor

experience and potential distress. Although this does not suggest that all occupants experience challenges with sensory processing, there is a firm connection to the voluntary shifting of space in physical environments which provided benefit to the occupants in the workplace when they did make a shift. By incorporating a universal design approach in a context-based workplace model (Erdtman et al., 2021), workplace designers should be able create integrated, diverse, and inclusive spaces that could accommodate for almost everyone with little or no physical changes required.

### 2.5.3 Interpersonal Connection

What makes us intrinsically human is our need for meaningful connection. In a workplace with an activity-based working model, neighbourhoods provide for a sense of belonging in a shared workplace environment (The Changing Workplace, 2022). Neighbourhoods are also made up of a compilation of different activity-based working space settings ensuring that occupants and their teams are able to work independently, connect and find each other with ease in order to collaborate, achieving the outcome required from an activity-based working model. However, this may not be enough, and the value in providing the occupants with a psychologically safe environment (Mahmoud et al, 2022) could also facilitate higher interdependent support, opportunities for learning and collective sharing. When occupants feel psychologically safe, they are more easily able to advance to a level of selfactualisation and in turn provide mentoring and support for others in their teams and business units (Hoffman and Compton, 2022). Environments like these strengthen organisations to enable growth as well as creating the potential to increase productivity. Over and above spaces for activities, there should also be spaces and environments in an organisation that enable self-development for its occupants. A context-based model could additionally provide developmental spaces for learning, both synchronously and asynchronously (Bunga et al., 2022) as well as 1:1 mentoring and coaching from leaders (Schermuly et al. 2022) thus reinforcing trust in these environments. The return to the office (<u>JP Morgan, 2022</u>) has been somewhat successful by adopting hybrid working models (Appel-Meulenbroek et al., 2022) but there is definitely room for advancement. The potential offering to occupants for selfdevelopment, psychologically safe environments and belonging support a positive nudge theory approach (Chowdhury, 2022) to stimulate a higher return to the office

that so many organisations expect with their redesigned physical workplaces that provide more inclusivity.

# 2.5.4 Mental Well-being

Physical workplaces and their design have been identified as an influential factor on the mental health of the occupants in a workplace (Leka and Nicholson, 2019). Office space traditionally provided pathogenic support focusing on prevention, cure, and safety but what may prove to be more beneficial is a salutogenic approach that focuses on promoting mental health and well-being (Forooraghi et al., 2020). It has been highlighted that salutogenic approaches have unfortunately not been applied enough in a workplace context as they should. Other research has also provided insights on how to design better workplaces, with the focus on a high indoor environment quality, which is also linked to the sensory topic, and can support mental well-being in the workplace (Bergefurt et al., 2022). These indoor environment quality topics include views to nature, the effects of light in a space, biophilic office design, and good acoustics. With a new context-based workplace model, the physical workplace can provide specific salutogenic spaces that accommodate for mindfulness, selfcare, and therapy. Physical space such as Snoezelen rooms, with support from occupational therapists, (Zhang et al., 2020) have been shown to help manage and reduce mental distress and sensory input that can reduce burnout. Snoezelen rooms are custom designed, multisensory rooms that promote well-being and better functioning when their occupants interact with the elements implemented (<u>Snoezelen, 2022</u>). Technology can also be implemented in spaces to support the provision of therapy rooms that provide cognitive behavioural therapy (CBT) with the use of virtual reality technology (Riches et al, 2020) making support accessible, flexible, and asynchronous. CBT is a method of therapy that allows occupants to identify stressors and learn to change negative patterns in their behaviours and emotions (Cherry, 2022). The benefits derived from a human centric space accommodating for mental health and well-being can positively impact the value congruence (Edwards and Cable, 2009) that organisations can offer, reinforcing their ability to become, as well as maintain, a preferred employer status with the support from the creation of specialised physical workplaces that are truly human centric.

# 2.5.5 Physical Wellness

Activity-based working has also been acknowledged to have some positive effects on physical wellness (Koohsari, et al., 2022). Moving between spaces to an alternative workplace setting that is better suited to an occupant's activity is shown to reduce the inactivity of occupants in the workplace making time spent at the office less sedentary. Another variable for movement would be the thinking of space syntax (Hillier, 2012), which encourages people to move around a space more effectively if they are able to see other occupants that they may want to connect or collaborate with (Karimi, 2017). Standing has been also shown to reduce negative effects on the body by putting less strain on the skeletal system, muscular system, and reduce noncommunicable diseases (<u>Bonnet and Cheval, 2022</u>). There has also been a trend over the last few years introducing wellness programs in the workplace which have also proven to be beneficial in stimulating healthier behaviour of occupants within an organisation (Jones et al., 2019) and the results of this have are a decrease in absenteeism and medical spending. Agreeably, the current workplace offering for occupants are progressive and would already be able to have a positive impact. The context-based workplace model could further support these initiatives by providing spaces that facilitate therapeutic areas in the workplace equipped with relaxation equipment such as massage chairs, encourage group physical activities like yoga or Pilates and also provide spaces for occupants to meditate (Tánczos et al., 2022). It is also important to note that factors like gender and age, specifically in the previously mentioned study, where the adoption with men under 35 years of age, were low for these group activity initiatives. This could however be remedied with further effort and encouragement to improve acceptance. By placing focus on creating spaces for wellness in a context-based model, the access to these facilities becomes more tangible, more accessible, and acceptable and may help reduce resistance and improve the development and growth of sport social groups based on the alignment of similar interests of people with an organisation. This would also contribute to a sense of belonging for occupants and provide another positive nudge to support the value created by the physical workplace and thus providing equity for the occupants.

#### 2.6 Literature review matrix

During the literature review process, it became evident that there were limited studies available that examine the development of new space models for workplaces and

more specifically in relation to diversity, equity, and inclusion. With that, certain topics with similar focus areas were looked at to understand the gaps in research. The main keywords that were highlighted are activity-based working, future of work, workplace design, space models, diversity, inclusion, and human centricity. Some sub-keywords which are commercial real estate, productivity, sustainability, collaboration, employee experience, and psychological safety. See Table 2.1 for an overview of the literature review matrix.

Table 2.1. Literature Review Matrix

Literature Review Matrix				
Activity based working metrics				
Publication	Date	Author/s	Title	
Journal of	2022	Appel-Meulenbroek, R.,	"How to attract employees	
Environmental		Kemoperman, A., van	back to the office? A stated	
Psychology		de Water, A., Weijs-	choice study on hybrid working	
		Perree, M. and	preferences"	
		Verhaegh, J.		
Type:	Case s	tudy		
Methods used:	Survey			
Findings:	This stu	dy reveals that the expect	ed trend of doing concentration	
	work c	at home and communica	tive work at the office does not	
	apply	to everyone. It highligh	ts the need for diverse office	
	enviro	nments to accommodate	different employee preferences	
	and suggests that hybrid working policies should consider these			
	variations. Additionally, the study emphasizes the importance of			
	addressing noise and crowdedness in office spaces to supp			
	both communication and concentration tasks effectively.			
Limitations:	Focus on physical workspace characteristics and only respondents			
	from a single organisation.			
Journal of	2011	Appel-Meulenbroek, R.,	"An end-user's perspective on	
Corporate		Groenen, P. and	activity-based office concepts"	
Real Estate		Janssen, I.		
Type:	Case study			
Methods used:	Literature review and survey			

Findings:	The benefits and drawbacks of activity-based office concepts are			
	highlighted, emphasising the importance of physical, social, and			
	mental aspects in employee workspace choices. The study reveals			
	that p	personal preferences sign	nificantly influence the use of	
	differe	nt workspaces, and misuse	of the office concept, often due	
	to des	ign failures, can lead to r	educed productivity, illness, and	
	dissatis	faction. Ergonomics and	d IT equipment are generally	
	satisfa	ctory, but critical design iss	tues need addressing to optimise	
	worksp	oace use.		
Limitations:	The vo	rying frequency and dura	tion of the activities could affect	
	the ob	oservation chances. Mode	ern technologies could enhance	
	observ	ation, but they raise ethic	cal concerns and may not align	
	with no	ew work philosophies. The	observation period is crucial for	
	reliable	e data on workplace effici	ency.	
Data in Brief	2022	Halldorsson, F.,	"Longitudinal data on	
		Kristinsson, K.,	implementing an activity-	
		Gudmundsdottir, S. and	based work environment".	
		Hardardottir, L.		
Туре:	Case S	itudy		
Methods used:	Survey			
Findings:	The do	ata offered insights into th	e long-term impacts of activity-	
	based	based work environments on employees, measuring constructs like		
	privacy, psychological ownership, perceived productivity,			
	satisfaction, and job strain. It could aid researchers studying work			
	30113101	ction, and job strain. It cou	uld aid researchers studying work	
	enviro	• 	uld aid researchers studying work managers considering such	
	enviro	• 		
Limitations:	enviroi implen	nment effects and nentations.		
Limitations:	enviror implen	nment effects and nentations.  veys, the implications of re	managers considering such	
Limitations:	enviror implen For sur be sig	nment effects and nentations.  veys, the implications of rentificant. Response bias co	managers considering such	
Limitations:	enviror implen For sur be sig partici	nment effects and nentations.  veys, the implications of rentificant. Response bias contains may not provide the	managers considering such sponse and sampling biases can an lead to inaccurate data, as	
Limitations:	enviror implent For sur be sig particity validity	nment effects and nentations.  veys, the implications of rentificant. Response bias compants may not provide the of the study's conclusions.	sponse and sampling biases can an lead to inaccurate data, as neir true opinions, affecting the	
Limitations:	enviror implen For sur be sig partici validity finding	nment effects and nentations.  veys, the implications of rentificant. Response bias continuous may not provide the of the study's conclusions that do not accurately response.	sponse and sampling biases can an lead to inaccurate data, as heir true opinions, affecting the ans. Sampling bias can result in	
Limitations:	enviror implen For sur be sig partici validity finding	nment effects and nentations.  veys, the implications of rentificant. Response bias compants may not provide the of the study's conclusions that do not accurately regulated the generalisability of the study's conclusions.	sponse and sampling biases can an lead to inaccurate data, as neir true opinions, affecting the ens. Sampling bias can result in epresent the broader population,	

Human	2021	Jooss, S., McDonnell, A.	"Flexible global working
Resource		and Conroy, K.	arrangements: An integrative
Management			review and future research
Review			agenda"
Type:	Literati	ure review	
Methods used:	Literati	ure review	
Findings:	Review	vs flexible global work an	rangements and highlights their
	growin	g use by multinational e	enterprises for greater flexibility.
	Despite	e their potential benefits, s	such as relationship building and
	knowle	edge transfer, flexible g	lobal work arrangements lack
	stratec	gic integration with in	nternational human resource
	mana	gement, limiting their effe	ectiveness. The study also notes
	health	and well-being concer	ns associated with these work
	arrang	ements. It calls for mo	ore empirical and conceptual
	researd	ch, improved methodolo	ogies, and a multi-disciplinary
	appro	ach to better understand	and optimize flexible global work
	arrang	ements across various field	ds, including international human
	resource management, international business, and global		
	strategy.		
Limitations:	A key limitation highlighted in the text is the potential disconnect		
	between flexible global work arrangements and human resources.		
	There is also a significant gap in understanding policies and		
	procedures at the business unit and organisational levels within		
	multinational enterprises.		
Journal of	2022	Marzban, S., Candido,	"A review of research in
Facilities		C., Mackey, M.,	activity-based working over
management		Engelen, L., Zhang, F.	the last ten years: lessons for
		and Tjondronegoro, D.	the post-COVID workplace".
Type:	Journal		
Methods used:	Literature review		
Findings:	The review discusses the evolution of keywords related to activity-		
	based work in academic papers over the past decade. It		
	highlights a shift towards health-related outcomes in recent		

	T		
	research, with keywords like "workspace health promotion" and		
	"well-being" becoming more common. The publication frequency		
	of activity-based work -related papers has increased since 2014,		
	peaking in 2019. Geographically, most papers originate from		
	Swede	en and the Netherlands, v	with Germany, Australia, Japan,
	and Finland also contributing significantly. The USA has fewer		
	academic studies but a strong industry-based research stream on		
	open-plan offices supporting activity-based work.		
Limitations:	At the	time of this study, no rese	arch had yet been published on
	the pa	ındemic's effects on activit	y-based work.
World	2022	Quito, A.	"How Hybrid work is
Economic			revolutionising our office
Forum			spaces"
Type:	Article		
Methods used:	Literati	ure review	
Findings:	The art	ricle discusses how hybrid w	vork is transforming office spaces,
	empho	asising flexibility and tech	nology integration. Offices are
	being i	redesigned with features lik	ce moving partitions, raised floors,
	and m	ore digital screens to acco	mmodate hybrid teams. Meeting
	rooms	are evolving to enhan	ce collaboration, with designs
	resembling small cinemas equipped with multiple projection		
	screens, improved acoustics, and comfortable seating. This shift		
aims to create parity		o create parity between v	rirtual and in-person participants
	and improve overall meeting experiences.		
Limitations:	The article has several limitations. It primarily focuses on the benefits		
	and technological advancements in hybrid workspaces but does		
	not extensively address the challenges and potential downsides.		
	Issues such as maintaining team cohesion, managing remote and		
	in-office employee dynamics, and ensuring equitable access to		
	resources are not deeply explored. Additionally, the article does		
	not provide empirical data or case studies to support its claims,		
	which could limit the practical applicability of its		
	recommendations.		

Applied	2022	Wang B., Liu Y., Qian J.,	"Achieving effective remote
Psychology		and Parker S.K.	working during the COVID-19
			pandemic: a work design
			perspective".
Type:	Case S	itudy	
Methods used:	Survey		
Findings:	The re	search explores how wo	ork characteristics can improve
	remote	e workers experiences, ide	entifying key challenges such as
	work-h	ome interference,	ineffective communication,
	procro	stination, loneliness, and	self-discipline. It highlights the
	import	ance of social support and	job autonomy in mitigating these
	challe	nges, while noting that	workload and monitoring can
	exace	rbate them. The study also	re-theorises home-work conflict,
	empho	asising that job autonomy	may not always reduce work-
	home	interference. Additionally,	it addresses procrastination as a
	challe	nge that can be mitigo	ated through work design and
	unders	scores the surprising role	of job autonomy in reducing
	Ioneliness.		
Limitations:	The research has shown some limitations. Firstly, the data was		
	collected in China, which may affect the generalisability of the		
	findings, especially since remote working is relatively low in some		
	countries. Cultural factors also play a role, as attitudes towards		
	workplace monitoring may vary across different cultures.		
	Secondly, the study was conducted during the COVID-19		
	pandemic, which introduced unique pressures that		unique pressures that could
	influence the results. Lastly, the cross-sectional nature of Study 2		
	means it suffers from common method bias.		
The American	1997	Wooster, M.M.	"The One Best Way: Frederick
Enterprise			Winslow Taylor and the Enigma
			of Efficiency"
Туре:	Article		
Methods used:	Reviev	V	

Findings:	The ar	ticle discusses the impact	of flexible work arrangements on	
	emplo	yee productivity and satisf	action. It highlights the benefits of	
	flexible	e work arrangements, suc	ch as increased autonomy and	
	improv	ved work-life balance, v	vhile also addressing potential	
	challer	nges like maintaining team	cohesion and managing remote	
	work d	lynamics. The study empho	asises the importance of strategic	
	implen	nentation of flexible work	arrangements to maximise their	
	positive	e effects on both employe	es and organisations.	
Limitations:	It prin	narily focuses on the	advantages of flexible work	
	arrang	ements without thorou	ghly exploring the potential	
	downs	ides. Additionally, the stud	y lacks empirical data and case	
	studies	to support its claims,	which may limit the practical	
	applic	ability of its recommendo	ations. The article also does not	
	addres	ss the long-term impacts o	of flexible work arrangements on	
	emplo	yee well-being and orga	nisational performance, leaving	
	room f	or further research in these	areas.	
Diversity, Equity, & Inclusion metrics (See Chapter 2 for details on the metrics)				
Diversity, Equity	, & Inclu	sion metrics (See Chapter	2 for details on the metrics)	
Publication	, <b>&amp; Inclu</b> Date	sion metrics (See Chapter Author/s	2 for details on the metrics)  Title	
			,	
Publication	Date	Author/s	Title	
Publication <b>Building and</b>	Date	Author/s Bergefurt, L., Weijs-	Title  "The physical office workplace	
Publication <b>Building and</b>	Date	Author/s  Bergefurt, L., Weijs- Perree, M., Appel-	Title  "The physical office workplace as a resource for mental health	
Publication <b>Building and</b>	Date	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.	Title  "The physical office workplace as a resource for mental health	
Publication  Building and  Environment	Date 2022 Journa	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.	Title  "The physical office workplace as a resource for mental health	
Publication  Building and  Environment  Type:	Date 2022  Journal Literatu	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.	Title  "The physical office workplace as a resource for mental health	
Publication  Building and Environment  Type:  Methods used:	Journal Literatu	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review view analysed 133 papers of	"The physical office workplace as a resource for mental health  – A systematic scoping review"	
Publication  Building and Environment  Type:  Methods used:	Journal Literatus physical	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review view analysed 133 papers of all office environment and	Title  "The physical office workplace as a resource for mental health  — A systematic scoping review"  on the relationship between the	
Publication  Building and Environment  Type:  Methods used:	Journal Literatus physical studies	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review view analysed 133 papers of all office environment and a focused on traditional aspects.	Title  "The physical office workplace as a resource for mental health  — A systematic scoping review"  on the relationship between the mental health. It found that most	
Publication  Building and Environment  Type:  Methods used:	Journal Literatus This revenue studies and te	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review view analysed 133 papers of all office environment and a focused on traditional aspects.	Title  "The physical office workplace as a resource for mental health  - A systematic scoping review"  on the relationship between the mental health. It found that most pects like light, noise, air quality,	
Publication  Building and Environment  Type:  Methods used:	Journal Literatus This reviews and terviews and terminal control of the control o	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review view analysed 133 papers of all office environment and is focused on traditional aspersemperature with less attentions.	"The physical office workplace as a resource for mental health  - A systematic scoping review"  on the relationship between the mental health. It found that most pects like light, noise, air quality, on given to elements like outside	
Publication  Building and Environment  Type:  Methods used: Findings:	Journal Literatus This revenues and ten views at The revenues and the control of the revenues and the control of the revenues and the control of the revenues at the control of the revenues and the control of the revenues at the control of the revenues at the control of the revenues at the control of the c	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review view analysed 133 papers of al office environment and is focused on traditional aspersemperature with less attentional biophilia.	Title  "The physical office workplace as a resource for mental health  - A systematic scoping review"  on the relationship between the mental health. It found that most pects like light, noise, air quality, on given to elements like outside specific and may not be	
Publication  Building and Environment  Type:  Methods used: Findings:	Journal Literatus This reviews and terminal views and terminal periodical studies are studies and terminal studies are studies	Author/s  Bergefurt, L., Weijs- Perree, M., Appel- Meulenbroek, R. and Arentze, T.  Il  Ure review View analysed 133 papers of all office environment and is focused on traditional aspermentature with less attentional biophilia.  View's findings are contextalisable. The quality of the incomplete in the contextalisable.	Title  "The physical office workplace as a resource for mental health  - A systematic scoping review"  on the relationship between the mental health. It found that most pects like light, noise, air quality, on given to elements like outside specific and may not be	

Environment	2008	Bodin D.C. and & Bodin,	"Office type in relation to					
and Behavior	2000	L.						
and Benavior		<b>L.</b>	health, well-being, and job					
			satisfaction among					
_			employees"					
Type:	Journe							
Methods used:	Questi	Questionnaire						
Findings:	Cellulo	ır offices enhance indepe	ndence and personal control by					
	allowir	ng individuals to personalis	e their rooms and close doors for					
	privac	y, reducing background no	oise and enabling small meetings.					
	Worke	rs in cellular offices report	high levels of health, well-being,					
	and jo	b satisfaction. Flex office	s, popular since the 1990s, offer					
	workst	ation choice and social int	eraction, despite criticism for lack					
	of pers	sonal control. Workers in fl	ex offices also report high health					
	and jo	ob satisfaction, possibly o	due to the freedom to choose					
	workst	ations and work from hon	ne. Shared room and flex offices					
	show t	he highest job satisfaction (	and leadership approval, with flex					
	offices	excelling in goal achi	evement due to independent					
	assigni	ments, and shared room of	fices fostering strong cooperation					
	throug	rough small groups.						
Limitations:	It was	an observational cross-sec	tional study, so respondents					
	were r	ot studied over time, possi	bly preventing definitive					
	conclu	usions about causes for diff	erences in health, well-being,					
	and jo	b satisfaction. The sample	size for shared room offices was					
	small, v	with only 26 participants fo	r multivariate analysis. The					
	numbe	er of confounders was limit	ed due to the constraints of the					
	sample	e size and other factors like	general life situation,					
	socioe	conomic group, personali	ty, and past experiences were					
	not co	nsidered. Corporate cultui	re and values were not					
	contro	lled for, though they are a	ssociated with the line of					
	busine	ss, which was controlled. S	elf-reported health may differ					
	from a	ctual diagnosed health. Lo	astly, the study was conducted in					
	Stockh	olm, an urban setting that	may differ from less populated					
	areas.							

Building	2019	Colenberg, \$.	"The relations between interior		
Research &			office space and employee		
Information			health and well-being – a		
			literature review"		
Type:	Journe	11			
Methods used:	Literat	ure review			
Findings:	The stu	udy identifies three main f	indings regarding the impact of		
	interio	office space on health.	Firstly, open-plan offices, shared		
	rooms,	and high background r	noise are detrimental to health.		
	Secon	dly, most other features ar	nalysed tend to enhance health.		
	Thirdly	positive health outcomes	are associated with features like		
	sit-star	nd desks, increased daylig	ht, personal control, plants, and		
	outdo	or views, which benefit b	oth physical and psychological		
	well-be	eing. The research primarily	focuses on physical health issues,		
	with le	ss emphasis on psycholog	ical and social well-being, often		
	highlig	hting ways to prevent hea	Ith problems rather than improve		
	health	through elements like day	light and nature contact.		
Limitations:	The lim	nitations are the restriction t	o peer-reviewed journal papers		
	in two	databases.			
Environment	2019	Danielsson, C.B., and	"Office Employees' Perception		
and Behaviour		Theorell, T.	of Workspace Contribution: A		
			Gender and Office Design		
			Perspective"		
Туре:	Journe	1			
Methods used:	Survey				
Findings:	The st	udy's descriptive results	show significant differences in		
	background factors (age, education, job rank, supervisory				
	positio	n) across office designs fo	or both genders. Cellular offices		
	had tl	ne largest proportion of	participants, while combination		
	offices	had the smallest. Women	were more prevalent in all office		
	design	s, with the most unequal g	gender distribution in hot desking		
	offices	. Cellular offices had the old	dest employees, while large open		

	plan o	ffices had the youngest. Ea	ducational levels varied, with the		
	lowest	among women in hot de	esking offices and the highest in		
	small c	pen plan offices. Men ger	nerally held higher job ranks, with		
	the hig	ghest proportion of wome	en in cellular offices. Satisfaction		
	with w	orkspace contribution was	highest in cell-offices and lowest		
	in hot	in hot desking offices. Access to supportive facilities varied, with			
	cellula	r offices providing the high	nest satisfaction and hot desking		
	offices	the lowest.			
Limitations:	The ne	gative perception of hot	desking offices is almost gender		
	equal,	indicating fundamental is	sues with this design. The gender		
	differe	nces in satisfaction were	noted, with men generally less		
	satisfie	d with shared workspaces	and women more affected by		
	the lad	ck of supportive facilities i	n hot desking offices. The study		
	sugges	ts that the architectural o	and functional features of office		
	design	s impact employee satis	faction, but further research is		
	neede	d to explore these relat	ionships in more detail and to		
	consid	er organisational and psyc	chosocial outcomes important to		
	emplo	yee health and well-being			
	I				
Eindhoven	2023	Gerardina, A., and	"The physical workplace as a		
University of		Bergefurt, M.	resource for mental health: A		
Technology			salutogenic approach to a		
			mentally healthy workplace		
			design at home and at the		
			office"		
Туре:	Thesis				
Methods used:	Literati	ure review, VR experiments			
Findings:	The stu	udy found that sound mas	sking in office environments can		
	reduce	e speech intelligibility and i	mprove short term mental health		
	outcor	mes like stress and mood. B	siophilic design elements, such as		
	plants	and views outside, positi	ively impact psychological and		
	cognit	ive responses, enhancing	overall mental health. In home-		
	work e	nvironments, satisfaction w	vith daylight, views, artificial light,		
	nrivac	v and areenery is linked to	o better mental health, while the		

	absen	ce of a dedicated workr	room increases distractions and				
	stress.	stress.					
Limitations:	A more	e detailed research study	to fully understand the complex				
	relatio	relationships between workplace design and mental health may					
	be rec	quired. The focus on implie	ed characteristics means chronic				
	menta	I health consequences rec	ceived less attention. The sample				
	size an	d scope of the study sugge	est that further research is needed				
	to exp	lore the intricate network o	of workplace design aspects and				
	their in	npact on mental health.					
Journal of	2014	Lyons, S., & Kuron, L.	"Generational differences in				
Organizational			the workplace: A review of the				
Behavior			evidence and directions for				
			future research".				
Type:	Journe	Journal					
Methods used:	Literati	ure review					
Findings:	Gener	ational differences in th	ne workplace show increasing				
	individ	ualism, with younger gene	erations being more extroverted,				
	consci	entious, and self-centred	I, but also more anxious and				
	depressed. They value material rewards and leisure more and						
	have lower job satisfaction and organizational commitment.						
	Research highlights a disconnect between perceived and actual						
	generational differences, suggesting a need for further study.						
	Managers should recognise these differences as a form of						
	dynamic diversity linked to power dynamics in organisations.						
Limitations:	The research suggests the need for a more nuanced						
	unders	understanding of generational identity and its impact on the					
	workpl	workplace, rather than simple notions of birth cohorts. Future					
	researd	ch should explore mecha	nisms of generational identity in				
	organi	sations, generational conf	lict, perceptions of generational				
	differe	nces, and intersections w	rith other forms of diversity. The				
	topic i	s susceptible to exagger	ation requiring a balanced and				
	critical	approach to interprete	ation and reporting to avoid				
	perpet	tuating stereotypes.					
	1						

Journal of	2024	Tagliaro, C., Migliore, A.,	"Room for diversity: a review of				
Corporate		Mosca, E.I. and	research and industry				
Real Estate		Capolongo, S.	approaches to inclusive				
			workplaces"				
Type:	Journe	I					
Methods used:	Literati	ure review					
Findings:	The st	udy highlights that dive	rsity, equity, and inclusion are				
	underd	developed in workplace c	lesign and strategies. Academic				
	studies	often focus on specific o	categories of employees or treat				
	diversit	ry as a tangential aspect. T	he research identifies four macro-				
	catego	ories of diversity: psyc	ho-physical conditions, socio-				
	econo	mic conditions, cultural c	spects, and ability, experience,				
	and s	trengths. The study also	emphasises the importance of				
	integro	integrating inclusive design principles, such as Universal Design,					
	into wo	into workplace environments.					
Limitations:	The high degree of subjectivity in the preparation of CSR reports,						
	which hinders their interpretation and use in decision-making						
	proces	processes. There is a missing link between diversity categories and					
	workpl	ace strategies, particulo	arly in company reports. The				
	researd	ch calls for an expansio	n of methodology and scope,				
	includi	ng more keywords, a det	ailed analysis of design features,				
	and er	mpirical data collection me	ethods like surveys and interviews.				
	The stu	udy also highlights the nee	d for better integration between				
	materi	al and immaterial elen	nents of the workplace and				
	encou	rages collaboration betw	veen academic and corporate				
	sectors	to create equitable and i	nclusive work environments.				

#### 2.7 Literature review outcomes

Change is often challenging, and people tend to hold on to familiar ways of thinking and working. However, adversity and challenges can also drive growth and innovation, as seen in the global response to the COVID-19 pandemic. Despite the immense loss and suffering caused by the pandemic, it has led to significant advancements in remote work, digital collaboration, and workplace flexibility (Kniffin et al., 2021). This experience underscores the importance of embracing change and

adapting to new ways of working to ensure the continued success of organisations and their employees.

As the world continues to evolve, the literature review reveals the initial outcome to redefine the narrative of the office and its function. By moving away from outdated activity-based working models (Privett, 2020) and adopting a more diverse and inclusive approach to workplace strategy, organisations can create environments that support the diverse needs of their employees and contribute to their long-term success. This is reflected in the Harvard Business Review article by Davis (2021) that confirmed that organisations in Australia are trying other models. For example, the Hub and Spoke model is being used where there is a main office but also satellite location where people can work from. Even though there are advantages to this thinking, models like this do not compare to the value of connecting people and accommodating a more diverse workforce.

Comparatively, the Smart Working Plus model (see Figure 3.3) is shaped by its global presence and diverse workforce, necessitating the customisation of areas to accommodate cultural and architectural differences. In contrast, the Smart Working Plus model might benefit through a more standardised approach due to less variation in these contexts. Both strategies emphasise flexibility and remote working options, however Smart Working Plus includes specific alignment with managers and local regulations, which may be more controlled in its implementation. Both approaches do not recognise or fully integrate diversity, equity, and inclusion metrics, to support a diverse and inclusive workforce.

The literature review suggests that a context-based workplace model could provide a more inclusive and diverse human-centric space, offering supportive, trusting, and psychologically safe environments for occupants. This could enable organisations to improve the use of their physical workplaces, attract and retain talent, and continue to be an employer of choice (Edwards and Cable, 2009). The review also suggests that a context-based workplace could provide a platform for higher inclusion of diverse occupants that enable the creation of innovative ideas leading to sustainable business growth. The research suggests the innovative proposition of a context-based workplace model affords office-based occupants the opportunity to recontextualise their point of reference for 'work-life balance', prompting a paradigm shift towards

'work-life integration'. This approach aligns with the case study by (Appel-Meulenbroek et al., 2022).

While the physical office may not be as central to work as it once was, it remains a crucial element of organisational culture and collaboration. Large corporations have invested heavily in their physical workplaces, and it is essential to consider how these spaces can be used sustainably and effectively in the future. By rethinking the purpose and function of the office (Hunter, 2024), organisations can ensure they are not "throwing the baby out with the bathwater" and continue to leverage their physical spaces to support their employees and achieve their goals.

In summary, the literature review outcome revealed the need for the progression of activity-based working. This shift required may not be a simple iteration of the existing model but rather a fundamental shift towards a more collective and inclusive approach to workplace strategy. This shift should address the identified metrics related to diversity, equity and inclusion and better support the evolving needs of a globalised workforce to facilitate a more human centric workplace.

## 2.8 Summary

From the results of the literature review, the emerging focus areas are reflected within the context of global organisations with the focus on age, gender and nationality for global organisations, sensory processing by considering the effect of the inputs from the environment on people, the positive impact from meaningful connection, mental well-being, and physical wellness. Primarily, the development, testing and corroboration of a new context-based workplace model that advances defined diversity, equity, and inclusion topics in workplace strategy and design is required to address the literature review outcomes in the research that are presented by the activity-based working model most commonly used in the modern workplace.

To address the gaps, the research aims to analyse the limitations for accommodation in activity-based working models to provide inclusive and diverse human centric spaces. A novel context-based workplace model could support the challenges for organisations looking to design workplaces that are value congruent and seek to offer supportive, trusting and psychologically safe environments for occupants. Spaces that

offer these values present occupants with an opportunity for achieving a sense of belonging and thriving in a post pandemic workplace.

Possible limitations for this research topic could be sourcing of in depth literature reviews and analysis considering the effect of a context-based model in relation to the improvement of mental health and wellness but could present a potential for further studies. There may also be new research available during this research project timeline that could provide further insights and will be explored as part of the continuous literature review process that will be undertaken to ensure that the information referenced for the research project is up to date and relevant.

By integrating diversity, equity, and inclusion considerations such as global organisations, sensory processing, interpersonal connection, mental well-being, and physical wellness into workplace design that exceed traditional activity-based models, the novel context based model could enhance organisational strategies for talent attraction and retention, foster innovation, and create psychologically safe environments where employees can thrive in a post-pandemic context (Edwards and Cable, 2009).

**CHAPTER THREE: RESEARCH METHODOLOGY** 

3.1 Introduction

This study aims to review and analyse the role of the activity-based working model. It

seeks to identify the shortcomings of the current activity-based working model at a

global organisation known as Smart Working Plus, specifically its ability to

accommodate diversity, equity, and inclusion metrics i.e. global organisations,

sensory processing, interpersonal connection, mental well-being, and physical

wellness, thereby shifting the focus towards a more human-centric workplace

strategy.

To achieve a comprehensive understanding, the study employs a mixed-methods

approach, combining qualitative and quantitative research methodologies. The data

collection process is designed to capture a holistic view of the workplace

environment and includes:

• Online Survey: The survey gathered extensive data on various aspects of the

current workplace model, including workplace dynamics and employee

experiences across different demographics and roles.

Interviews: Conducted with organisational leaders, these interviews provide a

dual perspective on the current workplace model, how it is perceived and

utilised by leadership, and how leaders interact with and manage their teams

within this model.

By analysing the experiences of both general users and those in leadership positions,

the study aims to uncover the nuanced benefits and challenges faced by different

user groups. This dual-perspective analysis is crucial for identifying areas of

improvement and developing a workplace model that is inclusive and equitable.

The research findings are corroborated through a workshop, which serves as a

collaborative platform for stakeholders to engage in discussions around the proposed

workplace model called the "Polycontextual Workplace" (PCW). The workshop is

instrumental in refining the initial model and ensuring that it aligns with the goal of

creating a more inclusive and equitable work environment.

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The proposed workplace model emphasises key diversity, equity, and inclusion metrics such as global organisations, sensory processing, interpersonal connection, mental well-being, and physical wellness. By integrating these metrics, the model seeks to create a workplace environment that is responsive to the diverse needs of employees explored in the literature review, thereby fostering a sense of belonging and enhancing overall job satisfaction.

This research contributes to the field of workplace design by highlighting the critical role of diversity, equity, and inclusions in shaping the future of work. It advocates for a shift from a task-centric to a human-centric approach, providing valuable insights for organisations looking to cultivate a culture of inclusivity and equity while also enhancing the effectiveness and satisfaction of their workforce.

#### 3.2 Theoretical model framework

During the process of the literature review and exploring the metrics for diversity, equity, and inclusion, a theoretical model was developed for the PCW model, as shown in Figure 3.1, that guided the research study. With theory influencing practice, the development of the theoretical model helped to highlight the challenges that the users faced in an activity-based workplace setting, the opportunities for improving the workplace model to accommodate more human centricity and informing the proposed solutions. It also contributed to establishing the foundation for the research questions (Heale & Noble, 2019).

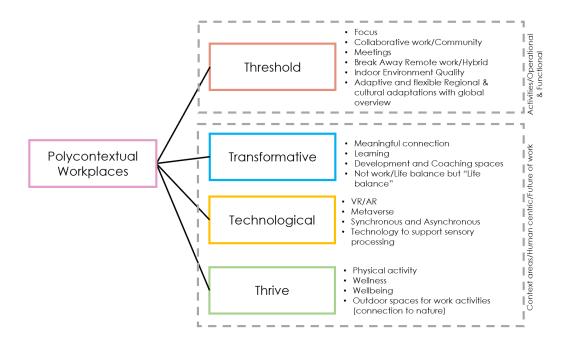


Figure 3.1. Theoretical model for the "Polycontextual Workplace" (PCW) model

The proposed theoretical model presents an initial novel approach to workplace design, focusing on diversity, equity, and inclusion and includes elements of the activity-based workplace thinking. It is structured around four key components: Threshold, Transformative, Technological, and Thrive, each addressing different aspects of a context-based model.

The "Threshold" section of the model emphasises the importance of functional, activity-based workplaces. It recognises the need for various types of spaces, from quiet focus areas for individual work to collaborative community spaces for teambased tasks. The inclusion of spaces for confidential and sensitive work demonstrates an understanding of the need for privacy in certain tasks, while the provision for quick access booths suggests a recognition of the need for flexibility and adaptability in the workplace.

The inclusion of remote work/hybrid reflects the changing nature of work in the post-pandemic era, acknowledging the shift towards more flexible working arrangements. This human centric approach to remote work, rather than a prescriptive approach, allows for greater flexibility and adaptability, catering to individual employee needs and circumstances.

The emphasis on sensory processing in the indoor environment quality is a significant step towards creating a more inclusive workplace. By considering factors such as light, sound, touch, smell, and sight, the model acknowledges the diverse sensory needs and preferences of employees. The adaptability of the design, through the principles of universal design and sustainability, further contributes to the inclusivity of the workplace.

The global overview with regional and cultural adaptations is a critical aspect of the model, recognising the diversity of the workforce and the need for workplaces to reflect this diversity. By adapting the workplace design to regional and cultural contexts, the model ensures that all employees, regardless of their cultural background, feel included and valued in the workplace.

The "Transformative" section of the model focuses on learning, mentoring, and development spaces, acknowledging the importance of continuous learning and personal development in the workplace. The concept of meaningful connections, through 1:1 informal interaction, reflects an understanding of the social aspect of the workplace and the role it plays in employee well-being and engagement.

The provision for life balance amenities, such as clothing, groceries, beauty, banking, pharmacy, doctors, and dentists, indicates a recognition of the need for holistic employee well-being. This section's emphasis is not just on work-life balance, but on life balance, recognising that employees have needs and responsibilities outside of work that can impact their work performance.

The "Technological" section underscores the importance of integrating technology into the workplace. While this section is less detailed than the others, it is a crucial aspect of modern workplace design. Technology can facilitate collaboration, increase efficiency, and enable flexible working arrangements, contributing to diversity and inclusion.

The "Thrive" section focuses on wellness and well-being, an increasingly important aspect of workplace design. The provision for physical activity, wellness, and well-being spaces, including outdoor spaces for work activities, reflects a holistic approach to employee well-being. The inclusion of decompression spaces and mindfulness

rooms is particularly noteworthy, acknowledging the mental health aspect of well-being.

This theoretical model was intended to represent a theoretical approach to context-based workplace design that prioritises diversity, equity, and inclusion. The intention was to recognise the diversity of employee needs and preferences, and the importance of flexibility and adaptability in meeting these needs. Although the development of this model was elementary due to its theoretical nature, it provided insight into the creation of the research questions in Chapter 1.

## 3.3 Research design

The research design for this study was formulated with an approach of utilising both qualitative and quantitative methods. The value of a mixed methods approach in this study lies in its ability to provide a more comprehensive understanding of the research questions as opposed to that of a singular method (see Table 3.1 for Methodology Overview). By combining both qualitative and quantitative methods, there was on opportunity to maximise the strengths of each approach while attempting to mitigate their respective limitations. According to Creswell and Creswell (2023), the key reasons, and specifically in relation to this research, that a mixed methods approach would add more value than a singular method are that by combining qualitative and quantitative data provides a richer understanding of research problems. Quantitative data reveals trends and patterns, while qualitative data uncovers underlying reasons and contexts. This dual approach addresses different research questions, enhances the overview and transferability of findings, and contributes to developing more robust models.

The online survey collected both quantitative and qualitative data. Surveys are valuable for gathering data from large samples, promoting standardisation, generating quantifiable data, and providing efficiency. They allow participants to respond asynchronously, offer anonymity, and facilitate comparability (Bryman, 2016). Surveys enhance the representativeness of findings by collecting data from many participants. Standardised questionnaires reduce biases and inconsistencies, leading to reliable results. The data can be easily analysed to identify trends and test hypotheses. Online surveys are efficient and cost-effective, enabling quick data

collection and analysis. They also provide anonymity, encouraging honest responses, especially on sensitive topics. Their standardised nature allows for data comparison across different groups and time periods, useful for exploring changes in attitudes, behaviours, or experiences over time or between different locations.

In this study, the surveys were designed to collect data on employee perspectives and user experiences related to the current Smart Working Plus workplace model. In the survey, participants also had the opportunity to provide feedback for improvements they would like to experience in the workplaces such as what types of spaces would better support them while at the office. This improvement feedback did contribute to the development of the proposed model by identifying areas for improvement. See Appendix A for the survey template.

The qualitative research involved conducting interviews, which, as <u>Seidman (2013)</u> notes, offer several advantages. Interviews provide in-depth insights into participants experiences, thoughts, and feelings, which are crucial for exploring complex workplace environments. They allow for flexible data collection, enabling follow-up questions to delve deeper into emerging themes. Interviews, especially with leaders, helped build rapport and trust for this research, leading to more honest responses. They also offer valuable contextual information, enhancing understanding of the factors shaping participants views. Interviews are also effective for exploring sensitive topics, providing a safe space for participants to share freely. In Summary, interviews for this research were essential for gaining detailed insights into leadership experiences and perspectives, complementing survey findings with rich qualitative data. Leaders shared their experiences with the Smart Working Plus model and suggested improvements, contributing to the development of the Polycontextual model. See Appendix B for the interview template.

A workshop was conducted to present the research findings from the surveys and interviews and was used to corroborate the initially proposed model. Workshops are effective for disseminating research and facilitating discussions, as noted by Liamputtong (2011). In this study, the workshop enabled lively and collaborative discussions, leading to the development of recommendations for enhancing the proposed PCW workplace model. The group interaction generated rich and diverse insights, with participants building on each other's ideas, challenging perspectives,

and providing a broader range of experiences and opinions. This method proved efficient for collecting data from multiple participants simultaneously and offered insights into social norms, group dynamics, and shared experiences that individual interviews or surveys might not reveal. Despite having a structured format, the workshop included some brainstorming, role-playing, and scenario-based discussions, which revealed findings that met or exceeded expectations. The supportive and non-threatening environment allowed for open discussions on sensitive or controversial topics, which may not have been able to be achieved through surveys. This workshop was instrumental in refining the PCW model based on collective input and experiences.

In summary, the use of these methods as an overall strategy for the research design (see Figure 3.2) was validated by the richness and depth of the data collected. The combination of quantitative and qualitative methods allowed for a comprehensive exploration for the need for the advancement of diversity, equity, and inclusion in the workplace, and the development of a new, human-centric workplace model (Johnson and Onwuegbuzie, 2004).

Table 3.1. Methodology overview

Methodology overview					
Literature Review (RQ	Literature Review (RQ 1)				
Data collected:	•	Existing academic literature on workplace design,			
		diversity, equity, and inclusion.			
	•	Studies on activity-based working and its limitations.			
	•	Research on the impact of workplace design on			
		employee well-being, engagement, and productivity.			
	•	Relevant theories and frameworks in the fields of			
		organisational behaviour, environmental psychology,			
		and human resources.			
Method:	•	Systematic search of academic databases (e.g.,			
		Google Scholar, Scopus, Web of Science, UH Online			
		Library) using relevant keywords and search strings.			
	•	Snowball sampling to identify additional relevant			
		literature through citations.			

