Aligning Technology and Strategy for Employee Development and Engagement in Non-Ergodic New Normal Environments: MNEs Operating in New Zealand

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THESIS ABSTRACT

This research examines how HR professionals in multinational enterprises (MNEs) operating in New Zealand perceive, evaluate, and implement human resources (HR) technologies for employee development and engagement in a volatile, non-ergodic new normal environment. Addressing empirical and contextual gaps in the literature, the research integrates the Technology Acceptance Model (TAM) with the dynamic capabilities framework to connect micro-level adoption cognitions with firm-level sensing, seizing, and transforming processes. Two questions guide the research: How do HR professionals in MNEs operating in New Zealand perceive and respond to the challenges and opportunities of the non-ergodic new normal environment, particularly in relation to using technology as a strategic asset toward employee development and engagement?; How do HR professionals evaluate and implement HR technologies, and to what extent do their decisions shape the development of sustained competitive advantage for the firm?

A qualitative, phenomenological design was used. Semi-structured, in-depth interviews were conducted with seven HR professionals holding managerial roles across several industries within MNEs in New Zealand. Data was analysed inductively using thematic analysis.

Findings show three perceived domains of opportunity: Technological development; Accessibility; and Instrumental gains. Perceived challenges are regarding: Contextual issues; And responsible innovation. Evaluation of HR technologies tends to be shaped by institutional influence, and personal use criteria, with adoption monitored through usage, qualitative feedback, and learning analytics. Sustainability of use depends on digital literacy, change management, and clear AI policies. Firms are centralising HR technology stacks, automating and streamlining routine tasks, and redeploying HR effort toward higher-value work, and prioritising future-proof, integrable systems.

The integrated lens of the TAM and dynamic capabilities explains why user-centric ease of use and usefulness are necessary but insufficient, as HR technologies deliver strategic value when adoption is coupled with capability renewal. In New Zealand's small-market context, successful initiatives prioritise usability, mobile access, security, and scalability over novelty, and balance global platform

mandates with local responsiveness. The study contributes empirical depth to a literature dominated by reviews, advances a cross-level theoretical integration, and offers actionable guidance for HR leaders seeking technology-enabled agility, engagement, and capability building under persistent uncertainty.

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ATTESTATION OF AUTHORSHIP

"*I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.*". ChatGPT was consulted within this thesis to assist with proofreading.

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ETHICS APPROVAL

This research was approved by the Auckland University of Technology Ethics Committee (AUTEC) on the 27th of February 2025 (See Appendix A).

Ethics application number: 25/13

CHAPTER ONE: INTRODUCTION

1.1 Background and problem statement

Since the COVID-19 pandemic in 2020, digital transformation and technological advancements have rapidly accelerated across industries, highlighting the importance and potential uses of technology for employee planning, engagement, and development (Minbaeva & Navrbjerg, 2023; Stone et al., 2024; Sun et al., 2024). These developments have led to the emergence of a non-ergodic new normal environment, characterised by discontinuous change, radical uncertainty, and dynamic systems with unstable equilibria (Ahlstrom et al., 2020; Hitt et al., 2021a; North, 1999). MNEs operate in cross-border, dynamic, and complex environments, requiring them to continuously adapt with technological innovations and advancements to gain or maintain their competitive advantages, even more so within the contemporary environment, all while rethinking their approaches to employee development and engagement (Ahlstrom et al., 2020; Hitt et al., 2021b; Duan et al., 2024; Minbaeva & Navrbjerg, 2023). Regarding this, technology is increasingly viewed and framed as a strategic asset in this transformation, offering tools to benefit agility, resilience, and long-term competitive advantages (Duan et al., 2024; Swarnakar et al., 2025). A shift toward AI-driven HR solutions, hybrid work, and digital learning platforms further indicates an evolution in the role which technology holds in human resources management (HRM) (Gupta et al., 2024). However, despite growing interest within the literature, key theoretical, empirical, and contextual gaps remain regarding how MNEs strategically adopt, evaluate, and implement technology to support employees in such volatile conditions, particularly in contexts such as New Zealand.