	Inclusion and exclusion criteria to ensure the selection of
	the relevant literature is of a high-quality.
Analysis:	Thematic analysis to identify common themes, trends,
	and gaps in the existing literature.
	Critical evaluation of the strengths and weaknesses of
	the current research and theories for activity-based
	working.
	• Integration of the various literature to inform the
	development of the theoretical Polycontextual model.
Expected findings:	Identification of key factors influencing activity-based
	workplace design models and the low impact on
	diversity, equity, and inclusion.
	Insights into the limitations of activity-based working and
	opportunities for improvement.
	A comprehensive understanding of the current state of
	research in the field.
Surveys, Interviews a	nd Workshop (RQ 2)
Data collected:	Employee perceptions and experiences of activity-
	based workplace design, diversity, equity, and inclusion.
	Managerial and organisational perspectives on the role
	of workplace design.
	• Insights into the specific needs and preferences of
	employees in relation to the four components of the
	Polycontextual model.
	Feedback and input from workshop participants on the
	proposed polycontextual model
	Ideas and suggestions for refining and improving the
	model
	Insights into the feasibility and potential challenges of
	implementing the model in various organisational
	contexts.
Method:	Development of survey questionnaires and interview
	guides.
	Sampling of participants from various geographical locations with the organisations, business functions that

are not only related to real estate, and diverse cultural backgrounds to ensure diversity. Administer surveys and conduct of interviews, ensuring confidentiality and informed consent. Co-ordinate a workshop with a diverse group of participants, including employees, managers, and real estate professionals. Presentation of the proposed polycontextual model and findings from the literature review, surveys, and interviews. Facilitation of group discussions and activities to gather feedback and input on the model. Quantitative survey data. Analysis: Thematic analysis for qualitative interview data, identifying patterns and trends in participant responses. Triangulation of survey and interview data to ensure the validity and reliability of findings. Thematic analysis of workshop discussions and activities, identifying key themes and trends in participant feedback. Identification of areas for refinement and improvement in the polycontextual model. Integration workshop findings with the literature review, surveys, and interviews to validate the polycontextual model. Expected findings: Identify employee needs and preferences in relation to workplace design, informing the development of the polycontextual model. Insights into the role of workplace design in promoting diversity, equity, and inclusion from both the employee and the organisational. Identification limitations of potential for the implementation of the polycontextual model.

- A refined polycontextual model that incorporates feedback and input from workshop participants.
- Identification of potential challenges and opportunities for implementing the model.
- Corroboration of the "Polycontextual Workplace" model through stakeholder input, increasing the models credibility and relevance in the field of workplace design.

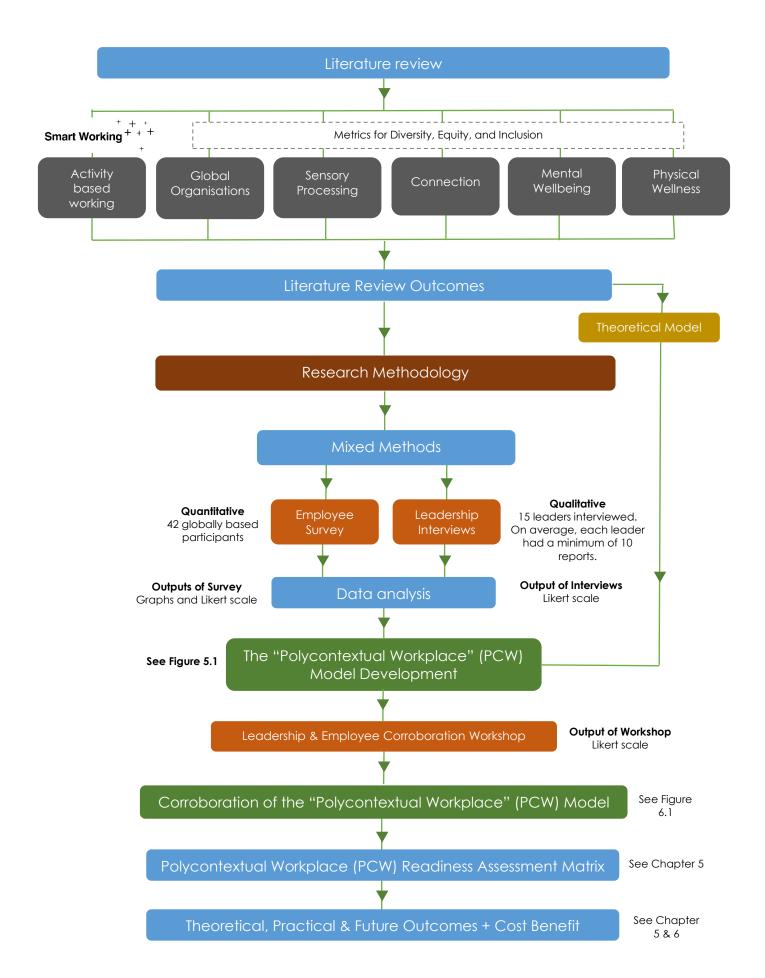


Figure 3.2. Overview of Research Design

#### 3.4 Parameters

The research study analyses the current implemented activity-based workplace model within a global organisation, called Smart Working Plus, as shown in Figure 3.3. Analysing this model and collecting user feedback produced results that supported and informed the development of the new Polycontextual model.

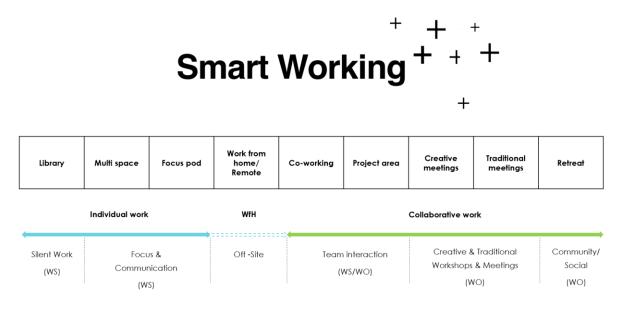


Figure 3.3. Smart Working Plus model based on Activity-Based Working

To develop an understanding of the Smart Working Plus, it is important to unpack the model. Smart Working Plus is based on the activity-based working concept. The model provides options for users to choose different space modules that are designed for either individual work or collaborative work. Work from Home or remote working is also a part of the model. Within the individual work and collaborative work, there are space modules that either provide spaces with standard workstation (WS) with ergonomic and height adjustable desks & chairs or working options (WO) which will provide a seat for you to sit at, that may not be ergonomic, as well as a surface to place a laptop on that may also not be ergonomic.

Individual work in the Smart Working Plus model, comprise of three space modules i.e., "Library", "Multi Space" and "Focus Pod". The "Library" space module allows for non-communicative individual work in collective environment, the "Multi Space" is a semiprivate space with a high acoustic value that is conducive to verbal communication and allows users limited proximity to other users so as to facilitate some connection, and the "Focus Pod" allows for concentrated work in an enclosed

space for one user. These spaces are equipped with standard workstations. Work From Home or remote working provides the ability for users to work outside of the office space, most likely from home, and has the benefits of reduces commute, opportunities for focus work or online collaboration. This has become a requirement for most organisation post pandemic (Wigert, et al., 2023). Hybrid work is accepted to be an integral part of the workplace in the future and is an operational model in terms of workplace strategy and design, therefore the focus will of this research study will not examine this in depth.

The collaboration space settings have five space modules i.e., "Co Working", "Project Area", "Creative Meetings", "Traditional Meetings" and "Retreat". In the "Co Working" space module, users can work individually or collaboratively in a collective environment, in a "Project Area" users can work collectively in a small group for a defined time and when the space is not used by project teams, the space can also be used as standard workstations for team collaboration or individual use. The two meeting options are for either for creative session where the furniture is flexible and can be moved around to facilitate a team breaking out into smaller teams or traditional sessions with more standardised meeting room furniture. The "Retreat" space an informal space where users meet other users serendipitously and can grab a beverage while connecting either socially or for informal work. By understanding the functions of the spaces, we observe that the existing modules do not explicitly cater to the diverse needs of all employees, potentially leading to feelings of exclusion or discomfort among underrepresented groups. For instance, the "Co-Working" and "Project Area" modules could benefit from incorporating spaces designed for neurodiverse individuals, ensuring sensory-friendly environments that accommodate different working styles. Additionally, the "Creative Meetings" and "Traditional Meetings" modules could include features, either technical or physical, that support hybrid meetings, allowing remote participants to engage fully and equitably. To address these gaps, the proposed changes will be explored through surveys and interviews, aiming to gather insights on how to create more inclusive and equitable workplaces.

An additional parameter consideration for this research study was the involvement of human participants. For the online surveys, there was a total number of participants were forty-two. The participants were invited on a voluntarily basis to complete the

survey with invitations extended across the organisation covering all the distinct geographical locations. This supported in exploring the gender, generation, and geographical location metrics for the research. All the participants involvement was anonymous. Additionally, interviews were conducted with fifteen participants holding leadership positions within the organisation and who were also located in different geographical locations. Finally, a workshop involving ten diverse participants with distinct roles, demographics and workplace requirements was conducted to deliver the research findings from the surveys and the interviews and facilitate discussions around a proposed workplace model. The global distribution increased the probability of a having a diverse sample of participants with different experiences, perspective and cultural influences which would positively influence the diversity, equity, and inclusion metrics for a new model development.

## 3.5 Analytical methods

Thematic analysis was the chosen method for data analysis in this study with it application relevant to qualitative research technique and also with relevance to the qualitative data that is specific to this research. This method was selected due to its inherent flexibility and its capacity to provide a rich, detailed, and complex account of data. It enabled the identification, analysis, and reporting patterns or themes within the data, offering a nuanced understanding of the data's complexities. The use of thematic analysis in this study allows for a more in-depth exploration of the research topic, providing a comprehensive understanding of the participants' experiences and perceptions.

Thematic analysis (see Table 3.2) offers several advantages over other methods used in similar research. Unlike more prescriptive methods such as grounded theory or interpretative phenomenological analysis, thematic analysis allows for a more flexible approach. This flexibility is beneficial in that it allows the researcher to tailor the analysis to the specific needs of the study, rather than being constrained by a predetermined framework. Furthermore, thematic analysis is particularly useful for examining the viewpoints of different research participants, highlighting similarities and differences, and generating unanticipated insights, thereby enriching the depth of the data interpretation. The thematic analysis in this study followed a similar approach to the

six-phase guide proposed by <u>Braun and Clarke (2006)</u> and with that, a semantic coding process was also employed.

Table 3.2. Thematic analysis

1	Data familiarisation	Transcribing data, iteratively reading
		the data, and understanding the
		data
2	Generation of Initial Themes	Maintain "familiarity" balance with
		some activity-based areas, context
		over activities, greater Diversity,
		Equity, and Inclusion in workplace
		design
3	Theme Decision	Cultural, societal, geographical,
		global, operational, strategic
4	Theme Review and Refinement	Final themes and sub themes are
		established.
5	Theme Definition and Naming	Themes and sub themes assume their
		final form and are defined.
6	Extract Selection for the Report	Provide evidence for themes and
		their relation to the research
		questions.

The analytical process commenced by delving deep into the raw data and conducting a thorough and iterative examination of the collected information. This entailed multiple readings of the data and making note of any emerging patterns, anomalies, and any compelling subtleties. These initial impressions were instrumental in shaping the subsequent analytical stages mentioned in Table 3.2. Some examples of the data that piqued interest during this phase was that even though there was a definite momentum to progress the thinking of the workplace model to be more people centric and advance diversity, equity and inclusion, there were also subtleties that suggested a slight level of discomfort for the potential of the unknown with a new model but not enough to suggest that the existing activity-based model should continue in its entirety. This seemed to also be common in human behaviour when users are presented with innovation for environments or tools that they are familiar with (König and Neumayr, 2017).

Semantic coding, as discussed by Braun and Clarke (2006), was used to identify and code the explicit, surface-level meanings in the data and was the in initial generation for the framework of the themes. This approach was instrumental in bringing to light the manifest content of the data, which was then interpreted in the context of the broader themes and the research questions. Repetitive phrases and comments relating to both activity-based working and the need for more human centricity based on diversity, equity, and inclusion influenced the analysis and were noted and the main contributors to the start of the development of the themes. Other phrases were confidentiality, acoustics, artificial and natural lighting, social and connection. The determination of what constituted a theme was influenced by the frequency, relevance, and richness of the semantic data. A theme was deemed significant if it encapsulated a pattern in the data that was pertinent to one or more research question. The process of assembling codes into themes involved a systematic clustering of related codes, facilitated by a thematic map. The themes underwent a stringent review process to ensure their coherence, distinctiveness, and relevance to the research questions. This involved a recursive process of cross-checking the themes against the entire data set. Some themes were amalgamated, others were split, and some were discarded during this process. Here the initial themes were identified and then they were checked against the dataset to ensure they accurately represent the data. For example, one of the initial themes identified was "workplace experience," and the phrases related to this were reviewed in the data (e.g., survey responses, interview transcripts) where participants talked about their experiences in the workplace. If certain themes accurately captures the participants experiences and perceptions, it was retained. If not, it was refined or alternatively discarded.

Each theme was then meticulously defined and named to encapsulate its essence and significance. The definition offered a clear depiction of what the theme represents, and the name was a concise label that captured the core concept of the theme. This involved reviewing the themes to ensure they are internally homogeneous (i.e., the data within the theme cohere together meaningfully) and externally heterogeneous (i.e., there is a clear and identifiable distinction between different themes). For instance, if there were two themes, "present day workplace models" and "spaces aligned to tasks", there may not be significant distinction between these themes i.e., lack of external heterogeneity, a decision was taken to merge them into one theme. Alternatively, if a theme like "workplace challenges" was regarded to be

too broad and encompassed too many different issues i.e., lack of internal homogeneity, a decision to break it down into smaller, more specific themes was taken.

Refining themes involved defining and naming the themes in a way that accurately represents the data. For example, a theme initially named "workplace experience" were refined to "workplace experience in a post COVID office" to reflect the data more accurately. The finalised themes were intrinsically linked to the research questions, providing nuanced insights into the phenomenon under study. Furthermore, the themes contributed to the existing body of knowledge by corroborating, extending, or contesting previous findings. The relationship between the themes and the research questions are also relevant and worth providing clarity on. Theme one is related to research question one which explores the activity-based working and its value and its relevance in a hybrid working environment post the pandemic, theme two is related to research question two and examines the experience people have in the workplace and finally theme three relates to research question three where the polycontextual model is presented and the metrics for diversity, equity and inclusion are explored to propose a solution for the short comings of activity-based working models.

Finally, the selection of extracts for the final report was guided by their representativeness and richness. Extracts that best illustrated each theme and provided a detailed and nuanced understanding of the data were chosen. For example, an extract where participants expressed "work-life integration" was positioned to be illustrate the theme three.

Refer to the Figure 3.4 for the thematic analysis overview.

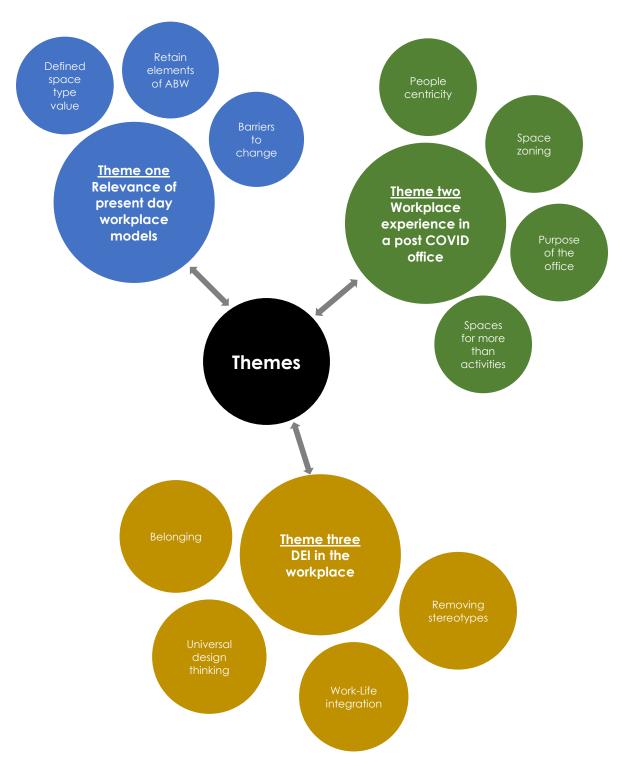


Figure 3.4. Thematic analysis overview

## 3.6 Ethical considerations

As part of the process of conducting this research, strict adherence to ethical guidelines prescribed by the University were upheld given the involvement of human participants in the survey, interviews, and workshop. The study was designed and

executed with a profound respect for the principles of anonymity, beneficence, non-maleficence, and fairness, which are the cornerstones of ethical research involving human subjects. Prior to the commencement of the study, formal ethical approval was obtained from the university's ethics committee (see Appendix C). This approval process involved a rigorous review of the study's design, methodology, and protocols to ensure they conformed to the highest ethical standards. The approval served as an affirmation of the study's commitment to uphold the dignity, rights, safety, and well-being of the participants.

Informed consent was another critical ethical consideration in this study. Before participating in the survey and interviews, all participants were provided with comprehensive information about the purpose of the study, the procedures involved, the expected duration of their participation, and their rights as participants, including the right to withdraw from the study at any time without any negative consequences (see Appendix D). Only after understanding and agreeing to these terms did the participants provide their formal consent to participate in the study.

To protect the privacy of the participants, all data collected in the study were treated with the utmost confidentiality. Identifying information was removed or disguised in the data analysis and reporting stages to maintain the anonymity of the participants. Any data that could potentially identify individual participants were stored securely and will be destroyed after a specified period, in accordance with the university's data protection policy. The study was designed to minimise any potential harm or discomfort to the participants. The survey and interviews were conducted in a non-intrusive manner, and the workshop was facilitated in a way that promoted a safe and inclusive environment for all participants. Any concerns or issues raised by the participants were addressed promptly and respectfully. This study is committed to upholding the highest ethical standards in all aspects of its design and execution. The ethical considerations and protocols followed in the study not only ensured the protection of the participants but also enhanced the credibility and validity of the research findings.

The trustworthiness and reliability of this study were of paramount importance and were ensured through rigorous methodological and ethical practices, some of which were mentioned above. Trustworthiness, a crucial aspect of research, comprises four

main components: credibility, transferability, dependability, and confirmability as discussed by Korstjens and Moser (2018). These practices not only protected the rights and well-being of the participants but also contributed to the quality and integrity of the research. The trustworthiness and reliability of the study further enhance the value and significance of the research findings, and the new workplace model developed as a result of this study.

Credibility was achieved through the triangulation of data (<u>Torrance, 2012</u>) collected from different sources, namely the survey, leadership interviews, and workshops. This approach allowed for a comprehensive and in-depth exploration of the research topic, thereby enhancing the validity of the findings. The use of multiple data sources also helped to cross-verify the data, reducing the likelihood of bias, and increasing the credibility of the study.

Transferability refers to the extent to which the findings of the study can be applied to other industries or workplace environments (Korstjens and Moser 2018). While the study was conducted within a global life sciences organisation, the insights gained, and the new workplace model developed could potentially be relevant and applicable to other organisations in the life sciences industry or even beyond. Detailed descriptions of the research context, participants, data collection and analysis processes were provided to allow readers to make informed judgments about the transferability of the findings.

Dependability and confirmability were ensured through a clear and detailed documentation of the research process. This included the research design, data collection methods, data analysis procedures, and the decisions made throughout the study. Such transparency allows for the study to be replicated in the future, contributing to its dependability. It also enables other researchers to confirm the findings, enhancing the confirmability of the study (Korstjens and Moser 2018).

Reliability, on the other hand, refers to the consistency of the research findings. In this study, reliability was ensured through the use of standardised and validated tools for data collection, such as the survey. The interviews and workshops were also conducted in a consistent manner, with the same set of questions and activities used

for all participants. This consistency helped to reduce variability in the data and increase the reliability of the findings (Korstjens and Moser 2018).

#### 3.7 Limitations

It is essential to recognise and address the limitations that may arise within any research study. Acknowledging these limitations not only enhances the credibility of the research but also provides valuable insights for future investigations in the field. The present study employs a mixed-methods approach, encompassing online surveys, in-depth interviews, and a workshop, to explore the research questions. While this approach offers advantages, it is not without potential constraints (Reid et al, 2018). Below are the potential limitations identified with the chosen research design and methodology (see Figure 3.2), clarifying their potential impact on the interpretation of the findings. The limitations identified are as follows:

- a. Bias in participant responses: Despite the anonymity provided by online surveys, there is always a risk of bias in participant responses. This could be due to social desirability bias, where participants provide responses, they believe are socially acceptable rather than their true opinions. Similarly, in interviews, participants may provide responses they believe the researcher wants to hear.
- b. Generalisation: The results obtained from the survey and interviews could be perceived as a generalisation to all global organisations. The participants responses are influenced by their specific experiences and contexts, which may not be representative of all employees in different global organisations.
- c. Non-response bias: There is a risk of non-response bias in online surveys, where those who choose to respond may differ in significant ways from those who do not. This could affect the results and limit the representativeness of the findings.
- d. Interpretation bias: In qualitative research, such as interviews, there is a risk of interpretation bias from the researcher. Personal biases and preconceptions could influence how they interpret and understand the data.
- e. Limited depth in surveys: While surveys can provide a broad overview of trends and patterns, they may not always be able to provide the depth of understanding that can be achieved through other qualitative methods.

- f. Workshop dynamics: In a workshop setting, some participants may dominate the discussion, while others may not feel comfortable sharing their views. This could limit the diversity of perspectives gathered.
- g. Dependability of self-reported data: Both the survey and interviews rely on self-reported data, which may not always be dependable or accurate. Participants may not remember certain experiences accurately, or they may unintentionally exaggerate or downplay certain aspects.
- h. Cultural differences: The study involves global organisations, and cultural differences could influence participants understanding and interpretation of survey questions and interview prompts.

# 3.8 Summary

This chapter reviews the role of the activity-based working model, Smart Working Plus, in accommodating diversity, equity, and inclusion metrics. The study employs a mixed-methods approach, combining online survey and interviews with organisational leaders to capture a holistic view of the workplace environment. The research findings are corroborated through a workshop, leading to the development of the PCW model.

The theoretical model framework structured around four key components, Threshold, Transformative, Technological, and Thrive, addresses various aspects of workplace design, including functional spaces, sensory processing, regional and cultural adaptations, continuous learning, life balance amenities, technology integration, and wellness. The research design utilises both qualitative and quantitative methods to provide a comprehensive understanding of the need for a human-centric workplace model.

The chapter concludes by highlighting the importance of a mixed-methods approach in developing a workplace model that fosters inclusivity and equity, contributing valuable insights for organisations aiming to enhance employee satisfaction and effectiveness. It also acknowledges several limitations, such as potential biases in participant responses, generalisation issues, non-response bias, interpretation bias, limited depth in surveys, workshop dynamics, dependability of self-reported data, and cultural differences, which may impact the findings.

### **CHAPTER FOUR: DATA ANALYSIS**

# 4.1 Data campaign

This chapter presents the findings of a comprehensive research study that investigates the relevance and the user evolution for activity-based working setting in the post-COVID era. The research approach utilised online survey, leadership interviews, and interactive workshops to gather a rich and diverse range of data. These methods facilitated a thorough exploration of the contemporary shifts in workplace dynamics and the emerging need for more human centric and inclusive work models. The data collected closely analysed the outcomes of the research design and refined the proposed theoretical model shown in Figure 3.1. The focus of this research is the development of a novel polycontextual model that seeks to advance diversity, equity, and inclusion in the workplace. The following chapter will delve into the detailed analysis of the data collected, the insights from this analysis, and how these insights informed the development of the proposed Polycontextual Workplace (PCW) model.

### 4.2 Survey

The survey for this study was conducted using Microsoft Forms (see Appendix A for the full questionnaire). This digital platform enabled efficient distribution across the organisation and facilitated participation from employees in multiple regions. The opportunity to participate was open to all employees and shared through organisational leaders to ensure broad reach while maintaining participant anonymity. In total, forty-two employees completed the survey.

To capture a wide range of perspectives, the survey sample reflected diversity across gender, generational cohorts, and geographical locations (see Appendix F for full demographic results). From the responses received, 52.4% (22 participants) were female, 45.2% (19 participants) were male, and 2.4% (1 participant) preferred not to disclose their gender. Regarding generational representation, 10% (4 participants) were Baby Boomers (1946–1964), 31% (13 participants) Generation X (1965–1979), 45% (19 participants) Generation Y (1980–1995), and 14% (6 participants) Generation Z. Geographically, 20% (8 participants) were based in Asia, 56% (24 participants) in Europe, 2% (1 participant) in Africa, 15% (6 participants) in North America, and 7% (3 participants) in South America. Notably, only 37% (16 participants) were based in the

same region as their country of birth, meaning 63% (26 participants) were expatriates, further highlighting the global nature of the participant group. This diversity was integral to the research objectives, which aimed to capture inclusive, organisation-wide insights and to assess whether perceptions and needs varied by gender, generation, or geographical location, improving the applicability of conclusions across the global context and reducing the risk of bias from over-representation of any single cohort.

The survey adhered to the university's research ethics guidelines (see Chapter 3 for ethical considerations). Ethical approval was obtained prior to data collection (see Appendix C). Participation was voluntary and based on informed consent, with clear information provided about the study's purpose, procedures, and the right to withdraw at any time without consequence.

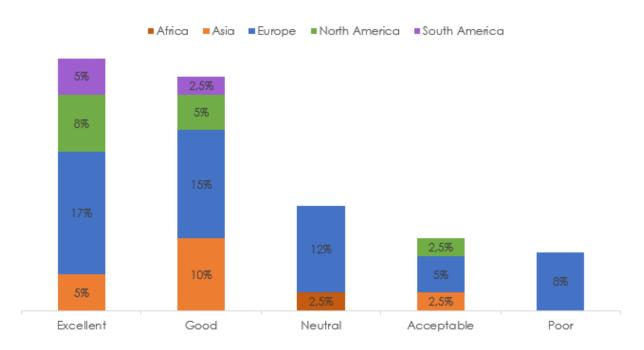
Thematic analysis (<u>Braun and Clarke, 2006</u>) was used to provide a detailed account of the data, enabling the identification, analysis, and reporting of patterns and initial themes. Thematic analysis allowed for tailoring the analysis to the study's specific needs and was useful due to the nature of this study. The analytical process began with a thorough examination of the raw data, noting emerging patterns and subtleties. Please see the raw data for the survey outcomes in Appendix E with Appendix F being the detailed analysis for survey.

The themes were then interpreted in the context of broader workplace themes and the research questions, and was corroborated by their frequency, relevance, and richness within the data. The themes underwent a rigorous review process to ensure their coherence, distinctiveness, and relevance to the research questions in Section 2.8. This involved cross-checking themes against the entire data set, where some themes were amalgamated, split, or discarded. The finalised themes were linked to the research questions, providing nuanced insights into the study.

To communicate and visualise the outcomes of the survey and interviews, the Likert Scale was employed (Boone & Boone, 2012). This made it possible to quantify and statistically analyse sentiments, feelings, and attitudes, which would otherwise be difficult to measure. In this analysis, the scale will be represented by numbers ranging

from -3 to 3, where the number 3 represents "strongly agree" and -3 representing "strongly disagree" and the number 0 expressing a neutral opinion (<u>Jamieson, 2004</u>). For Likert Scales, see Table 4.1 for the survey, Table 4.2 for the leadership interviews and Table 4.3 for the workshop.

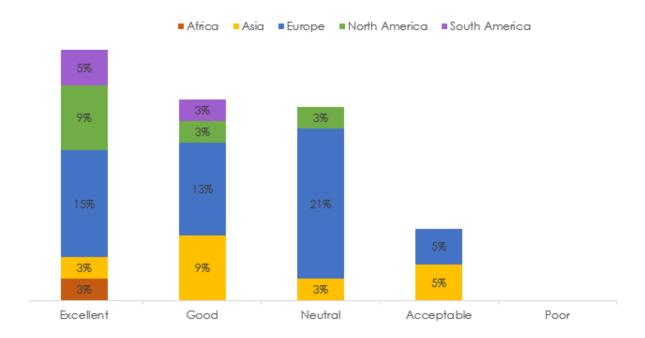
Looking into the data, the analysis for the global organisation metric examined responses filtered by nationality, generation, and gender and comparing it to the acceptance of the Smart Working Plus model as well as the potential for the availability of more spaces to improve the workplace experience. For the nationality metric in Figure 4.1, there was a good acceptance of the Smart Working Plus model with the highest number (67,5%) of responses for "Good "and "Excellent". There was also a small number of responses (18%) that did feel like the model was "Poor" or "Acceptable". The lowest response (14,5%) reflected "Neutral".



		Rating				
		5 4 3 2 1				
		Excellent	Good	Neutral	Acceptable	Poor
	Africa	0	0	1 (2,5%)	0	0
es ses	Asia	2 (5%)	4 (10%)	0	1 (2,5%)	0
No. of responses	Europe	7 (17%)	6 (15%)	5 (12%)	2 (5%)	3 (8%)
resi	North America	3 (8%)	2 (5%)	0	1 (2,5%)	0
	South America	2 (5%)	1 (2,5%)	0	0	0

Figure 4.1. Global organisation (Nationality) Do you think that Smart Working Plus is a good workplace model?

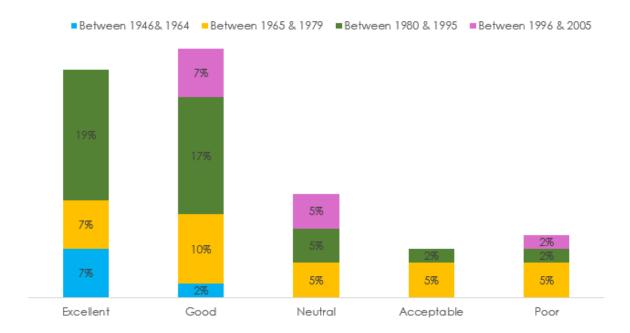
There was also a desire to also have more variety of spaces in the workplace as seen in Figure 4.2 with the highest number of responses (63%) for "Good "and "Excellent". There was no responses for "Poor" and a small number (10%) that selected "Acceptable". Although there was satisfaction with the Smart Working Plus model from the "Neutral" responses (27%), it could also suggest that there was equally a desire for progression with more space options and although there was some resistance on both accounts it was not representative of the majority or responses.



			Rating				
		5	5 4 3 2 1				
		Excellent	Good	Neutral	Acceptable	Poor	
	Africa	1 (3%)	0	0	0	0	
&	Asia	1 (3%)	4 (9%)	1 (3%)	2 (5%)	0	
No. of responses	Europe	6 (15%)	5 (13%)	9 (21%)	2 (5%)	0	
resp	North America	4 (9%)	1 (3%)	1 (3%)	0	0	
	South America	2 (5%)	1 (3%)	0	0	0	

Figure 4.2. Global organisation (Nationality) There could be more space options available over and above the ones available in Smart Working Plus

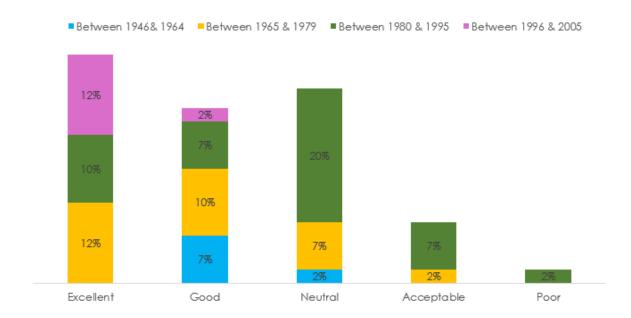
Similar patterns emerged for the generation metrics as shown in Figure 4.3 and Figure 4.4. The generation categories are Baby Boomers, born between 1946-1964, and are known for their strong work ethic. Generation X, born between 1965-1980, are independent and adaptable. Millennials born between 1981-1996, are techsavvy and value work-life balance, and Generation Z born between 1997-2012, are diverse, socially conscious, and highly tech-savvy. There was a varied response from all generations for the Smart Working Plus model to be suitable in Figure 4.3, but still significant responses (69%) as "Good "and "Excellent".



			Rating								
		5	4	3	2	1					
		Excellent	Good	Neutral	Acceptable	Poor					
v	Bet. 1946-1964	3 (7%)	1 (2%)	0	0	0					
. of onses	Bet. 1965 & 1979	3 (7%)	4 (10%)	2 (5%)	2 (5%)	2 (5%)					
No.	Bet. 1980 & 1995	8 (19%)	7 (17%)	2 (5%)	1 (2%)	1 (2%)					
2	Bet. 1996 & 2005	0	3 (7%)	2 (5%)	0	1 (2%)					

Figure 4.3. Global organisation (Generation) Do you think that Smart Working Plus is a good workplace model?

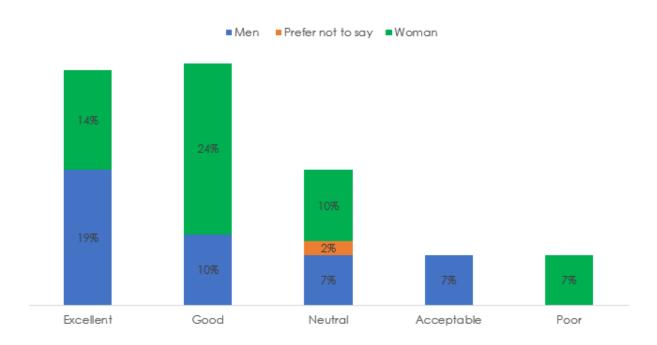
There was a desire to also have more variety of spaces in the workplace, seen in Figure 4.4, with the highest number of responses (34%) for "Excellent". There was significant responses (29%) for "Neutral". As with the nationality metric, although there was satisfaction with the Smart Working Plus model, it could suggest that there was a desire for progression with more space options but with some apprehension for what the new spaces could mean specifically for users that have been in the workplace for some time already.



			Rating								
		5	4	3	2	1					
		Excellent	Good	Neutral	Acceptable	Poor					
Ş	Bet. 1946 & 1964	0	3 (7%)	1 (2%)	0	0					
No. of responses	Bet. 1965 & 1979	5 (12%)	4 (10%)	3 (7%)	1 (2%)	0					
espo	Bet. 1980 & 1995	4 (10%)	3 (7%)	8 (20%)	3 (7%)	1 (2%)					
	Bet. 1996 & 2005	5 (12%)	1 (2%)	0	0	0					

Figure 4.4. Global organisation (Generation) There could be more space options available over and above the ones available in Smart Working Plus

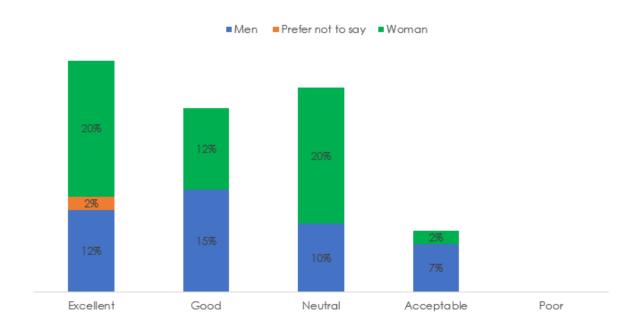
The gender metrics in Figure 4.5, illustrated a positive experience for both "Men" and "Woman" with a higher rate (38% i.e. Total for Excellent and Good) from "Woman" which could indicate that women are satisfied with the model a bit more than men (29% i.e. Total for Excellent and Good).



			Rating								
		5	4	3	2	1					
		Excellent	Good	Neutral	Acceptable	Poor					
of nses	Men	8 (19%)	4 (10%)	3 (7%)	3 (7%)	0					
No. of sponse	Prefer not to say	0	0	1 (2%)	0	0					
S R	Woman	6 (14%)	10 (24%)	4 (10%)	0	3 (7%)					

Figure 4.5. Global organisation (Gender) Do you think that Smart Working Plus is a good workplace model?

However, Figure 4.6 also showed a high response rate from women (32% i.e. Total for Excellent and Good) for a desire to also have more variety of spaces in the workplace and no responses for "Poor". As with the nationality and generation metrics, although there was satisfaction with the Smart Working Plus model (61% i.e. Total for Excellent and Good), there was a desire for progression with more space options and shows that both genders were open to having more options with a slight bias toward women.



			Rating								
		5	5 4 3 2 1								
		Excellent	Good	Neutral	Acceptable	Poor					
F es	Men	5 (12%)	6 (15%)	4 (10%)	3 (7%)	0					
No. of responses	Prefer not to say	1 (2%)	0	0	0	0					
resk Z	Woman	8 (20%)	5 (12%)	8 (20%)	1 (2%)	0					

Figure 4.6. Global organisation (Gender) There could be more space options available over and above the ones available in Smart Working Plus

In Figure 4.7, the research outcomes indicate that sound quality significantly impact the workplace experience and should be integral considerations in the development of a more human-centric workplace model. The majority of participants (72,5%) expressed that sound transmission or avoidance affects their overall experience, suggesting that employees value spaces with appropriate acoustics. Even though sound levels may not be a primary concern (12,5%), they still hold importance. Participants also expressed a preference for quiet spaces or designated quiet zones, and some suggested ambient sound or white noise could be beneficial which can be seen in Figure 4.10.

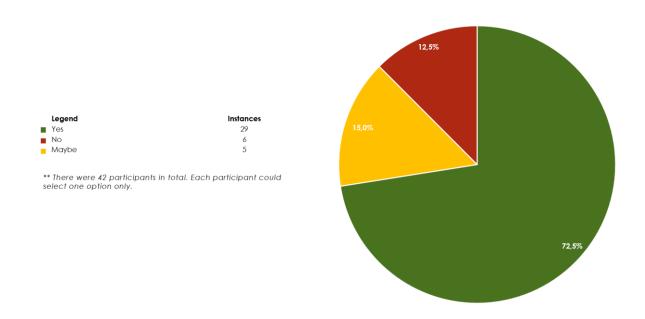


Figure 4.7. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space?

Similarly, in Figure 4.8, light quality, both artificial and natural, was found to significantly affect the workplace experience for 86% of participants. The quality of light was linked to improved mood, productivity, and overall well-being. While not a primary concern for all (7% of participants), light quality still holds significant importance for most, with a clear preference for natural light (Meister, 2018).

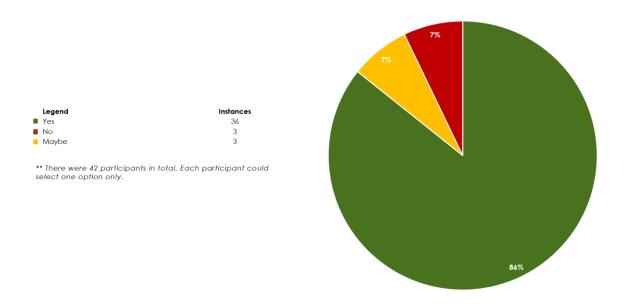


Figure 4.8. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space?

In Figure 4.9, the responses for interpersonal connection suggest a need for more flexible spaces for focused work, balancing privacy, and connectivity. The need for flexibility is similar to the study by Quito, 2022. Participants desired spaces fostering community building and social connections, sensory reminders for stress management, and short periods of focused work. The importance of learning spaces and physical well-being spaces was also highlighted. Some participants questioned the role of space in enhancing psychological safety and promoting social networking, arguing these depend more on people and teams. However, others suggested fun areas for informal connection could foster togetherness.

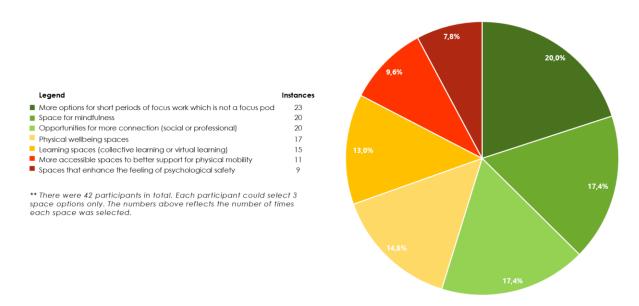


Figure 4.9. Do any of the new spaces suggested support an improvement to the existing spaces to make it more user friendly?

Figure 4.10 shows a significant preference (23,3%) for quiet spaces facilitating individual mindfulness practices emerged, highlighting the need for mental well-being activities as with the study from Keh, 2022. A moderate interest (8,9%) in counselling spaces, both in-person and virtual, underscores the necessity for workplace mental health resources, with privacy considerations (Cook and Malloy, 2014). A similar preference (8,9%) for collective mindfulness spaces indicates the value of group activities. The strong preference for time-out (28,9%) and social spaces (30%) suggests the importance of relaxation, rejuvenation, and social connection. This is also validated by both Simões, 2022 and Weir, 2023).

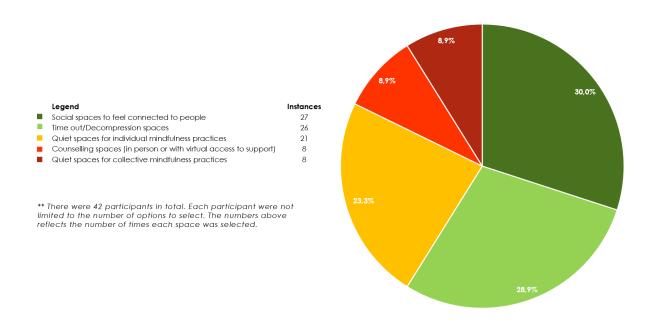


Figure 4.10. What characteristics do you think a space should have to provide support for mental health?

For physical wellness, Figure 4.11 shows a moderate interest (15,6%) in massage and therapy rooms indicate value of stress-relief spaces. High interest in power nap spaces (25%), highlight the importance of rest and rejuvenation as with the article by Ryall, 2023. A strong preference for natural light (27,1%) underscores its role in promoting well-being corelating with Meister, 2018. The highest preference was for biophilic areas (30,2%), reflecting the importance of natural elements (Colenberg, 2019). There was a moderate interest (17,7%) in wellness programs also suggests some value for physical activity and social interaction.

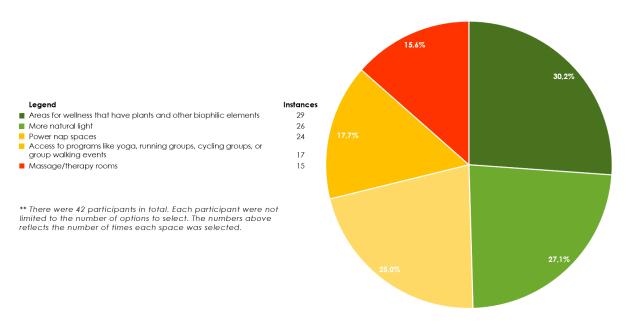


Figure 4.11. What kind of spaces would support health and well-being and what elements do you think these would consider?

In summary, Table 4.1 is a Likert scale (<u>Boone & Boone, 2012</u>) that consolidates the five metrics identified in Chapter 4.2. The responses collected in the survey were used to plot the scoring on the Likert Scale. It suggests a sense of comfort with the Smart Working Plus model, however there were also defined responses for the shift towards a more human centric and human context workplace approach. The results provided adequate signals that the development of a context based approach would better accommodate the diverse needs and preferences of employees within a global organisation, prioritising human context and well-being, accommodating diverse needs and inclusion, and aligning with global people agendas, business objectives and value alignment. However, there was juxtaposition between the desire for a more human-centric workplace model and discomfort with the unknown of moving away

from Smart Working Plus (<u>König and Neumayr, 2017</u>). The Likert Scale representation for the survey responses are as follows:

Table 4.1. Likert Scale: Survey results

SURVEYS			Ro	ating Sco	ile		
Metrics	-3	-2	-1	0	1	2	3
Effectiveness of current activity based working (ABW) model							
Can there be improvements to the current status quo?							
Global organisation's (Gender) - Current model satisfaction							
Global organisation's (Gender) - Need for a polycontextual approach							
Global organisation's (Generation) - Current model satisfaction							
Global organisation's (Generation) - Need for a polycontextual approach							
Global organisation's (Location) - Current model satisfaction							
Global organisation's (Location) - Need for a polycontextual approach							
The need for sensory processing improvements							
The need for more connection							
Mental Wellbeing incorporated in the workplace							
Physical Wellness incorporated in the workplace							
Could the Polycontextual model support in creating more people centric spaces?							

# 4.3 Leadership interviews

Interviews with participants in leadership positions were conducted in person and virtually, with participants located in the same regions as the users from the survey. Please see the interview question in Appendix B. For the interviews, participants were asked questions related to the Smart Working Plus workplace model that is implemented throughout the organisation in alignment with the questions asked in the survey. These questions were open text questions to get a qualitative view to understand if there were alignments or differences in requirements from leaders and

other participants. Please see the raw data for the survey outcomes in Appendix G and the analysis on the interviews in Appendix H.

The outcome of the interviews offers a comprehensive analysis of leaders perspectives on the Smart Working Plus model and the consideration toward a proposed new model prioritising employees contextual need. The leaders who were from diverse cultural backgrounds, provided insights into the strengths and limitations of the Smart Working Plus model and the potential benefits and challenges of the new human-centric model.

In the Likert Scale (<u>Boone & Boone, 2012</u>) in Table 4.2 below, the leaders appreciated the Smart Working Plus model for its flexibility and interaction opportunities, which foster a dynamic work culture. However, they also identified areas for improvement, such as the need for more confidential spaces, open spaces for team collaboration, and social spaces to build community. They also emphasised the importance of trust, communication, and visibility in the model, noting that these aspects' effectiveness depends on team dynamics and leadership style. The leaders also highlighted the need for the model to address diverse needs and promote inclusion in the workplace.

The leaders perspective corroborates that the potential of a new model prioritising employee well-being would benefit both the business and its employees. They acknowledged the importance of sensory processing in the workplace, suggesting the new model should consider elements like natural light, sound management, and outside views. They also recognised the role of the workplace in promoting mental health and physical wellness, suggesting the new model should support these elements. The leaders inclusive leadership style aligns with the move towards a more human-centric model, and they believe the new model should support this style and promote an open and inclusive environment. The leaders cultural backgrounds and generational differences influenced their perspectives on both models. For instance, the Argentinian leader's appreciation for community and connection, the German leader's emphasis on work-life balance, the Turkish leader's understanding of cultural differences, the Italian leader's experience working in Shanghai, and the French leader's Generation Y background all shaped their views. These differences highlight the importance of considering diversity and inclusion in workplace model design.

These outcomes were considered in the creation of the spaces that are part of the spaces in the draft PCW model that was used in the corroboration workshop.

Just as with the survey, there was juxtaposition between the desire for a more human-centric workplace model and discomfort with the unknown of moving away from Smart Working Plus (König and Neumayr, 2017). It was advocated, during conversations with the leaders, that with change that is very impactful as with the PCW model, it is critical to implement a robust change management program to ensure the smooth transition (Payne et al, 2023). The Likert Scale representation for the interviews are:

Table 4.2. Likert Scale: Interview results

INTERVIEWS			R	ating Sco	ale		
Metrics	-3	-2	-1	0	1	2	3
Effectiveness of current activity based working (ABW) model							
Can there be improvements to the current status quo?							
Global organisation's (Gender) - Current model satisfaction							
Global organisation's (Gender) - Need for a polycontextual approach							
Global organisation's (Generation) - Current model satisfaction							
Global organisation's (Generation) - Need for a polycontextual approach							
Global organisation's (Location) - Current model satisfaction							
Global organisation's (Location) - Need for a polycontextual approach							
The need for sensory processing improvements							
The need for more connection							
Mental Wellbeing incorporated in the workplace							
Physical Wellness incorporated in the workplace							
Could the Polycontextual model support in creating more people centric spaces?							

With a rich qualitative data set, the analysis below further describes outcomes, that are worth noting, from the leadership interviews that may not be captured in the Likert scale.

#### Flexibility and Interaction

The Smart Working Plus model, as evidenced by the diverse perspectives of the leaders interviewed, is widely appreciated for its flexibility and the opportunities it provides for increased interaction (Bal and Izak, 2020). The leaders, with backgrounds from diverse cultures such as Argentina, Germany, Turkey, Italy, and France, value the model's provision of a variety of spaces. This variety allows them to choose a space that aligns with their work needs, thereby fostering a sense of autonomy and control over their work environment. This flexibility, as the leaders suggest, is instrumental in facilitating a dynamic and adaptable work culture, which is increasingly becoming a necessity in the contemporary globalised work landscape.

# **Need for Improvement**

Despite the numerous benefits associated with the Smart Working Plus model, the leaders identified several areas that require improvement. They noted the need for more confidential spaces, which are crucial for sensitive work that requires privacy. They also highlighted the need for more open spaces that facilitate team collaboration, as well as additional breakout or social spaces that can foster informal interactions and build a sense of community among employees. Furthermore, the leaders suggested that the model could be improved by offering more choices of spaces to accommodate diverse work styles and tasks, thereby catering to the diverse needs and preferences of the workforce.

# Trust, Communication, and Visibility

Trust, communication, and visibility emerged as key themes in the leader's perspectives on the Smart Working Plus model. The leaders believe that the model supports these elements to some extent but could be improved. They suggest that the model's open design and flexible spaces can foster an environment of trust and facilitate communication (<u>Fischer and Walker, 2022</u>). However, they also note that the

effectiveness of these aspects is heavily dependent on team dynamics and leadership style, indicating that the human elements within the workplace play a crucial role in realising the potential of the model.

#### **Diverse Needs and Inclusion**

The leaders emphasised the importance of addressing diverse needs and promoting inclusion in the workplace for a global organisation (Dixon-Fyle et al., 2020). They suggested that the Smart Working Plus model should consider the diverse character traits and behaviours that influence how people work. This recognition of diversity and inclusion is crucial in the contemporary globalised work landscape, where workforces are increasingly becoming diverse in terms of nationality, gender, age, and other demographic factors.

# **Positive Perspective**

All leaders expressed a positive perspective on the potential for a new human-centric workplace model. They believe that such a model, which prioritises the needs and well-being of employees, would be more beneficial for the business and its employees. This perspective aligns with the growing recognition in organisational studies that human-centric models, which prioritise employee well-being and satisfaction, can enhance organisational performance and productivity (Leka and Nicholson, 2019).

#### **Sensory Processing**

The leaders acknowledged the importance of sensory processing in the workplace (Häne and Windlinger, 2022). They suggested that the new model should consider elements such as natural light, sound management, and views to the outside. This recognition of the role of sensory processing in shaping the workplace experience aligns with the growing body of research in environmental psychology that highlights the impact of the physical environment on employee well-being and productivity.

#### Mental Health and Physical Wellness

The leaders recognised the importance of mental health and physical wellness in the workplace (Forooraghi et al., 2020). They suggested that the new model should support these elements, for example, by providing spaces for relaxation and physical activity. This recognition of the role of the workplace in promoting mental health and physical wellness aligns with the growing recognition in organisational studies of the importance of employee well-being for organisational performance and productivity.

# **Leadership Style and Inclusion**

The leaders' leadership style, which values trust, communication, visibility, and inclusion, aligns with the move towards a more human-centric model. They believe that the new model should support this leadership style and promote an open and inclusive environment (Ashikali et al., 2020). This perspective aligns with the growing body of research in leadership studies that highlights the effectiveness of inclusive and participatory leadership styles in enhancing team performance and employee satisfaction.

# Cultural Background and Generational Differences

The leader's cultural background and generational differences influence their perspectives on the Smart Working Plus model and the proposed new model (Farndale et al., 2015). For instance, the Argentinian leader's Latin American background may contribute to her appreciation for community and connection, as well as her preference for green spaces and outdoor integration. The German leader's location in a country known for its strong labour rights and emphasis on work-life balance may shape her views on the Smart Working Plus model. The Turkish leader's international experience may influence his understanding of cultural differences and diverse needs across locations. The Italian leader's experience working in Shanghai may shape his views on the Smart Working Plus model, particularly in terms of cultural differences in work habits. The French leader's Generation Y background may make him more receptive to flexible and innovative workplace models. These cultural and generational differences highlight the importance of considering diversity and inclusion in the design of workplace models.

#### 4.4 Workshop

Following the survey and leadership interview assessment, a collaboration workshop was conducted to present the outcomes of the survey and interviews, a workshop was coordinated with a sample on participants which included participants that were part of the survey and the interviews. Some of the participants did not participate in both the survey and interview and were intentionally included in the workshop following the research principles of respondent corroboration. This is a process where researchers return to their participants to check the accuracy of their findings and involve new participants in the corroboration phase (Birt et al., 2016).

The benefits of corroboration with the approach is that:

- New participants can bring fresh perspectives and ideas to the table. They might see things that the original participants overlooked or took for granted. This can lead to new insights and improvements in the research outcomes.
- Since these new participants were not involved in the initial stages of the research, they are likely to be less biased. They can provide an objective review of the research outcomes, which can help to identify any potential flaws or biases in the study.
- Including new participants in the corroboration process can increase the validity
  of the research outcomes. If these new participants agree with the findings of the
  research, it adds more weight to the results. Conversely, if they disagree, it can
  highlight areas where the research may need to be refined.
- New participants might represent different demographics or groups that were not included in the original study. This can make the research outcomes more applicable and relevant to a wider audience.
- The involvement of new participants in the corroboration process can enhance the credibility of the research. It shows that the researchers are open to scrutiny and are committed to ensuring the accuracy and reliability of their findings.

The workshop incorporated both the original survey and interview participants, and new participants, adhering to the principles of respondent corroboration (Birt et al., 2016). A draft version of the PCW model was presented to participants for corroboration. Feedback was collected using Slido (see Appendix K for Slido results), which is an online platform for audience interaction. From the workshop outcomes, a Likert scale was composed (See Table 4.3) and corroborated the five distinct 'space

archetypes' have been created for the PCW model. The results are explored and discussed in-depth in Chapter 5.

Table 4.3. Likert Scale: Workshop results

WORKSHOP	Rating Scale							
	-2	-1	0	1	2	3		
Continued value of SWP modules for a people centric work style				I				
a. Co Working								
b. Focus Pods								
c. Traditional Meeting rooms								
d. Retreat								
e. Multi Space								
SWP model vs Polycontextual								
Polycontextual workplace model improves upon the SWP models								
Limitations of the SWP model compared to the proposed model								
SWP module/s are still relevant in today's evolving work environment?								
Global Organisations (Geographical, Gender, Generation)				1				
Proposed refinements for the polycontextual workplace model to accommodate the preferences of different geographical locations								
nput to ensure the model is inclusive and supportive of all genders								
Catering to the varying work styles and preferences of different generations?								
Connection								
Features of the polycontextual model effectively foster connection and collaboration among employees								
Enhancement of the "Inclusive Spaces" promote better team nteraction and connection								
ncorporation of additional tools into the model to support remote or virtual connection								
Sensory Processing								
Differentiation in zones will support sensory processing needs								
nclude additional features to better cater to sensory seeking or sensory avoidance needs								
Additional requirements to implement to ensure that the Polycontextual model is responsive and adaptable to the sensory needs of all employees								
Mental Wellbeing					1			
mpact of the polycontextual workplace model on employee mental health as Positive or Negative								
Additional resources or support systems could be incorporated nto the model to enhance mental health support								
nterventions required over and above space to promotes mental health								
Physical Wellness				1				
Any additional features that could enhance the polycontextual model should to promote physical wellbeing								
Specific physical facilities to better support employee physical health and wellbeing								

Polycontextual workplaces feedback		•		
Space suites of the polycontextual workplace exceed SWP promoting a positive work environment				
Opportunities for refinement in the polycontextual model				
Polycontextual model balance between collaboration and individual work could be more attractive				
Potential challenges or obstacles in implementing this model				
Preferred model for Diversity, Equity, and Inclusion				
Would the SWP model more suitable to advance Diversity Equity and Inclusion?				
Would the Polycontextual model more suitable to advance Diversity Equity and Inclusion?				

#### **CHAPTER FIVE: DISCUSSIONS**

#### 5.1 Introduction

The participants identified potential challenges in implementing the PCW model (see Figure 5.1), including resistance to change, cost considerations, and acceptance of the model. There were debates during the workshop with discussion how the effect of a traditional company culture and the resistance with moving from traditional office to Smart Working Plus were hugely significant factors that drove this resistance further. However, it was validated that effective and continuous change management strategies would support employees to adapt better when implementing the PCW model. When asked to choose between the PCW model and Smart Working Plus for more human centricity and Diversity Equity and Inclusion, the participants preferred the PCW model suggesting a recognition of the PCW models potential in promoting and advancing the human-centricity and inclusive work environments required in a hybrid, post COVID workplace.

The corroboration workshop revealed an overall preference for the PCW Model over the Smart Working Plus model. The participants responses underscored the need for the workplace model to be holistic, adaptive, inclusive, and responsive to the evolving needs of the modern workforce. However, they also highlighted potential challenges in implementing such models, underscoring the need for effective change management strategies and strong leadership support to ensure that if the model is implemented it is successful.

The 'space archetypes' are:

#### **Inclusive Spaces**

Inclusive spaces are designed to foster teamwork and interaction among employees, thereby nurturing a sense of inclusion and integration within the organisation. These spaces are technologically enabled collective areas that facilitate language translation in a global organisation, thereby promoting cross-cultural communication and collaboration. Functionally, these spaces are conducive to brainstorming, group discussions, and problem-solving, thereby fostering a culture of collective intelligence and innovation.

#### **Diverse Spaces**

Diverse spaces, as the name suggests, are multifunctional areas that can be adapted for various purposes. These spaces reflect the value of differentiation in the workplace, offering a range of unique contexts such as prayer rooms, mothers rooms, sleep pods, sensory seeking, and sensory avoidance spaces. Functionally, these spaces can transform into small format hybrid meeting rooms or working cafes, thereby providing versatility and adaptability in the workplace.

# **Equitable Spaces**

Equitable spaces are designed to promote equal access to resources, visibility, and opportunities for all employees. This supports the principle of equity and equality in the work environment. Contextually, these spaces offer mindfulness areas, meditation pods, psychological safety zones, and internal gardens or green spaces. Functionally, these spaces can serve as Co Working spaces, Focus Pods, or Traditional and Creative meeting areas, thereby promoting a culture of fairness and inclusivity.

#### **Accessible Spaces**

Accessible spaces ensure that the office environment is adaptable and accessible to everyone, including employees with disabilities or special needs. Contextually, these spaces include Snoezelen rooms, popup stores/providers, grocery collection points, support animal spaces in offices, and wellness rooms. Functionally, these spaces can serve as Retreat or coffee spaces, thereby ensuring a work-life integration that is inclusive and accommodating.

# **Leverage Spaces**

Leverage spaces are designed to support learning, skill development, and knowledge sharing, either synchronously or asynchronously. These areas also enable leaders to mentor and develop their teams. Contextually, these spaces include virtual learning pods or rooms, mentoring 1:1 rooms, and binaural beats pods. Functionally, these spaces can transform into training rooms that are flexible enough to change into brainstorming or Creative Meeting rooms, thereby fostering a culture of continuous learning and development.

The PCW model proposes a holistic approach to a post COVID and hybrid working environment with innovative workplace design. By integrating context-based design with elements of activity-based working, this model offers a diverse range of spaces that cater to various work-related activities and employee needs, thereby fostering a culture of inclusivity, adaptability, and continuous learning. These outcomes are aligned with the literature review outcomes in Chapter 2.

The participants responses from the workshop provided rich insights, revealing the perceived strengths, weaknesses, and areas of improvement for both the Smart Working Plus and the PCW models. The participants valuation of the Smart Working Plus spaces revealed a distinct preference for Co-Working spaces (73%), Retreat (55%), and Multi Space (45%). This suggests an inclination towards spaces that foster collaboration, connection, and versatility. However, the lower valuation of Traditional Meeting Rooms and Focus Pods indicated a potential disconnect between the individualistic design of these spaces and the evolving needs of the modern workforce as these spaces where also deemed to be required to continue with operational activities while at the office.

The participants perceived the PCW model as a significant improvement over the Smart Working Plus model. The PCW model's emphasis on employee well-being, introduction of new categories of spaces, and increased flexibility were lauded. This suggests a growing recognition of the importance of holistic, adaptive, and diverse workplaces in enhancing employee satisfaction and productivity in the office as opposed to only accommodating for activities. The critique of the Smart Working Plus model was multifaceted, encompassing issues of identity, change management, scientific basis, and lack of innovation. The participants responses underscore the need for spaces in the workplace that are not only functional but also provide for and foster a sense of belonging, are responsive to change, are underpinned by empirical evidence, and are forward-thinking. Despite its perceived limitations, the participants acknowledged the continued relevance of all Smart Working Plus modules, albeit with different balances for different groups. This highlights the need for a more balanced workplace model that caters to a spectrum of people, work styles, and preferences. This is also aligned to the literature review analysis for the DEI metrics in Chapter 2.

The participants agreed that the PCW model more suitable for different geographical locations. These included cultural adaptations and improved amenities which could be religious differences, connection and collaboration styles and even sensory avoidance or sensory seeking acceptance or needs within different cultures. This underscores the importance of contextualising modern workplace models to better accommodate local cultures and preferences. The participants proposed several measures, to supplement the model makeup and to enhance gender inclusivity in the PCW model, such as gender-neutral toilets and free menstruation products. This reflects a growing awareness of the need for the workplace to be sensitive to genderspecific needs and to promote gender equity. The participants believed that the PCW model is sufficiently individualistic to cater to all generations. However, they suggested further adaptations, such as the inclusion of digital mobile applications and even and area for social (audio or video) content design, highlighting the need for workplace model to be responsive to the evolving digital landscape. Here the digital nature of the workplace could play a role in being a generation levelling tool giving access to all generations to adopt creating a platform for everyone to connect more and efficiently.

Accessible Spaces and Diverse Spaces in the PCW model were identified as key in the advocacy for the different needs supporting a sample of employees that were potentially not considered with Smart Working Plus. This underscores the importance of designing workspaces that are inclusive and diverse to foster a sense of community and collaboration. The participants also proposed several technological tools, including 3D cameras, virtual reality, and simultaneous language translation tools, to enhance remote or virtual connections in the PCW model. This highlights the need for workplace models to be responsive to the high expectation and growing mandatory trend of remote and virtual work. Participants believed that differentiation in zones in the PCW model would support sensory processing needs. Providing the opportunity for dedicated zones suggests the recognition of the importance of sensory experiences in shaping employee well-being and productivity and even the drive for employees to be on site more often. The positive impact on employee mental health with access to Equitable Spaces, underscores the importance of designing workspaces that promote mental health. The need for the workplace to provide opportunities and facilities for employees to have the option to practice mindfulness and have spaces for psychological safety are very received. With all the awareness

of mental health and more open conversation on these topics, these facilities are becoming more of a necessity rather than nice to haves. Similarly, participants suggested several resources and facilities, such as gym programs and healthy food, to promote physical well-being in the PCW model and also confirm that maintain a balance of mental health and physical health as a key component of positive employee experience.

#### The Polycontextual Workplace Accessible Spaces Inclusive Spaces Diverse Spaces Equitable Spaces Leverage Spaces Inclusive spaces **Diverse spaces** are Equitable spaces Accessible spaces Leverage spaces multifunctional and support learning, skill promote equal ensure that the encourage teamwork and provide versatile access to resources, office environment is development, and interaction among areas that can be visibility, and adaptable & knowledge sharing Description employees. These adapted for various opportunities for all accessible to either synchronously areas fostering a purposes. These employees everyone, including or asynchronously. sense of inclusion spaces reflect the supporting the employees with These areas also and integration value of principle of equity disabilities or special enable leaders to within the differentiation in the and equality in the needs and the mentoring and work environment. availability of developing their organisation. workplace. work/life integration teams. spaces. Context: Context: Context: Context: Context: Virtual learning pods or Mindfulness/Meditation Technology enabled Prayer rooms/Mothers Snoezelen rooms, mentoring 1:1 collective spaces that rooms/ Sleep pods pods/Psychological rooms/popup Space options rooms/Binaural beats could help language /Sensory seeking/ safety/Internal stores/providers/Groce pods translation in a global Sensory avoidance Gardens or green ry collection/Support organisation. spaces spaces animal spaces in **Functional**: offices/Wellness rooms Training rooms that are Functional: Functional: Functional: flexible to change to Brainstorming, Group Small format hybrid Co Working spaces, Functional: brainstorming or discussions, and meeting rooms/ Focus pods, traditional Retreat or Coffee creative meeting problem-solving Workina cafe and creative meetinas spaces

Figure 5.1. The "Polycontextual Workplace" (PCW) Model

#### 5.2 Expected results

Below are initial expected results and can be elaborated on as follows:

# 5.2.1 Model Development of the "Polycontextual Workplace" (PCW)

The PCW model (see Figure 5.1) is a novel approach to workplace strategy and design that considers the various contexts in which users work in a physical office space. Unlike traditional activity-based models, which focus on specific activities only, the PCW model also considers human context which include the physical environment, social interactions, individual needs, and preferences and mental health & well-being.

The PCW model development is expected to provide a new perspective on workplace strategy and design, offering a more holistic understanding of the workplace. It recognises that work is not just about completing tasks, but also about interacting with others, the diverse needs of employees in a global organisation, adapting to changing environments, and balancing personal and professional needs. This context based approach can lead to more flexible and adaptable workplaces, which can better accommodate the preferences of employees and in turn support a high performing organisation (Farndale et al., 2015).

# 5.2.2 Diversity, Equity, and Inclusion

The PCW model proposes to advance diversity, equity, and inclusion in the workplace. By considering the broader context of work, this model can help to create globally accessible space archetypes that are more inclusive and equitable.

For example, by recognising the diverse needs, diverse cultures, and preferences of employees, the PCW model can help to ensure that all employees have access to spaces in an office space that can provide equal opportunities to succeed, regardless of their background, differences, or circumstances. This could, after a prolonged implementation and an operational period, be measured through qualitative indicators such as improved representation of diverse groups, reduced disparities in opportunities and outcomes, and increased inclusivity in workplace culture (McCleary-Gaddy, A. 2019). By providing for this, the PCW model can help to

accommodate more users with diverse needs and their varying preferences, which can support a more inclusive and equitable workplace.

## 5.3 Practical implications

The PCW model has several practical implications for businesses and organisations. By promoting a more flexible and adaptable workplace, this model can lead to changes in physical workplace design, management strategies, and employee engagement practices.

For example, in terms of workplace design, the PCW model could lead to more flexible and adaptable workplaces, which can better accommodate a larger variety of employee needs and preferences. This could include a mix of private and communal spaces, flexible seating arrangements, a higher array of different zones, more green spaces and purposefully created spaces that support mental health and well-being. Additionally, the development of training programs could be envisaged to facilitate the adoption of this model, equipping workplace managers with the necessary skills and knowledge to support users in the new environment. Acknowledging the high value of change management for user acceptance, a robust change management program (Payne et al, 2023) is a vital component in workplace strategy and design. It helps to ensure seamless transitions to new thinking, minimising disruptions to achieve acceptance and positive morale amongst users. By involving employees in the process and effectively communicating the benefits of the change, it helps mitigate resistance. Furthermore, it plays a crucial role in maximising the benefits of new workplace model by monitoring the implementation process and addressing any arising issues, fostering a culture of continuous improvement. Through effective change management, there could be better alignment with the organisation's broader strategic goals, ensuring that the workplace effectively supports the organisation's mission and objectives.

In terms of management strategies, the PCW model could lead to more flexible and adaptable management practices, which can better accommodate the diverse needs and preferences of employees. This could include flexible working hours, hybrid

working options, and more personalised individual support and development opportunities.

In terms of employee engagement, the PCW model could lead to more inclusive and equitable engagement practices, which can better accommodate the diverse needs and preferences of employees in a global organisation. This could include inclusive communication practices, equitable recognition and reward systems, and inclusive decision-making processes.

The preliminary findings can be expanded on under the following headings:

#### 5.3.1 Initial Data

The initial data explores the potential for the development required from the Smart Working Plus model activity-based model to the PCW model. The study included diverse participants to capture a wide range of experiences with activity-based working. The survey and interviews revealed both benefits and challenges of Smart Working Plus. Participants appreciated the model's flexibility, but desired more human-centric office spaces and faced difficulties with collaboration and communication with 20% of participants in the survey requesting more spaces for focus, 17,4% requesting spaces for mindfulness and 17,4% requesting more opportunities for connection that is both social and professional (See Figure 4.9). The analysis and communication of the data can be observed in Table 4.1 and Table 4.2.

Workshop results indicated that even with successful activity-based working implementation, employee resistance could arise due to insufficient zoning for different human contexts. The findings suggest that while activity-based working has its advantages, it also presents challenges (See Table 4.3). Transitioning to a context based model would still necessitate addressing individual and collective needs and providing adequate support and resources.

Figure 5.2 below, serves to provide an understanding of zoning for Smart Working Plus. The zones in the Smart are categorised and described as follows:

Public Zone: Public facing areas to engage with externals and cross functional group securely and professionally. Certain spaces could have accessed by invitation. Shared Zone: Spaces that foster collaboration. They allow for more flexibility, social and collaborative work. This is the link between different homebases if applicable Community Zone: Spaces where teams will generally work on their daily activities. These spaces will be a combination of individual and collaborative space modules.

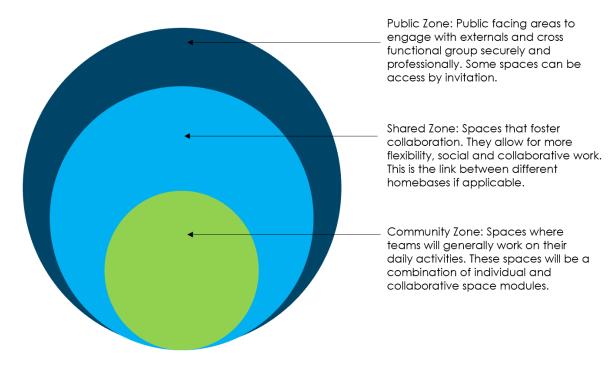


Figure 5.2. Smart Working Plus Zones

With the feedback from the participants, Figure 5.3 shows an additional zone which was amalgamated into the Smart Working Plus zoning to supplement the value in the PCW model. This zones is called the Context Zone. The Context Zone is a unique zone in the model designed to foster DEI while nurturing human centricity in the office. This is not just a physical space, but a zone that promotes personal growth, well-being, and a sense of safety.

The Context Zone is a dedicated area that fosters learning, mentorship, sensory processing (avoidance or seeking), psychological safety, wellness, and mental wellbeing. It's a place where you can step away from your usual work routine, engage in meaningful conversations, learn new skills, and focus on your mental health and wellness.

The Context Zone offers numerous benefits that can significantly enhance the workplace environment. By promoting Diversity, Equity, and Inclusion, the zoning ensures that all employees feel valued and included, fostering a more harmonious and collaborative work culture. This zone supports personal growth by providing opportunities for learning and mentorship, allowing employees to develop new skills and advance their careers. With a focus on mental health and wellness, the Context Zone offers a safe space for employees to take breaks, engage in sensory processing activities, and focus on their psychological safety. It encourages meaningful interactions by facilitating conversations and connections among employees, strengthening team bonds, and improving communication (Abrahams, J. and Von Frank, V., 2013). Additionally, by providing a dedicated area for relaxation and mental rejuvenation, employees can return to their tasks with renewed energy and focus, leading to increased productivity (Akksilp et al., 2023). Overall, the Context Zone nurtures human-centric values in the workplace, ensuring that employees' needs and well-being are prioritised, contributing to a more inclusive, supportive, and productive environment.

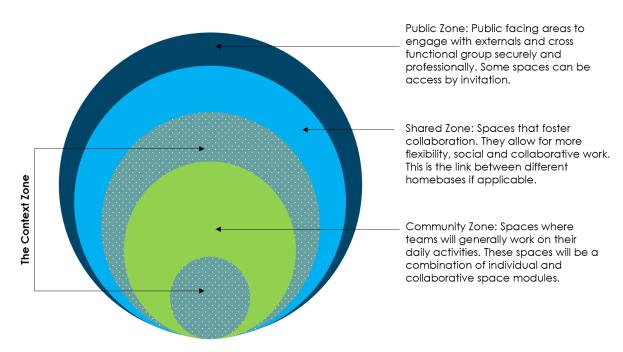


Figure 5.3. The "Polycontextual Workplace" (PCW) model Zones

Further to the Smart working Plus zoning model and the PCW zoning model, a zoning diagram was developed to demonstrate how a typical workplace could be arranged

with both a Smart working Plus model and the PCW model. Firstly, the Smart Working Plus zoning diagram, as seen in Figure 5.4 below, is aligned with the Smart Working Plus zones in Figure 5.2.

The Smart Working Plus zoning diagram is designed to optimise the functionality and accessibility of various workplace areas. In the Public Zone, the reception, luggage storage lockers, and working lounges are strategically placed to ensure easy access for all visitors and employees, fostering a welcoming environment and facilitating informal networking. However, the high foot traffic in this zone may lead to increased noise levels and necessitate enhanced security measures. The Shared Public Zone, which includes technology support, furniture storage, and public-facing meeting rooms, offers quick technical assistance and flexible space reconfiguration, enhancing productivity and presenting a professional image for client interactions. Nonetheless, the storage space may limit other uses, and public-facing meeting rooms might lack the privacy needed for confidential discussions.

The canteen or cafeteria, located in the Shared Zone (Public/Internal), serves as a central hub for social interaction and relaxation, promoting employee well-being. However, it can generate noise and odours that may affect nearby work areas and become crowded during peak times. The Shared Zone (Internal) hosts essential support services such as print rooms, wellness rooms, showers, changing rooms, multifaith rooms, and traditional meeting rooms. These facilities support employee health, inclusivity, and productivity but require significant space and regular maintenance.

In the Community Zone, small and medium meeting rooms, focus pods, library spaces, storage for filing, coworking spaces, working lounges, and creative meeting spaces are designed to foster collaboration and provide quiet areas for focused work. Balancing the allocation of space between collaborative and quiet areas can be challenging, and ensuring all areas are adequately equipped and maintained requires careful planning. Overall, the zoning diagram places each space in the most suitable zone to enhance accessibility, productivity, and employee well-being.

While the Smart Working Plus zoning design offers many benefits, there are potential drawbacks to consider. The high foot traffic in the Public Zone can lead to increased noise levels, potentially disrupting nearby work areas and necessitating enhanced security measures. The allocation of space for furniture storage in the Shared Public Zone might limit the availability of other functional areas. Public-facing meeting rooms may lack the privacy needed for confidential discussions. The canteen or cafeteria, while promoting social interaction, can generate noise and odours that affect adjacent workspaces and become crowded during peak times. The Shared Zone (Internal) facilities, such as wellness rooms and showers, require significant space and regular maintenance, which can be resource intensive. Balancing the allocation of space between collaborative and quiet areas in the Community Zone can be challenging, and ensuring all areas are adequately equipped and maintained requires careful planning. Addressing these potential drawbacks is crucial for creating a well-rounded and effective workplace design.

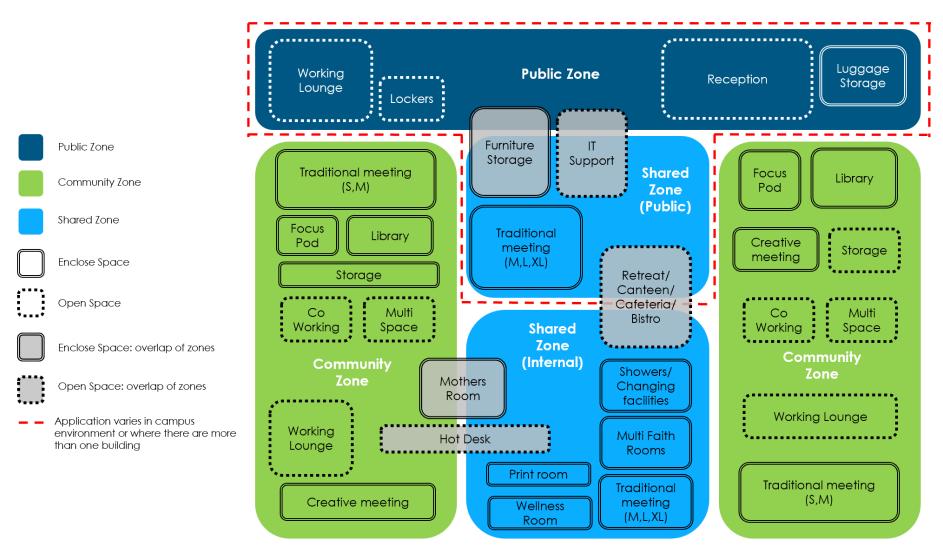


Figure 5.4. The Smart Working Plus Zoning diagram

The PCW model in Figure 5.1 and the zones in Figure 5.3 are aligned with the zoning diagram in Figure 5.5. The PCW model is designed to be flexible, allowing for minor adjustments to suit the needs of any organisation. Similarly to the Smart Working Plus zoning, it also includes the Public, Shared (internal and public) zones, Community Zone, but with an additional Context Zone. The Public Zone, similar to the Smart Working Plus model, includes reception, luggage storage lockers, and working lounges, ensuring accessibility and a welcoming environment. The Shared Public Zone hosts IT support, furniture storage, and public-facing meeting rooms, providing quick technical assistance and flexible space reconfiguration. The Shared Zone (Public/Internal) features a centrally located canteen or cafeteria, promoting social interaction and employee well-being. The Shared Zone (Internal) includes print rooms, wellness rooms, showers, changing rooms, multifaith rooms, and traditional meeting rooms, supporting employee health, inclusivity, and productivity. The Community Zone offers meeting rooms, focus pods, library spaces, storage for filing, coworking spaces, working lounges, and creative meeting spaces, fostering collaboration and focused work.

The Context Zone is a unique addition that significantly enhances the workplace environment by promoting Diversity, Equity, and Inclusion. This zone ensures that all employees feel valued and included, fostering a harmonious and collaborative work culture. It supports personal growth by providing opportunities for learning and mentorship, allowing employees to develop new skills and advance their careers. With a focus on mental health and wellness, the Context Zone offers a safe space for employees to take breaks, engage in sensory processing activities, and focus on their psychological safety. It encourages meaningful interactions by facilitating conversations and connections among employees, strengthening team bonds, and improving communication. Additionally, by providing a dedicated area for relaxation and mental rejuvenation, employees can return to their tasks with renewed energy and focus, leading to increased productivity. The space archetypes within the Context Zone i.e. Inclusive Spaces, Diverse Spaces, Equitable Spaces, Accessible Spaces, and Leverage Spaces ensure inclusivity, diversity, equity, accessibility, and continuous learning and development. Overall, the PCW model creates a dynamic and adaptable workplace that meets diverse employee needs, fostering a productive, inclusive, and collaborative atmosphere.

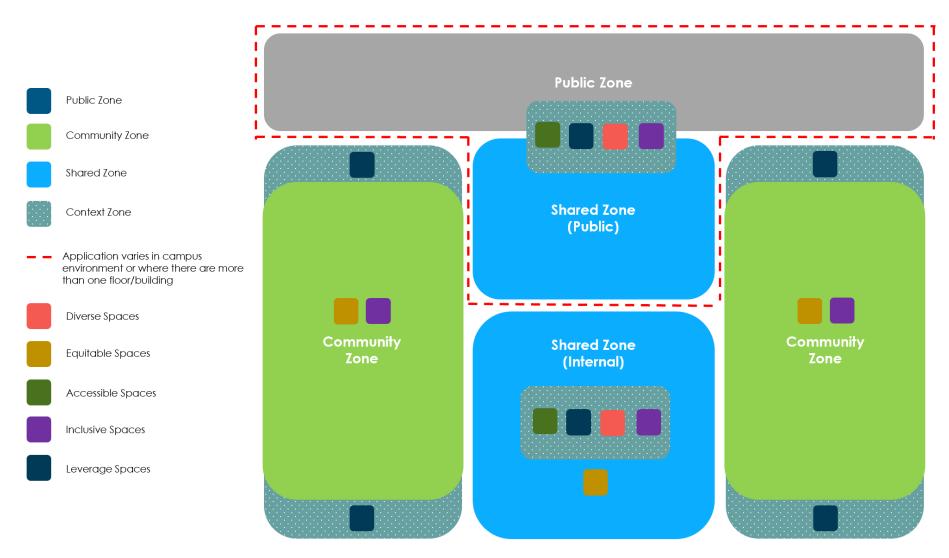


Figure 5.5. "The Polycontextual Workplace" (PCW) Zoning diagram

# **5.3.2 Emerging Trends**

There was a clear correlation between the implementation of a context-based workplace model and increased levels of participant satisfaction and engagement. This may suggest that employees value the flexibility and autonomy that this type of model could provide. The data also indicated that the effectiveness of a context-based model is influenced by a range of factors, including generational differences, geographical location, gender, sensory processing, interpersonal connection, mental health, and physical well-being. This underscores the importance of considering these factors when designing and implementing a context-based workplace model. This could also be supported by a robust change management program as mentioned above.

# **5.3.3 Unexpected Findings**

One unexpected finding was that participants still requested the activity-based model be incorporated, and not totally disregarded, in the development of the PCW model so that the users that enjoyed the benefits of activity-based could still enjoy the benefits of having these types of spaces. This could have a positive variable impact of the context based model on diversity, equity, and inclusion. The data also suggested that the impact of the model on diversity, equity, and inclusion is contingent on other factors, such as the size of the organisation, the industry in which it operates and workplace culture. This highlights the need for a nuanced understanding of the context based model and its potential implications.

# 5.3.4 Implications

The preliminary findings of this research have several implications. They suggest that while the context based model can offer significant benefits, it is also not without challenges. These challenges may include the need for significant organisational change, updated management strategies, potential resistance from employees with the introduction of a new model, and the need to carefully consider a range of factors in the design and implementation of the model. Furthermore, the findings indicate that further research is needed in certain areas, particularly in relation to the long term impact of the model on diversity, equity, and inclusion and also what other

metrics could be influenced apart from the ones focused on the research. This could further unpack the complex interplay of factors that influence the effectiveness of the context based model and maximise its potential benefits while minimising its potential drawbacks.

# 5.4 The "Polycontextual Workplace" (PCW) Readiness Assessment Matrix

The PCW Readiness Assessment Matrix is a comprehensive tool designed to evaluate an organisation's preparedness to implement the PCW model, which emphasises inclusivity, diversity, and holistic employee well-being. The assessment criteria and questions were developed through analysis of the outcomes from the survey, interviews, and workshop outcomes where conversational question and comments reflected the need to understand at what level these diversity, equity, and inclusion metrics could be implemented. This approach aligned with the research from Meiboudi et al. (2016) for criteria creation for integrative assessment systems. This model recognises the multifaceted nature of modern workplaces, where factors such as gender, generational differences, geographical location, sensory processing needs, connection, mental health, and physical well-being play crucial roles in shaping the work environment. The assessment matrix was structured to capture the nuances of these dimensions through a series of targeted questions, each scored on a scale from 1 to 5. The <u>Young Entrepreneur Council</u>, <u>2020</u> article for creating a simple scoring system was used to develop the scoring structure. By aggregating the scores across seven key sections i.e. Gender, Generation, Geographical Location, Sensory Processing, Interpersonal Connection, Mental Well-being, and Physical Wellness, the tool provides a quantifiable measure of an organisation's readiness to implement the PCW model. This measure not only highlights areas of strength but also identifies opportunities for improvement, thereby guiding organisations in their journey towards creating a more inclusive, supportive, and productive workplace (Kohl, 2022). The goal of this assessment is to foster environments where all employees can thrive, irrespective of their diverse backgrounds and needs, thus driving organisational advancement and sustainability for workplace design. The Assessment Matrix is below in Table 5.1.

The readiness assessment matrix should primarily be used by real estate professionals, workplace strategy experts, and interior designers. These groups will be able to leverage crucial insights form the outputs to implement into the physical and functional aspects of the workplace, which are essential for implementing the PCW model. Additionally, the assessment should include a diverse group of stakeholders within the organisation, such as employees across various departments, roles, and levels of seniority, as well as management and team leaders to understand their views on inclusivity, diversity, and employee well-being. Human Resources professionals and Diversity and Inclusion officers should also be surveyed to provide insights into existing diversity, equity, and inclusion initiatives and areas for enhancement.

Surveying recent hires can offer fresh perspectives on the onboarding process and initial impressions of the workplace culture. Both remote and on-site workers should be included to capture the full range of experiences and challenges related to geographical location and work arrangements. Employee Resource Groups can provide specific insights into the needs and experiences of diverse employee groups. By surveying this diverse cross-section of the organisation, robust data can be gathered, using the matrix, to accurately assess readiness and identify targeted areas for improvement.