To investigate the adoption of HR technologies, the Technology Acceptance Model (TAM) by Davis (1986, 1989) is a useful theory, as it assesses individual-level factors like perceived usefulness and perceived ease of use towards end-user attitudes and behavioural intention. Within employee literature, application of the TAM tends to focus on end-users such as employees (Dastane et al., 2024; Wang et al., 2025). Although this provides valuable insights into behavioural adoption, it overlooks the organisational and strategic processes shaping the selection and implementation of HR technologies in

the first place (Hamouche et al., 2025). HR professionals tend to evaluate technologies not only for functionality, but are also likely to consider their alignment with broader organisational objectives, risk profiles, and cultural readiness (Deepa et al., 2024; N. Malik et al., 2022). This individualistic end-user application of the TAM overlooks critical organisational-level concerns, such as cost-benefit analysis, institutional pressures, or long-term scalability, issues that are prevalent within the MNE context, operating in fragmented and diverse markets (Caligiuri et al., 2020; Harney & Gubbins, 2024).

Within the non-ergodic new normal environment, organisations need to have the strategic ability to adapt and respond in a timely manner. The dynamic capabilities framework (Teece et al., 1997) offers a strategic lens to understand how organisations navigate uncertainty through the processes of sensing, seizing, and transforming. Although this framework is conceptually well-suited to non-ergodic new normal environments, it is often referenced implicitly or at a surface-level in HRM technology literature (Autsadee et al., 2024; Deepa et al., 2024; Gupta et al., 2024). Various studies reference agility, adaptability, or resilience, they often fail to examine in greater depth the firm-specific characteristics and types of activities, particularly those related to technological capabilities, that enable an organisation to remain competitive in changing environments (Asokan et al., 2022; Garg et al., 2022). Therefore, the dynamic capabilities concept provides a useful framework for analysing how firms use HR technologies to renew capabilities, reconfigure talent systems, or develop long-term strategic alignment (Beletskiy & Fey, 2021; Grimpe et al., 2023).

The absence of integrated frameworks which bridge individual-level adoption with organisational-level transformation creates a key theoretical gap obscuring the link between user acceptance and long-term capability development. This gap is particularly important as HR technology research tends to treat adoption as an isolated behavioural outcome rather than a precursor to organisational renewal and strategic adaptation (Autsadee et al., 2024; Hamouche et al., 2025). For instance, a technology may be perceived as useful (TAM), prompting individuals to experiment with, adopt, or embed it into their daily routines. These early behavioural responses shape whether the technology becomes routinised, resisted, or abandoned (Davis, 1989). Such patterns of individual-level

engagement may directly influence whether the organisation can build the learning, data flows, and process improvements required to build or strengthen dynamic capabilities. However, even when users perceive a system as useful, this does not automatically translate into strategic value if the technology is not integrated into the organisation's sensing, seizing, or transforming capabilities (Gupta et al., 2024; Teece, 2007). Without adequately addressing this disconnect, the success or failure of the implementation of HR technology misses a critical and holistic view.

Accordingly, this research is grounded in the integration of TAM theory and the dynamic capabilities framework. TAM offers insight into the behavioural mechanisms underpinning acceptance and resistance, while dynamic capabilities explain how organisations reconfigure and renew capabilities (Davis, 1989; Teece, 2007). Integrating the two provides a more complete theoretical account of how individual-level adoption shapes organisational-level capability development and how technology choices influence long-term strategic adaptability.

Furthermore, existing research tends to adopt a conceptual or prospective lens when examining the role of technology in employee management, exploring future-oriented technological capabilities or conducting network analyses, bibliometric reviews, or thematic reviews (Autsadee et al., 2024; Gupta et al., 2024; Hamouche et al., 2025; Malisić et al., 2025), with limited grounded empirical insights into current organisational practices. The dominant methodological approach in existing empirical studies tends to be survey-based or experimental (Nasar & Ray, 2024; Pašalić & Ćukušić, 2024), whilst a gap of contextual richness and limited attention to the strategic decision-making processes behind the adoption and encouragement of technology is apparent.