Table 5.1. "The Polycontextual Workplace" (PCW) Readiness Assessment Matrix

The "Polycontextual Workplace" (PCW) Readiness Assessment Matrix						
GENDER						
			Ratin	g		
Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
	1	2	3	4	5	
1. My organisation supports gender diversity and inclusion through the design of workspaces (e.g., gender-neutral restrooms, private spaces for nursing mothers)?						
2. There are design elements in place that address and prevent						

gender discrimination						
and harassment (e.g.,						
well-lit areas, clear						
sightlines)?						
3. My organisation						
provides equal access						
to amenities and						
facilities regardless of						
gender (e.g., locker						
rooms, wellness rooms)?						
4. My organisation						
ensures that workplace						
design supports fair and						
unbiased interaction						
and visibility (e.g.,						
inclusive meeting						
spaces)?						
5. There are support						
spaces within the						
workplace design for						
employees facing						
gender-related						
challenges (e.g.,						
confidential meeting						
rooms, retreat rooms)?						
rearris, remedi rearris):						
GENERATION						
		PENERATION				
		SENERATION	Ratin	9		
Question	Strongly	Disagree		g Agree	Strongly	
Question			Ratin		Strongly Agree	Total
Question	Strongly		Ratin		• ,	Total
·	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
Question  1. My organisation accommodates the	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
My organisation     accommodates the	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
My organisation     accommodates the     needs and preferences	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training &	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees from different	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees from different generations (e.g., techenabled rooms,	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees from different generations (e.g., techenabled rooms, collaborative spaces)?	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees from different generations (e.g., techenabled rooms, collaborative spaces)?  3. My organisation	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total
1. My organisation accommodates the needs and preferences of different generational cohorts through workspace design (e.g., flexible seating, quiet zones)?  2. Training & development spaces are designed to cater to the diverse learning styles of employees from different generations (e.g., techenabled rooms, collaborative spaces)?	Strongly	Disagree	Ratin Neutral	Agree	Agree	Total

collaboration through workplace design (e.g., open-plan areas, breakout rooms)?  4. There are design initiatives to address potential generational conflicts or misunderstandings in the workplace (e.g., spaces for informal interactions)?  5. My organisation leverages the strengths and experiences of each generational cohort through workplace design (e.g., mentorship areas)?						
Thermership dreas) :	GEOGRA	APHICAL LO	CATION			
			Rating	a		
Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
	1	2	3	4	5	
1. My organisation manages & supports employees who work in different geographical locations through workplace design (e.g., remote work setups, satellite offices, cultural nuances)?						
2. There are considered design elements and easy to use technologies in place to facilitate effective communication & collaboration among geographically dispersed teams (e.g., video conferencing rooms)?  3. My organisation understands and respects cultural differences through workplace design (e.g.,						

culturally inclusive						
spaces)?  4. There are measures in place to ensure equitable access to resources and opportunities for remote or geographically dispersed employees (e.g., shared workplaces)?  5. My organisation addresses the challenges of time zone differences in global teams through workspace design (e.g., flexible work hours, 24/7						
access, asynchronous work)?						
worky.	SENSC	ORY PROCES	SSING			
			Rating	g		
Question	Strongly Disagree	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Total
1. My organisation considers sensory processing needs when designing workspaces and environments (e.g., adjustable lighting,						
soundproof rooms)?  2. There are accommodations available for employees with sensory processing sensitivities or disorders (e.g., quiet zones, sensory-friendly areas)?  3. My organisation educates staff about sensory processing issues and promote a supportive work environment through design (e.g., informational signage)?  4. There are quiet zones						

available for employees who need them?  5. My organisation gathers feedback from employees regarding sensory processing needs and preferences to inform workplace design refinements?						
	INTERPERS	SONAL CON				
Question	Strongly Disagree	Disagree 2	Ratin Neutral	Agree	Strongly Agree	Total
1. My organisation fosters a sense of belonging and connection among employees through workplace design (e.g., communal areas, social hubs)?  2. There are initiatives in place to promote teamwork & collaboration within and across departments through workplace design (e.g., collaborative workplaces)?  3. My organisation uses technology to maintain connections among remote or hybrid workers (e.g., virtual collaboration tools)?  4. There are strategies employed to integrate new employees into the organisational culture and community through workplace design (e.g., onboarding spaces, meet & greet spaces)?  5. My organisation supports social interactions &				4		

relationship-building among employees through workplace design (e.g., break rooms, lounges)?							
MENTAL WELL-BEING							
			Ratin	g			
Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	
1. Mental health resources & support systems are available to employees within the workplace design (e.g., wellness rooms, meditation spaces)?  2. My organisation promotes awareness & reduce stigma around mental health issues through workplace design (e.g., informational displays, quiet areas)?  3. There are policies in place to ensure worklife balance & prevent burnout, supported by workplace design (e.g., flexible workspaces, rest areas)?  4. My organisation supports employees in managing stress and maintaining mental well-being through workplace design (e.g., relaxation zones)?  5. There are regular		2	3	4	5		
mental health check-ins or assessments to monitor employee well-being, facilitated by workplace design (e.g., private consultation rooms)?							

PHYSICAL WELLNESS						
			Rating	 g		
Question	Strongly Disagree	Disagree 2	Neutral 3	Agree	Strongly Agree 5	Total
1. There are initiatives in my organisation to support employees physical health and well-being through workplace design (e.g., fitness areas, ergonomic furniture consults)?  2. Wellness resources and facilities are accessible to all employees, regardless of location or work arrangement (e.g., onsite gyms, wellness				4		
rooms)?  3. My organisation regularly assesses & improves workplace safety and ergonomics (e.g., ergonomic assessments, safety audits)?  4. My organisation encourages physical						
activity & healthy lifestyle choices among employees through workplace design (e.g., standing desks, walking paths, walking paths, walking pads)?  5. There are programs or incentives in place to support employees in achieving their physical health goals, facilitated by workplace design (e.g., wellness challenges, fitness classes)?						

#### 5.4.1 Score calculation

Based on the <u>Young Entrepreneur Council</u>, <u>2020</u> article for creating a simple scoring system. The total score calculation comprises of each question with a score between from 1 to 5 and each section has five questions. Therefore, each section can have a maximum score of 25.

Considering each section the calculations are as follows:

Gender: 5 questions x 5 points = 25 points

Generation: 5 questions x 5 points = 25 points

Geographical Location: 5 questions x 5 points = 25 points

Sensory Processing: 5 questions x 5 points = 25 points

Interpersonal Connection: 5 questions x 5 points = 25 points

Mental Well-Being: 5 questions x 5 points = 25 points Physical Wellness: 5 questions x 5 points = 25 points

The total maximum score for the entire assessment is 175 points (7 sections x 25 points).

# 5.4.2 Readiness Levels

The total score from readiness assessment provides a comprehensive measure of an organisation's preparedness to implement a polycontextual model. The scoring system ranges (0-50, 51-100, 101-125, 126-175) offer a balanced distribution across the total score of 175 points, ensuring each category has a meaningful range. The foundations were drawn and adapted from behaviourally anchored rating as discussed by <u>Lubbe and Nitsche, 2019</u>. This avoids overly narrow or broad categories and allows for incremental improvement, with logical progressions between each level of readiness. The increments between categories reflect a clear distinction in readiness levels, providing actionable insights for improvement. This approach helps create a clear and understandable framework for evaluation. Additionally, the chosen limits can have a psychological impact on respondents, motivating organisations to strive for higher scores and continuous improvement. Scores of 50 or below indicate a need for significant improvement, while scores above 100 suggest higher readiness. The scoring system is flexible and adaptable to allow for adjustments based on feedback and results to better fit your assessment goals.

To determine the readiness levels, the ranges of the total scores are:

#### 0-50: Low Readiness

A score between 0-50 indicates low readiness, suggesting significant improvements are needed to support an inclusive and diverse workplace. Organisations in this range may face challenges in employee satisfaction, productivity, and retention.

#### 51-100: Moderate Readiness

A score of 51-100 reflects moderate readiness, where some areas are adequately addressed, but further enhancements are necessary to fully support a polycontextual environment.

# 101-125: High Readiness

Organisations scoring 101-125 demonstrate high readiness, indicating they are well-prepared and have many effective practices in place to foster inclusivity, well-being, and collaboration.

# 126-175: Very High Readiness

Finally, a score of 126-175 signifies very high readiness, showing that the organisation is highly prepared and already exhibits many characteristics of the PCW. These organisations are likely to experience high employee engagement, satisfaction, and overall organisational performance.

This scoring system helps organisations identify strengths and areas for improvement, guiding them towards creating a more inclusive, supportive, and productive work environment and support the advancement of Diversity, Equity and Inclusion in workplace strategy and design.

# 5.4.3 Opportunity for improvements to the score

Improving readiness scores in the PCW Readiness Assessment involves implementing targeted strategies focused on the design and physical office space. Here are some effective strategies, aligned with the metrics in the readiness assessment:

#### Gender

- 1. Inclusive Design Elements: Incorporate gender-neutral restrooms, adequate private spaces for nursing mothers, and well-lit areas with clear sightlines to ensure safety and inclusivity.
- 2. Design for Safety: Ensure that workplace design addresses and prevents gender discrimination and harassment through thoughtful layout and visibility.
- 3. Equal Access to Amenities: Provide equal access to amenities and facilities, such as standard workplaces, focus workplaces, locker rooms and wellness rooms, for all genders.
- 4. Inclusive Meeting Spaces: Design meeting spaces that support fair and unbiased usability and accessibility to equipment and furniture without the need for special interventions, ensuring inclusivity.
- 5. Supportive Spaces: Create confidential meeting rooms and other support systems within the workplace design for employees facing gender-related challenges or discrimination.

# Generation

- 1. Flexible Workplace Design: Accommodate the needs and preferences of different generational cohorts through flexible seating, furniture variety for potential mobility accommodations, quiet zones, and collaborative spaces.
- 2. Diverse Learning Environments: Design training and development spaces that cater to diverse learning styles, such as tech-enabled rooms and collaborative areas.
- 3. Intergenerational Collaboration: Encourage intergenerational collaboration through open-plan areas, breakout rooms, and mentorship spaces.
- 4. Conflict Resolution Spaces: Create informal interaction spaces to address potential generational conflicts or misunderstandings.
- 5. Leverage Generational Strengths: Design areas that leverage the strengths and experiences of each generational cohort, such as mentorship areas.

## **Geographical Location**

- 1. Hybrid Work Setups: Design hybrid work setups and workplace strategies to support employees in different geographical locations. This process needs to be a continuously iterative process and evolve as maturity of hybrid working evolves.
- 2. Collaboration Technologies: Incorporate improved video conferencing rooms and other technologies to facilitate effective communication among geographically dispersed teams.
- 3. Culturally Inclusive Spaces: Design culturally inclusive spaces that respect and celebrate cultural differences.
- 4. Equitable Access: Ensure equitable access to resources and opportunities through shared workplaces and flexible workplace design and furniture.
- 5. Time Zone Considerations: Address time zone challenges with flexible work hours and 24/7 access to workplaces and or technology.

# **Sensory Processing**

- 1. Adjustable Environments: Design workplaces with adjustable lighting, soundproof rooms/furniture solutions or areas, and flexible seating arrangements to consider sensory processing needs.
- 2. Sensory-Friendly Areas: Provide quiet zones and sensory-friendly areas for employees with sensory processing sensitivities or disorders.
- 3. Educational Signage: Use informational signage to educate staff about sensory processing issues and promote a supportive environment.
- 4. Feedback Mechanisms: Gather feedback from employees regarding sensory processing needs to inform workplace design.

#### **Interpersonal Connection**

- 1. Communal Areas: Foster a sense of belonging and connection through the design of communal areas and social hubs.
- 2. Collaborative Workplaces: Promote teamwork and collaboration with collaborative workplaces and cross-departmental areas.

- 3. Virtual Collaboration Tools: Incorporate the use virtual collaboration tools and technology to maintain connections among remote or hybrid workers in the physical workplace to enable flexibility.
- 4. Onboarding Spaces: Design onboarding spaces to integrate new employees into the organisational culture and community.
- 5. Social Interaction Spaces: Support social interactions and relationship-building with break rooms, lounges, and other social spaces.

### Mental Well-Being

- 1. Wellness Rooms: Provide wellness rooms, meditation spaces, and other mental health resources within the workplace design.
- 2. Awareness Campaigns: Promote awareness and reduce stigma around mental health issues with informational displays and quiet areas.
- 3. Flexible Workplaces: Ensure the workplace is designed for better work-life integration and prevent burnout with flexible workplaces and rest areas.
- 4. Relaxation Zones: Support stress management with relaxation zones and stress-relief areas.
- 5. Private Consultation Rooms: Facilitate regular mental health check-ins and assessments with private consultation rooms.

## **Physical Wellness**

- 1. Fitness Areas: Implement fitness areas, if possible, use ergonomic furniture as a standard, and explore the appropriate initiatives to support physical health and wellbeing within your organisational culture.
- 2. Accessible Wellness Resources: Ensure wellness resources and facilities are accessible to all employees, regardless of location or work arrangement.
- 3. Ergonomic Assessments: Regularly assess and improve workplace safety and ergonomics with ergonomic assessments and safety audits.
- 4. Encourage Activity: Design workplaces that encourage physical activity and healthy lifestyle choices, such as standing desks and walking paths.
- 5. Wellness Programs: Provide programs or incentives to support employees in achieving their physical health goals, facilitated by workplace design.

Implementing design and physical office space improvements can yield numerous benefits for an organisation. Enhanced inclusivity and diversity are achieved by incorporating inclusive design elements, making all employees feel valued and respected (Kramar, 2013). Improved employee well-being results from designing spaces that cater to sensory processing needs, mental health, and physical wellbeing, leading to reduced stress, lower absenteeism, and higher productivity. Increased collaboration and innovation are fostered through collaborative workplaces and social interaction areas, driving innovation, and improving problemsolving capabilities. Flexible workplace designs that accommodate diverse generational cohorts and geographical locations ensure that all employees have access to necessary resources, regardless of their background or work arrangement (Abrahams, J., and Von Frank, 2013). Higher employee engagement and retention are likely as a well-designed workplace supports various aspects of employee wellbeing and inclusivity, making employees more likely to stay with the organisation. Enhanced organisational reputation is achieved as organisations investing in inclusive and supportive workplace designs are seen as leaders in diversity and employee wellbeing, attracting top talent and clients. Boosted productivity is a result of addressing sensory processing needs, providing wellness resources, and creating spaces for relaxation and rejuvenation, allowing employees to maintain higher levels of focus and productivity. Finally, stronger organisational culture is built through spaces that promote connection and a sense of belonging, leading to improved morale, better communication, and a more cohesive team (O'Neill, 2010). Overall, these improvements contribute to a more inclusive, supportive, and productive work environment, benefiting both employees and the organisation as a whole.

### 5.5 Comparison with previous studies

The PCW model represents a significant advancement in contemporary workplace strategy and design thinking. This is proposed by integrating flexibility, inclusivity, and employee well-being into its core philosophy. To contextualise its contributions and understand its place within the broader landscape of workplace design research, it is essential to compare it with other notable studies in the field. Two such studies provide valuable insights: the research on the physical workplace as a resource for mental

health by <u>Gerardina and Bergefurt (2023)</u> and the study on the shifting fundamentals of pandemic-disrupted coworking environments by <u>Orel et al. (2023)</u>.

Gerardina and Bergefurt (2023) explores the physical workplace as a resource for mental health, emphasising a salutogenic approach to workplace design. This approach focuses on creating environments that promote mental well-being rather than merely preventing mental illness. The study identifies key physical workplace characteristics, such as light, noise, and air quality, that significantly impact employees' mental health. By adopting a holistic perspective, the research highlights the importance of designing workplaces that support mental health through both environmental quality and the provision of spaces that cater to diverse needs. This aligns with the PCW model's emphasis on mental health and wellness, particularly through the Context Zone, which provides dedicated areas for relaxation, sensory processing, and psychological safety. The Context Zone's design principles resonate with the findings, as both emphasise the creation of environments that actively contribute to mental well-being rather than merely mitigating negative factors.

Orel et al. (2023) study examines the impact of the COVID-19 pandemic on coworking spaces and how these environments have adapted to new challenges. The study highlights the shift towards more flexible and hybrid work arrangements, emphasising the need for coworking spaces to support both individual and collaborative work. It also underscores the importance of creating inclusive and adaptable environments that can accommodate diverse work styles and preferences. This resonates with the PCW model's focus on flexibility and inclusivity, as it seeks to create a supportive environment that addresses a wide range of employee needs. The study by Orel et al. (2023) provides valuable insights into how coworking spaces have evolved to meet the demands of a post-pandemic world, highlighting the importance of adaptability and inclusivity, key principles that are central to the PCW model.

The progression of workplace models from traditional office layouts to open-plan designs and, more recently, to activity-based working has set the stage for the PCW model. Traditional office layouts, characterised by private offices and cubicles, prioritised individual work and privacy but often lacked flexibility and collaboration

opportunities. The shift to open-plan offices aimed to enhance communication and collaboration by removing physical barriers, but it also introduced challenges such as increased noise levels and reduced privacy. Activity-based working emerged as a response to these challenges, offering a variety of workspaces tailored to different tasks and promoting flexibility and employee choice. The PCW model builds on the principles of activity-based working by further emphasising inclusivity and well-being through the Context Zone. This evolution reflects a growing recognition of the diverse needs of employees and the importance of creating a supportive and adaptable work environment.

In conclusion, the PCW model aligns with and extends the findings of both references by integrating flexibility, inclusivity, and employee well-being into its core philosophy. By providing dedicated spaces for mental health and wellness, promoting diversity, equity, and inclusion, and ensuring adaptability to changing needs, the PCW model offers a comprehensive and forward-thinking approach to workplace design. This comparison underscores the model's potential to create a more human-centric workplace that prioritises employee well-being and productivity, ultimately leading to a more supportive and inclusive work environment. See Table 5.2 for Comparative table of previous studies.

Table 5.2. Comparative table of previous studies

Characteristic	PCW Model	Gerardina &	Orel et al. (2023)
		Bergefurt (2023)	
Core Focus	Flexibility, inclusivity,	Physical workplace	Pandemic-disrupted
	and employee	as a resource for	coworking; adaptation
	well-being	mental health.	to hybrid and flexible
	integrated.		models.
Key Principles	Inclusivity, DEI,	Salutogenic focus	Flexibility; inclusivity i.e.
	well-being,	i.e. light, noise, air	support for individual &
	adaptability i.e. 5	quality as levers.	collaborative work
	metrics as per		and adaptability.
	Figure 5.1		

Design	ABW core plus	Emphasis on	Reconfigurable zones;
Features	Context based	environmental	bookable rooms;
	enhancements.	quality.	hybrid technology.
Wellbeing &	Central pillar:	Evidence that	Emphasises
Mental Health	proactive mental	well-designed	environments that
	health support via	environments	sustain well-being
	dedicated spaces.	actively support	under hybrid/remote
		mental health.	dynamics.
Flexibility	Very high	Indirect	High
DEI	Explicit DEI lens.	Supports diverse	Calls for environments
	Designed for	needs via holistic,	that accommodate
	neurodiversity,	salutogenic	diverse work styles &
	accessibility, cultural	design.	preferences.
	needs.		
Findings	Integrates best of	Links	Documents evolution
	ABW with explicit	environmental	of coworking under
	well-being & DEI	quality to mental	pandemic pressures.
	mechanisms.	health outcomes.	
Challenges /	Requires change	Requires	Sustaining community,
Limitations	management,	measuring	equity of access, and
	training, iterative	well-being beyond	financial viability in
	measurement.	absence of illness.	hybrid.
Contribution	Extends ABW with	Reframes	Clarifies hybrid-ready
to the Field	well-being &	workplace as	coworking
	inclusivity as design	pro-health system.	fundamentals.
	requirements (not		
	add-ons).		
Typical Use	Global, diverse	Any workplace	Coworking & hybrid
Cases	organisations	prioritising mental	ecosystems across
	needing resilient,	health outcomes.	sectors.
	inclusive		
	environments.		

### 5.6 Summary

This chapter investigates the relevance and evolution of activity-based working settings in the post-COVID era, utilising online survey, leadership interviews, and interactive workshops. The study aims to develop a novel context-based model to advance diversity, equity, and inclusion in the workplace. The metrics are i.e. global organisations, sensory processing, interpersonal connection, mental well-being, and physical wellness. The findings highlight the need for more human-centric and inclusive work models, leading to the development of the PCW model. This model integrates context-based design with activity-based working, offering a diverse range of spaces that cater to various work-related activities and employee needs.

The survey and interviews were conducted with employees and leaders using Microsoft Forms and in-person/virtual interviews. These methods identified patterns and themes related to workplace dynamics, showing a general acceptance of the Smart Working Plus model but a desire for more diverse spaces. Leaders appreciated the flexibility and interaction opportunities of the Smart Working Plus model but identified needs for more confidential, open, and social spaces. The workshop included original and new participants for corroboration and presented the PCW model, which was perceived as a significant improvement over the Smart Working Plus model. The model emphasised employee well-being, new categories of spaces, and increased flexibility.

The space archetypes within the PCW model include Inclusive Spaces, which foster teamwork and cross-cultural communication; Diverse Spaces, adaptable for various purposes, including prayer rooms and sleep pods; Equitable Spaces, which promote equal access and psychological safety; Accessible Spaces, ensuring adaptability for employees with special needs; and Leverage Spaces, supporting learning, skill development, and mentoring.

In conclusion, the PCW model offers a holistic approach to post-COVID and hybrid working environments, prioritising inclusivity, adaptability, and continuous learning. It aligns with global business objectives and employee well-being, creating a dynamic and adaptable workspace that meets diverse employee needs and fosters a productive, inclusive, and collaborative atmosphere. The model's emphasis on mental

health, sensory processing, and physical wellness underscores its potential to enhance employee satisfaction and productivity.

#### **CHAPTER SIX: OUTCOMES**

#### 6.1 Introduction

The "Polycontextual Workplace" (PCW) model (see Figure 6.1) offers several advantages and disadvantages. As corroborated in the workshop, one of its primary strengths is its flexibility, allowing organisations to make minor adjustments to suit their specific needs, ensuring the workplace can evolve with changing requirements. Considering the corroborated PCW model shown in Figure 6.1, the inclusion of the Context Zone promotes diversity, equity, and inclusion, fostering a harmonious and collaborative work culture where all employees feel valued. This zone also supports employee well-being by providing safe spaces for relaxation, sensory processing, and psychological safety, contributing to overall mental health. Additionally, the Context Zone encourages personal growth through learning and mentorship opportunities, helping employees develop new skills and advance their careers. The dedicated areas for relaxation and mental rejuvenation enable employees to return to their tasks with renewed energy and focus, leading to increased productivity which can enhance the value of the traditional office environment. Furthermore, the Community Zone and Inclusive Spaces foster collaboration and innovation through brainstorming, group discussions, and problem-solving. Accessible Spaces ensure that the office environment is adaptable and inclusive for everyone, including employees with disabilities or special needs.

However, there are also potential drawbacks to consider. The inclusion of multiple specialised zones and space archetypes requires careful planning and significant space allocation, which may be challenging for smaller organisations or those with limited office space. Implementing and maintaining diverse and specialised spaces, such as wellness rooms, sensory processing areas, and mentoring pods, can be resource-intensive in terms of both time and budget. Balancing the allocation of space between collaborative areas and quiet zones for focused work can be challenging, requiring careful planning to meet diverse employee needs. This should be applicable for all organisations regardless of their size. High foot traffic between the zones and the presence of collaborative spaces can lead to increased noise levels, potentially disrupting nearby work areas, necessitating effective noise management strategies. Additionally, public-facing meeting rooms and open

collaborative spaces may lack the privacy needed for confidential discussions, requiring additional measures to ensure privacy. Overall, while the PCW model offers a dynamic and adaptable workplace that prioritises employee well-being, inclusivity, and productivity, careful planning and resource allocation are essential to address the potential challenges and ensure successful implementation. The outcomes have been separated into theoretical, practical, and future and are discussed in detail below.

### 6.2 Cost-Benefit Analysis

In an era of constrained resources and increasing demands for accountability, cost-benefit analysis has emerged as a critical tool for decision-makers in both the public and private sectors (<u>Jiang and Maggraf, 2021</u>). This analytical approach systematically evaluates the economic pros and cons of various projects, policies, or investments, providing a quantitative basis for comparing alternatives and making informed choices. By assigning monetary values to both costs and benefits, cost-benefit analysis facilitates a comprehensive assessment of the potential impacts, ensuring that the benefits of a proposed action outweigh its costs. The cost-benefit analysis (see Table 6.1) for the PCW model implementation is broken down into the follow considerations:

# Redesign and Refurbishment

The initial capital expenditure for redesigning and refurbishing office spaces to include specialised zones such as wellness rooms, sensory processing areas, and mentoring or spaces can be substantial cost. This includes architectural and interior design fees, construction costs, and the purchase of new furniture and equipment (CBRE, 2024). For example, creating a sensory processing area might require soundproofing, specialised lighting and equipment, and ergonomic furniture, all of which add to the initial costs.

#### **Technology Integration**

Investment in advanced technology to enhance the functionality of each zone is necessary considering the influence and impact that technology has in the modern workplace (Marcial et al. 2022). This includes tools for virtual collaboration, the

potential for language translation, and sensory processing support. The cost of implementing these technologies can vary widely depending on the sophistication and scale of the solutions chosen.

### **Ongoing Operational Costs and Facility Management**

Maintaining specialised spaces involves regular cleaning, repairs, upgrades, and utilities. Wellness rooms, for instance, may require frequent restocking of supplies and periodic maintenance of equipment (Xu et al., 2019). Sensory processing areas might need regular updates to technology and furnishings to ensure they remain effective and comfortable for users. Additional staff may be required to manage and maintain these specialised zones, adding to the operational costs. This includes roles such as wellness coordinators, IT support for technology integration, and facilities management personnel.

# **Employee Training Programs**

Comprehensive training programs for employees and managers (van Assen, 2019) on the PCW model are essential. This includes initial training sessions, ongoing workshops, and support resources to help employees adapt to the changes. The cost of these programs includes hiring trainers or employing internal trainers, developing training materials, and potentially compensating employees for time spent in training.

#### **Change Management**

Engaging key stakeholders, including leadership, employees, and external partners, requires time and resources for the effort of change management (<u>Payne et al., 2023</u>). Conducting workshops and meetings to gather input and build support is crucial for successful implementation. The cost of these activities includes facilitation fees, venue hire, and materials.

# **Enhanced Employee Well-being**

The PCW model's emphasis on mental health and wellness, through dedicated areas for relaxation, sensory processing, and psychological safety, leads to improved employee well-being. Studies have shown that employees who feel supported and valued are more productive, with higher levels of engagement and lower absenteeism (Bergefurt et al., 2022). For example, a study by the World Health

Organisation found that for every \$1 ( $\in$ 0.92) invested in mental health, there is a return of \$4 ( $\in$ 3.68) in improved health and productivity (World Health Organisation, 2016).

# Employee Retention and Creating a Supportive Work Environment

A workplace that prioritises flexibility, inclusivity, and employee well-being is likely to have higher employee satisfaction and retention rates. Reduced turnover leads to cost savings in recruitment, onboarding, and training of new employees. According to the <u>Society for Human Resource Management (2019)</u>, the average cost-per-hire is approximately \$4,129 (€3 798.68), and the average time to fill a position is 42 days. Reducing turnover can therefore result in significant cost savings.

# **Dedicated Collaboration Spaces**

The Community Zone and Inclusive Spaces foster collaboration and innovation through brainstorming, group discussions, and problem-solving. These spaces encourage spontaneous interactions and cross-functional teamwork, leading to innovative solutions and improved business outcomes. Research by <u>Steelcase (2024)</u> found that companies with highly collaborative work environments are five times more likely to be high performing.

# Futureproofing with Flexibility and Adaptability

The inherent flexibility of the PCW model allows organisations to quickly adapt to changing needs and dynamic work environments. This adaptability makes the workplace more resilient to disruptions and better equipped to seize new opportunities. For example, during the COVID-19 pandemic (Kniffin et al., 2020), organisations with flexible workspaces were better able to transition to remote work and maintain productivity.

#### **Reduced Absenteeism**

Improved employee well-being and mental health can lead to lower absenteeism rates. According to the <u>American Institute of Stress (2022)</u>, stress-related absenteeism costs U.S. businesses approximately \$300 (€277) billion annually. By providing a supportive work environment, organisations can reduce these costs.

#### **Lower Healthcare Costs**

Investing in employee well-being can lead to lower healthcare costs for the organisation. A study by the <u>Integrated Benefits Institute (2020)</u> found that for every \$1 ( $\in$ 0.92) spent on wellness programs, medical costs fall by about \$3.27 ( $\in$ 3.02).

To provide a more concrete analysis, below is a hypothetical organisation, with approximately 500 employees, that would implement the PCW model. The following assumptions and estimates are:

- Initial costs are estimated at €3 300 per employee based on the total estimated investment. This cost is estimated and adapted from the assumptions from CBRE, 2024.
- Maintenance costs are €600 per employee per annum. This cost is estimated and adapted from the assumptions from <u>CBRE</u>, 2024.
- The assumed total annual revenue generated by the organisation is €10,000,000. A 5% increase in revenue would result in an additional €500,000 in revenue (Boyles, 2022).
- Reduction in Employee turnover assumes the average Cost of Turnover per Employee is €10,000, Initial Turnover Rate is 10% (50 employees), Reduced Turnover Rate is 8% (46 employees), Number of Employees Retained is 4, Cost Savings from Reduced Turnover is €50,000 (basic calculation) and the Estimated Comprehensive Savings is €200,000 (considering broader impacts).
   (Castrillon, 2024)
- The Innovation and Collaboration cost are assumed to be the annual revenue of €10,000,000. If the improvements in collaboration and innovation lead to a 3% increase in business sales. (de Jong, et al., 2025)
- The average cost of absenteeism per employee per year is €1,000. It is assumed
  that the organisation has 500 employees and experiences a 20% reduction in
  absenteeism (American Institute of Stress, 2022)
- The average healthcare cost per employee per year is €3,000. It is assumed
  that the organisation has 500 employees and experiences a 10% reduction in
  healthcare costs (Integrated Benefits Institute, 2020)

(Note: exchange rates variations were not accounted for at the time of compiling this information)

Table 6.1. "Cost- Benefit Analysis Assumptions and Estimates"

Cost Benefit Analysis Assumptions and Estimate	s
Initial Investment	
Redesign and Refurbishment	€1 000 000
Technology Integration	€ 500 000
Training Programs	€ 100 000
Change Management	€ 50 000
Total Initial Investment (based on €3 300 per employee)	€1 650 000
Annual Maintenance Costs	
Operational Costs	€ 200 000
Facility Management	€ 100 000
Total Annual Maintenance	€ 300 000
Annual Benefits	
Increased profitability (based on a 5% revenue increase)	€ 500,000
Reduced Employee Turnover Savings	€ 200,000
Innovation & Collaboration (3% business sales value)	€ 300,000
Reduced Absenteeism (20% reduction: absenteeism)	€ 100,000
Lower Healthcare Costs (10% reduction: healthcare costs)	€ 150 000
Total Benefits (Assumption)	€1 250 000
Net Benefit (Initial year)	
Total Benefits	€1 250 000
Initial Investment	€1 650 000-
Annual Maintenance	€ 300,000-
Total	€ 700,000-
Net Benefit (Year 2)	
Total Benefits	€1 250 000
Annual Maintenance (estimated 10% increase per year)	€ 330 000-
Total	€ 920 000

Net Benefit (Year 3)	
Total Benefits	€1 250 000
Annual Maintenance (estimated 10% increase per year)	€ 363 000-
Total	€ 887 000
Net Benefit (Year 4)	
Total Benefits	€1 250 000
Annual Maintenance (estimated 10% increase per year)	€ 399 300 -
Total	€ 850 700
Net Benefit (Year 5)	
Total Benefits	€1 250 000
Annual Maintenance (estimated 10% increase per year)	€ 439 230-
Total	€ 810 770
Total Benefit after 5 years	€2 768 470
Total Benefit per employee	€ 2500

Based on this analysis, the organisation would experience a net cost in the initial year due to the significant upfront investment. However, in subsequent years, the annual benefits would outweigh the maintenance costs, which include a 10% annual increase, resulting in a positive net benefit per year. Over a five-year period, the total net benefit would be approximately €2,768,470, demonstrating the perceived long-term value of implementing the PCW model.

By conducting a thorough cost-benefit analysis, organisations can make informed decisions about the implementation of the PCW model, ensuring that the benefits outweigh the costs and contribute to overall organisational success.

#### The Polycontextual Workplace Accessible Spaces Inclusive Spaces Diverse Spaces Equitable Spaces Leverage Spaces Inclusive spaces **Diverse spaces** are Equitable spaces Accessible spaces Leverage spaces multifunctional and promote equal ensure that the support learning, skill encourage teamwork and provide versatile access to resources, office environment is development, and interaction among areas that can be visibility, and adaptable & knowledge sharing Description employees. These adapted for various opportunities for all accessible to either synchronously areas fostering a purposes. These employees everyone, including or asynchronously. sense of inclusion spaces reflect the supporting the employees with These areas also and integration value of principle of equity disabilities or special enable leaders to within the differentiation in the and equality in the needs and the mentoring and work environment. availability of developing their organisation. workplace. work/life integration teams. spaces. Context: Context: Context: Context: Context: Virtual learning pods or Mindfulness/Meditation Technology enabled Prayer rooms/Mothers Snoezelen rooms, mentoring 1:1 collective spaces that rooms/ Sleep pods pods/Psychological rooms/popup Space options rooms/Binaural beats could help language /Sensory seeking/ safety/Internal stores/providers/Groce pods translation in a global Sensory avoidance Gardens or green ry collection/Support organisation. spaces spaces animal spaces in **Functional**: offices/Wellness rooms Training rooms that are Functional: Functional: Functional: flexible to change to Brainstorming, Group Small format hybrid Co Working spaces, Functional: brainstorming or discussions, and meeting rooms/ Focus pods, traditional Retreat or Coffee creative meeting problem-solving Workina cafe and creative meetinas spaces

Figure 6.1. The "Polycontextual Workplace" (PCW) Model - corroborated

#### **6.3 Theoretical Outcomes**

The PCW model represents a significant advancement in contemporary workplace design by integrating flexibility, inclusivity, and employee well-being into its core philosophy. This model builds on the principles of activity-based working and refines them to address the diverse needs of modern and diverse workforces.

# The "Polycontextual Workplace" (PCW) Model

The PCW model, following corroboration in the workshop, (see Figure 6.1) introduces the innovative space architypes i.e., Inclusive Spaces, Diverse Spaces, Equitable Spaces, Accessible Spaces, and Leverage Spaces, which promotes diversity, equity, and inclusion. This zone ensures that all employees feel valued and included, fostering a harmonious and collaborative work culture. By providing the context spaces, the model addresses a wide range of employee essential workplace needs, from collaboration and individual work modes. The space architypes emphasis on mental health and wellness, with dedicated areas for relaxation, sensory processing, and psychological safety, contributes to overall employee well-being and productivity (Gerardina and Bergefurt, 2023). This also aligns with the outcomes from the literature review.

The model's inherent flexibility allows organisations to make minor adjustments to suit their specific needs, ensuring the workplace can evolve with changing requirements. This adaptability is crucial in today's dynamic work environment specifically for incorporating hybrid work, where the ability to quickly respond to new challenges and opportunities is a significant advantage. The PCW model also considers incorporates advanced technology to enhance the functionality of each zone, including tools for virtual collaboration, the potential of language translation. This was part of the outcomes from the participant feedback in the workshops.

# Refinement of Activity-Based Working

Activity-based working is a workplace design ethos that offers a variety of work settings geared towards different workplace activities and tasks. Originally coined by (Veldhoen,1994) in his book "The Demise of the Office," activity-based working provides a variety of space options tailored to specific tasks, boosting productivity and collaboration. The PCW model refines activity-based working by incorporating

elements that address the complexities of modern office work and the cognitive load on employees.

One key refinement is the emphasis on inclusivity and well-being (Keh, 2022). While traditional activity-based working focuses on providing flexible workplaces, the PCW model goes further by creating environments that support mental health and wellness. This includes quiet zones for focused work, biophilic design elements to reduce stress, and wellness features such as relaxation areas and sensory processing spaces. These enhancements ensure that employees can maintain peak performance levels throughout the day. This was also corroborated in the workshop with participants.

The integration of hybrid work is also critical and is part of the model as is aligned with new ways of working (Hunter, 2024). Modern activity-based working must balance remote and in-office work, catering to employees who enjoy a blend of both environments. The PCW model supports this by providing technology-enhanced spaces that facilitate effective collaboration among a dispersed workforce. Smart technologies, such as sensors and data analytics, help optimise space usage and ensure that employees can find the right spaces for their tasks. The potential for more intuitive technologies, specific to workplace utilisation, can support users to progress on the ability to collaborate with a purpose while at the office making interaction and connection feel more natural.

The model also prioritises flexibility and organisational personalisation. No two organisations are completely alike, and tailored activity-based working solutions are essential for addressing unique organisational cultures and brand identities. The PCW model allows for customisation of spaces to reflect the specific needs and values of each organisation, ensuring a more cohesive and supportive work environment.

# **Evolution of Workplace Models**

The progression of workplace models from traditional office layouts to open-plan designs and, more recently, to activity-based working has set the stage for the progression to the PCW model. Traditional office layouts, characterised by private

offices and cubicles, prioritised individual work and privacy but often lacked flexibility and collaboration opportunities. The shift to open-plan offices aimed to enhance communication and collaboration by removing physical barriers, but it also introduced challenges such as increased noise levels and reduced privacy. <u>Turjeman-Levi and Kluger (2022)</u> confirms this approach with the literature on sensory processing.

Activity-based working emerged as a response to these challenges, offering a variety of workspaces tailored to different tasks and promoting flexibility and employee choice. The PCW model builds on the principles of activity-based working by further emphasising inclusivity and well-being through the Context Zone. This evolution reflects a growing recognition of the diverse needs of employees and the importance of creating a supportive and adaptable work environment.

Overall, the PCW model creates a more human-centric workplace that prioritises flexibility, inclusivity, and employee well-being, ultimately leading to a more productive and supportive environment. By integrating advanced technology, promoting mental health and wellness, and supporting hybrid work models (Quito, 2022), the PCW model represents a refined and forward-thinking approach to workplace design.

#### **6.4 Practical Outcomes**

Implementing the PCW model requires a comprehensive change management program and a commitment to continuous development. The first step is preparation and planning, which involves engaging key stakeholders early in the process. This includes leadership, employees, and external partners. Conducting workshops and meetings to gather input and build support is crucial. Clearly defining the vision and objectives of the PCW model and communicating the benefits, such as increased flexibility, inclusivity, and employee well-being, is essential. Conducting a thorough assessment of the current workplace environment to identify existing strengths and areas for improvement, and establishing a baseline to measure progress, sets the foundation for successful implementation.

The next phase is design and development are where detailed plans for each zone (Public, Shared, Community, and Context) are developed. Ensuring that the design aligns with the principles of flexibility, inclusivity, and well-being is key. Defining the specific space archetypes within the Context Zone, such as Inclusive Spaces, Diverse Spaces, Equitable Spaces, Accessible Spaces, and Leverage Spaces, ensures these spaces support a wide range of activities and needs. Incorporating technology to enhance the functionality of each zone, including tools for virtual collaboration, language translation, and sensory processing, is also important.

During the implementation phase, starting with pilot programs in select areas to test the new model and gathering feedback to make necessary adjustments before a full-scale rollout is recommended. Providing comprehensive training for employees and managers on the new workplace model and offering ongoing support to help them adapt to the changes is crucial. Maintaining open and transparent communication throughout the implementation process, using multiple channels to keep everyone informed and engaged, ensures a smooth transition.

Embedding the change (<u>Payne et. al., 2023</u>) involves fostering a culture that embraces the principles of the PCW model. Encouraging behaviours that support flexibility, inclusivity, and well-being, and updating workplace policies and procedures to reflect the new model, ensures alignment with organisational goals. Continuously monitoring the implementation process and gathering feedback from employees to make ongoing improvements is essential for long-term success.

Continuous development is achieved by encouraging a growth mindset within the organisation, promoting flexibility and adaptability to respond to changing needs and opportunities. Implementing iterative improvements based on feedback and changing circumstances, and regularly reviewing and refining the workplace model, ensures it remains relevant. Investing in continuous learning and development programs, offering opportunities for employees to develop new skills and advance their careers, and establishing mentorship programs to support personal growth and knowledge sharing, fosters a culture of continuous improvement.

Focusing on employee well-being by continuously enhancing wellness programs to support mental and physical health, providing resources for relaxation, sensory processing, and psychological safety, and promoting work-life balance through flexible work arrangements and supportive policies, ensures a supportive work environment. Conducting regular surveys to gather employee feedback on the workplace environment, organising focus groups to explore specific issues and gather in-depth insights, and using this data to identify areas for improvement, ensures the workplace model evolves to meet the needs of employees.

#### **CHAPTER SEVEN: CONCLUSION**

The Polycontextual Workplace (PCW) model offers a comprehensive, forward-looking approach to contemporary workplace design by integrating flexibility, inclusivity, and employee well-being at its core. Building on the foundations of activity-based working, the model strengthens task spaces while deliberately addressing diverse employee needs through dedicated zones for the five metrics for DEI discussed in this study. The metrics are global organisations, sensory processing, interpersonal connection, mental health and physical wellbeing. In doing so, the PCW advances a more human-centric workplace that is capable of evolving with organisational priorities and workforce expectations.

A central strength of the PCW model lies in its adaptability. Rather than prescribing a single layout, it provides a framework that organisations can calibrate to local context, making incremental adjustments to space typologies as needs change. The model's explicit emphasis on diversity, equity, and inclusion ensures that environments serve a wide spectrum of users, including those with different cultural backgrounds, neurodiverse needs, and varied working patterns. This, in turn, supports psychological safety and a positive workplace culture, which are linked to higher engagement, innovation, and performance. The Context Zone, Community Zone, and Inclusive Spaces function together to enhance both individual focus and collective problem-solving, thereby supporting productivity and knowledge sharing.

At the same time, successful implementation requires careful planning and governance. Diverse and specialised spaces may involve capital and operational expenditure, the potential of additional floor area, and introduce complexities around acoustics and privacy, especially where high foot traffic and open collaboration are prominent. These risks can be mitigated through evidence-based zoning, acoustic treatments, protocols for confidential work (e.g., enclosed rooms and booking norms), and by sequencing change with robust engagement, training, and continuous improvement. While the PCW requires upfront investment, just as with a traditional ABW implementation, a balanced cost-benefit view indicates the potential for meaningful long-term returns: improved well-being and retention, richer collaboration, reduced absenteeism, and attenuated healthcare costs.

Several future-oriented priorities are integral to the conclusion of this work and should shape the next phase of research and practice. These are:

## **Empirical evaluation and longitudinal impact**

A rigorous evidence base is essential to demonstrate how the PCW influences DEI, satisfaction, retention, and productivity over time. Longitudinal studies (<u>Halldorsson et al., 2022</u>) tracking engagement, turnover, and performance would clarify the durability of benefits and identify where refinements are most effective.

# Tailoring for diverse demographics

Understanding how different groups, such as remote and hybrid workers, employees with disabilities, and multicultural teams, use and benefit from PCW environments will sharpen design guidance and policy (<u>Dixon-Fyle et al., 2020</u>). Particular attention should be paid to how sensory-supporting spaces assist neurodiverse employees and how inclusive zones strengthen cross-cultural collaboration.

## Role of Technology in Enhancing Functionality

Investigating the role of technology in enhancing the functionality (Marcial et al., 2022) of the PCW model is another promising area for future research. This includes examining how tools for virtual collaboration, language translation, and sensory processing can improve the work experience for employees. Studies could explore the impact of smart technologies, such as sensors and data analytics, on space utilisation and employee productivity. Additionally, research could assess the effectiveness of virtual reality (VR) and augmented reality (AR) applications in creating immersive and interactive work environments.

#### Comparative Studies with Other Workplace models

Comparative studies between the PCW model and other contemporary workplace designs could help identify best practices and areas for improvement. By comparing the outcomes of different models (<u>Davis, 2021</u>), researchers can determine which design elements are most effective in promoting flexibility, inclusivity, and employee well-being. These studies could involve case studies of organisations that have implemented various workplace models, providing real-world examples of successful design strategies.

# **Real-World Application Testing**

To validate the theoretical benefits of the PCW model, real-world application testing is essential. This involves implementing the model in actual workplace settings and conducting rigorous evaluations to assess its impact. Real-world application testing can provide valuable insights into the practical challenges and benefits of the model, helping to refine and optimise its design. Organisations can start by implementing pilot programs (Oconto and Cantrell, 2023), in select areas to test the new model. These pilot programs can serve as a testing ground for the various elements of the PCW model, allowing organisations to gather feedback and make necessary adjustments before a full-scale rollout. For example, a company might create a pilot the PCW model in one of its office locations and monitor its impact on employee well-being and productivity over a six-month period.

By pursuing these research opportunities and conducting real-world application testing, scholars and practitioners can deepen their understanding of how to create more inclusive, flexible, and supportive work environments. The insights gained from these studies can inform the ongoing evolution of workplace design principles, ultimately leading to more effective and human-centric workplaces.

In summary, the implementation of the PCW model offers a comprehensive approach to modern workplace design, integrating flexibility, inclusivity, and employee well-being into its core philosophy. This model builds on the principles of activity-based working, refining them to address the diverse needs of contemporary workforces. One of its primary strengths is its flexibility, allowing organisations to make minor adjustments to suit specific needs, ensuring the workplace can evolve with changing requirements. The model promotes diversity, equity, and inclusion, i.e. global organisations, sensory processing, interpersonal connection, mental well-being, and physical wellness, fostering a harmonious and collaborative work culture. Dedicated areas for relaxation, sensory processing, and psychological safety contribute to overall mental health and productivity. Additionally, the Community Zone and Inclusive Spaces foster collaboration and innovation through brainstorming, group discussions, and problem-solving, enhancing productivity and innovation.

However, the impact of the study and implementing and maintaining diverse and specialised spaces can require time and budget and requires careful planning and potential physical space allocation. Increased noise levels from high foot traffic and collaborative spaces necessitate effective noise management strategies, and public-facing meeting rooms and open collaborative spaces may lack the privacy needed for confidential discussions. The model's emphasis on inclusivity and well-being, flexibility and adaptability, and technology integration enhances functionality and supports hybrid work models. Practical outcomes include the need for comprehensive change management programs, employee training, and continuous improvement. The cost-benefit analysis highlights upfront investment, ongoing costs, and long-term benefits such as improved employee well-being, higher retention rates, enhanced collaboration, reduced absenteeism, and lower healthcare costs. Future outcomes suggest empirical evaluation, research on specific needs and preferences of different employee groups, investigating the impact of smart technologies, comparative studies, and real-world testing.

Overall, the PCW model offers a dynamic and adaptable approach to workplace design, prioritising employee well-being, inclusivity, and productivity, with careful planning, resource allocation, and continuous development essential for successful implementation.

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**Appendices** 

**Appendix A: Survey questions** 

The activity-based working (ABW) concept referred to as Smart Working Plus (SWP) at

COMPANY NAME supported the organisation where we transitioned from dedicated

and shared spaces as the basic workplace concept. In the SWP office environment,

you are able to find the right space module for the different working activities while

at the office. The spaces vary and can accommodate you if want to do focus work

in a quiet environment, collaborate with your team or creatively conduct a workshop

or a meeting, you have the options and the choice between different designed

workplaces.

The aim of the survey is to understand what your experience has been in these

spaces, if there are any improvements that you can suggest as well as areas that

you may be very happy working in. The improvements will be directed toward

thinking about developing a new space model that could better support employees

with a human centric approach to workplaces. My research focusing on creating a

new space model with the focus on diversity, equity, and inclusion in the workplace.

Diversity, equity, and inclusion is an expansive topic. For this research, the metrics for

diversity, equity, and inclusion focus on:

1. Global organisation

2. Sensory processing

3. Connection

4. Mental wellbeing

5. Physical wellness

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- 1. Which region are the offices you are located in? If the region you are currently located in is the same as your place of birth, please also select the option "same as region of birth"
- o Asia
- o Europe
- o Africa
- Australia
- Antarctica
- North America
- South America
- o Same as region of birth
- 2. What gender do you identify with?
- o Female
- Male
- o Non Binary
- Prefer not to say
- Other
- 3. What year where you born in?
- Between 1946 and 1964
- Between 1965 and 1979
- Between 1980 and 1995
- Between 1996 and 2005
- 4. Rate the statement below (1=poor 3=neutral and 5=excellent)
- o I understand how to use Smart Working Plus effectively.
- o Do you think SWP is a good workplace model?
- o Does it allow you to be effective in your role?
- o There can be more options for the spaces that are available.

5. Which 3 spaces in the SWP model are your preferential spaces to work in or the ones you use the most?



- Library
- o Multi Space
- o Focus Pod
- o Remote Working
- Co Working
- o Project Area
- Creative Meetings
- Traditional Meetings
- o Retreat
- 6. Why do you believe the spaces you have selected work the best for you?
- 7. Do you feel that the current workplace model supports and promotes an environment of trust where you feel that you are able to choose the best type of space to work in the office? (Add any additional comments in the "other" text field).
- o Yes
- o No
- Maybe
- Other

8. Which spaces, if any, with the current SWP workplace model gives you the impression of this being a space that promotes trust?



- Library
- o Multi Space
- Focus Pod
- o Remote Working
- Co Working
- o Project Area
- Creative Meetings
- Traditional Meetings
- Retreat
- 9. Being able to see/have access to other people you work with helps facilitate good communication and collaboration while at the office. Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective? (Add any additional comments in the "other" text field).
- o Yes
- o No
- Maybe
- Other

- 10. Is it easy to move or transition into different to SWP spaces? i.e., moving from coworking to focus pod and back to a co-working space depending on the task you are performing (Add any additional comments in the "other" text field).
- Yes
- o No
- Maybe
- Other
- 11. Do any of the recommendations below support an improvement to the existing spaces to make it more user friendly?
- o More options for short periods of focus work which is not a focus pod
- Learning spaces (collective learning or virtual learning)
- Space for mindfulness
- o Physical wellbeing spaces
- o Spaces that enhance the feeling of psychological safety
- Opportunities for more connection (social or professional)
- o More accessible spaces to better support for physical mobility
- Other

12.	What would these solutions address for you considering your requirements?	

- 13. What characteristics do you think a space should have to provide support for mental health?
- o Quiet spaces for individual mindfulness practices.
- Counselling spaces (in person or with virtual access to support).
- Quiet spaces for collective mindfulness practices.
- Time out/Decompression spaces.
- Social spaces to feel connected to people.
- 14. What kind of spaces would support health and wellbeing and what elements do you think these would consider?
- Massage/therapy rooms
- Power nap spaces

- More natural light
- o Areas for wellness that have plants and other biophilic elements
- o Access to programs like yoga, running groups, cycling groups, or group walking events
- 15. Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer? (Add text in "other" text field).
- Yes
- o No
- Maybe
- Other
- 16. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference? (Add text in "other" text field).
- Yes
- o No
- Maybe
- Other
- 17. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space? (Add text in "other" text field)
- Yes
- o No
- Maybe
- Other
- 18. Do you feel that the above mentioned adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business?
- Yes

o Maybe	
o Other	
19. Would you prefer to continue to use an activity-based working model, or do you fe	el
that a new model that was more human centric, where we include space for diver	se
needs and inclusion as mentioned in the introduction and interview, would be mo	re
beneficial for the business?	
	]
	J
20. If so, what do you think these benefits would be and how does it align to our busine objective and values at COMPANY NAME?	ess
	•
21. If you were able to add any new space to the workplace, could you describe 2 ne	€W
spaces that you would include in the workplace, what would they be and why wou	ηd
you suggest it?	
	]
	_

o No

## Appendix B: Interview questionnaire for Employee-Workplace Alignment (EWA) with

Key experts			
Interview no.:			
Date:			
Time:			
Location:			
Interview type:	Face to Face	Online	

## <u>Introduction</u>

Good morning/afternoon. Thank you so much for your time today and agreeing to be a part of my interview process for my research. I would like to introduce myself and what we will be doing in our time together so that I create an understanding of the process we will have today.

My name is Hassan Shaikh. I serve as Senior Manager Workplace Strategy as part of the Global Facilities and Engineering (GFE) team based in Ingelheim, Germany. I am currently pursuing a Doctorate in Design with my research focusing on creating a new space model for designing office spaces that support diversity, equity, and inclusion in the workplace.

I will firstly begin with providing you with some background on activity-based working (ABW). We can align this concept with Smart Working Plus (SWP) at COMPANY NAME where we transitioned from dedicated and shared spaces as the basic workplace concept. In the Smart Working office environment at BI, you are able to find the right space module for the different working activities while at the office. The spaces vary and can accommodate you if want to do focus work in a quiet environment, collaborate with your team or creatively conduct a workshop or a meeting, you have the options and the choice between different designed workplaces.

The aim of the interview is to understand what your experience has been in these spaces, if there are any improvements that you can suggest as well as areas that you may be very happy working in. The improvements will be directed toward thinking about spaces that support employees in specific areas related to diversity, equity, and inclusion (DEI). The areas for potential improvement are:

Global organisations (e.g., gender, generation, nationality)

Sensory processing (e.g., sound, light, air pollutants, touch)

Connection (e.g., sense of belonging, social spaces, collaboration, working

space – individual and collective)

• Mental health (e.g., decompression spaces, therapy/self-care, connection to

nature)

Physical Wellness (e.g., yoga, gym, massage)

The interview is comprised of 20 questions that will help to gather information and

create an understanding what employees experience have been in the current SWP

workplace. There will also be questions that will request any suggestions for spaces

that you feel could support you in addition to what we have already have in our

workplace concept. Out of the interviews, there will be a collection of common

keywords from which subjective ideas will be developed of recommended

spaces/space modules as a cross check to a new proposed space model.

Following the interviews, there is the opportunity to voluntarily participate in workshops

to receive the results of the interviews and to request input on any further suggestions

for refinement of the new workplace model.

Please note: all responses will be treated in confidence and the participants identities

will not be used. No names will be required during these interviews. The information

gathered will only be used for this research.

Can I please have your consent to proceed and if you are comfortable for me to

record the interview for later reference during the research? (EC3 form to be

completed)

Interviewees Questions

Deliver the questions and help facilitate a better understanding in the interview/call.

Question 1: (Persona)

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Please could you provide some of details in order to allow for the creation of a general
employee profile. What is your gender, generation, work location & nationality?
Gender:
What year where you born (to assign to generation):
Work Location:
Birth Location (Nationality):
Question 2: (Benchmarking activity-based working use case)
What is your understanding of activity-based design or Smart Working Plus (COMPANY
NAME model) which is made up of different spaces that are available to you in your
workplace, enabling you to carry out the tasks required for your role, and do you
believe this is a good model?
Question 3: (Self-analysis)
Describe the different activity-based working spaces do you use the most and why?
(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment
of trust where you feel that you are able to choose the best type of space to work in
the office? If not, why do you think that is?
Question 5: (Trust)
Which spaces, if any, in the current workplace gives you the impression of this being
a space that promotes trust and why? Is there anything that could be done to
improve this?
Question 6: (Communication)
Do you feel communication plays a part of creating a successful workplace and the
current space facilitate good communication?

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play of
part in making communicating easier and more effective?
Question 8: (Restrictions)
Is it easy to move or transition into different to SWP spaces in the current workplace
model and if not and is there something specific that you feel makes this movemen
feel unnatural or difficult?
Question 9: (Input on current)
Do you have any recommendations on what you would like to add or change to
improve the existing spaces to make it more user friendly?

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the
current spaces?
Question 11: (Needs analysis DEI)
Do you have any diversity, equity, and inclusion related requirements (global
organisation, sensory processing, connection, metal wellbeing, physical wellness) that
you would need to have supported in your workplace? Please can you identify these
and describe what solutions could be provided to support this.
Question 12: (Self-analysis from Q11)
What would these solutions address for you considering your requirements?

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mento
health? (Quiet spaces, destressing spaces, counselling spaces)?
Question 14: (Health and Wellbeing)
What kind of spaces would support health and wellbeing and what elements do you
think these would consider? Please comment on air quality, movement, exercise
decompression spaces, massage/therapy spaces, sleep spaces.
Ougstion 15: (Attraction)
Question 15: (Attraction)
Do you feel that diversity, equity, and inclusion adjustments in the workplace could
have an impact on employee satisfaction, productivity, and attracting more diversity
and talent to the business? What specifically should be the focus to improve the
workplace?

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace
options/settings you use when you consider the level and quality of light, both artificial
and natural, in the office space? If so, how does this factor influence your experience
and choice of space?
Question 17: (IEQ – Sound)
Do you find that there is an effect on your experience in the workplace
options/settings you use when you consider the level and quality of sound transmission
or avoidance in the office space? If so, how does this element influence your
experience and what is your preference?
Question 18: (IEQ –Connection to nature)
Does having views to the outside spaces influence your decision on what spaces to
use? Is your preference to have views to nature or urban activity? If so, why do you
feel that it is important and what would you prefer?

Paradise question 19:

If you were able to add any new space to the workplace, could you describe $2\ \mathrm{new}$
spaces that you would include in the workplace, what would they be and why would
you suggest it?
Question 20:
Would you prefer to continue to use an activity-based working model, or do you feel
that a new model that was more human centric, where we include space for diverse
needs and inclusion as mentioned in the introduction and interview, would be more
beneficial for the business? If so, what do you think these benefits would be and how
does it align to our values?
Wrap Up
Thank the participant for their time and being a part of the interview. If they have
agreed to the interview being recorded (audio and or video), let them know that the
recording can be made available at their request.
Close interview.
COMMENTS (for interviewer)

# Appendix C: Ethics approval notification



# SOCIAL SCIENCES, ARTS AND HUMANITIES ECDA

#### **ETHICS APPROVAL NOTIFICATION**

TO Hassan Shaikh

CC Gabriel Barros Dos Santos

FROM Dr Brendan Larvor, Social Sciences, Arta & Humanities ECDA

Vice Chair

DATE 10/07/2023

Protocol number: CTA/PGR/UH/05917

Title of study: Polycontextual Workplaces: A context-based workplace

model advancing workplace strategy and design for

greater diversity, equity, and inclusion (DEI)

Your application for ethics approval has been accepted and approved with the following conditions by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

no additional workers named

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

Permissions: Any necessary permissions for the use of premises/location and accessing

participants for your study must be obtained in writing prior to any data collection

commencing. Failure to obtain adequate permissions may be considered a breach

of this protocol.

External communications: Ensure you quote the UH protocol number and the name

of the approving Committee on all paperwork, including recruitment

advertisements/online requests, for this study.

<u>Invasive procedures</u>: If your research involves invasive procedures you are required to

complete and submit an EC7 Protocol Monitoring Form, and copies of your

completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Validity:

From: 10/07/2023

This approval is valid:

To: 30/09/2023

Please note:

Failure to comply with the conditions of approval will be considered a breach of

protocol and may result in disciplinary action which could include academic

penalties.

Additional documentation requested as a condition of this approval protocol may be

submitted via your supervisor to the Ethics Clerks as it becomes available. All

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documentation relating to this study, including the information/documents noted in the conditions above, must be available for your supervisor at the time of submitting your work so that they are able to confirm that you have complied with this protocol.

Should you amend any aspect of your research or wish to apply for an extension to your study you will need your supervisor's approval (if you are a student) and must complete and submit form EC2.

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1A. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1A may need to be completed prior to the study being undertaken.

Failure to report adverse circumstance/s may be considered misconduct.

Should adverse circumstances arise during this study such as physical reaction/harm, mental/emotional harm, intrusion of privacy or breach of confidentiality this must be reported to the approving Committee immediately.

# Appendix D: Email to participants

Good day,

You are being invited to complete an online survey/interview as part of a Doctoral course being undertaken by Hassan Shaikh, a Doctorate in Design student at School of Creative Arts, University of Hertfordshire, UK.

Please read the following information carefully before deciding whether to take part. Please ask if there is anything that is not clear or if you would like more information. You are eligible to take part in this study if you are 18 or over.

### The Study

The purpose of the study is to understand what your experience has been in activity-based working (ABW) spaces and if there are any improvements that you can suggest as well as areas that you may be very happy working in. The improvements will be directed toward thinking about developing a new space model that could better support employees with a human centric approach to workplaces.

### What does taking part involve?

If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask about Global organisations, Sensory processing, Connection, Mental wellbeing and Physical wellness and it will take you approximately 25-30 minutes to complete for the online survey and 45mins to 1hr for the interview.

# Do I have to take part?

No. It is up to you to decide whether or not to take part. You are free to withdraw from the study at any time and without giving a reason. If you choose not to take part, you do not need to do anything further.

# Are there any benefits or risks for me if I take part?

You may not directly benefit from this research; however, we hope that your participation in the study may contribute to creating a more inclusive workplace for employees which exceed the expectations of activity-based working workplaces.

There are no expected risks for participants. Any data that you provide will be treated as confidential and the questionnaire is anonymous.

All data from the study will be stored securely on my university One Drive cloud storage system which only I have access to and will be securely destroyed after the study is concluded.

What will happen to the findings of this study?

The findings will be used to produce data to answer my research questions which are: Research Question 1 (RQ1): In the context of a global organisation and the user experience, how effectively does an activity-based model continue to contribute to post pandemic workplaces?

Research Question 2 (RQ2): Why would "The Polycontextual Workplace" model be effective in enhancing current workplace strategy and design for diversity, equity, and inclusion in global organisations?

Research Question 3 (RQ3): What opportunities and challenges does "The Polycontextual Workplace" model present for the diversity, equity, and inclusion metrics for this research i.e., global organisations, sensory processing, connection, mental wellbeing, and physical wellness?

Has this study received ethical approval?

This study has been approved by the University of Hertfordshire Social Sciences, Arts and Humanities, Ethics Committee with Delegated Authority (SSAH ECDA). The Ethics Protocol number for this study is CTA/PGR/UH/05917

If you would like to receive more information and for any other queries about this project you can contact me by email (<a href="mailto:hs16abf@herts.ac.uk">hs16abf@herts.ac.uk</a>) or my Supervisor, Gabriel Barros Dos Santos (<a href="mailto:g.santos@herts.ac.uk">g.santos@herts.ac.uk</a>)

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address:

Secretary and Registrar

University of Hertfordshire

College Lane

Hatfield, Hertfordshire

AL10 9AB

United Kingdom

If you do not wish to participate in this survey, Click the "NO, I will not participate" and close your browser.

If you are interested in taking part, please read the statements below and then click the 'YES, I will participate' to record your consent to participate.

- I confirm that I have read the study information. I have had the opportunity to consider the information and ask questions. Any questions have been answered satisfactorily
- I understand that my participation is voluntary, and I am free to withdraw from the study at any time without giving a reason
- I am 18 or over

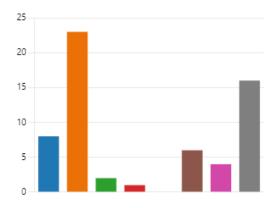
YES, I will participate

NO, I will not participate

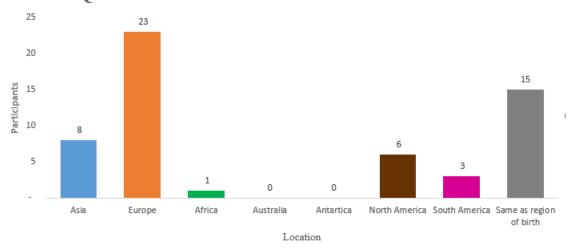
# Appendix E: Raw data from surveys

1. Which region are the office you are located in? If the region you are located in is the same as your place of birth, please also select the option "same as region of birth.

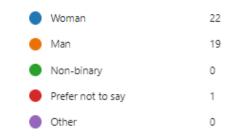


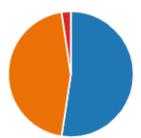


# **QUESTION 1 - DISCREPANCY CORRECTION**



2. What gender do you identify with?





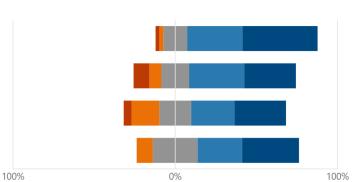
# 3. What year were you born in?

	Between 1946 and 1964	4
•	Between 1965 and 1979	13
•	Between 1980 and 1995	19
•	Between 1996 and 2005	6



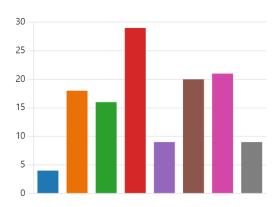
4. Rate the statement below (1=poor 3=neutral 5=excellent)





5. Which three spaces in the Smart Working Plus model are your preferential spaces to work in or the ones you use the most?





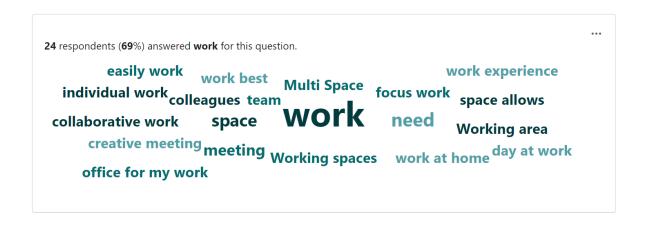
6. Why do you believe the spaces you have selected work the best for you?

Latest Responses

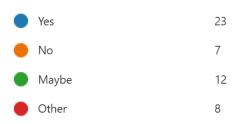
"As i mostly work from home, when I am at work, I need a co-working space...

Responses

"i prefer most time to work from home office because it would take 1,5 hours...



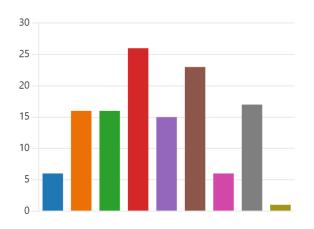
7. Do you feel that the current workplace model supports and promotes an environment of trust where you feel that you are able to choose the best type of space to work in the office? (Add any additional comments in the "other" text field)





8. Which spaces, if any, with the current Smart Working Plus workplace model gives you the impression of this being a space that promotes trust?





9. Being able to see/have access to other people you work with helps facilitate good communication and collaboration while at the office. Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective? (Add any additional comments in the "other" text field)





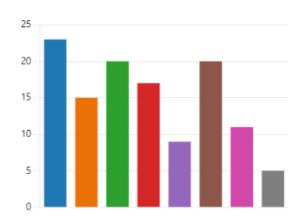
10. Is it easy to move or transition into different to Smart Working Plus spaces? i.e., moving from co-working to Focus Pod and back to a Co Working space depending on the task you are performing (Add any additional comments in the "other" text field)





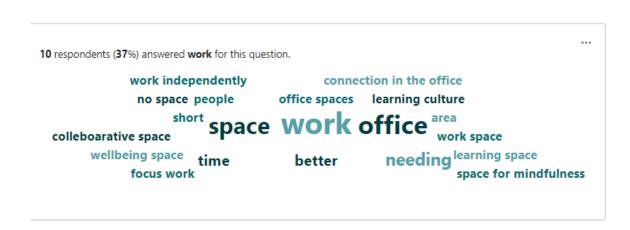
11. Do any of the recommendations below support an improvement to the existing spaces to make it more user friendly?





12. What would these additional spaces address for you?

27
Responses
"As I am not often at work, there is a focus of social connection when I am in...

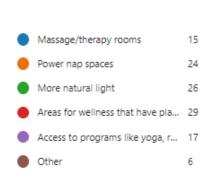


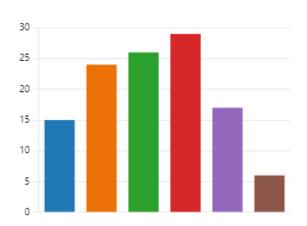
13. What characteristics do you think a space should have to provide support for mental health?





14. What kind of spaces would support health and wellbeing and what elements do you think these would consider?





15. Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer? (Add text in "other" text field)





16. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference? (Add text in "other" text field)





17. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space? (Add text in "other" text field)





18. Do you feel that the above mentioned adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business?





19. Would you prefer to continue to use an activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business?

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29

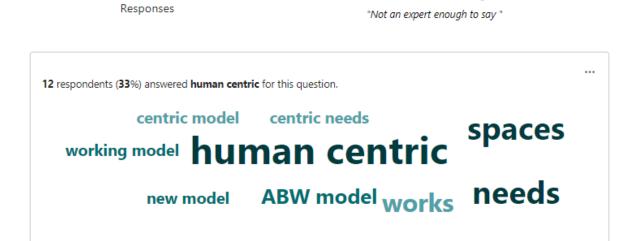
Responses

Latest Responses

"I like the smart working"

Latest Responses

"communication between Teams"



20. If so, what do you think these benefits would be and how does it align to our business objective and values at COMPANY NAME?

10 respondents (34%) answered people for this question.

people business centric people back to the office environment office space older people office space people employee happier people people are comfortable better BI human work 'needs new people have problems

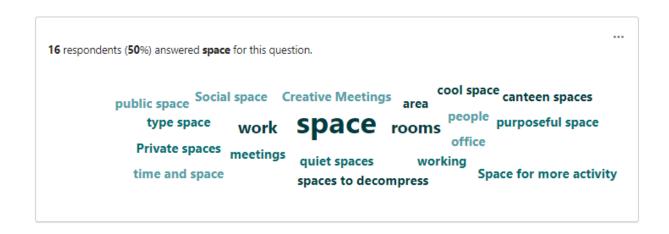
21. If you were able to add any new space to the workplace, could you describe two new spaces that you would include in the workplace, what would they be and why would you suggest it?

Responses

Latest Responses

"Room with many plants for creative meeting (without screens)"

"1. Small quiet spaces, I have not seen actual pods in our offices so that coul...



## Appendix F: Detailed analysis of surveys

1. Which region are the office you are located in? If the region you are located in is the same as your place of birth, please also select the option "same as region of birth.

The first question examined the geographical location of the participants and also considered if they were located in the same region as their region of birth. On examining the responses, several discrepancies were found based on the total of forty-two participants recorded. The total on the graph is forty four when the responses are added excluding the result for "same as region of birth. By examining the raw data, the errors were found as a result of inputs by three participants who have selected an additional location instead of the option "same as region of birth." Considering how the results were captured in the raw data based on other participants who selected the option "same as region of birth", the first selection was recorded as the location where the participant are based, and the second selection recorded was the location "same as region of birth". From this examination, the second input from these three responses have been discarded from the three participants who selected a new location, and the corrected numbers would reflect as Africa=1instead of 2, Australia=0 instead of 1, and South America=3 instead of 4. One participant also responded by selecting the "same as region of birth" option only. This response for this question will not be added as there is no way of determining the location of the participant. The number for the option "same as region of birth" =15. The graphical correction to the first question is reflected in Appendix E.

From the responses received for this question 20% of the respondents were based in Asia, 56% in Europe, 2% in Africa, 15% in North America and 7% in South America. Interestingly only 37% of the respondents were based in the same region as the country of birth which results in 63% of participants being expatriates. The findings in this question starts to contribute to creating an overview for the metric relating to a global organisation. These results will also contribute to the insights for the overall perceived effectiveness of the activity-based working models for participants based on their geographical location, its acceptance or resistance, and the relation to the workplace culture in the locations where the participants are based. The outcomes will allow more in-depth filtering to provide further insights from other questions in the survey to better understand the needs of the participants for a more people centric

workplace environment. From a business perspective, this demonstrates the already established diversity within this organisation and the possibility for employees that are employed by the organisation to be based in locations other than the region of their birth.

# 2. What gender do you identify with?

From the responses received, 52,4% of the participants were female, 45,2% were male and 2,4% of the participants preferred not to provide a response to the question on gender. The intended outcomes of this question was to continue to build on the metric of a global organisation and to determine if the participants who used the activity-based working models were provided with an environment that supported fairness and inclusion regardless of gender. Considering that the outcome from this question may not be entirely representative of the entire organisation, a generalised conclusion could be that the organisation has successfully attracted and retained a diverse workforce in terms of gender balance. The outcomes could also conclude that women were slightly more comfortable than men in participating in this survey as they may have a vested interest in the topic for a more people centric workplace strategy with the intention of contributing toward the improvement of the workplace for more inclusivity (Danielsson & Theorell, 2019).

### 3. What year were you born in?

Continuing with the metric of global organisations, the results for the generation demographics were expected particularly for an organisation within the Life Sciences industry. 10% of the participants were Baby Boomers (1946-1964), 31% were Generation X (1965-1979), 45% were Generation Y (1980-1995) and 14% were part of Generation Z (Abrahams & Von Frank, 2013). The small representation from the Baby Boomer group, suggests that it is likely that this group have been employees that have been with the organisation for a long time, are nearing retirement or in part-time consulting roles (Abrahams & Von Frank, 2013). The input from their experiences could be valuable in creating an understanding of what initiatives were implemented previously for workplace development, what was successful in terms of workplace design, and if diversity, equity, and inclusion was a consideration for workplace development in the past.

Generation X have the second highest representation are likely to hold senior or leadership position within the organisation. This means that their ability to influence is substantial and could play a vital role in identifying barriers, promoting, and implementing a change to a more people centric workplace model that has the potential to outperform traditional activity-based working models and contribute to positive outcomes for the organisation and its people (Abrahams & Von Frank, 2013).

Generation Y are the largest contributors in the survey and will have the most considerable influence on the results. Stereotypically known to have characteristics such as being tech savvy, flexible, result orientated and striving for greater work-life balance, their inputs could drive the adoption of inclusive practices in the workplace, request social spaces, and motivate for more human centric workplaces for the organisational progression. The insights provided by this group could align with the effectiveness of the potential for diversity, equity, and inclusion initiatives and its impact on employee engagement and how it could influence innovation and the benefit a global organisation (Abrahams & Von Frank, 2013).

The small representation of the Generation Z participants may be due to their recent entry into the organisation or alternatively that they are on the cusp of completing their education as working students. This group are commonly regarded as digital natives and their influence could contribute to identifying emerging trends focused on digital integration and sustainability within the workplace. Their experience in activity-based working settings would contribute to providing a long term view on the value of having a balance in a new people centric workplace for higher human centricity, longevity and need for technology that enables progression in a hybrid workplace (Abrahams & Von Frank, 2013).

To establish context for the questions regarding the current activity-based working model, it is necessary to provide clarity of the framework of the Smart Working Plus model, as per Figure 3.3. It is firmly based on the activity-based working concept which accommodates for individual work, collaborative work, and remote working. The intention to incorporate remote working into the model was to align how people work with hybrid work requirements. This thinking is essential for most if not all workplace concepts globally post the COVID pandemic.

Within the individual work settings, there are three space modules i.e., "Library," "Multi Space" and "Focus Pod." The "Library" space module allows for non-communicative individual work in collective environment, the "Multi Space" is a semiprivate space with a high acoustic value that is conducive to verbal communication and allows users limited proximity to other users so as to facilitate a level of connection, and the "Focus Pod" allows for concentrated work in an enclosed space for one user.

Remote working provides the ability for users to work outside of the office space, most likely from home, and has the benefits of reduces commute, opportunities for focus work or online collaboration. By incorporating a remote working option in the Smart Working Plus model, create a sense of relevance for the model as it is an accepted and very prominent working style following the COVID-19 pandemic.

The collaboration space settings have five space modules i.e., "Co Working", "Project Area", "Creative Meetings", "Traditional Meetings" and "Retreat". In "Co Working" spaces users can work individually or collaboratively in a collective environment, in a "Project Area" users can work collectively in a small group for a defined time and when the space is not used by project teams, the space can also be used as workstations for team collaboration. The two meeting options are for either for creative sessions where the furniture is flexible and can be moved around to facilitate a team breaking out into smaller teams or traditional sessions with more standardised meeting room furniture. The "Retreat" space an informal space where users meet other users serendipitously and can grab a beverage while connecting either socially or for informal work.

## 4. Rate the statement below (1=poor 3=neutral 5=excellent)

The first part of this question aimed to assess the participants understanding of the Smart Working Plus workplace model. The majority of respondents had a good to excellent understanding of the model, with 47.6% of the participants rating their understanding as excellent (5) and 33.3% of the participants rating it as good (4). This suggests that the model was well-communicated and clear to most participants.

However, 4.8% of participants, who responded with a (1) or (2), rated their understanding of the model as poor or below average. This could indicate that there

may be a need for some form of training required to ensure that all participants have a better understanding of the Smart Working Plus model. The neutral responses accounted for 14.3% may represent employees who have a basic understanding of the model but may not be fully utilising the potential of the model. It could also suggest that these participants are neutral toward to the model.

Overall, the results of this question suggest that the Smart Working Plus model is generally well-understood by employees, but there is room for some improvement which could be in the form of iterative training on how to better use the space modules to ensure that all participants can effectively use the variety of spaces available in the Smart Working Plus model.

The second part of the question asked the opinion of the participants on the quality of the Smart Working Plus model. The results show that there is a fairly even distribution across the rating scale, but with a slim majority of 66.6% rating the model as good (4) or excellent (5). This indicates that the Smart Working Plus model is generally well-received and considered effective by a majority of employees. There was an evident percentage of respondents that comprised of 16.7% that rated the model as neutral (3). This could suggest that they may not have strong opinions on the model or alternatively may see room for improvement. 16.6% of participants rated the model as poor (1) or below average (2), indicating a certain level of dissatisfaction with the Smart Working Plus model and could be indicative of a potential opportunity for adjustments to improve the model.

The overall results suggest that Smart Working Plus model is generally well received, however there is a significant portion of employees who may benefit from changes to the model or may require additional support or training to make the best use of the model in their daily working styles and activities.

The third part of the question aimed to determine if participants felt that the Smart Working Plus model allowed them to be effective in their roles. The results show a relatively even distribution across the rating scale, with a slight majority of 59.5% rating the model as effective (4) or highly effective (5) in supporting their roles.

A significant percentage of 21.5% of participants rated the model as ineffective (1) or somewhat ineffective (2), which may indicate that the model may not be sufficiently supporting the needs of all participants in their roles. 19% of participants rated the model as neutral (3), which also suggests that they may not see a strong impact from the model related to the effectiveness in their roles. These results indicate that while the Smart Working Plus model is generally effective for the majority of the participants, there is a significant number of participants who may not be extracting the full benefit of the model. This could mean that the model may require some adjustments or additional guidance to support participants so that they are able to use the spaces in the model to enable them to execute individual or collaborative tasks that provide benefit in their roles.

The fourth part of the question assessed the participants opinions on whether they were open to include more options for spaces in the Smart Working Plus model. The results show that 60.9% of the participants rated a need for more options as good (4) or excellent (5). With 29.3% of the participants rating the need for more options as neutral (3), this could suggest that they may not have strong opinions on the matter or may be satisfied with the current space modules available in Smart Working Plus. In addition to this 9.8% of participants rated the need for more options as below average (2), indicating that they may not see or have a need for additional spaces to be included in the Smart Working Plus model. With the outcome of the results suggesting that a majority of participants may be eager to see more options for other options for space modules in the Smart Working Plus model, there are participants who may not see the benefit.

To conclude the analysis of this question, the results indicate that the Smart Working Plus model is acceptable for the participants, but that there is a significant portion of participants who may not be having the same experience and fully benefiting from the model. This could suggest that there may be an opportunity for changes or refinements to the model to enable participants to have spaces where they feel they could be more effective in their roles. Sufficient caution should be applied to ensure that any changes proposed to the model should carefully consider the diverse needs and preferences of employees in a global organisation to ensure that any new model establishes a platform for inclusivity for all employees.

5. Which three spaces in the Smart Working Plus model are your preferential spaces to work in or the ones you use the most?

The responses from the participant on this question provided insight on their usage of the space modules withing the Smart Working Plus model. The analysis will be assessed separately with consideration for the purpose of either individual work setting ore collaborative work setting. The participants responses are:

# a. Individual Work Settings

The "Library" space module, designed for non-communicative individual work in a collective environment, received the lowest weighted score of 3%. This suggests that participants may not perceive the "Library" as the most suitable space for their preferred work activities. It is essential to assess the factors contributing to this lower preference and explore ways to enhance the appeal and functionality of the "Library" or if it is a feasible space module to continue with at all. The interpretation could be that employees may be seeking more interactive and collaborative spaces, which may better support their work needs and preferences while at the office.

The "Multi Space" module, designed for verbal communication and limited proximity to facilitate connections, received a moderate weighted score of 14%. This indicates that participants find value in collaborative workspaces with acoustic privacy. It would be valuable to determine if this module can be optimised to ensure they provide an ideal environment for effective communication and connection.

The "Focus Pod" module, designed for concentrated work in an enclosed space, also received a relatively high weighted score of 13%. This suggests that participants appreciate the availability of private spaces for focused work. To further enhance the people-centric model, it may be beneficial to explore the option for more innovative designs that offer privacy without compromising on flexibility, accessibility, and collaboration.

## b. Collaboration Space Settings

The "Co Working" space module, provides a collective environment for individual or collaborative work and received the highest weighted score among all space modules which was 23%. The Smart working Plus model works on the premise that

collaborative work will be a minimum of 60% of the activities in the office and 40% will be individual. This indicates a strong preference for flexible workspaces that foster collaboration and social interaction. To align with a more people-centric model, it would be crucial to understand how to ensure this space module will continue to deliver on it being a preferential space by equipping it with the necessary technology and amenities to support diverse work styles and promote spontaneous collaboration.

The "Project Area" module, designed for collaborative work in small groups, received a lower weighted score of 7%. This suggests that participants may not perceive the Project Area as a primary choice for their collaborative activities. It would be valuable to reassess the design and functionality of Project Areas, ensuring they cater to the specific needs of project teams and provide an environment conducive to productive collaboration.

The "Creative Meetings" space module, offering flexible furniture arrangements for team breakout sessions, received a moderate weighted score of 16%. This implies that participants recognise the importance of spaces that foster creativity and ideation. Further refinement could lead to spaces that inspire creativity and encourage out-of-the-box thinking within these spaces.

The "Traditional Meetings" module, featuring standard meeting room furniture for more structured sessions, received a similar weighted score to "Creative Meetings" of 17%. This suggests that participants value both the flexibility of "Creative Meetings" as well as the formality of "Traditional Meetings". It would be advantageous to determine what the optimal balance between these two meeting options, providing spaces that can accommodate both collaborative and more structured discussions.

The "Retreat" space module, an informal area for social connections or informal work, received a lower weighted score of 7%. This implies that participants may not perceive the "Retreat" as a highly utilised space within the Smart Working Plus model. This could probably mean that the space is not equipped or designed to be inviting and promote spontaneous interactions and networking opportunities. This will be assessed in the workshops to understand how to better refine this space for better usage.

The survey did not include remote working as a space module, but it is acknowledged as a critical element of the Smart Working Plus model and has become fundamental for employees in a post pandemic workplace. This metric must also be validated in the workshops to determine the influence on participants wanting to come to the office. According to Wigert et al. (2023), who have assessed over two hundred thousand employees in total, the future of the office is a hybrid operational model.

While the analysis of participant preferences and weighted scores for each space module within the Smart Working Plus model provides valuable insights for the development of a more people-centric workplace model, there are clear that some modules either need to be refined or reconsidered for discontinuation as it may not contribute toward people centric model. By addressing the strengths and areas of improvement identified in this analysis, it is possible to create a workplace environment that better aligns with the diverse needs and preferences of employees, ultimately enhancing collaboration, productivity, and overall employee satisfaction.

6. Why do you believe the spaces you have selected work the best for you? The participants' responses to this question are a follow on from the responses in question five. They provide a nuanced understanding of the preferences from the participants for different space modules in the Smart Working Plus model.

Several participants expressed a preference for collaborative spaces, such as the "Co Working" and "Project Area" modules. These preferences are driven by the participants desire for social interaction and collaboration in the workplace. Participants who preferred these spaces often mentioned the value of being part of a team, sharing experiences with colleagues, and having easy access to colleagues. These responses suggest that their experiences in the current workplace model successfully fosters a sense of community and collaboration among employees.

However, the responses also highlight the importance of having spaces for focused, individual work. Participants who preferred the "Focus Pod" and "Library" modules often mentioned the need for quiet and concentration, especially when working on

complex tasks or participating in virtual calls. These responses suggest that while collaboration is valued, there is also a need for spaces that support focused, individual work in the current workplace model.

The participants' responses also reveal preference for flexibility in the workplace. Several participants mentioned the value of having a variety of spaces to choose from, depending on their tasks and work needs for the day. This suggests that the current workplace model provides a range of spaces that cater to diverse work styles and tasks. There is, however, not much mention of the ease of moving between the spaces.

Some participants did express concerns about certain aspects in the current workplace model. For instance, some participants mentioned the need for better IT equipment and soundproofing in the collaborative spaces. These concerns are suggestive of qualities of the current spaces that could be improved in the current workplace model and that should be raised in the workshop to support the development of the new model.

The analysis reveals a clear preference for collaborative spaces, but also highlights the importance of having spaces for focused, individual work. The responses also suggest that the current workplace model successfully provides a variety of spaces that cater to diverse work styles and tasks, but there are areas for improvement.

7. Do you feel that the current workplace model supports and promotes an environment of trust where you feel that you are able to choose the best type of space to work in the office? (Add any additional comments in the "other" text field)

The philosophy of any activity-based working model promotes an environment of trust and enables employees to choose the best type of space for to the type of work they are doing at that point in time. The survey results indicate that 53% participants responded positively, 17% negatively, and 29% were uncertain about the Smart Working Plus model's effectiveness.

The majority of participants (53%) were satisfied with the Smart Working Plus model ability to support and promote an environment of trust. This positive response could be attributed to Smart Working Plus offering flexibility in accommodating diverse work styles and needs, such as the "Library" for non-communicative individual work, the "Multi Space" for semi-private communication, and the "Focus Pod" for concentrated work. The incorporation of remote working also aligns with the global shift towards hybrid work arrangements, which have become increasingly important in the post-COVID era. This outcome can also be noted in question 5 and 6.

However, there is also a significant proportion of participants (47%) who expressed a dissatisfaction or uncertainty regarding the Smart Working Plus model. This dissatisfaction and uncertainty may stem from various factors, such as the potential for isolation in certain work settings (e.g., "Focus Pod"), the lack of privacy in others (e.g., "Library"), or the challenges associated with remote working (e.g., maintaining work-life balance, managing distractions). Also considering the collaboration space settings that offer diverse options for group work, it may not fully address the needs of all employees, as some may prefer more informal or spontaneous interactions or require special provisions to reap the benefit of the collaboration space options.

It can be suggested here that by addressing these concerns and move towards a more people-centric model, organisations could consider implementing additional measures to support employee well-being and work-life balance, such as providing mental health resources, offering flexible work hours, and encouraging regular breaks. Additionally, there could be investment made toward the development of more adaptable and inclusive workplaces that cater to a wider range of employee needs and preferences, such as modular furniture, soundproofing solutions, and designated areas for relaxation and socialising.