Acknowledging New Zealand's context is also important when researching MNE's HR technology strategies. As a relatively small, geographically isolated economy, organisations operating in New Zealand tend to operate with limited opportunities to exploit scale, and with higher barriers to international connectivity, which are factors shaping how quickly technologies and management practices diffuse, and how talent strategies may be configured across a dispersed market (New Zealand Productivity Commission, 2021; The Treasury, 2022). These contextual features affect MNEs local

responsiveness, where talent management must function effectively in a relatively small labour market whilst balancing global integration pressures, and technology adoption decisions may need to account for slower diffusion dynamics and distance-related coordination costs (New Zealand Productivity Commission, 2021; The Treasury, 2024).

While New Zealand's digital infrastructure and innovation ecosystem have strengthened in recent years, constraints do persist. New Zealand's capital markets have been relatively shallower in comparison to international peers, thereby complicating access to growth capital for scaling advanced technologies and research and development (R&D) intensive initiatives (Ernst & Young [EY], 2019). Simultaneously, the domestic pool of advanced digital skills tends to be comparatively small, with ongoing shortages across ICT roles, thus tightening competition for specialist talent and increasing reliance on immigration or distributed teams, which are issues directly affecting the implementation, localisation, and sustainability of HR technologies within MNEs operating in New Zealand (Department of Internal Affairs [DIA], 2025; NZTech, 2023). These contextual factors are further supported by the New Zealand Productivity Commission's (2020) inquiry which concluded that New Zealand needs faster and broader technology adoption, supported by more flexible training systems and regulation removing diffusion barriers. For MNEs, this emphasises the importance of aligning global HR technology processes and policies with local constraints in skill supply, capital, and business ecosystem maturity when pursuing employee development and engagement in Aotearoa (New Zealand Productivity Commission, 2020).

A distinct contextual gap also exists in the study of MNEs operating in New Zealand, or other Oceanic contexts. Despite the increasing focus on technology in HRM, MNEs face challenges regarding the effective implementation of technology for employee development and engagement (Ruiz et al., 2024). The instability and unpredictability of non-ergodic new normal environments can influence decision-making, requiring MNEs to build dynamic capabilities to gain or maintain their competitive advantages (Swarnakar et al., 2025). Current research on how MNEs view and respond to these challenges within the geographic context of New Zealand is low, simultaneously, there is a significant

need to further research and explore the strategic role of technology in HRM, the influences on, and challenges associated with its adoption, and its long-term effects on the sustainability of the MNEs competitive advantage (Salvadorinho et al., 2024). Despite the recognition that MNEs are uniquely positioned to leverage global knowledge, capital, and digital infrastructure to drive strategic transformation (Beletskiy & Fey, 2021; Ferreira et al., 2022), empirical studies on Oceanic MNEs remain rare, and fewer acknowledge how these firms navigate localised challenges such as digital maturity, workforce readiness, or regulatory conditions (Linares-Garcia & Roofigari-Esfahan 2024; Salvadorinho et al., 2024). Given that MNEs often face pressures of global integration and local responsiveness (Duvivier et al., 2019; Mayrhofer et al., 2024), examining their strategic HRM responses in New Zealand offers valuable insights for both theory and practice, notably regarding the understanding of how technology is adapted, localised, or resisted in complex environments.

Ultimately, while the role of technology in HRM is increasingly recognised as critical for strategic adaptation in non-ergodic new normal environments, a key gap within the literature is not the absence of theories, but the lack of research designs which generate insights through the applied use of those theories. In particular, there is limited empirical work that: Applies dynamic capabilities lenses to follow how MNEs actually sense, seize and transform via HR technologies; Operationalises TAM from a focus on end-users to the managerial scope; And integrates TAM constructs with dynamic capability processes in context-specific studies of MNEs operating in New Zealand (Ahlstrom et al., 2020; Davis, 1986; Duan et al., 2024; Gupta et al., 2024; Hitt et al., 2021; Minbaeva & Navrbjerg, 2023; North, 1999; Stone et al., 2024; Sun et al., 2024; Teece et al., 1997). Theoretical gaps lie in the limited exploration of how HR technologies themselves function as mechanisms for capability-building, with few studies explicitly linking digital tools to the sensing, seizing, and transforming processes central to dynamic capabilities. Likewise, TAM remains theoretically constrained by its predominant focus on end-users, overlooking the evaluative and strategic judgements of HR professionals whose decisions may shape technology adoption and long-term integration. There is also an underdeveloped theoretical understanding of how individual resistance to technology affects organisational-level capability

development, despite its potential to constrain the realisation of strategic intent. This study addresses these evidence gaps by using TAM-aligned behavioural considerations such as perceived usefulness and perceived ease of use, alongside dynamic capabilities processes to examine how MNEs operating in New Zealand perceive, evaluate, and implement HR technologies, and what consequences these have for employee development and engagement in the non-ergodic new normal environment (Ahlstrom et al., 2020; Davis, 1986; Hitt et al., 2021; Teece et al., 1997).