Overall, the results from this question indicate that while the Smart Working Plus model is generally effective in promoting an environment of trust and accommodating diverse work styles, there is still room for improvement in terms of fostering a more people-centric approach. By addressing the concerns and needs of employees who expressed dissatisfaction or uncertainty, the creation of more inclusive, supportive,

and adaptable workplaces can be achieved where the need of the employee are prioritised employee focusing on well-being, connection, and personal development.

8. Which spaces, if any, with the current Smart Working Plus workplace model gives you the impression of this being a space that promotes trust?

This question looked to analyse the trust-promoting potential within the Smart Working Plus model where each of the space modules that make up Smart Working Plus model where weighted to create an understanding on the perception that participants have for sense of trust within each space module.

The "Library" module scored the lowest (5%) amongst the individual work settings space modules suggesting that participants perceived the "Library" module as a less trust-promoting space compared to other modules. This could result from the intent of the space module that has emphasis on non-communicative individual work in a collective environment.

The "Multi Space" space module received a moderate score (13%), indicating that participants view it as a trust-promoting space to some extent and the intent of the space which allows for verbal communication and limited proximity to other users, likely contributes to this perception.

The "Focus Pod" module shares the same score as the Multi Space (13%), suggesting that participants also perceive it as a trust-promoting space and this perception could be contributed to the enclosed design that supports concentrated work for one user. The likelihood that these space modules are preferred by participants in senior or leadership positions are relatively high, and it could also be likely that it suits the needs of participants who require spaces for confidential work and for those that potentially find it overwhelming to focus in the "Multi Space" or "Co Working" space modules.

The "Co Working" module received the highest score (21%), indicating that participants perceive it as a highly trust-promoting space from all of the space modules available. The opportunity for participants to work both individual and

collaborative work in a collective environment fostering trust through shared experiences and interactions is likely to contribute to this high score.

The "Project Area" space module received a moderate score (12%), suggesting that participants perceive it as a trust-promoting space to some extent where collective groups with a small number of users work for a defined time. It is likely that value of more intermit interaction contributes to this perception where teams foster trust through shared goals and collaboration.

The "Creative Meeting" module received a high score (18%), indicating that participants perceive it as a trust-promoting space potentially due to the ability to support flexible furniture arrangements and encourage team breakouts.

The "Traditional Meeting" module received the lowest score (5%) among the collaboration space settings and suggests that participants perceive this module as a less trust-promoting space compared to other collaboration modules. With the space being very traditional and this includes the type of furniture used for this space module, the perception will be directly related to users past experience of these spaces.

The "Retreat" module received a moderate score (14%) suggesting that participants perceive it as a trust-promoting space to some extent as there are opportunities for informal meetings and serendipitous encounters that may influence the participants perception. These moments provide employees/users with opportunities that foster social connections and trust through shared experiences.

9. Being able to see/have access to other people you work with helps facilitate good communication and collaboration while at the office. Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective? (Add any additional comments in the "other" text field)

This question assessed the value of visibility for participants of their other colleagues, managers, and leaders in making communication easier and more effective. The

participants' responses were categorized into "Yes", "No", "Maybe", and "Other", with the majority agreeing that visibility plays a significant role in facilitating communication and collaboration. This question and the ones that follow start to explore specific requirements related to the Smart Working Plus as the current model and the metrics outlined for Polycontextual workplaces to assess where the gaps are in the current model.

The overwhelming majority of participants (88%) agreed that visibility of colleagues, managers, and leaders in the Smart Working Plus model plays a part in making communication easier and more effective. None of the participants disagreed with the statement that visibility of colleagues, managers, and leaders and this unanimous agreement highlights the importance of visibility and accessibility in promoting communication and collaboration in the workplace. A small number of participants (12%) were uncertain about the role of visibility of colleagues, managers, and leaders and this may indicate that some employees have mixed experiences or preferences regarding visibility and accessibility in the workplace. Six participants provided additional comments that generally supported the notion that visibility of colleagues, managers, and leaders and these comments emphasised the benefits of quick interactions, reduced need for formal meeting requests, and the importance of inperson discussions for effective communication. However, one participant also highlighted the value of remote working for promoting diversity and creativity by collaborating with team members from all over the world. Considering the responses received and that the question did not specifically relate to Smart Working Plus settings, it could be perceived that visibility to others may not necessarily always applicable to how Smart Working Plus workplaces are created and has an effect on the workplace experience for users. This could also be due to factors like the physical and structural space within the building, specific user requirements aligned with the type of business function in that space and also the way participant behaviour influenced how users chose the space module to work in i.e., if employees always chose "Focus Pods" and "Multi Spaces" when they are in the office. In general, the need for visibility of other is confirmed to be criteria of high value in a workplace.

10. Is it easy to move or transition into different to Smart Working Plus spaces? i.e., moving from co-working to "Focus Pod" and back to a "Co Working" space depending on the task you are performing (Add any additional comments in the "other" text field)

As the effectiveness for the usage of activity-based working environment, like Smart Working Plus, relies on users moving between different types of space settings in order to perform the tasks that suit the type of space module. This principle is valid for all activity-based working models. The results were 60% responding as "Yes", 20% responding as "No" and 20% responding as "Maybe". There were also twelve responses for "Other" that provided text input responses.

Participants were asked if moving between spaces was something that was easy for them to achieve. These responses were analysed and applied to the different space modules that are on offer in Smart Working Plus. As a starting point, the results indicated that participants did appreciate that they had the option to choose the space that suited them for the tasks they were doing. In the "Library" space module where the space allows for non-communicative individual work in a collective environment, some participants expressed concerns about the disruptive nature of moving between spaces, which could impact the effectiveness of the "Library" setting. Additionally, the availability of appropriate technology and the need for carrying paperwork were mentioned as potential barriers to effectively use the space. The "Multi Space" module, which offered a semi-private space with high acoustic value for verbal communication, received mixed feedback. Some participants appreciated the flexibility of moving between spaces, while others found it disruptive. Some concerns for this space module were the availability within the space setting and the need for carrying paperwork were also mentioned as potential challenges. The "Focus Pod" module that is designed for concentrated work in an enclosed space also received mixed feedback. Some participants found it easy to move between spaces, while others mentioned the lack of availability of "Focus Pods", as with the "Multi Space", and appropriate technology as barriers. Furthermore, the issue of people occupying focus pods all day was raised, which could limit the availability of these spaces for others.

The "Co-Working" space module that is intended for individual or collaborative work in a collective environment, received positive feedback from participants who appreciated the flexibility and choice it offers. However, some participants mentioned the challenges of hybrid work and the need for space to conduct Teams calls without disturbance to other that are also using the space. Many people having Teams call in the space same could be unpleasant and may then change the behaviour of users in the space to want to accommodate other and them reduce their willingness to have online meetings at the workstations. The "Project Area" module did not receive specific feedback in the survey. The "Creative Meeting" and "Traditional Meeting" modules did not receive specific feedback in the survey. The general concerns about the availability of spaces, the size of the rooms and the challenges of hybrid work could apply to these modules. Technology in these rooms would need to be very good, both video and audio, to allow for a good user experience. The technology would also need to be easy to use. No specific feedback was received for the "Retreat" spaces. The understanding that the space is a social space and that there was the opportunity to conduct informal meetings that are not confidential may offer conflicting values to more traditional office users and could be a barrier for them to move to this space to work based on the perception that if you are having a coffee and connecting with other users in a social space, you may not be productively working.

11. Do any of the recommendations below support an improvement to the existing spaces to make it more user friendly?

To provide a detailed analysis of the recommended spaces requested and their implications for changing the current Smart Working Plus workplace model to a more people-centric model, we will examine each recommended space module individually. This analysis will explore the potential benefits and considerations associated with incorporating these spaces into the existing Smart Working Plus model.

More options for short periods of focus work (not "Focus Pods")

The recommendation for more options for short periods of focus work was the highest response at 20% and suggests a need for spaces that cater to individuals requiring concentrated work without the need for an enclosed focus pod. This could be

addressed by introducing additional spaces that provide a quiet and focused environment, which could serve a similar purpose as that of touch down workstations or phone booths in an area that is easy to access. These spaces should be designed to minimise distractions and promote deep work for short periods. By offering a variety of options for short periods of focus work, individuals can choose the environment that best suits their needs, leading to increased productivity and satisfaction.

# Learning space

With a 13% response rate, learning spaces signify a desire for areas dedicated to professional development and knowledge sharing. These spaces could be designed to facilitate training sessions, workshops, or seminars, providing employees with opportunities to enhance their skills and expand their knowledge. Incorporating learning spaces within the workplace model could promote a culture of continuous learning and growth, fostering employee development and engagement. This also is a driver for employee retention and talent attraction (Keller, 2017).

### Space for mindfulness

The request for spaces dedicated to mindfulness was at 17% and highlights the importance of mental well-being and stress reduction in the workplace. These spaces can be designed to encourage relaxation, meditation, or other mindfulness practices. Incorporating such spaces into the workplace model can provide employees with a designated area to recharge and rejuvenate, leading to improved focus, creativity, and overall well-being (Yu and Zellmer-Bruhn, 2019).

### Physical wellbeing spaces

There was a 15% request for physical wellbeing spaces emphasising the significance of promoting employee health and wellness. These spaces can include fitness areas, stretching zones, or wellness rooms equipped with amenities for relaxation or exercise. By integrating physical wellbeing spaces into the workplace model, organisations can demonstrate their commitment to employee health, fostering a positive work environment and potentially reducing health-related issues. There is also high value on social connections or clubs related to wellbeing spaces as a method of community health (Centers for Disease Control and Prevention, 2023).

Spaces that enhance the feeling of psychological safety

The need for spaces that enhance the feeling of psychological safety (8%) highlights the importance of creating an inclusive and supportive work environment. These spaces could be designed to promote open communication, collaboration, and trust among employees and leaders. By incorporating elements such as comfortable seating arrangements, informal meeting areas, and collaborative workstations, organisations can foster a sense of psychological safety, leading to increased employee engagement and satisfaction (Ravishankar, 2022).

Opportunities for more connection (social or professional)

The recommendation for more connection opportunities at 17%, reflects the desire for spaces that facilitate social and professional interactions among employees. These spaces could be designed to encourage informal conversations, networking, or team-building activities. By providing areas such as communal lounges, breakout spaces, or social hubs, the promotion of a sense of community and strengthen relationships among employees, potentially enhancing collaboration and innovation (Weir, 2023).

More accessible spaces to better support physical mobility

At 10%, the request for more accessible spaces signifies the importance of accommodating employees with physical mobility challenges. Organisations can address this by ensuring that the workplace model incorporates inclusive design principles, such as wheelchair-accessible workstations, height-adjustable desks, and ergonomic seating options. By prioritising accessibility, organisations can create a more inclusive and equitable work environment, supporting the well-being and productivity of all employees (Pineda, 2022).

Other (Breakdown area with simple sport, spaces where I can bring the kids with me/family-friendly, need phone booths)

The "Other" recommendations encompass a breakdown area with simple sports facilities, family-friendly spaces, and the need for phone booths. These suggestions highlight the need for spaces that cater to employees' diverse needs and lifestyles. Incorporating a breakdown area with simple sport facilities, such as a pool table or

table tennis, can provide employees with opportunities for relaxation and stress relief. Family-friendly spaces can offer parents the flexibility to bring their children to work, creating a supportive environment for work-life integration. Additionally, phone booths can provide employees with private spaces for confidential conversations or focused work (Rothbard, 2020).

# 12. What would these additional spaces address for you?

As organisations strive to create work environments that are conducive to productivity, collaboration, and well-being, this question aims to understand the diverse needs and expectations of the participants. The options proposed in the question reflect some options to fulfil these diverse needs and highlights areas where the Smart Working Plus model could be improved to better support user needs. This questions analysis examines why these options and discusses their implications for the Smart Working Plus model. The responses (23) for more options for short periods of focus work outside of a focus pod suggests a need for further flexibility and choice in the workplace model. This could be interpreted as a call for spaces that offer a balance between privacy and connectivity and allow users to engage in focused work without feeling isolated. Providing spaces like these would not only enhance productivity but also foster a sense of autonomy and control which are key elements in promoting job satisfaction and well-being (Quito, 2022).

From the responses received, several participants expressed a desire for spaces that foster community building and social connections, indicating that the office is not just for individual, heads-down work. The need for spaces that provide sensory reminders for stress management was also highlighted, particularly by a participant with ADHD. Participants also expressed a need for spaces that allow for short periods of focused work and provide the opportunity for individual work. The importance of learning spaces was underscored by several participants, who suggested that such spaces could attract more people, promote sharing and communication, and cultivate a better learning culture. The need for physical wellbeing spaces was also highlighted, with participants noting that such spaces could increase user satisfaction level and engagement and accommodate employees with health conditions signalling that the employer has a vested interest in the health.

Some participants expressed scepticism about the role of space in enhancing psychological safety and promoting social networking, arguing that these are more dependent on people and teams than on the physical environment. However, others argued that more fun areas for informal connection could foster a better sense of togetherness.

In conclusion, the responses reflect a desire for a diverse range of spaces that cater to participants varying needs and work styles.

13. What characteristics do you think a space should have to provide support for mental health?

The modern workplace constantly evolving to serve people better a larger emphasis is being placed on creating environments that support not only the physical but also the mental well-being of employees. In this context, this questioned aimed to understand the participants preferences for different types of spaces that could support mental health in the workplace. These responses could provide practice based insights that could inform the development of a new workplace model, moving from an activity-based approach to one that is more people-centric and designed for human context.

The first option indicates a significant preference (23%) for quiet spaces that facilitate individual mindfulness practices. The importance of providing employees with designated areas where they can engage in activities that promote mental well-being, such as meditation, deep breathing, or simply taking a break from work-related tasks can contribute to reduced stress levels, increased focus, and enhanced overall well-being among employees in a new workplace model. By integrating individual mindfulness spaces into the workplace model, organisations can reinforce their commitment to employee mental health and well-being, fostering a supportive and nurturing work environment that values personal growth and self-care (Keh, 2022).

The second options results reveal a moderate interest in counselling spaces (9%), both in-person and with virtual access to support. This response highlights the need for organisations to consider providing employees with access to mental health resources

and professional support within the workplace. By incorporating counselling spaces into the workplace model, organisations can create a more people-centric environment that acknowledges the importance of mental health and well-being. However, there could be risks of having these spaces in an office environment with consideration for discreteness or privacy as some employees may not feel a sense of psychological safety being seen making use of this facility. The location of these spaces will be important so that there is some level of discretion for employees who choose to make use of this type of amenity. (Cook and Malloy, 2014).

The response to the third option indicate a moderate preference for quiet spaces (9%) that could facilitate collective mindfulness practices. This finding suggests that employees value opportunities to engage in group activities that promote mental well-being, such as guided meditation sessions or group yoga classes. Incorporating such spaces into the workplace model can contribute to a sense of community and shared purpose among employees, fostering a supportive and nurturing work environment that values personal growth and self-care (Keh, 2022).

The responses to the option for time out or decompression spaces (29%) reveal a strong preference for participants, indicating that employees value opportunities to take breaks and recharge during the workday. Incorporating such spaces into the workplace model can contribute to reduced stress levels, increased focus, and enhanced overall well-being among employees. (Simões, 2022). Space in a workplace model that could facilitate this could include designated break zones where employees can step away from their workstations and engage in brief, rejuvenating activities.

This final options results indicate a strong preference (30%) for social spaces that promote connection and interaction among employees. This finding underscores the importance of providing employees with designated areas where they can engage in informal conversations, collaborate on projects, or simply enjoy each other's company. Incorporating spaces that could achieve this can contribute to a sense of community and shared purpose among employees, fostering a supportive and nurturing work environment that values personal growth and self-care. Some options for these types of spaces could include designated conversation zones with

comfortable seating and inviting environmental elements, such as plants or soft lighting in a café or lounge setting (Weir, 2023).

This question provide valuable insights into the types of spaces that employees believe can support mental health in the workplace. There is a clear preference for quiet spaces for individual mindfulness practices, time out/decompression spaces, and social spaces to feel connected to people. These findings suggest that participants value spaces that allow for relaxation, rejuvenation, and social connection, in addition to those that facilitate individual and collective mindfulness practice. We can start to see the importance of designing workplaces that prioritise human context and mental well-being, fostering a supportive and nurturing environment that promotes personal growth, self-care, and social connection. As organisations navigate the post-pandemic world and the shift towards more hybrid work arrangements, these considerations will be crucial in creating workplaces that are not only functional and efficient but also conducive to the mental health and well-being of employees.

14. What kind of spaces would support health and wellbeing and what elements do you think these would consider?

This question aimed to explore the preferences regarding various spaces that could support health and wellbeing in the workplace. The survey question focused on six options: Massage and therapy rooms, power nap spaces, more natural light, areas for wellness that have plants and other biophilic elements and access to programs like yoga/running groups/cycling group/walking groups.

The inclusion of massage and therapy rooms in the workplace (14%), indicating a moderate level of interest among participants. This preference suggests that value of spaces dedicated to relaxation and stress relief, which can contribute to improved mental health and overall wellbeing was high with participants. Incorporating massage and therapy rooms in the new workplace model could help address the increasing need for mental health support in the post-pandemic work environment. These spaces could also serve as an additional incentive for employees to return to

the office, as they provide a unique benefit that may not be available when working remotely.

Power nap spaces demonstrated a relatively high level of interest amongst participants (22%). This preference highlights the importance of rest and rejuvenation in the workplace, as power naps have been shown to improve cognitive performance, mood, and alertness (Ryall, 2023). Integrating power nap spaces into the new workplace model could help employees maintain optimal productivity levels and reduce the risk of burnout. Additionally, these spaces could be designed to accommodate various levels of privacy and comfort, catering to the diverse needs of employees.

The desire for more natural light in the workplace indicates a strong preference among participants (23%). The significance of natural light in promoting employee health and wellbeing has been linked to improved mood, increased productivity, and reduced eye strain. (Meister, 2018). Incorporating more natural light into the new workplace model could involve the strategic placement of workstations near windows, the use of glass partitions, and the possibility of the installation of skylights. This design element could also contribute to a more sustainable and energy-efficient workplace, reducing the reliance on artificial lighting.

Areas for wellness that incorporate plants and other biophilic elements received the highest number of votes (26%), reflecting a strong preference among participants. This result highlights the importance of incorporating natural elements into the workplace, as biophilic design has been shown to reduce stress, improve cognitive function, and enhance overall wellbeing. Integrating biophilic elements into the new workplace model could involve the inclusion of indoor gardens, green walls, and natural materials, but could also include nature-inspired artwork and patterns (Colenberg, 2019). These design features could help create a more nurturing and restorative work environment, promoting employee health and wellbeing.

Access to wellness programs such as yoga, running groups, cycling groups, and walking groups indicated a moderate level of interest among participants (15%). This preference suggests that employees value opportunities for physical activity and

social interaction in the workplace. Incorporating wellness programs into the new workplace model could help foster a sense of community and camaraderie among employees, while also promoting physical health and stress reduction. These programs could be offered both on-site and remotely, catering to the diverse needs and preferences of employees in a hybrid work environment (Jones et al., 2019).

This question in the survey reveals a clear preference for spaces that promote health and wellbeing in the workplace, with a particular emphasis on biophilic design, natural light, and power nap spaces. These findings suggest that the development of a new workplace model should prioritise human context and wellbeing over activities in an activity-based model. By incorporating the preferences of employees, the new workplace model can better support the diverse needs of individuals in a post-pandemic work environment, fostering a more resilient, healthy, and productive workforce.

15. Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer? (Add text in "other" text field)

Participants were asked if the influence of views to outside or spaces on their decision to use specific spaces within the workplace, as well as their preference for views of nature or urban activity. The results of the question could provide valuable insights into the importance of views to the outside spaces in shaping employee workplace experience preferences related to their wellbeing.

An overwhelming majority of participants (88%) indicated that having views to the outside spaces influences their decision on what spaces to use suggesting that access to natural light and visual connections to the outdoors are important factors in employee wellbeing and workplace experience satisfaction (Mercy et al., 2022). Incorporating views to the outside spaces in the new workplace model could involve strategic placement of workstations near window or the use of more glass partitions to create more transparency and a more natural feel for lighting in a workplace. Also, having more spaces with views of nature, as many participants expressed a

preference for nature views over urban activity could increase the workplace experience.

None of the participants indicated that views to the outside spaces do not influence their decision on what spaces to use and a small number of participants (12%) indicated that views to the outside spaces may influence their decision on what spaces to use. The result from the "maybe" option could suggest that while views to the outside spaces may not be a primary factor for all employees, they still hold some importance in shaping workplace preferences.

In the "Other" option for the question, participants provided further insights into their preferences regarding views to the outside spaces. Many participants expressed a preference for nature views, citing reasons such as reduced stress, improved mood, and a sense of connection to the environment. Some participants also mentioned the importance of views to the outside spaces for relaxation and eye strain relief.

In general, the responses reveal a strong preference among participants for views to the outside spaces, with a particular emphasis on nature views. These findings suggest that the development of a new workplace model should prioritise access to natural light and visual connections to the outdoors, in order to support employee wellbeing and satisfaction. This could also be a determining consideration in locations where the office space is leased and where there is more choice on selection of a new office space with views to nature being a priority. With these criteria, the resultant effect could be that office spaces that are leased could be out of the central zones in cities due to the fact that most cities have limited option for views to nature in the central parts. This would then negatively affect consideration like the commute times and connection to amenities for employees but potentially positively affect the rental costs for these office space.

16. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference? (Add text in "other" text field)

The effect of sound transmission or avoidance on participants experience in the workplace, aimed to understand the potential implications for the development of a more people-centric workplace model in contrast to the Smart Working Plus model. A majority of participants (73%) indicated that the level and quality of sound transmission or avoidance in the office space does have an effect on their overall workplace experience (Macchie et al., 2018). This result suggests that employees value spaces with appropriate sound levels and acoustics as it can contribute to improved focus, productivity, and even their overall wellbeing. The potential to better incorporate higher quality sound transmission or avoidance considerations in a new workplace model could involve the use of sound-absorbing materials, the strategic placement of workstations, and the creation of designated quiet zones.

A small number of participants (15%) indicated that sound transmission or avoidance does not affect their workplace experience. This result suggests that while sound levels may not be a primary concern for all employees, however they still hold some importance for the majority of participants. A small number of participants (13%) indicated that sound transmission or avoidance may have an effect on their workplace experience. This result suggests that sound levels may not be a primary factor for all employees, but they still hold some importance in shaping their workplace preferences and the spaces they select.

Further, in the "Other" category provided more insight into their preferences regarding sound transmission or avoidance where participants expressed a preference for quiet spaces or designated quiet zones, confirming that is supported improved focus, reduced distractions during moments of concentration, and the need for privacy during some calls or meetings. Some participants also mentioned the importance of ambient sound or white noise as a tool to create a comfortable work environment for them.

There is a clear preference for participants for the option to reduce or control sound in the workplace and potentially in the workplace. In doing this user with could have the opportunity to achieve more individual focus, specifically if they had the choice in certain areas that were designated quiet zones. This could also really benefit users that are unable to regulate the behaviour if there is too much external stimulus from the environment, they are in.

17. Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space? (Add text in "other" text field)

This question looked to determine the effect of light quality, both artificial and natural, on participants experience in the workplace. This included their preferences regarding light levels. The question aimed to understand the potential implications of these preferences for the development of a more people-centric workplace model, in the context of the current Smart Working Plus model. The results of this question could provide valuable insights into the importance of light quality in shaping employee preferences and wellbeing.

A majority of participants (86%) indicated that the level and quality of light, both artificial and natural does have an effect on their workplace experience. This result suggested that employees value spaces with the best light levels for the activity they were doing. The light levels were also a contributor to improved mood, productivity, and overall wellbeing (Preto and Gomes, 2019). From this response, incorporating light quality considerations in the new workplace model could cater to the diverse needs and preferences of employees. Some considerations could involve the use of natural light through strategic placement of workstations near windows as well as the use of artificial light that mimics natural light. It would also be important to have spaces with varying levels of light quality and exposure.

A small number of participants (7%) indicated that light quality does not affect their workplace experience which suggests that while light quality may not be a primary

concern for all employees, it still holds significant importance for the majority of participants.

An equally small number of participants (7%) indicated that light quality may have an effect on their workplace experience. This result suggests that light quality may not be a primary factor for all employees, but it still holds some importance in shaping workplace preferences.

In the "Other" category, participants provided additional insights into their preferences regarding light quality. Many participants expressed a preference for natural light, as the feedback from their experience, the effect of light improved their mood, increased their productivity, and provided a sense of connection to the outside environment. Some participants also mentioned the importance of adequate light for work performance and wellbeing. These responses further underscore the significance of incorporating light quality considerations in the new workplace model.

To consolidate the analysis from the participants for this question, it could be concluded that there is a clear preference among participants for appropriate light quality in the workplace, with a particular emphasis on natural light. These findings suggest that in the development of a new workplace model, light quality should be prioritised in order to support employee experience, their mood while in the office, their productivity, and their wellbeing. By incorporating this the new workplace model can better cater to the diverse needs of individuals, fostering a more resilient, healthy, and productive workforce.

18. Do you feel that the above mentioned adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business?

To determine whether adjustments in the workplace, such as those related to sound transmission or avoidance and light quality, could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business, this question aimed to understand the potential implications of these preferences for the development of a more people-centric workplace model. The results of the survey

reveal valuable insights into the importance of workplace adjustments in shaping employee satisfaction, productivity, and talent attraction (Singh and Saxena, 2022). A majority of participants (95%) indicated that adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business. This response suggests that employees value spaces that prioritise human context and wellbeing, which can contribute to improved satisfaction, productivity, and talent attraction.

A small number of participants (9%) indicated that adjustments in the workplace would not have an impact. This result suggests that while workplace adjustments may not be a primary concern for all employees, however they still hold significant importance for the majority of participants.

A small number of participants (9%) indicated that adjustments in the workplace may have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business. This result suggests that workplace adjustments may not be a primary factor for all employees, but they still hold some importance in shaping workplace preferences.

In the "Other" category, participants provided insights into their preferences regarding workplace adjustments. These responses also supported the confirmation of incorporating workplace adjustments in the new workplace model for diverse users. Summarising the responses reveal a clear preference among participants for adjustments in the workplace that prioritise human context and wellbeing, with a particular emphasis on sound transmission or avoidance and light quality. These findings suggest that with the development of a new workplace model.

19. Would you prefer to continue to use an activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business?

These results reveal a variety of opinions regarding the preference for continuing to use the Smart Working Plus model or adopting a new model that is more human-

centric. While some participants expressed satisfaction with the current Smart Working Plus model, others indicated a preference for a more human-centric approach that caters to diverse needs and inclusion. The following analysis aims to reflect on the implications of these preferences for the development of a new workplace model.

Some participants expressed satisfaction with the current Smart Working Plus model, highlighting its efficiency and the improvements it has brought to the workplace. This response does fully reflect the recent transition of users from traditional workstyles of single offices and dedicated workstations. These participants believe that the current model does have the potential to be refined by focusing on the human elements, such as noise reduction and the creation of spaces for individuals with health conditions. This perspective suggests that the current model can be adapted to better cater to the diverse needs of employees, without the need for a complete overhaul. A significant number of participants expressed a preference for a more humancentric model, emphasising the importance of creating spaces that support a global organisation with diverse needs. These participants believe that a human-centric approach would be more beneficial for the business, as it would foster a stronger culture that is aligned with the current values of the business. It would also support higher employee wellbeing representing more inclusion and attract a more diverse workforce. This perspective suggests that the development of a new workplace model should prioritise human context and wellbeing, in order to better cater to the diverse needs of individuals in a post-pandemic work environment.

Some participants suggested a combined approach, combining elements of the Smart Working Plus model with a more human-centric focus. These participants acknowledged the benefits of the Smart Working Plus but recognised that it may not be a one-size-fits-all solution for all geographical locations, the respective cultures, and even the users in different departments and teams. This approach would involve thoughtful design and discussion with end users, ensuring that the option for a revised workplace model caters to the diverse needs and preferences of employees while maintaining the important aspects influencing efficiency and flexibility from the Smart Working Plus model.

A few participants expressed uncertainty about the differences between the Smart Working Plus model and a more human-centric approach, indicating a need for education on the various workplace models and their implications. These participants suggested that the key to a successful workplace model lies in understanding the specific needs of employees and tailoring the design accordingly.

The concluding statements for this question are that while some participants expressed satisfaction with the current Smart Working Plus model, others indicated a preference for a more human-centric approach that caters to diverse needs and inclusion. These findings suggest that the development of a new workplace model should consider the diverse needs and preferences of employees, potentially adopting a hybrid approach that combines elements of the Smart Working Plus model but with the caveat that there needs to be more human-centric focus.

20. If so, what do you think these benefits would be and how does it align to our business objective and values at COMPANY NAME?

Participants were then asked their opinion of the potential benefits of a new workplace model that is more human-centric and how it aligns with COMPANY NAME business objectives and values. Many participants highlighted the alignment of a more human-centric workplace model with COMPANY NAME business objectives and values, such as improving lives, fostering a people-oriented business, and promoting social responsibility. These participants suggested that a human-centric approach would not only improve employee wellbeing and productivity but also support the company's commitment to creating a positive impact on society. This perspective suggests that if a new model was developed it must prioritise tangible and relatable human context as well as wellbeing, in order to better align with the company's objectives and values.

Several participants emphasised the potential benefits of a more human-centric workplace model in attracting and retaining talent. They believe that a workplace designed to cater to diverse needs and promote inclusion would be more appealing to potential employees, helping the company attract a more diverse workforce. This benefit could also extend to support and improve existing employee satisfaction and

retention, as it would create a more supportive and comfortable working environment. This perspective suggests that there could be substantial value for the organisation if the development of a new workplace model increased accommodation for diverse needs and inclusion, in order to better support the company's talent attraction and retention efforts. Some participants highlighted the potential benefits in fostering collaboration and breaking down silos within the organisation. They believe that a workplace designed to promote interaction and collaboration would help employees build stronger connections with their colleagues, leading to improved teamwork and innovation.

A few participants mentioned the importance of considering cost efficiency and maximising space utilisation when developing a new workplace model. They acknowledged the benefits of the current Smart Working Plus model in terms of space utilisation and suggested that a more human-centric approach could be combined with the existing model. This communicated the commitment of participants to always be mindful of the costs attached to improvements. This demonstrates the values of "Sustainable Development for Generations" within to organisation and that the improvements need are not only important for the employees but also for the organisation.

Several participants highlighted the importance of addressing the need for spaces that cater to individuals with health conditions, as well as spaces that promote diversity and inclusion. This reiterates the already existing culture for inclusion but suggests that there is tremendous opportunity for the strong internal values to be translated into the workplace development.

21. If you were able to add any new space to the workplace, could you describe two new spaces that you would include in the workplace, what would they be and why would you suggest it?

Finally, participants were asked for their suggestions for two new spaces that they would include in the workplace and why they would suggest spaces. This question focused on a blue sky approach and looked to explore the potential for unrestricted improvement without any boundaries for participants. Many participants suggested

spaces dedicated to wellbeing and relaxation, such as nap spaces, mindfulness areas, and quiet spaces for decompression. These spaces would provide employees with a place to rest, recharge, and manage stress, ultimately contributing to improved productivity and overall wellbeing.

Several participants reiterated the importance of social and collaborative spaces, such as innovation rooms, creative meeting areas, and informal gathering spaces. These spaces could facilitate interaction and collaboration among employees, fostering a sense of community and belonging within the workplace and support a more connected and engaged workforce.

Some participants suggested the inclusion of family-friendly spaces and concierge services, which would support employees in balancing their work and personal lives. These spaces and services could include childcare facilities, pet-friendly areas, and personal support services, such as reservation assistance and gift shops. This shows the shift from the thinking of work-life balance to a more life-work integration approach (Bhat et al., 2023).

A few participants highlighted the importance of incorporating technology into the workplace, suggesting spaces equipped with virtual reality and other advanced technologies stating that these spaces could enable employees to collaborate more effectively across teams and locations, fostering innovation and problem-solving. Considering the generation implication of participants int this survey, the need for using technology to create or facilitate more efficiency is required to support a more innovative and connected workforce.

Several participants expressed a desire for nature-inspired spaces, such as rooms filled with plants or outdoor social spaces. These spaces would provide employees with a connection to nature, promoting relaxation and creativity. The importance for the participants to have a connection to nature has been a prominent feature of these results. This could be perceived as the confirmation of the positive effect of a connection with nature and that this may also be an area that is not present in the current Smart Working Plus model.

**Appendix G: Transcripts from interviews** 

Interview 1

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation X

Work Location: Ingelheim Germany

Birth Location (Nationality): British

Question 2: (Benchmarking activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Not much experience in Smart Working Plus as there was a recent move to a Smart

Working Plus environment. It is a very normal work environment from previous

companies where employed, but overall, there is good interaction in the spaces with

people compared to being in a private office as with old office space at BI. For

managing teams, it may prove to be a bit more difficult as people are distributed and

more choice of space for teams will be great.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

The experience s good overall with activity-based working so there are not many

complaints for the usage of spaces. The 3 areas that are most uses are coffee spaces

for social interaction hybrid meetings and some confidential focused work, but this

focus work is not very often however it is required.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

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When working on salaries there is a need for more confidential spaces as information may be displayed on screens. So, to do this I move to a focus pod but generally it is a great environment where my team feel comfortable to communicate and choose the space that suits them. Visibility in the space is key so they can easily reconnect. Not always good.

### Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

Semiprivate spaces or enclosed rooms to have 1:1 conversation. It's a lot to do with behaviour and etiquette and people only start to learn this through experience.

## Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Yes. There is value in having conversation happening around you as there could be an opportunity for learning or sharing experience with each other.

## Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Yes, the more people can see you the more effective communication is. It must be intentional communication and not necessarily up to chance encounters.

## Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

The balance between the spaces is not good. Asked to further explain. It's because people are creatures of habit and there is a lack of churn. It's also probably due to the fact that the offices are relatively empty and there is no need to move. Clean desk policy is not also well respected.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

More open space for teams to collaborate at with desks and more break out or social spaces.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

There is a need for more behavioural changes to use the spaces effectively.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Not personally. There is on opportunity to create more space, probably social/professional connection spaces where the current spaces are not used. People should be focused on and maybe it is dependent on the culture. There may be a difference between a consulting firm and a privately owned company.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

After COVID the culture has adapted. There may be a need to change the perception of having a coffee in the social space and working. But also, maybe more walking meetings outdoors would also be helping people connect 1:1 or collectively and also help with other Diversity, Equity, and Inclusion requirements people could have.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

As previous answer

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

Social and innovation spaces. Maybe these are more relevant to my role and team.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes. If leaders are more accessible and there are more space for diverse people, it makes for a better growth environment for existing and new employees.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

Natural light is essential as people are happier if they are not seated in closed windowless rooms. Asked about internal artificial light. There are options available nut we do not even consider tis at BI. Maybe its cost related or not an option, so people don't explore it.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

I haven't really observed this. I think it important that you have different zones of acoustic, but culture also plays a role. It has a lot to do with what people are used to.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Yes. As per previous answer. People like having views to the outside for both urban and nature but it is dependent on where the building is situated and its surroundings.

# Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Higher aesthetics. The value of the feeling of being in a nice environment has a huge impact on people. It changes you workplace experience. More social spaces so people can connect more. It good for global organisations with different people to learn about each other and from each other and build relationships.

### Question 20:

Would you prefer to continue to use an activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Yes, more human spaces will be better. It's good for the business and the people.

Interview 2

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation Y

Work Location: Columbia

Birth Location (Nationality): Mexican

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Yes. I understand what Smart Working Plus is supposed to achieve. It does facilitate

the need for specific activities for example, focus work, emails, talking time and social

time. However, I feel that the model doesn't focus on results...it mainly just the activity

that people need to do.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

As a leader in finance, most of my work is somewhat confidential where there are

conversation with the banks, with employees on salary, with my team and some focus

office based work. For meetings, its mostly formal and it's probably due to my role.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Yes, it's pretty user focused here in Columbia and people normally talk together as

opposed to silent work as in Germany. Post covid, if people are in the office its already

a good sign that people are in a trustful environment.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

It about people connecting and generating ideas to and it's not just sitting and typing away. The balance between focus and collaborative or social spaces is essential. For me there is an element of trust if people are in the office for full days and not losing time on half days in then leave for half day to home office.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

It's the most important part. People are natural communication and find it easy to just walk up to someone and asking them a question. Even the overhearing of conversation to potentially contribute to supporting someone. Online communication makes it more difficult and is more consuming both send and receiving messages. Online just takes longer as it comes across as harsh if you don't warm people up on chat.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Absolutely. In the work culture here, people walk up easily to others and talk to them to discuss something. If you can see someone you are more likely to approach them and talk. It's unlike the culture in Germany where you see someone in an office, and you don't feel like you can approach them.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Depend on the design and how integrated it is. If the spaces are far away from each other like social space and quiet space to maintain acoustic zone, it may be difficult

for people to move. Maybe there are visual cues to direct people to different spaces to help them...like colours or carpets that are different.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Open space in Columbia makes it more trustworthy.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

Openness of people to be accessible is good for the work culture.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

No not personally. Maybe this is something that will affect older generations but generally wellbeing is of high importance to people. Space for relaxation and recharging when at the office similar to the popular tech companies.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

The office is in competition with the home setup and if there is no space for relaxation, as you have at home to disconnect from work or activity, it could influence the return to office positively.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

The value for private space for recharging and relaxing will really help people to regroup and even if it's for a few minutes could play a huge role to provide refuge when you are under stress.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

It depends on the availability of space in the office, but we have an area for massage that happens once a month where someone comes in to offer people massages where they pay a discounted fee, and the service is at the office. People really enjoy having this option and the opportunity to take care of themselves.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes. People won't only stay because we create spaces for them to be better but it's about the culture within the organisation. Making space of this thinking shows commitment of the organisation to the people and that commitment is the driver for talent attraction and retention.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

People really enjoy having external views, but it depends on the location vs the travel time vs the costs for the organisation. Our spaces aren't too bad, but We are in a large enough city and the cityscapes are great. If costs and travel times were not an option, it would be a big option.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

We don't like very quiet spaces so there needs to be a buzz. But in saying that people definitely need space for focus and quiet work. Non communicative zones will not work in Columbia and it's not a sign of disrespect its very much the culture of loud talking and connectedness.

# Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

There is a development close by that has lots of outside nature spaces and its very popular and expensive to be there, but people really like it there. The companies that are there have this status of high value and special and its attractive for people to be with those companies as well. If it were a possibility to get a vacancy, there it would be great for our people and the business, but the costs are high.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

More technology enabled spaces would make it easier for people to see value in the workplace as opposed to user influenced spaces that required effort for people to change the temperature, control the sun with blinds, etc.

I like term soft spaces that we spoke about when referring to space other than activity spaces. The second will be more soft spaces like decompression rooms and refuge areas. Maybe also a place for pets in the office as many people are torn between being with their pets and being at the office. After the pandemic many more people have pets, and the commitment is high for providing for them. Maybe some guideline on how this could happen would facilitate people coming back to the office as well and a better office environment.

## Question 20:

Would you prefer to continue to use an Activity-based Working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more

beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

For BI, Smart Working Plus is a huge step forward from the traditional workplace setup we are used to. Leaders are normally in huge offices and now we are in shared spaces and people that are not leaders are also adapting to us being in their spaces and being close in proximity. So, I think maybe slow and intentional integration of soft spaces could happen but more controlled so that there is not constantly new ways to learn all the time and big changes again. People are looking to leaders to lead by example and the leaders are looking to senior leaders to also lead by example. But this is a good way forward and people centric spaces will be very beneficial especially with the newer generation entering the workforce.

Interview 3

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation X

Work Location: Vienna

Birth Location (Nationality): Austrian

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Yes, I really enjoy working in this type of setting. For me it's important to have access

to people and for people to have access to me. I believe this is a good model

because as it's a progression from where we were with our traditional assigned seats

and offices.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

I prefer open spaces where I am with my team. I only use focus pods rarely and its

then for either focus work or conversations that require some level of privacy but

generally it's in the open space.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Previously everyone that was in leadership were all in office and there was a lot of

secrecy with information that could not be shared with employees. I think this is the

start of our chance to share thoughts with employees and listen to their thoughts as

well. Realistically, if it think about it now only 2% of my topics are very confidential.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

Open spaces are great for this but even if there are rooms, there should be transparency with glass. By being visible we create psychological save spaces for our teams.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Talking to each other is very important especially as a service provider to the business. Open clear communication shows trust in employees and then employees trust you as a leader.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Most definitely. When we are in the office, there should be as much face to face time as possible. That why we are making the effort to come on into the office in the current workplace environments.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

I think that people that have this sense may not see the positives of moving around to different spaces. The movement is good as there a coincidental meeting that happen that can save time when you chat while walking instead of setting up a formal meeting and waiting for the right moment to meet.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

I would like to see people more when I am at the office not to do a headcount but to have contact with them and connect.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

As above.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

We have to allow for opportunities for people to move to a better and more suitable space if they need to. For me, if I feel over stimulated, I like to take a walk. Preferably in nature but anywhere outside will help me a bit better.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

Access to green spaces and sometimes it's not possible to always be close to a dedicated space for nature. Even if its good views to nature or a courtyard that is disconnected from the office space.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

I think 1 person spaces are good but maybe it's me or the culture here in Vienna, that we enjoy a coffee and a chat and that really can help some people be less occupied with what they are worries about. I personally prefer some physical activity to destress.... anything that allowing me to exert myself.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

We have massage rooms here and they are well used when they on offer.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

We think we are diverse, but we are not as far as we need to be. Younger generations have a very different outlook on work and connecting and we need to start considering this when we create office space. We need more spaces for interaction and communication and socialising to get people connected.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

I'm not sure. I think it is, but I have not much experience with this.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

I find silent collective space a waste of time. What is the point of being together if you are not communicating or working together. I believe that there are a balance of space that are required where people can talk and can be focused, and one needs to be respectful in these environments to engage well.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Yes. I have already mentioned how important it is to me and I feel that there will be more people that feel this way. Especially in a city. People want and need spaces to be connected to nature. It has a positive effect on them and like I said it does not have to be in forest but can be internally as well.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

I'm not sure if it is specific to space that I have suggestions for. I would look for change in culture. Viennese are very traditional and the same for the thinking. There are so many positive implementations we can do but it will be challenged by people, and they will resist. I would like for people to be open to suggestion for open and progressive space for more connection.

I also think learning environments where older generation can share and learn from younger generations. It will help with trust.

### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

I think it is good but it's not the only way to work. We need to implement changes slowly and steadily and help people adapt. We need more diversity and not everyone that looks and thinks the same. It will be great for the business to be able to innovate and grow and different ideas and experience will help us shape that.

Interview 4

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation X

Work Location: Ridgefield US and Athens US

Birth Location (Nationality): American

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

I do have a good understanding and yes, I think there is a place for Smart Working

Plus. However, there is a tension between the business uses vs the functional uses and

it's not always clear and easy for people to adapt. It's also a difficult task to look at

the cost related to the real estate value as real estate doesn't have an income

generation for the money spent.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

There are two types that suit my work style and it's the formal meetings as many of my

interactions and collaborations are in formal meeting settings. The second preference

inf the focus pods due to the task I have to do that require high levels of focus. It's

probably a result of my generation and the behaviour I am accustomed to.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

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I think all do to an extent but none of the modules truly support the concept of trust unless you are in a 1:1 with someone in a closed space. I suppose it depends on what type of trust we are referring to.

Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

The library spaces are not available in the US for some reason, but I feel that these spaces will give a sense of trust for allowing focus work. Sometimes the focus work in a co working space there is a lot of disturbance by people talking on hybrid calls. Younger people prefer the open space modules.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

It's probably the most important but it also depends on the type of workstyle and the working culture to an extent in the US.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

If there are spaces in zones for communication and quiet work, it helps people understand the space fit to purpose. Now with this model, the open door policy of traditional offices are always on unless you are in a room with closed door. There is also the risk of over stating the visual signals and stopping people coming to talk to you. It may be a little counterproductive and won't let people grasp or develop work culture social cues.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Back to the different zones. These will potentially help people move if the spaces are in areas that are active or passive.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Introverts and extroverts use the space differently and there are also many other character traits and behaviours that influence this. Unless you have tried other ways, it's difficult to say but there is no right or wrong. It's a lot about the value in exchange with groups of people.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

If you operate in a global context, you may have days that are bac to back online meetings and there are no spaces that can really accommodate this.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Nothing for me specifically but I find that a need for some personalisation could improve the experience. The thinking towards this needs to be open and making space that can adapt for everyone (race, gender, age) but with little to no adaptation.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? I think it will help with a better experience for the users.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

For me personally connection to nature is the best. It grounds you. Also, if there was a space like this to disengage, then it should feel like a different world. Like steeping through a portal into another setting.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

I have no preference.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes, for both new and existing employees. Existing employees will adapt and learn how valuable this change can be for them and influence their experience in the office.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

The guidance is improving, and these include the value of having workstations near natural light. It was not always required or implemented if there was no opportunity to access natural light. But it has a positive effect on people.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Here again I think the zoning will be crucial. The choice of moving to different zones for different work requirements. It's not always easy to sit in a space where one loud person is talking, and you are trying to do focus work.

# Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Yes, but it's not always possible if we are not in a campus environment or close to open spaces. But you could have soe options for some spaces with plants in that is softer and less clinical. We have to do more research into this as an organisation if this is something that is important to people.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Social spaces for people to connect and easier technology integration. Both these will improve the workplace experience,

#### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

We need to give people more explanation either way wherethe its Activity-based Working or a new model. I do think there is a higher need for people centricity in our business as a family owned people business. But if people are not taken on the journey for change well, they will struggle anyway doesn't matter if it's AWB or a new people centric model.

Interview 5

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation X

Work Location: Ingelheim HQ

Birth Location (Nationality): French

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

I think it's better than being in singles office and is moving us forward for how we work.

The French culture I feel is more open than the German culture when it comes to

working environments and you can feel that here in Germany. Some of our buildings

with Smart Working Plus don't have good natural light and the co working spaces are

small, maybe too small for teams to work together. Positively, it does require a

dynamic attitude toward work.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

Mostly the open space and the collaboration rooms. I enjoy being with my team if I

am at the office and it also give me a chance to collaborate with other if they see

me or I see someone I need to talk with.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

In the space, it depends on the leadership style. In my team people have the freedom

to work where it suits them and there is no hierarchies. Transparency promotes trust.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

It really should be all spaces but sometimes leaders can't see the dynamic benefit of the space to enable trust environments.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Yes, this is obvious. Successful teams need very good communication, but it is up to the individual and the leaders (all the people in the office space) to work toward this. The space is a tool to facilitate it more effectively.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Clear vision with your team is very good for communication but leaders need to lead by example on this point. Some do not.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

It should be easy to move. But people tend don't to move because of their behaviour they are used to in traditional spaces. It may be because of human comfort in a space.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

We need encourage people somehow to use spaces where they can connect and talk to each other. Since they are at the office there should be a want to have more face to face time.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

Clearly identify zones for activities may help people understand the spaces better and then they are able to use the space better. Maybe like colour coding spaces i.e., red = quiet, green equals communication

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

I don't have any specific needs. But I know we really don't have any or enough space for people to be accommodated in if they have some requirements. It's something we are working on for sure as I am working on the wellness and employee benefit programs, but we can do more.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

We just need to establish a minimum concept for specific needs and safe spaces, genders, and sight restricted users.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

It would be great again here to establish a minimum concept. We know there is big requirement for this with burnout especially post covid.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

Yes, but it needs to move beyond gyms and yoga. Again, a minimum concept is required on spaces truly benefit people and their health and wellbeing. But what exactly are these?

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes. I feel that companies like Google are doing so much more, and this is what attracts people to wanting to join the company and also being the workplace.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

There is a definite effect on the mood of people, but this can also be supplemented with artificial lights.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

It does depend on the needs of a specific person and is very relevant. I think sometimes there is more value form the internal environment with green spaces and colours. This really influences people from what we see.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Not really always possible to be near parks but they can be close by, and this helps people if they need connection to nature.

# Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

More collaboration rooms and spaces where we have flexibility to stand and to communicate and choice to do so. Also, I think chill room or dark rooms would be interesting. I saw a school with a dark room for kids to move into to feel they are in a different place out of the school environment and listen to music or just relax.

### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

There can definitely be improvements and also of the other effort we make outside of the office space thinking can be part of the model. Like you mentioned work life integration rather than work life balance because balance is subjective. Leaders must take a more active role and live the values we expect our people to live.

Interview 6

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation X

Work Location: Ingelheim

Birth Location (Nationality): German

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Yes, I was an ambassador for Smart Working Plus. Being part of the Diversity, Equity,

and Inclusion business unit, it was also good to see the options being offered to

people. It has helped us rethink work from traditional office spaces. The aesthetics are

good, it helps increase collaboration and innovation and change our work culture

slightly. It's also great to for people to meet and network.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

Overall, I like the homebase concept where I can sit in an open space and move to

a more appropriate space when required. With my team it helps us be together and

even work in the social spaces if we choose.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

I think trust should be natural and not defined by space. But I think there may also be

a difference for how trust is for men and women on the office. These also led to men

and women using different space very differently.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

This question for me is the difference between presence culture vs results cultus and we are trying to shift away from this. All the spaces should empower trust and it more about starting with trust.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

It does promote communication because we are more visible to people. It's easier to talk to people if you can see them. This also feeds into trust and allows business unit to be stronger in the connection.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Leader must be role models for this. There is a lot of pressure on employees to make this work, but it must start with leaders making the space for visibility being ok.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Not for me no. I think it's part of the natural and normal way to work at the office. Maybe this also refers back to trust. I think people will naturally choose.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

No.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

For activities no. The Smart Working Plus model has what we do for work activities covered.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

I think noise is always a big one and this probably relates to German culture a bit which feed perception of good spaces. There is preference for quiet spaces. But we are also seeing that there are more requests for prayer room and incorporating this into our workplace.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

There is a need to look at groups and individual needs and accommodate a more diverse groups we have as a global company. Also, neurodiverse groups prefer silent rooms, reduced background noises and here we see that there is a lack of a need to change space to suit in some instances. We also have to be careful to define the difference between a want and a need.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

Most importantly it needs to be discreet to people feel safe to use these spaces. The type of room is a good topic, but this can be defined with users.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

Our gym is well used but I don't think it's always necessary to have it in every building but maybe best in a central location. Recreation room where people can have a recharge nap is required is excellent and these can be rooms where the lighting and furniture can be adjusted to suit. Also massage chairs could add huge value as people sit for long hours and it will be great to have this option to relax.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes, it has to be done. Younger generations are looking for life balance. We offer loads of options already that are beneficial like take away food from our canteen which helps people not stress out about cooking when they get home and it's really convenient. Sure, we can do a bit more.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

This topic needs to address to topics for me. One ins neurodiverse users and the second is the effect of lighting to create a mood in a space. How we use a space can be influenced by the light type, colour, and other properties.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Here as well, we ned option. People can choose to be in spaces where you can have sound avoidance or high sound absorption. I think people will choose the best for them.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

It always nice to have access to nature but not always possible so we must also consider indoor spaces with greenery and maybe images that create an environment for connections to nature. The aesthetics should also compliment this. We have to work with what we have and make the best of it.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Larger bathroom within male and female bathroom for people with need to change medical support devices or wash for prayer. The stall should have a wash basin in it and be a bit bigger, so they have some comfort to do this. The second will be recreation (sleep option) rooms with a level of discretion and privacy where people feel safe to use them. It probably down to where they are located.

### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Thinking about after what we have discussed in relation to our Smart Working Plus model, there are definitely opportunities for change. We need to define our goal to do this, and this should be to future proof out company. If we start now and do little improvement at a time, we can help people adapt their mindsets more comfortably.

Interview 7

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation X

Work Location: Barcelona

Birth Location (Nationality): Spanish

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

I know that's it is an improvement from working in pure open spaces and desks are

not dedicated to any specific person. It helps with neighbourhoods when teams can

find each other but the human tendency is to not really move from the desk you

occupy on the day.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

I mostly sit in the open plan with my team. When the need arises, I use small meeting

rooms and also the larger meeting rooms.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Yes. In Barcelona the culture is very transparent and friendly and community oriented,

so the trust environment is already there.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

Mostly for my team and I it will be the Co Working spaces where they can talk and exchange freely.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

It's very important for teams to always have clear easy communication and be accessible when they are working together.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

If they see each other, they are more likely to engage and be together if they have something to work on or any questions.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Yes. I think because we have enough space, people are creatures of habit. They still need to have a home for themselves even if they are moving into meetings. But is habit more than anything else.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Not really anything in specific.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

We have a lot of option so nothing else to add.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Nothing specific for me but I do not think there would be any special features for women compared to me in my opinion. I think maybe women are more practical. More consideration can be made for people with disabilities.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? No answer.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

Spaces to disconnect will be great and it doesn't need to be for long periods but it cod be shot periods just as a reset especially if people are stressed out. Outdoor spaces will also help and maybe some games rooms where people can get together.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

Exercise really helps people manage stress and also to feel energised. I think those airport massage chairs will be well used if we have them and people will be encouraged to use them if they are available.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes, the sense of community is what a lot of people are looking for and spaces that offer that will be a huge attractor for new joiners.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

We have an amazing office that is LEED certified and you can feel it compared to some other offices. It light and bright and has a good balance of natural and artificial light.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Generally, the acoustics are good in the office. There are not many complaints about this but there are complaints about the wooden floors when people walk on them. Maybe this can be considered when we apply finishes in certain spaces and how they affect people around them.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Our office is situated in a very nice location and there are option to enjoy outdoor walks which many people do after lunch. I think it's a nice option to have as many people are very active at our offices.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

A really nice canteen is always creating a great environment for people and maybe a juice bar for healthy food and social interactions. I feel we also need more spaces for collective spaces like in corridors where we can enable spontaneous conversation or working spaces.

#### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Where we have Smart Working Plus, the space re great and not much can be done to improve is visually. I think people may benefit from having the neighbourhood removed and then they ca feel free to move around and sit in alternative spaces if they want and interact with colleagues hey don't normally work with.

Interview 8

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation X

Work Location: Lyon

Birth Location (Nationality): Spanish

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

The openness and collaboration option are great. However, this is always dependent

on how these concepts are lived and how people choose to work when they are at

the office. Having choice is important.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

I normally work in either the focus spaces or the collaboration spaces depending on

what activities I have at the office. If I have back to back meeting I would rather work

from home.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Yes, but we have mandates in some countries, and this is not aligned with the thinking

of trust.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

Maybe the open spaces but again I think it's more about the mindset of people and the mindset of the team. Many people work with old mindsets.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

It does but you have to lead by example. For some job functions it's not required as much as others, so it depends on the type of person and their job functions.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

It's a combination of the layout of the office and the concept but the type of person and the behaviour of people is still the most important to make this effective.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

It's basically habit, and people are creatures of habit. For some it's great to be moving and sitting in different places but for ither it's not so good. Some people even sit with other department, and this is great to see especially for relationship building.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Some office can be influenced by the workers council but generally people are ok with it.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

Not really anything specific. I thinks it down to behaviour and willingness of people to adapt finally.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

This is not applicable for me. My choices are mainly based on the agenda for the day. If I am in meetings, then there is less interaction as opposed to when I have time to work with the teams.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? Not applicable.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

These spaces are valuable to some people but not for all. Some people need contact with other while others prefer to be alone. It also is very dependent on the country and the culture of the people in that country.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

These would be great, and it also needed. They specifics are something that can be defined and again it may be done for country and culture, but people will feel good knowing that the organisation has their wellbeing in focus and there is genuine concern about their health.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

The younger generation will change a lot. I have seen in interviews that people ask about substantiality and what tangible things we are doing because it matter to them that it's not greenwashing. So, any of this human benefit will definitely be more attractive to younger people. They are better at setting balance boundaries than my generation is.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

Natural light is just as important as interior light. As long as it's not overwhelming and it appropriate for the type of space or activity you are doing people will have a good experience.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

It depends on the induvial. Some like the buzz and some don't. There is no one size fits all but it's important especially if you function requires focus and quiet.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Sometimes it's not possible but then we select building we must try to see if these opportunities are possible internal maybe terraces with working place.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

I don't have anything for the space, but I would like to see leaders being examples. Especially self-care. As a leader you tend to go nonstop, and you must make time for yourself and take care of yourself. Good awareness of mental health is also very important as a leader and as an employee.

#### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Overall, the concept is good. I would like to see more behaviour and culture improvements. The space is a tool, but the behaviour drives the effectiveness of the spaces and the office.

Interview 9

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation X

Work Location: Ingelheim

Birth Location (Nationality): Dutch

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Personally, I can work anywhere, and I don't feel bound to a specific location of

building. What I like about Smart Working Plus is that there are options to choose from

and what make me feel good it the look and feel of the spaces.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

Open communal coffee areas on then local coffee areas on the working floors and

focus pods spaces. I think I like the sit stand desks for my working time at the office.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Leadership style sometimes influences this but to have the choice shows that you have

trust. Also, we have very educated and responsible people at the company that are

more than capable, so trust is automatic.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

Open spaces really show this and the look and feel of the space can suggest trust and empower people to choose the spaces they need.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Yes, it's very good and virtual connection has made this even easier for us.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

The virtual options again really promote this however there is no substitute for human connection.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Not at all. I like the movement and it helps me be more mobile and active while I am at the office.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Finding people is an issue while on site. I normally am not sure where people are, but we have tools to contact each other. It may just be nicer to be able to locate people. I'm sure there are privacy issues but it's just a thought.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

It will give people comfort and a sense of security knowing that there will be a team member they can connect with when at the office.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Not for myself. I like using a Jabra to have online meetings, so I am not sure if that is considerate when others are around and that's why I like using focus pods. I won't disturb others.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? Not applicable.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

We don't have too much of it, but we need it more and more. We are seeing this with interacting with people more on the topic. And it's not the "Library" type settings those are normally repurposed for workplace. It's one person type spaces that have modesty.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

It would be great to have massage rooms, prayer rooms, but when we implement this, it needs change management or people won't feel free to use it and may be

perceived as a waste of money. We have to stimulate better behaviour to encourage people to use it.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

While younger people are good at work life boundaries, they need to be able to have the option to use offices and provide feedback to how to improve it. It will only happen if they are able to see the benefit and this improvement could be the nudge for them to start using it.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

Natural light topic is close to my heart, and I feel it's a basic thing we need to always have. It has a major effect on people and can influence the workplace experience positively.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Here we ned to have options that people can move into to avoid the over stimulation.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

The campus is great for this as its accessible. We are also looking into biodiversity spaces and project like bee keeping and food gardens to ad to encourage moving around outdoors.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Light and lots of natural light in social and working spaces. It would be great is space we have can adapt to the use that people need instead of people adapting to the space.

### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Smart Working Plus is doing a lot of this already but yes, it is an opportunity to further develop this and live out company values. I am also thinking of social wealth and having mental health space and wellness spaces are great to move toward more human centric workplaces. Outdoor integration is also a huge benefit if we can do where it's possible.

Interview 10

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation Y

Work Location: Ingelheim

Birth Location (Nationality): Argentinian

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

I like the different spaces for different types of work that needs to be done. Its gives

people choice. Teams are not separated from each other and that helps with

collaboration while in the office.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

If I do focus work and back to back meeting, I do this at home. It doesn't make sense

for me to be in the office in these days. When I am in the office, I make sure it to be

with my team and the people I ned to have contact with.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

It's down to leadership style. From me there is no mandate to on how people work

and when they work. So, they get their outcomes achieved and there is no judgement

because lie is still happening.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

Not any specific space but it the type of space that suits the work they are doing for the day and the same for myself. I fully trust my team.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

If you are working in a team is the most important part of teamwork.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Yes, it's almost natural to know you can be in contact with someone if you see them and they are not busy. Also, you get to meet colleagues that you may not have met before apart from online meetings if people are travelling in from other parts of the world.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

It is a bit of a pain to pack up and move if you need to move to another space for a short time. Sometimes it's not possible to do as well. I see that where people have their lockers is normally where they sit. Again, I think this is down to ease of use.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Spaces to detach when required and visibility to other must be good. Lockers unassigned.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

I think this will release people for being confirmed to a space because of their access to their belongings.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Nothing specific for me personally. Maybe more consideration for wheelchair users and social space for people to connect. The Argentina culture is all otto do with community and connection.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

It will make a space this suitable for everyone. It's better for different cultures and types of people like introverts and extroverts.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

I feel that maybe some people may find this easier at home. At the office it may not be that comfortable for them. Maybe at the office it best to provide distractions like games or social interaction spaces.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

As a new mother it would be nice to have a space for some privacy and maybe a fridge for lactating. Also, when I was pregnant it would have been nice to have a space to lay down for a little while. The body gets very tired. But to be fair unless you

have had this experience you would not be able to relate to it.... I could not relate to this when I didn't have a baby.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

I have a young team so if there were more of these options, it would have a positive impact. Just a bit more human space.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

Natural light is essential. We should always have this as a consideration.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Depends on the role of the person. But if people have a choice, then they can move or even work from home.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

I find that green space re important. In Argentina we used to walk after lunch to get some fresh air. On a campus it may be a bit easier. I think having office near spaces will be good, but it can't be a deciding factor. There are pros and cons with the cons being the effect on travel times.

## Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Massage spaces would be great. Healthy option for fruit available in the offices on the campus. Currently people have to walk to a central point to get this.

### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

More alignment with company values and the people. Integrate work and life and consider younger people and leadership must also progress. So yes, we can move toward a more human workplace concept.

Interview 11

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Female

What year where you born (to assign to generation): Generation X

Work Location: Ingelheim

Birth Location (Nationality): German

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

I have always embraced Smart Working Plus, and I can use the model well. I like the

variety of choices in the places to work and not choose the space over and over

again. I am not a leader that leads with status so that how I chose to use the spaces.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

"Co Working" and then "Focus Pod" if there is a need for conversations that other

may not need to be privy to. This is mainly due to my role and it not avoidable.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Open spaces. I think the trust is there already, but it help keep the trust sustainable.

Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being

a space that promotes trust and why? Is there anything that could be done to

improve this?

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Open spaces again and it aligned with behaviour.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Yes, it does help communication a lot because people are visible but there is also a risk of over communication with too much accessibility.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Yes, but it also important to space to disconnect sometimes. Leaders need this more at some point depending on what they are dealing with.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Initially it was difficult but it's not so difficult as it was before. Out technology has also allowed for this to be easier. However, technology does sometime also delay the efficiency when disconnecting and reconnecting. There is time lost.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Look and feel can be improved. Maintenance of the spaces can be done much better in shared spaces. Sometimes it take a long time for things to be fixed because nobody is aware if it has been reported or not.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

Easier and more efficient. Also, easier to navigate. Because our campus is so large it's difficult always know where to go and who to speak to get things done.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Nothing in specific for me. I like ambient noise when I work so I don't like to be silent all the time. It gives me energy when there are other people around.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? Motivation if others are also motivated but it depends on my agenda.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

As a company culture this may be too far ahead for us. Library spaces are not good, and nobody likes them. Nobody want to be quiet in a collective environment. It's not natural.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

Outdoor walking and getting fresh air is good for me.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

This question completed the story for all the additions we talked about. Younger people want to share experiences and knowledge and they also want event and brand alignment.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

Wellbeing is crucial and aligned with company values. Natural light is first place and standard, but we can also have light that changes when the time changes to naturally work with people body clocks.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Really depends on the person and their roles.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Depends on culture and its not to say that in a city you won have the opportunity to connect with you environment. It's just a different type of environment. Sure, being close to nature of good but city spaces and being around other people in the parks or streets are great and very soothing.

Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Better look and feel aligned with hospitality and secondly navigation to find people, places, events, etc.

# Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

If we do this, we need to fully align with company culture, and it must not get outdate quickly. Maybe we must be bolder to go with human centric workplace.

Interview 12

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation Y

Work Location: Ingelheim

Birth Location (Nationality): German

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

It's a huge step forward from where we were to where we are now. It much better to

have these options as opposed to being so rigid in our thinking of the workplace and

what we are onsite to so.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

I mostly use the coffee area and creative spaces because I come to the office to

collaborate and be with my team. My focus work and concentration work are done

form home.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Yes, I think it has its benefits for work related takes but there seems to be some

opportunities that are missing. The large spaces don't always accommodate trust but

tis the only spaces we have that people feel seen and can find community.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

I think that their needs be opportunities for smaller areas like the concept of a cave where people can feel safer and maybe les exposed. Just some space that are more intimate would be good for the feeling of safety.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

When you are able to see people it easier to communicate but we lack areas that have nonverbal communication and lead people to gather with intention of connecting.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

I think this is also valid when spaces for leaders and managers are comfortable and cod make the space feel like it's more conducive to communication. Our coffee space for example are great but they don't allow you to fully connect. It suggest that you can be there for a limited time and then people move on.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

No opinion on this. It's up to the individual and their need to change without feeling judged.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

I would like to see space that are more purposeful for connection and not left to chance.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

We then start making use of lived improvements and people can relate to the space more and its more natural.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

I think we need a much higher level of intergenerational connection, and this won't necessarily be done by only having work activities for spaces. Also, as a global company we need to allow for more cultural diversity.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

Higher connection and transfer of information and human exchange and exposure to different cultures can only allow for a richer user experience in our spaces and this effects the culture as well.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

Maybe some spaces that don't have screens in so you can actually disconnect and not work or try to distract yourself from working. Not technology free but the option to detach and not work.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

This is very personal preference issue. And maybe spaces won be used as much if they don't suit individual preferences. For me, I like the idea of sleep spaced for power naps. In Japan it is a normal issue to have a nap and in other countries they have some other interesting things they do for wellbeing but its related to lifestyle.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

I think the intergeneration will be a huge attractor if we can get it right and the also the experience of moving to different space that don't feel like work where the user experience on the workplace is positively affected.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

It's probably building dependent. But artificial light can influence how you feel in the space. I'm not a fan of direct light like in standard office and much prefer the softer indirect lighting. Especially when it some sot connection warmer light is more preferable.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

I am deaf and my hearing is aided so the control of sound is important. I like being with people and the energy from the buzz and interaction. But certain spaces should allow for zones of sound.

# Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

It super important to me and we are lucky that on or campus we have over 3000 trees. So, we are lucky to have access to this. However, we don't have opportunities to work outside, and not enough people do walk meetings.

# Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

I would love to see more animals on site, and I know it is difficult with being manufacturing and office site. But there must be options for this for people. There are many studies show the positive effect on people for animals in the office but how we execute this is important. I would like to see silos between business functions removed so we can truly connect.

## Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Absolute room for improvement but it will be systemic change. We must focus on the core of what we want to achieve, and that core is people and human centricity.

Interview 13

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation X

Work Location: Ingelheim

Birth Location (Nationality): Turkish

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Yes, it much better than what we had in the past which was people sitting in offices

by themselves. There are more opportunities to engage with people and make

coming to the office more effective.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

I normally use meeting rooms and open spaces. The meeting rooms are for when I

meet with my team and for confidential conversations and open space for everything

else. Most of my focus work I do at home or if I am in back to back meetings.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

I would like to say it does, but I sees people that are nervous to be judges on how they

use spaces or if they are in a space too long, they could be seen as not working.

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Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being a space that promotes trust and why? Is there anything that could be done to improve this?

I don't think it matter about the space but more about how leaders use the space which make their teams see that its ok to also use these spaces.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Most of the model does but not all of it. I think when we are at the office is mostly for communication with each other. Another factor the building that the model is implemented in. It can make it good or bad as an experience.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

It's so much easier to find people to engage with or have short conversations with when you can see them. Being part if IT and the global function hybrid meetings also make this easy to achieve but there is no replacement for face to face.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

Depends on the shape of the building. Newer building are easier than the older one because of the shape of the floor with more people being together.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Nothing that comes to mind right now.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

No answer.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Nothing for me personally but this is an individual analysis question. It will be different for everyone.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements?

Gives the people an option to get their voices heard and they know that the company is listening to their neds and will try to cater for what is possible.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

Separation room or a place where you can go to have some time to unplug. It's always a little difficult because you are in an office environment, but it will help, and people will learn to use them. It's easier to this at home.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

Being active is important and we have gyms and games room to distract you and give yourself some self-care time. I have seen in other offices that the massage offer, and massage chairs are a big hit. It because it up to the people to make the choice to do this as well.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

As long as the outcome of any changes improve the friendly culture, I think that will only make it more attractive. As a company many people want to work for us already because it's a great company to work for.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

Natural light is big winner, but we do it better in Europe than it is in America. I was surprised that it not really a consideration or rather even an option. The positive effects are huge.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

Really depends on the induvial but if people have the option for ears that have better sound control, they will use it. White noise is not a great option because it makes you feel exhausted at the end of the day as it is a constant input.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

For me it's essential and can change how you feel about the experience at the office. Even if it's just being able to see some elements of nature on our campus makes you feel a bit more.

# Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

We can definitely make better use of technology to help people in the workplace make netter workplace choices. One for hybrid setting but two for information so the workplace experience is more intuitive.

## Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

It would definitely help but we must make sure that the outcome like culture is discussed and explained to people because this is the biggest benefit. It enhances our values and then will make our spaces special for people if they know the impact for everyone when it is improved.

Interview 14

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Baby Boomer

Work Location: Shanghai

Birth Location (Nationality): Italian

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Yes, it's a very good model and works well in APAC. Even though there are differences

in how people work and work culture in different locations, people use it well.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

I mostly work in open spaces and some meeting rooms. I like coming in on Friday as it

the time when I can do my focus work when the office is a bit more clam.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

People use it normally very in line with the rules of engagement. They work in working

spaces and feel less formal in retreat spaces.

Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being

a space that promotes trust and why? Is there anything that could be done to

improve this?

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Coffee spaces are when you see people most relaxed which could mean they are more trust positive.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

There is a very noticeable reserved culture in the office. People do talk but will not disturb each other. There are always some that are very loud as well.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

Yes, if they see the person, they want to communicate with they normally arrange to meet somewhere out of the space where everyone is working.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

There is a dedicated desk culture, and I don't think that there is much changing unless people eave to a meeting. Then they return to their desks.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

We need to be aware of religious requirements across different parts of Asia.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

It will make people feel more included if this is taken into consideration.

Question 11: (Needs analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Nothing specifically for me but mental health is a hot topic in the APAC region at the moment. People are experiencing burnout a lot and it wasn't spoken about a lot before.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? It will show that the leadership and the company cases for the people they are responsible for.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

I think here it will be great to have a space to move to. People are private and would benefit from a separate space with privacy.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

It would be great to have gyms in our office but it not always possible. Maybe we could consider different alternative since it is in a dense city. Maybe treadmills their desk that people can share.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could have an impact on employee satisfaction, productivity, and attracting more diversity and talent to the business? What specifically should be the focus to improve the workplace?

Yes, the younger generation s are desperate to be a part of organisation that have these considerations as it shows that the companies are progressive and care more about the people.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of light, both artificial and natural, in the office space? If so, how does this factor influence your experience and choice of space?

I think again it's about how people could have these opportunities to have different light levels in office that can stimulate wellbeing. Like they do on airplanes where the light changes and it helps you adapt for the different time zone you are moving into. Sleep pods would also be great a s this is a big part of culture. People work hard and then they take the opportunity to recover for short periods.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace options/settings you use when you consider the level and quality of sound transmission or avoidance in the office space? If so, how does this element influence your experience and what is your preference?

It depends on the location in APAC. But there is a culture of being aware of the space to be loud in and the spaces to be mindful of others.

Question 18: (IEQ –Connection to nature)

Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Depending on the location I don't think this is a huge consideration. People embrace being in the city and if they need to be in nature, they make the effort to leave the city.

# Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Large spaces for lunch. Or even adaptable space that can be changes to accommodate people lunch time. Now people use meeting rooms and then there is a risk of it not being clean or smells. I also like the idea of sleep pods and decompression rooms.

#### Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Yes. It a great opportunity to carefully revise and implement cultural relevant spaces to our work model to better serve our people.

Interview 15

Question 1: (Persona)

Please could you provide some of details in order to allow for the creation of a general

employee profile. What is your gender, generation, work location & nationality?

Gender: Male

What year where you born (to assign to generation): Generation Y

Work Location: Ingelheim

Birth Location (Nationality): French

Question 2: (Benchmarking Activity-based working use case)

What is your understanding of activity-based design or Smart Working Plus (COMPANY

NAME model) which is made up of different spaces that are available to you in your

workplace, enabling you to carry out the tasks required for your role, and do you

believe this is a good model?

Yes, I think it's good and it offers a lot of flexibility and helps the tram to communicate

better because its more open and options for team meetings are great.

Question 3: (Self-analysis)

Describe the different activity-based working spaces do you use the most and why?

(E.g., quiet, collaborative, creative, meeting rooms, coffee areas, hybrid)

Depends on the tasks I have to do.... I choose the right zone. Focus pod for

confidential or heads down wok or open spaces for community.

Question 4: (Trust)

Do you feel that the current workplace model supports and promotes an environment

of trust where you feel that you are able to choose the best type of space to work in

the office? If not, why do you think that is?

Yes and no. I think it depends on the team and on the leader or manager.

Question 5: (Trust)

Which spaces, if any, in the current workplace gives you the impression of this being

a space that promotes trust and why? Is there anything that could be done to

improve this?

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Probably where people can be seen and where people can be in a quiet place. It all depends on the circumstances or needs for the space.

Question 6: (Communication)

Do you feel communication plays a part of creating a successful workplace and the current space facilitate good communication?

Yes...probably the central meeting spaces. Its where I enjoy being when I want to be around people. It kind of like a kitchen environment in a home where people organically get together.

Question 7: (Communication)

Does visibility of colleagues, managers, and leaders in the space you occupy play a part in making communicating easier and more effective?

It does but it is also dependant on what type of work you are doing. I won't want to be disturbed if I am focusing. But it's probably like this only after the pandemic. I used to be able to focus and not pay any attention to noise around me before the pandemic.

Question 8: (Restrictions)

Is it easy to move or transition into different to Smart Working Plus spaces in the current workplace model and if not and is there something specific that you feel makes this movement feel unnatural or difficult?

It depends on the culture of the team and the type of work they do. Some people don't need to move most of the day and some do because they are collaborating a lot. It's down to the individual and their work style and preference.

Question 9: (Input on current)

Do you have any recommendations on what you would like to add or change to improve the existing spaces to make it more user friendly?

Something more well balanced as you can see there are a lot of contradictions. Also, spaces that are well thought through for everyone to be ok when they are in them.

Question 10: (Improvement)

What specifically about your recommendations do you think would improve the current spaces?

As above.

Question 11: (Nee Diversity, Equity, and Inclusion ds analysis Diversity, Equity, and Inclusion)

Do you have any Diversity, Equity, and Inclusion related requirements (global organisation, sensory processing, connection, mental wellbeing, physical wellness) that you would need to have supported in your workplace? Please can you identify these and describe what solutions could be provided to support this.

Not personally but I do like the be in quieter spaces. Sound avoidance. I think if there were zones for different activities it would help the office offer more flexibility of choice.

Question 12: (Self-analysis from Q11)

What would these solutions address for you considering your requirements? If there were zones you could choose to be in a quiet zone for focus and everyone around, you is also in a quiet zone doing the same type of work or the same for active zones where people are talking and collaborating.

Question 13: (Mental health)

What characteristics do you think a space should have to provide support for mental health? (Quiet spaces, destressing spaces, counselling spaces)?

I don't think as a concept it will work in large teams. People may feel awkward to use them if they are not positioned well and maybe we need to let people to move to a space or area that is for psychological safety. I would not be completely comfortable. I can use my commute as the opportunity to connect informally or to contemplate and reflect on my day.

Question 14: (Health and Wellbeing)

What kind of spaces would support health and wellbeing and what elements do you think these would consider? Please comment on air quality, movement, exercise, decompression spaces, massage/therapy spaces, sleep spaces.

This is very relative to company culture. If you organisation culture is one for wellbeing and yoga and social activity it works very well but it's not for every organisation.

Question 15: (Attraction)

Do you feel that Diversity, Equity, and Inclusion adjustments in the workplace could

have an impact on employee satisfaction, productivity, and attracting more diversity

and talent to the business? What specifically should be the focus to improve the

workplace?

Yes. If we have option, the space influences culture and the space can also inform

behaviour. But it seems like generation differences may not be so relevant anymore

as people are seeing the benefit enjoyed by some and adopt these as well. The

generation gap is blurred.

Question 16: (IEQ – Light)

Do you find that there is an effect on your experience in the workplace

options/settings you use when you consider the level and quality of light, both artificial

and natural, in the office space? If so, how does this factor influence your experience

and choice of space?

The quality of the colour of the light can affect how the space is used and the

environment of the space. In my research I looked at the effect of the condition of a

space on people and how long they interacted there so it's a huge factor.

Question 17: (IEQ – Sound)

Do you find that there is an effect on your experience in the workplace

options/settings you use when you consider the level and quality of sound transmission

or avoidance in the office space? If so, how does this element influence your

experience and what is your preference?

It's a hygiene factor but like I mentioned earlier the pandemic changed this for

everyone. People prefer quiet spaces and the need for a buzz in the environment is

not an attractive as it may have once been. You would be best position if you have

space for sound seeking and sound avoidance.

Question 18: (IEQ –Connection to nature)

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Does having views to the outside spaces influence your decision on what spaces to use? Is your preference to have views to nature or urban activity? If so, why do you feel that it is important and what would you prefer?

Its critical...the same as light determines behaviour, so too does the views to nature. It also makes a difference of the colours in the space where the views are the best as this influences how you receive the views.

# Paradise question 19:

If you were able to add any new space to the workplace, could you describe 2 new spaces that you would include in the workplace, what would they be and why would you suggest it?

Maybe nap pods if it was acceptable. I think maybe gathering spaces for people would be my first choice and the second would be childcare facilities or animal day care. The other types of offers that keep people at the office is not what people really want but when they are there it helps.

## Question 20:

Would you prefer to continue to use an Activity-based working model, or do you feel that a new model that was more human centric, where we include space for diverse needs and inclusion as mentioned in the introduction and interview, would be more beneficial for the business? If so, what do you think these benefits would be and how does it align to our values?

Yes, we need more human space with all the topics we discussed, it would be very beneficial. We know hybrid is here to stay so maybe we just need to be more flexible and make the space look and feel better.

## Appendix H: Detailed analysis of interviews

## Interview 1

Interviewee 1 has a profile of a male who part of Generation X, is of British nationality and works in Germany. The leader's experience with the Smart Working Plus model is limited, as he recently moved to this environment having worked in a more traditional office space since joining the organisation. However, he did acknowledge the benefits of increased interaction with people compared to a private office setting. He also recognised the challenges of managing teams in a distributed environment and suggests that more choice of space for teams would be beneficial.

The most frequently used spaces within the Smart Working Plus model are coffee spaces for social interaction, hybrid meetings, and occasional focused work. He appreciated the flexibility and variety of spaces available but noted the need for more confidential spaces when working on sensitive information. The leader firmly believes that visibility in the workplace is crucial for effective communication and team cohesion.

The interview reveals that the leader values trust, communication, and visibility in the workplace. He acknowledges the importance of having different zones of acoustic and the role of culture in shaping people's preferences. The experience of the workplace is also important, and he emphasised the significance of natural light and views to the outside, both for urban and natural environments.

The leader's responses suggested that there was room for improvement in the current Smart Working Plus model. He recommended more open spaces for team collaboration and additional breakout areas and or social spaces. He also highlighted the need for more openness to behaviour adaptations to use the spaces more effectively and the importance of always considering any diverse needs for inclusion in the workplace for current employees and the future.

The leader's perspective on the potential for a new human-centric workplace model was positive. He believed that such a model would be more beneficial for the business and its employees as it aligns with core values of the organisation. The leader's

suggestions for new spaces included higher aesthetics to make our office more attractive so people want to be in the space and more social spaces for people to connect and learn from each other apart from the central "Retreat" space module. Considering the leader's location, gender, generation, and nationality, it is essential to recognise the potential influence of these factors on his responses. Another key influencing factor was the leaders previous work experience in a consulting firm where the usage of space where there is fluidity in transitions and openness to use different spaces. These workplace cultural differences between a consulting firm and a privately-owned company, as well as the leader's previous experiences in other companies, may have shaped his views on the Smart Working Plus model and the need for a more human-centric approach.

The leadership style, although not explicitly mentioned in the interview, can be inferred from his emphasis on trust, communication, and visibility. He appears to value an open and inclusive environment where employees feel comfortable and supported. This leadership style aligns with the move towards a more human-centric model, as it prioritises the employee well-being and caters for a more diverse range of employee.

The "paradise question" response highlighted the leader's desire for a workplace that fosters a sense of belonging and growth for both existing and new employees. This aligns with the proposed metrics for a new human-centric model, which align with the benchmark metrics of the study i.e., global organisations, sensory processing, connection, mental health, and physical wellness.

In summary, the outcomes from interviewee one provides valuable insights into some of the limitations of the current Smart Working Plus model and the potential benefits that could be leveraged from a more human-centric workplace model. The leader's perspective, influenced by his background and experiences, highlighted the importance of trust, communication, visibility, and addressing diverse needs in the workplace. The proposed benchmark metrics aligned with the leader's leadership style and values, emphasising the need for the consideration of the well-being and diverse needs of all employees. The analysis of this interview supports the development of a new workplace model that prioritises human context over activities

ultimately benefiting both the business and its employees and in striving for this, it could create a more inclusive and supportive environment that fosters employee satisfaction, productivity, and growth.

## Interview 2

The second interview is with a leader who is male and is part of Generation Y. The interviewee is of Mexican nationality and works in Columbia. The leader's experience with the Smart Working Plus model is positive, but he felt that the model doesn't focus on results, but rather on the activities that people need to do. He suggested that a more results-oriented approach might be more beneficial.

As this leader is part the Finance business unit, the most frequently used spaces within the Smart Working Plus model are those that allow for confidential work, such as focus tasks and formal meetings. He appreciates the flexibility and variety of spaces available but notes the need for more confidential spaces when working on sensitive information. The leader also believes that visibility in the workplace is crucial for effective communication and team cohesion.

There is a high value placed on trust, communication, and visibility in the workplace. He acknowledges the importance of having different zones of acoustic and the role of culture in shaping people's preferences. The leader also emphasised the significance of natural light and views to the outside, both for urban and natural environments saying that it effected the experience in the workplace for employees and himself.

The leader's responses suggest that there is room for improvement in the current Smart Working Plus model. He recommends more open spaces for team collaboration and additional breakout or social spaces. He also highlights the need for behavioural changes to use the spaces effectively and the importance of addressing diverse needs and inclusion in the workplace. This is not congruent to the thinking that leaders need private paces for focus and confidential work only and would suggest that the other employees do not need the same spaces. However, the perspective on the potential for a new human-centric workplace model is positive. He believes that such

a model would be more beneficial for the business and its employees. The leader's suggestions for new spaces include higher aesthetics and more social spaces for people to connect and learn from each other.

The "paradise question" response highlights the leader's desire for a workplace that fosters a sense of belonging and growth for both existing and new employees. This aligns with the proposed metrics for a new human-centric model, which further highlight connection as the imperative.

In summary of this interview, the leader's perspective, influenced by his background and experiences, highlights the importance of trust, communication, visibility, and addressing diverse needs in the workplace. The proposed human-centric model metrics align with the leader's leadership style and values, emphasises the well-being and diverse needs of employees. However, there may be a sense that leaders have a need for higher confidentiality in spaces that other employees but with programs to facilitate behavioural changes to both leaders and employees, this could be a perception that could be dispelled to establish more equality in the preference for the focus and confidential spaces.

#### Interview 3

The interviewee, a Generation X male leader based in Vienna and is an Austrian, provides valuable insights into the Smart Working Plus model and reflected a nuanced understanding of the Smart Working Plus model and its benefits, as well as a recognition of the need for further development to better cater to diverse needs and inclusion.

The leader appreciated the Smart Working Plus model for its flexibility and the opportunities it provides for interaction and collaboration. He also valued the open spaces for their potential to foster communication and trust and saw the movement between different spaces as a positive aspect of the model. However, he also acknowledged the need for spaces that support focus work and privacy. These views align with the 'Connection' metric of the new model, emphasising the importance of social spaces, collaboration, and both individual and collective working spaces.

In terms of 'Sensory processing', the leader did not express a strong opinion on the impact of light on his workplace experience but emphasised the importance of sound management. He believed that a balance of spaces for communication and focus work is necessary, and that respect for these environments is crucial for effective engagement.

The leader's responses also touch on the 'Mental health' and 'Physical Wellness' metrics. He recognised the importance providing space that supported good mental health in the workplace, suggesting that spaces for physical activity and connection to nature can help alleviate stress. He also mentioned the popularity of massage rooms that they currently have at the workplace already, indicating a recognition of the role of physical wellness in the workplace.

The leader's responses reflected a leadership style that values openness, communication, and trust. He saw the potential for the workplace to foster these values and believed that the development of a more human-centric model could further enhance them. He suggested that such a model could support diversity and inclusion, attract more diverse talent, and ultimately benefit the business.

The "paradise question" elicited responses that further underscore the leader's values. He expressed a desire for a change in culture towards openness and progressiveness, and for learning environments that facilitate intergenerational exchange. These suggestions align with the 'Global organisations metric, emphasising the importance of diversity and inclusion in the workplace.

In conclusion, the leader's responses suggest that while the Smart Working Plus model has its strengths, there is room for improvement towards a more human-centric model and would better support the intention of the drive toward higher diversity and inclusion, as well as mental health and physical wellness, and also effective communication and collaboration. It would also align with the leader's values and leadership style, potentially enhancing his effectiveness as a leader. The leader's location, gender, generation, and birthplace may have influenced his responses, reflecting cultural norms and personal experiences, however, his responses also

suggest a willingness to challenge these norms and experiences in the pursuit of a more inclusive and effective workplace model.

#### Interview 4

The interview with this leader provides acknowledgement of the benefits of Smart Working Plus but also highlights the tension between business and functional uses, as well as the difficulty in adapting to the model. The leader's location and nationality is the United States and is a male and belongs to Generation X. Their leadership style, which seems to value structure and clear communication, may also influence their perception of a more human-centric model.

The leader's preferences for different activity-based working spaces are acknowledged to be influenced by their habitual work style and generation. He prefers formal meetings and focus pods, which allow for focused work and collaboration in a more structured environment and his workstyle is based on what he has been accustomed to in previous roles.

In terms of trust, communication, and visibility, the leader believes that the current workplace model supports these aspects to some extent but could be improved. There is mention that trust is better promoted in closed spaces during one-on-one interactions and that communication is highly dependent on work style and culture. The leader also highlights the importance of zoning of spaces and clusters of work modules in facilitating effective communication and visibility.

The leader's recommendations for improving the existing spaces include considering the different ways introverts and extroverts use the space, as well as accommodating for the diverse character traits and behaviours that influence workplace preferences for people. This may improve the overall workplace experience and reduce resistant in adopting the current model. He also emphasises the need for personalisation to improve the workplace experience.

Regarding mental health, health, and wellbeing, the leader values connection to nature and believes that spaces designed for disengagement should feel like a different world. Although there was not a specific preference for health and wellbeing spaces, he acknowledged the positive impact of Diversity, Equity and Inclusion adjustments on employee satisfaction, productivity, and talent attraction. This is a huge topic in the US and important for truly accommodating people from different backgrounds.

The leader's preferences for indoor environmental quality (IEQ) factors include having workstations near natural light and zoning to accommodate different sound levels. There is also an appreciation for views to the outside and suggest incorporating more plants and softer elements in the workplace.

In response to the "paradise question", the leader proposes adding social spaces for connection and easier technology integration to improve the workplace experience. The leader is open to adopting a new human-centric model but emphasised the importance of properly guiding employees through the change process if a new model was implemented. He believes that a more people-centric approach aligns with the organisation's values as a family-owned business.

#### Interview 5

The interviewee, a Generation X female leader of French nationality working in Germany, responses reflect a nuanced understanding of the Smart Working Plus model, its strengths, and areas for improvement, which are influenced by her cultural background, leadership style, and personal experiences.

The leader appreciates the Smart Working Plus model for its dynamism and its departure from traditional single-office setups, however, she identifies limitations such as inadequate natural light in the space she has experienced as well as a small allocation of co-working spaces that may hinder team collaboration. Her responses suggest a preference for a more people-centric model that promotes trust, communication, and flexibility and aligns with the proposed metrics under consideration for a new workplace model, particularly in terms of connection and sensory processing.

The leader's frequent use of open spaces and collaboration rooms indicates a preference for environments that facilitate interaction and collaboration. This preference aligns with the 'Connection' metric, emphasising the importance of social spaces and collaborative workplace settings. However, she does note that the effectiveness of these spaces in promoting trust and communication depends on leadership style. As a leader, she promotes transparency and freedom, allowing her team members to choose their workplaces, which suggests a democratic and inclusive leadership style.

In terms of sensory processing, the leader acknowledges the impact of light and sound on her and her teams workplace experience. She suggests that natural light can enhance mood, and that sound levels should be tailored to individual needs. She also highlights the potential benefits of internal green spaces and colours, suggesting a need for a more sensory-friendly workplace.

The leader's responses also touch on the importance of mental health and physical wellness in the workplace which cis related to her role in the organisation. She acknowledges the need for spaces that support mental health, particularly in the post-COVID era, and calls for a minimum concept for specific needs and safe spaces. She also recognises the need for health and wellness spaces that go beyond traditional gyms and yoga rooms. These responses align with the 'Mental health' and 'Physical Wellness' metrics, suggesting a need for a more holistic approach to workplace design.

In response to the "paradise question", the leader suggests the addition of more collaboration rooms and flexible spaces, as well as "chill" or "dark" rooms for relaxation which indicate a desire for a more diverse and flexible workplace that caters to a range of needs and preferences.

In conclusion, the leader's responses firmly align with the need for a new, more human-centric workplace model that goes beyond activity-based design. Such a model should promote trust, communication, and flexibility, cater to diverse sensory needs, and support mental health and physical wellness. It should also be inclusive and responsive to individual needs and preferences, reflecting the diverse nature of global

organisations. The leader's democratic and inclusive leadership style, coupled with her cultural background and personal experiences, shape her views on the Smart Working Plus model and its potential evolution. Her insights provide valuable input for the development of a new workplace model that is more aligned with the needs and preferences of today's diverse workforce.

#### Interview 6

The interviewee, a Generation X female leader of German nationality working in Germany, reflects a deep understanding of the Smart Working Plus model, its strengths, and areas for improvement. The leader appreciates the Smart Working Plus model for its dynamism, aesthetics, and its ability to foster collaboration, innovation, and a shift in an accustomed traditional work culture. She identifies limitations such as noise levels and the need for more diverse spaces to accommodate different needs. Her responses suggest a preference for a model that promotes more trust, communication, and flexibility. These requests align with the proposed metrics for a new workplace model, particularly in terms of "Connection" and "Sensory processing".

The leader's frequent use of the homebase concept and social spaces indicates a preference for environments that facilitate interaction and collaboration. This preference aligns with the 'Connection' metric, emphasising the importance of social spaces and collaborative work settings. However, she also notes that the effectiveness in promoting trust and communication depends on the specific leadership style in a business unit as different leaders lead differently. She, as a leader, promotes trust and visibility, allowing her team members to choose their workplaces to suit their needs or preferences, which is a very open and inclusive leadership style. The leader's responses focus natural light and its positive benefits to users of a space, and she also touches on the importance of mental health and physical wellness in the workplace. There is a need for these spaces to make the value of the spaces open to employees, but they also need to be easy to access and open for anyone to use without feeling like judgement is being passed on them for choosing to use these spaces.

In response to the "paradise question", the leader suggests the addition of larger bathrooms for people with medical support devices or washing needs for prayer, and recreation rooms with a level of discretion and privacy. These suggestions indicate a desire for a more diverse and inclusive workplace that caters to a range of needs and preferences.

In conclusion, the leader's responses suggest a positive outlook toward a more human-centric workplace model that goes beyond activity-based design. Even though she is a solid influence for the Smart Working Plus model there are suggestions that there could be opportunities for a model to enhance trust building, personal communication, and flexibility in choice to cater to diverse sensory needs and support mental health and physical wellness.

#### Interview 7

The interview responses from the leader, a Generation X female from Barcelona and is also located in Spain, reflect a good understanding of the Smart Working Plus model, acknowledging its benefits over traditional open spaces, but also recognising the human tendency to stick to familiar spaces when working in the office.

The leader's responses suggest a preference for co-working spaces, which facilitate free exchange and communication among team members. This preference aligns with the metric of connection, emphasising the importance of social spaces and collaboration in the workplace. The leader also acknowledges the role of trust in promoting a conducive work environment, suggesting that the existing Smart Working Plus workplace model does support an environment of trust.

In terms of sensory processing, the leader appreciates the balance of natural and artificial light in the office, suggesting a positive impact on her workplace experience. However, she notes the potential disturbance caused by the sound of people walking on wooden floors, indicating room for material selection improvements to reduce the effect of the stimulation by the surrounding environment.

The leader's responses also touch on the metrics of mental health and physical wellness. She suggests the inclusion of spaces for short breaks to manage stress, outdoor spaces for physical activity, and massage chairs for relaxation. These suggestions align with the need for space that provide for more than just activities in the workplace.

The "paradise question" further underscore the importance of social interaction and the importance of a sense of community in the workplace. She suggests the addition of a canteen and a juice bar for social interactions, and more collective spaces for spontaneous conversations or work would help with influencing behaviour on where people meet and add to the opportunities for serendipitous connection.

In conclusion, the leader's responses suggest that while the Smart Working Plus model has its benefits, there is potential for a more human-centric model that prioritises connection, sensory processing, mental health, and physical wellness. The suggestion for new spaces and improvements to existing spaces provide valuable insights for the development of such a model. The responses from leaders with more diverse backgrounds prove to be beneficial in developing a comprehensive and inclusive human-centric workplace model.

## **Interview 8**

This leaders response, who is a Generation X female based in France, but originally from Spain, acknowledges the benefits of the Smart Working Plus workplace model specifically in terms of openness and collaboration. She also recognises the importance of how these concepts are lived and how people choose to work and the relationship between their choice and the space available.

The leader prefers focus spaces or collaboration spaces, depending on her activities and agenda for the day. This preference aligns with the metric of connection and emphasises the importance of social spaces and collaboration in the workplace. The leader also acknowledges the role of trust in promoting a conducive work environment, suggesting that the existing workplace model supports an environment

of trust, but also noting that mandates in some countries are not aligned with this concept of trust.

In terms of sensory processing, the leader does not provide specific comments on light or sound but suggests that natural light is important and that the level of sound can depend on the individual and their job functions.

She also touch on the metrics of mental health and physical wellness suggesting that spaces for mental health are valuable to some people but not all, and that the need for such spaces can depend on the country and the culture of the people. She also suggests that spaces for physical wellness are needed and would be appreciated by employees and could have a positive effect on the workplace experience.

The "paradise question" response underscores the importance of self-care and mental health awareness for both leaders and employees. She does not suggest specific new spaces but emphasised the need for leaders to set an example in terms of self-care and mental health. This will also provide employees with a sense on knowing that the organisation and leader have a vested interest in their peoples wellbeing as well as themselves underlining the importance of human centricity.

In summary, the leader's responses suggest that while the Smart Working Plus model has its benefits but there is potential for a more human-centric model. The metrics of connection, sensory processing, mental health, and physical wellness are important to consider if we are creating spaces for a diverse range of people. It is equally important how workplace concepts are lived and the need for self-care and mental health awareness provide valuable insights for the development of such a model.

#### Interview 9

The interviewee, a Dutch Generation X female based in Germany, expresses her appreciation for the flexibility and variety of spaces offered by the Smart Working Plus model. She highlights the importance of trust, communication, and the ability to choose the best type of space for work. However, she also acknowledges the need

for improvements, such as better ways to locate colleagues and the inclusion of more spaces that support mental health and wellbeing.

The leader's responses indicated that she values the current Smart Working Plus model's ability to accommodate diverse needs and preferences, but she also recognised the potential for further development in these areas. For instance, she mentions the importance of natural light, sound management, and outdoor integration, which align with the sensory processing and connection metrics. Additionally, she emphasised the need for more mental health and wellness spaces, which correspond to the mental health and physical wellness metrics.

The influence of the leader's demographic profile may reveal that she may be more attuned to the importance of work-life balance, diversity, and inclusion, which are reflected in her emphasis on trust, communication, and the need for spaces that support mental health and wellbeing. Furthermore, her Dutch background may contribute to her appreciation for natural light and outdoor integration, as these are common features in Dutch workplace design.

Her leadership style appears to be characterised by trust, flexibility, and adaptability. She believes that the organisation has highly educated and responsible employees and this provides comfort and trust in the fact that they are easily able to choose the best spaces for their work tasks. This leadership style may influence her perception of a more human-centric model, as she recognised the importance of empowering employees to make choices that best suit their needs and preferences. She also acknowledges the need for change management to ensure that new spaces are effectively utilised and to achieve a higher perceived sense as valuable for it function. The paradise question, which asks the leader to describe two new spaces she would include in the workplace, reveals her desire for spaces with abundant natural light and adaptable functionality. This suggests that the leader values spaces that prioritises human comfort and wellbeing, and that can be easily adjusted to meet the diverse needs of employees. These preferences align with the proposed new workplace model's focus on human context and its emphasis on Sensory processing, Connection, Mental health, and Physical Wellness.

#### Interview 10

As an Argentinian, Generation Y female based in Germany, this leader appreciated the flexibility and variety of spaces provided by the Smart Working Plus model, emphasising the importance of trust, communication, and choice in the workplace but also suggests that there are some aspects that could benefit from improvement. For instance, she mentions the importance of natural light, sound management, and connection to nature, which align with the sensory processing and connection metrics. Additionally, she suggest that there could be more emphasis for the need for more spaces that support mental health and wellbeing.

She acknowledged that she may be more attuned to the importance of work-life balance, diversity, and inclusion, which are reflected in her emphasis on trust, communication, and the need for spaces that support mental health and wellbeing. This may also be due to the fact that this leader is part of a younger generation and her thinking and expectation from her team and herself are a bit more progressive. Furthermore, her cultural background being Latin American may contribute to her appreciation for community and connection, as well as her preference for green spaces and outdoor integration.

Her leadership style appears to be characterised by trust, flexibility, and adaptability. She believes that there is no mandate on how and when people work, as long as they achieve their outcomes, and she emphasised the importance of teamwork and communication. This type of leadership style recognises the importance of trusting and empowering employees to make choices that best suit their needs and preferences, and she acknowledges the need for leadership to also progress in line with the changing workplace needs.

The paradise question, which asks the leader to describe two new spaces she would include in the workplace, reveals her desire for massage spaces and healthy food options available in the offices on the campus.

#### Interview 11

The interview with the German female Generation X leader based in Germany, reveals a very good understanding of the Smart Working Plus model. Her perception is that it is a positive progression from the tradition approach to work that was in place previously. Her preferred spaces are "Co Working" and "Focus Pods", which she uses for collaboration and private conversations, respectively. She believes that the current model promotes trust and communication, although she acknowledges the risk of over-communication due to increased visibility being located in an open environment as a leader.

The leader's responses indicate that she values the metric of sensory processing, in particular the space that have ambient noise, which she feels energises her while working. She also recognised the importance of natural light and suggests incorporating lighting that adjusts to the time of day to support employees' body clocks.

In terms of connection, the leader emphasised the need for spaces that facilitate both social and work-related interactions. She also highlights the importance of navigation and finding people, places, and events within the workplace. This suggests that a more human-centric model should prioritise ease of navigation and convenient opportunities for connection.

The leader's responses regarding mental health and physical wellness reveal some hesitations about implementing specific spaces for these purposes. She believes that the company culture may not be ready for dedicated quiet spaces or therapy/self-care areas. However, she appreciates the opportunities for outdoor walks and the opportunities to get some fresh air outside of the office space as a means of promoting well-being.

Her leadership style, which does not rely on status, may influence her perception of a more human-centric model. She is open to change and improvement, as long as it aligns with the company culture and does not become outdated quickly. Her "paradise question" response suggests a desire for a workplace with a better look and

feel, inspired by hospitality, and improved navigation so the experience of being on campus or at any office site is good for any user.

#### Interview 12

The interview with the German male, Generation Y leader based in Germany, offers a comprehensive perspective on the Smart Working Plus. His responses demonstrate an appreciation for the Smart Working Plus model's advantages, while also acknowledging its shortcomings, particularly in terms of promoting connection, trust, and inclusivity.

The leader's responses indicate a preference for a more people-oriented model, which he believes would better cater to the diverse needs of employees. He highlights the significance of intergenerational connection and cultural diversity, suggesting that the current model could be enhanced to facilitate these aspects more effectively. His responses also underscore the importance of sensory processing, with specific mentions of light and sound. He expresses a preference for softer, indirect lighting and acknowledging that natural light is building dependent especially on a campus where there are many different buildings that have been built at different time periods to the current date. He acknowledges the need for designated sound zones, reflecting an understanding of the impact of the physical environment on employee well-being and productivity.

The questions about mental health and physical wellness reveal a desire for spaces that encourage disconnection from work and relaxation. He mentions the potential benefits of sleep spaces and spaces without screens, indicating an awareness of the importance of rest and disconnection in maintaining mental health. His reference to the positive effects of animals in the office also suggests an understanding of the potential benefits of biophilic design.

The leader's location, gender, generation, and birthplace may have influenced his responses. As a German Generation Y male, he may be more receptive to flexible and innovative workplace models. The leader's responses imply a participatory and inclusive leadership style. He values connection, trust, and the accommodation for

higher diversity, and believes in the importance of creating spaces that support these values.

The "paradise question" unveils the desire for more natural elements in the workplace, and interestingly include having animals in the workplace as it has merit for alignment with the core business and benefiting the wellbeing on the employees as well. There is also acknowledgement that it may not be best suited for all. The second responses further enhanced the progression toward a non-silo organisation where he believes the value for connection will be highest.

In conclusion, the interview indicates that while the Smart Working Plus model has its merits, there is potential for improvement. There is a desire for a more human-centric model preceding Smart Working Plus in which there is better support for cross functional connection and more inclusivity for different cultures. His responses imply that such a model would align with his values and leadership style and could potentially enhance employee experience.

### Interview 13

This leadership interview is with a Turkish, Generation X male based in Ingelheim. He see value in the Smart Working Plus model and for its ability to facilitate engagement and collaboration. However, he also points out some limitations, such as employees feeling judged for their use of spaces and the impact of building design on the effectiveness of the model. These concerns suggest that the current model may already require areas for improvement.

Regarding global organisations, the leader emphasised the importance of a friendly culture in attracting diverse talent. He believes that the current model already supports this to some extent, but there is always potential for further enhancement for a more inclusive environment for younger generations of employees that may join.

Sensory processing is an important aspect of the workplace experience that the leader acknowledges. He highlights the positive effects of natural light and the need for better sound control in workspaces. However, he also mentions the negative

impact of white noise on employee well-being. The implementation of some technology aspects can be very exhausting as an experience.

Connection is a key theme throughout the interview with the leader and he has emphasised the importance of face-to-face communication and the role of the physical environment in facilitating connections. He also notes the benefits of hybrid meetings and the need for spaces that support both individual and collective work. The leader suggests the need for more spaces that allow employees to unplug and decompress, acknowledging the challenges of providing such spaces in an office environment. This implies that the current model may already consider mental health to some extent, but there is potential for further development. His responses refer to as the availability of gyms and game rooms for self-care and suggests the addition of massage services. By supplementing the workplace with these spaces that promote physical wellness will substantially improve the workplace from Activity-based working.

These responses suggest a leadership style that values employee well-being, trust, and communication. This style may already be aligned with some aspects of a human-centric model, as it emphasises creating a supportive and inclusive environment. The paradise question response, which focuses on better use of technology to support workplace choices and enhance the workplace experience, further supports the idea that the current model may already incorporate some human-centric elements.

### Interview 14

The interview transcript presents a conversation with a male Baby Boomer leader, who is Italian by nationality and works in China. The leader acknowledges the effectiveness of the Smart Working Plus model in the Asia Pacific region, despite the cultural differences in work habits. He appreciates the model's various space modules for individual work, collaboration, and remote working. However, he also recognised the need for a more human-centric approach that caters to more diverse needs and inclusion.

The leader's responses indicate that the current Smart Working Plus model supports trust and communication to some extent, with the coffee spaces being particularly

conducive to trust-building. However, he also notes that there is a reserved culture in the office, with people being mindful of not disturbing others. He suggests that visibility of colleagues, managers, and leaders can facilitate easier and more effective communication.

The leader identifies some limitations in the current Smart Working Plus model, such as the prevalence of a dedicated desk culture. He also highlights the need to consider religious requirements across different parts of Asia. The importance of mental health support, as burnout is a growing concern in the APAC region and the leader believes that providing private spaces for mental health support and incorporating elements like adjustable light levels, sleep pods, and decompression rooms can enhance employee wellbeing.

Considering the metrics for the new human-centric workplace model, the leader's responses indicate that:

- 1. Global organisations: The leader acknowledges the need to consider religious requirements and diverse needs across different locations.
- 2. Sensory processing: The leader suggests adjustable light levels and spaces with different sound levels to cater to individual preferences.
- Connection: The leader believes that the current Smart Working Plus model supports trust and communication to some extent, but there is room for improvement.
- 4. Mental health: The leader emphasised the importance of mental health support, suggesting private spaces and decompression rooms.
- 5. Physical wellness: The leader proposes alternatives like shared treadmills at desks, given the limitations of providing gyms in dense urban areas.

The leader's understands the high value and importance of acknowledging cultural differences and diverse needs across locations which could be a result of his international experience and exposure to many cultures. Additionally, his leadership style may be more open to change and adaptation, as he recognised the importance to consider a more human-centric approach in the workplace.

In response to the paradise question, the leader suggests two new spaces: large, adaptable spaces for lunch and sleep pods or decompression rooms. These

suggestions indicate a desire for more flexibility and support for employee wellbeing in the workplace model.

The interview with the leader reveals that while the current Smart Working Plus model has its merits, there is a growing need for a more human-centric approach that caters to diverse needs and inclusion. The leader's insights emphasise the importance of considering global organisations, sensory processing, connection, mental health, and physical wellness in the new workplace model.

### Interview 15

The interviewee, a male leader from Generation Y, based in Germany and of French nationality, provides a comprehensive perspective on the Smart Working Plus model and the potential for a more human-centric workplace model. His leadership style, although not explicitly stated, can be understood from his responses to be one that is flexible, open to change, and centred around the needs of his team.

The leader demonstrated a thorough understanding of the Smart Working Plus model, appreciating its flexibility and its facilitation of better communication within teams. He acknowledges the model's ability to cater to different work requirements, enabling him to choose the appropriate space depending on the nature of his tasks. This suggests an appreciation for the model's adaptability and its alignment with the dynamic nature of work.

However, his views on trust within the model are mixed. While he acknowledges that the model can potentially promote an environment of trust, he also suggests that the effectiveness of this aspect is heavily dependent on the team dynamics and the leadership style. This indicates that while the Smart Working Plus model provides the necessary infrastructure to foster trust, the realisation of this trust is dependent on the human elements within the workplace.

Identification of certain restrictions in the current model, particularly pertaining to the ease of movement between different spaces influenced by the culture of the team and the nature of the work they engage in. In terms of potential improvements, he

recommends a more balanced approach to space design, indicating that the current model may not cater to all users' needs and preferences.

In terms of Diversity, Equity, and Inclusion requirements, the interviewee does not identify any personal requirements but suggests that the introduction of zones for different activities could enhance the flexibility and choice within the workspace. This indicates an understanding of the diverse needs of employees and the necessity for the workspace to cater to these needs.

He acknowledges the importance of mental health and wellbeing in the workplace. However, he suggests that the effectiveness of specific spaces dedicated to these purposes may depend on the overall company culture. This highlights the interconnectedness between the physical workspace and the organisational culture in promoting mental health and wellbeing.

The leader identifies light, and sound as significant factors influencing his workplace experience and suggests that these elements can significantly influence behaviour and preferences within the workspace. He also highlights the importance of having views to nature, indicating that these can influence how a space is used and even perceived.

In response to the "paradise question", the interviewee suggests the addition of gathering spaces and childcare or animal childcare facilities. These suggestions reflect a desire for a more inclusive and supportive workplace that caters to a wider range of needs, including those of employees with families.

The interviewee expresses support for a more human-centric model, suggesting that it could offer greater flexibility and improve the look and feel of the workplace. This suggests a recognition of the changing nature of work and the need for workplaces to adapt accordingly.

The responses suggest a general satisfaction with the Smart Working Plus model but also recognises the limitations and potential for improvement. His suggests that while the Smart Working Plus model has its benefits, there may be a need for a new model

that better aligns with the changing nature of work and the diverse needs of employees especially in a post COVID environment.

## **Appendix I: EC3**



(UH Protocol number: CTA/PGR/UH/05917)

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS ('ETHICS COMMITTEE')

FORM EC3

CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS

I, the undersigned [please give your name here, in BLOCK CAPITALS]
 of [please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of my involvement in the study. I have been told that in the event of any significant change to the aim(s) or

design of the study I will be informed and asked to renew my consent to participate in it.

2 I have been assured that I may withdraw from the study at any time without disadvantage or having to give a reason.

3 In giving my consent to participate in this study, I understand that voice, video, or photo-recording will take place and I have been informed of how/whether this recording will be transmitted/displayed.

41 have been told how information relating to me (data obtained in the course of the study, and data provided by me about myself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used, including the possibility of anonymised data being deposited in a repository with open access (freely available).

5 I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.

Signature of participant	Date	
Signature	of	(principal)
investigator	Date	
Name of (principal) invest	tigator [in BLOCK CAPITALS please]	
HASSAN SHAIKH		

**Appendix J: EC6** 



UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS ('ETHICS COMMITTEE')

FORM EC6: PARTICIPANT INFORMATION SHEET

## 1 Title of study

Polycontextual Workplaces: A context-based workplace model advancing workplace strategy and design for greater diversity, equity, and inclusion (DEI)

### 2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the study that is being undertaken and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University's regulation, UPR RE01, 'Studies Involving the Use of Human Participants' can be accessed via this link: <a href="https://www.herts.ac.uk/about-us/governance/university-policies-and-">https://www.herts.ac.uk/about-us/governance/university-policies-and-</a>

## regulations-uprs/uprs

(After accessing this website, scroll down to Letter S where you will find the regulation)

Thank you for reading this.

# 3 What is the purpose of this study?

The aim of the survey is to understand what your experience has been in these spaces, if there are any improvements that you can suggest as well as areas that you may be very happy working in. The improvements will be directed toward thinking about developing a new space model that could

better support employees with a human centric approach to workplaces. My

research focusing on creating a new space model with the focus on diversity,

equity, and inclusion (DEI) in the workplace.

Diversity, equity, and inclusion is an expansive topic. For this research, the

metrics for diversity, equity, and inclusion focus on:

1. Global organisation

2. Sensory processing

3. Connection

4. Mental wellbeing

5. Physical wellness

4 Do I have to take part?

It is completely up to you whether or not you decide to take part in this study.

If you do decide to take part, you will be given this information sheet to keep

and be asked to sign a consent form. Agreeing to join the study does not mean

that you have to complete it. You are free to withdraw at any stage without

giving a reason. A decision to withdraw at any time, or a decision not to take

part at all, will not affect any treatment/care that you may receive (should this

be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

Diverse group of participants are required and does not apply only to a specific

persona. All Participants must be over the age of 18.

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in it for:

Survey: Approximately 25-30 mins

Interview: Approximately 45mins – 1 hour required

Workshop: Approximately 4hrs

7 What will happen to me if I take part?

The first thing to happen will be:

335

Survey: The survey will require the participants to answer the same set of standardised questions on their experience in the workplace in terms of space and DEI which will eventually lead to them providing recommendations for progression

Interview: The interview will require the participants to answer the same set of standardised questions on their experience in the workplace in terms of space and DEI which will eventually lead to them providing recommendations for progression. This will be to experts/leaders

Workshop: The results communication will be a singular workshop along with the keyword findings and subjective ideas. Requests will be put forward for voluntary participation in additional ideation workshop that could support the refinement of the new space model.

What are the possible disadvantages, risks, or side effects of taking part?

(Note: if appropriate for this particular study, you will be asked to agree to any required health screening questionnaire in advance of the study. Please also note that circumstances may arise that could result in the need for you to withdraw from the study; should such circumstances occur, the investigator will discuss the matter with you.)

No risks have been highlighted

- 9 What are the possible benefits of taking part?
  Contribute experience-based feedback for the development of a new workplace model to be created in this research.
- How will my taking part in this study be kept confidential?

  No data will be shared with any party outside of this study except for ethics submission requirements for permissions from participants.

### 11 Audio-visual material

Any recording will be stored in a password protected one drive location during the analysis phase and will be discarded once the study is completed. All information and recordings will be gathered and stored for use during the study only. Reference can be made back to results only for confirmation of the accuracy of information documented. Information will be securely destroyed after the study is concluded which is estimated to be in 2026.

- 12 What will happen to the data collected within this study?
  - The data collected will be stored electronically, in a password-protected environment, for up to 36 months during the PhD, after which time it will be destroyed under secure conditions.
  - The data will be anonymised prior to storage.
  - You will be asked to sign a 'Contributors' Release Form' to allow the transmission of the audio/visual material to which you have contributed.
- Will the data be required for use in further studies?
  - The data will not be used in any further studies.
- 14 Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics
 Committee with Delegated Authority

The UH protocol number is CTAPGRUH05917

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions, or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities and, under such circumstances, you will be withdrawn from the study.

Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, in writing, by phone or by email: <a href="mailto:hassan.shaikh@beohringer-ingelheim.com">hassan.shaikh@beohringer-ingelheim.com</a>

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address:

Secretary and Registrar University of Hertfordshire College Lane

Hatfield

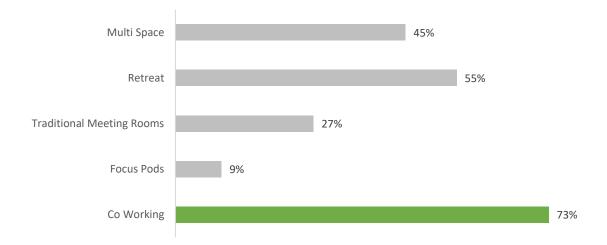
Herts

**AL10 9AB** 

Thank you very much for reading this information and giving consideration to taking part in this study.

## Appendix K: Slido questions and results from workshop

Q1. Which of the current Smart Working Plus spaces do you rate as high value to a people centric work style? (11 respondents)



Q2: a. In what ways do you believe the polycontextual workplace model improves upon the SWP models? (11 respondents)

- It's feel more oriented to well being of employees.
- It introduces new categories of spaces that didn't exist in the past.
- Virtual learning pods are new, Option of psychological safety
- Fit much more peoples needs and wishes
- Focuses more one the well-being of the employees, try's to include more employees (all) instead of personas.
- Offers more flexibility.
- More detailing of needs supports individual appreciation to the user experience.
- It provides space beyond just daily work needs.
- Because I do not have to make so many decisions before starting my day. And
   I do not have to think about all this rules. It seems more organic and fluent.
- Considers more the individual needs and supports more the wellbeing of people.
- Collaboration, creativity, synergies.
- The PWM caters to more diverse human space needs.

Q2: b. What limitations or shortcomings do you see in the SWP model compared to the proposed model? (11 respondents)

- Identity of the space is poor. Rooms are often to laud. One cannot be aware it the colleagues are in the same building.
- No or limited change management I don't see any shortcomings. Are different perspectives, I can prefer one over the other but I don't see a lack of something, in terms of an employee can perform its one task.
- Missing the sience.
- Learning opportunities.
- Missing the equality.
- Lighting concept, well being is missing No data driven model deployed to manage occupancy.
- Lack of Individualismus.
- Amenities and benefits are missing.
- Acceptance of people, not enough consideration of individual needs.
- It is too static and you have to take too many things in consideration before even starting to work.
- Not that innovative.
- SWP is a rigid understanding of the types of activities that people need to engage in when they come to the office.
- Not a full understanding of the model.

Q2: c. Which SWP module/s are still relevant in today's evolving work environment? Why or why not? (11 respondents)

- Some spaces look very attractive (like the airplane seat) but are less useful in practice.
- Retreat /Co-Working / Multispace /Creative Meetings are spaces that for me are relevant from SWP.
- Those all are space that's allow us to collaborate and grow.
- Co working is relevant Nower days you have complex problems that need complex answers wich can be solved alone. Physically working thoughter helps this. Even if people are working partly remote.
- Co working Traditional meetings Retreat Multi space.

- I believe all modules are still relevant, with different balances for different groups.
- Focus pods are quite useful since the workday, in office or wfh, consists of many video calls.
- Co-working for Communication, Focus Pod for Focus work, retreat for coffee
   Break and quick Chat.
- All of them.
- Co-working is still relevant because it gives people the opportunity to work together.
- The flexi desk choice isn't quite working for everyone every day.
- Quiet options and ergonomic equipment.
- All remain valid Space allocation based on need analysis needs to be adjusted.
- Open spaces which can foster collaboration.

Q3: a. Can you propose any specific requirements to adapt the polycontextual workplace model to accommodate the preferences of different geographical locations? (9 respondents)

- Improve possibilities to buy fresh fruits and food for those who are not able to use the cafeteria
- More personal storage space.
- Not so strict cothing rules
- I think people here like to have a good overview of the room and can see who is approaching. It is not very appreciated to sit with the back against the rest of the room/area.
- "Fixed" areas (neighbourhoods) for teams
- It might require new roles/ people to facilitate the activities in the new spaces.
   Think meditation teachers, coaches, councillors
- Meditation
- I will add a Religion place for people that require a place to pray.
- Adapt it to the geographical culture to enrich cross cultural relations in
- the organisation
- Branding of meeting rooms with local and regional context
- Gym

- Sauna 😉
- Q3: b. What considerations should we keep in mind to ensure the model is inclusive and supportive of all genders? (8 respondents)
  - Alignment with the DEI office to consider all inclusive options.
  - Period products for free.
  - Period products for free.
  - Hygiene products for women.
  - Particular smell in washrooms.
  - Hygienic dispensers.
  - gender neutral toilets, neutral colours, neutral smells.
  - I will include a non gender individual bathrooms.
  - Female only spaces.
  - Non binary bathrooms.
  - The restrooms are often super cold.
  - Bathrooms are important spaces and could be made to look and feel much nicer. Not like an airplane loo which it feels like atm.
  - Maybe Unisex Restrooms.
  - It's more about the people living the model? Than physical space.
  - Room temperature adjustments.
  - Different temperature needs.
- Q3: c. How can we modify the model to cater to the varying work styles and preferences of different generations? (10 respondents)
  - Flexible rooms.
  - Offering things like gym, PlayStation... coffee corner.
  - Good change Management adressing every Generation.
  - Awareness of the needs need to be transparent.
  - Communication!
  - The model is already very individual and should fit to all generations.
  - Maybe including an area to design content for social apps.
  - Flexible architecture.
  - Branding.
  - Different work areas to generations? -> problem not inclusive:/

- No changes at the moment.
- Different zoning allocation.
- I believe we can start ignoring the f2f demands of the boomers as they will phase out of leadership soon.
- X.

Q4: a. Which features or aspects of the polycontextual model do you believe will most effectively foster connection and collaboration among employees? (9 respondents)

- Learning area, spec. Brainstorming area, Accessible Space with snoezelen room.
- Accessible spaces for their variety of needs catered to and their lack of emphasis on productivity.
- Connection: equitable Collaboration: inclusive.
- Inclusive spaces Accessible spaces.
- Equitable Spaces, inclusive Spaces.
- Accessible spaces.
- Inclusive spaces and diverse spaces.
- Design and layout.
- Diverse Spaces.
- Accesible/diverse spaces.

Q4: b. How can we further enhance the "Inclusive Spaces" to promote better team interaction and connection? (9 respondents)

- Great technical Equipment, nice furniture, and Colors.
- Working and easy to understand technology, training sessions how to use it.
- Meanwhile a team is seating together with the correct tool a the interaction and connection is something that the environment cannot give it. It's something that come with the peoples/team.
- Have facilitators in those spaces or hosts (think hotel).
- Flexible Furniture, flexible It-Equipment.
- Playful elements (soccer table) and warm environments (plants, light, materials).
- Digital whiteboard with mulit site usage & engagement via multiple sites.
- Provide some team games, virtual or board games.

Coffee corners.

Q4: c. Describe any additional tools that could be incorporated into the model to support remote or virtual connections? (9 respondents)

- 3d Kamera, best possible techn. Equipment.
- Something like virtual reality.
- Simultaneous translation tool.
- Owl and other good camera staff, virtual rooms, VR glasses.
- Avatars.
- VR.
- Metaverse.
- VR / AR Technology.
- Apple AR glasses.
- Virtual reality tools/learning.
- Driving iPad Roboter (Like Sheldon in Big Bang Theory).
- VR / AR Technologie.

Q5: a. Why do you believe differentiation in zones will support sensory processing needs? (8 respondents)

- Different zones will offer a possibility for different experiences
- Smell and warmth for wellbeeing
- People are guided to the right zones and learn to handle their needs
- Because people process thing differently. I can work and think with music and people needs quiet space
- Because different zones could have different lighting, sound, and material themes.
- Because different tasks need different invironments
- Ocupation is king and driver for costs and colloberation
- Supports different approaches to business needs and job requirements

Q5: b. Are there any additional features could we include in the model to better cater to sensory seeking or sensory avoidance needs? (11 respondents)

- Musik in some places.
- Color concepts supporting mental well being.

- White noise areas Light regulation rooms Smell rooms (ocean).
- Branding.
- Clearly mark the spaces and explain the use and intention of the space.
- Noise canceling headphones could be useful when you want to aisolate yourself.
- Sound proofing measures.
- Colour coding, plants, smells, light concept.
- Nature sound in some area and a base background noise.
- Noice cancelling technology.
- Different Environments for different needs.
- White Noise.
- That music is quite crucial to some people to get work done.

Q5: c. What can be done to ensure that the new workplace model is responsive and adaptable to the sensory needs of all employees? (10 respondents)

- Design should be inclusive and flexible.
- Very good Promotion Camping, change management.
- I don't think you can do a place adaptable for all employees.
- Invite employees and ask them before. Good change Mamt.
- Should cover all individual needs, buildings must be flexible.
- Multiple options or frequency changes.
- Present and Communicate different Environments.
- Focused change management approach.
- Allow for individual behaviours (head phones for noise cancelling) even if it might seem awkward at first.
- Analyse the needs and adjust/support with relevant tools & fit outs.
- Change management on the new workplace model.
- Ask all employees what are their needs.
- Offer diverse options of sensory experiences.

Q6: a. How do you perceive the impact of the polycontextual workplace model on employee mental health? Positive/Negative.... Why? (10 respondents)

 Positive! It will offer more possibilities for the employers for work, collaboration, and relaxation.

- Take care of needs-positive.
- Positive because Individual People can adress different environments,
   Savespaces for struggling.
- Positive! More options, give them more choise make them happy.
- Positive because it offers variety without actively having to to plan this or think about it.
- Positive, because well being is part of the model.
- Very positive because the individual needs of people are considered.
- As it's try's to take care of the employees needs it should be positive.
- Positive as it will provide options or opportunities for employees to choose their work environment.
- Positive, as it helps to ease the stark divide between "home" and "office".
- Supports fully as it gives individual needs the room.

Q6: b. What additional resources or support systems could we incorporate into the model to enhance mental health support? (7 respondents)

- Chance to have a therapy sessions
- Music offers for Meditation pods
- Yoga /mind Yoga
- Usual unconventional communication sessions with colleague's
- Meditation offers
- Therapists and therapy rooms. Coaches. Personal Trainers.
- Guided meditation
- Focus zones or meditation sessions
- Sleeping pods

Q6: c. How can we ensure that our workplace model promotes a culture of openness and understanding around mental health? (11 respondents)

- Opportunities for anonymous expression of opinions.
- This needs to be honestly supported by the corporate values and needs to be promoted by the senior leadership without facing negative impacts.
- Leadership needs to embrace the model first and embrace the speak up culture.

- Good role Model from Leaders, Leaders should use Meditation pods etc. Too.
- I have no idea.... I think it depends on the behavior of the leaders.
- Don't neglect physical health.
- see leaders talking about their mental health openly.
- Mental Health Strategy Training of employees and leaders Talking about the topic Use storytelling.
- Train, communicate about mental health Make It more acceptable in work culture.
- Encourage open conversations around seeking mental health support / therapy from leaders.
- Leading by example by management.
- Open for Feedback and adjustments.

Q7: a. Can you list any features that the model should have that will most effectively promote physical wellbeing? (8 respondents)

- Feel-Welcome-Environment.
- Supervised sport classes.
- Cycling tours.
- Healthy food, also for the quick lunch.
- Gym programs.
- Active corner with guided exercises and information on further possibilities.
- Yoga, spinning classes, tennis classes, etc.
- nice ergonomics, sport groups, dreadmills.
- Sensory speaking and avoidance.
- Gym / Health Food.

Q7: b. How can we further enhance the model and or spaces to encourage regular physical activity and reduce sedentary behaviour? (9 respondents)

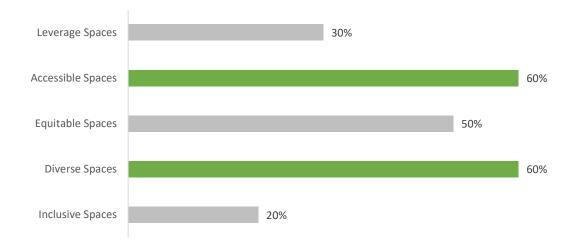
- More options for a gym on site without appointments.
- Walking desks.
- Walking meetings outdoors.
- Promote walking meetings.
- Multiple options and offers Weight training Yoga Pilates A full gym Or different litte ones all over the site.

- Training people to us SWP Right and make them stop camping.
- Include the Health Navigators Active corner Active breaks.
- Create indoor activities for teams.
- Monkey bars in meeting rooms, running track on campus, yoga mats.
- Walking machine meanwhile a take meeting. Ergonomics breaks.
- Limited availability of seating options? Or better more options to work while moving.

Q7: c. What additional resources or facilities could we include in the model to support employee physical health and wellbeing? (9 respondents)

- Zwift cycling.
- Gym, Massage, Physiotherapie.
- Walking path, yoga mat, free fruit.
- More Little gardens and Greens inside.
- Fitness and mindfulness classes/rooms.
- Roles and facilitators: it requires new leadership roles in the org to encourage new behaviours.
- Apps, coaches, healthy habits, etc.
- Stretching equipment.
- Yoga rooms.
- Sport groups, massage, smoothie bars.

Q8: a. Which space suites of the polycontextual workplace model would you find most effective in promoting a positive work environment that exceed Smart Working Plus? (10 respondents)



Q8: b. Are there any aspects of the model that you believe need improvement or refinement? If so, what are they? (7 respondents)

- More connection with outside space, visual and physical.
- When interviewing senior leadership you could phrase the questions so that they don't necessarily encourage only politically correct answers. This would help to reveal Better the underlying cultural divide between the generations.
- Maybe the leverage spaces should not only focus individuals but also pairs or small groups.
- No quiet zone to a highly collaborative zone.
- Right now no, maybe after implementation.
- Soundproofing could be improved.
- Progression of acceptance and piloting. Then fine tune.
- It is a progression. I would be interested to see test layouts.

Q8: c. How do you perceive the balance between collaboration and individual work in the polycontextual model? (9 respondents)

- People will use more Coll.space.
- I like the intention to enhance both, focused work, and collaboration work.
- More focus on collaboration work with more opportunities for retreat.
- There more options than in smart working.
- It feels more emphasis is put on diverse individual needs as opposed to the needs of a group for effective collaboration.
- It's a blended and inclusive option which gives end users the chiice.

- Quite balanced it seems that the individual has more options.
- It is more cohesive. It opens to both evenly.
- It's balance. You can choose a place according your daily need.
- Good balance.

Q8: d. Can you identify any potential challenges or obstacles in implementing this model? (9 respondents)

- Management perspective being very different than the others.
- Adress every Person every Generation.
- To convince Mgmt. and employees and.
- Cultural non-acceptance of the importance of mental health.
- Not understanding.
- Resistance to change.
- You can not make everyone happy. I see general issues regarding occupancy.
   What if everyone is in on wednesday?
- Management/ Cost.
- Cost-paying for new types of spaces without a proven ROI.
- Acceptance of the model.
- Management.
- German mindset.

Q9: Transitioning to either model would require a change in behaviour and mindset. With that in mind, which model would you prefer to use for more human centricity and more Diversity Equity and Inclusion? (9 respondents)