1.2 Research motivation

The primary motivation for this research emerges from the interaction between various shifts in the global business environment, namely the acceleration of digital transformation, the destabilising effects of the COVID-19 pandemic, and the rising importance of strategic employee development in navigating ongoing uncertainty and instabilities. These shifts have resulted in the culmination of a non-ergodic new normal environment, which is marked by persisting unpredictability, dynamic equilibria, discontinuous change, and shifting employee expectations and standards (Ahlstrom et al., 2020; Hitt et al., 2021a, 2021b; North, 1999). Within this context, HR departments within MNEs face unique challenges and opportunities as they attempt to sense and respond to environmental disruptions while maintaining competitiveness through employee strategies (Ahlstrom et al., 2020; Chatterjee et al., 2023; Edwards et al., 2022; Kim et al., 2022; Minbaeva & Navrbjerg, 2023). While the literature recognises that MNEs are well-positioned to lead digital innovation due to their scale and reach, few empirical studies have explored how these advantages translate into practice in smaller or non-centralised markets, such as New Zealand (A. Malik et al., 2020; Beletskiy & Fey, 2021; N. Malik et al., 2022).

This research is further motivated by the growing emphasis that technology is no longer solely an operational tool, but a strategic asset capable of reshaping the way firms attract, develop, and retain talent. Existing literature tends to position digital HR technologies such as AI-assisted talent management systems, immersive training simulations, virtual onboarding tools, and predictive workforce analytics as enablers of adaptability, agility, and strategic renewal (Autsadee et al., 2024; Deepa et al., 2024; Duan et al., 2024; Sun et al., 2024). Despite this theoretical optimism, empirical

research does not tend to capture the real-world complexities faced by organisations attempting to integrate these technologies, particularly in smaller or less frequently studied contexts such as New Zealand (Salvadorinho et al., 2024; Linares-Garcia & Roofigari-Esfahan, 2024). Further, current literature tends to be conceptual or review-based studies with limited depth on how organisations practically evaluate, implement, and adapt technology in rapidly shifting conditions such as the non-ergodic new normal environment (Asokan et al., 2022; Contreras et al., 2024; Dastane et al., 2024; Hamouche et al., 2025; Manroop et al., 2024). This hinders practical insights, as business does not occur in a vacuum and is often influenced by external pressures and factors.

From a theoretical view, this research contributes to an integrative lens that positions the Technology Acceptance Model (TAM) by Davis (1986, 1989) as the microfoundation for strategic leveraging, and the dynamic capabilities framework by Teece et al. (1997) as the firm-level mechanism that converts sustained use into competitive advantage. This research seeks to extend the TAM beyond end-user adoption by modelling how HR professionals evaluate, adopt, and routinise HR technologies through lenses such as perceived usefulness and perceived ease of use, shaping the evaluations of strategic value and the long-term sustainable impact of HR technologies (Hamouche et al., 2025; N. Malik et al., 2022; Nasar & Ray, 2024; Wang et al., 2025). Without sufficient acceptance and sustainable use, technologies are unable to generate the user practices, data flows, or managerial signals required for organisational sensing, seizing, and transforming (A. Malik et al., 2021; Teece et al., 1997). Building on this synergy, this research also models how HR managers evaluations of strategic value, shaped by TAM constructs, are enacted through capability processes in HRM; Sensing technological opportunities; Seizing via investment and governance choices; And transforming routines and skills, thereby linking micro-level adoption cognitions to macro-level capability renewal and performance outcomes (Beletskiy & Fey, 2021; Goi et al., 2023; Hamouche et al., 2025). Ultimately, this research complements contemporary HR-technology literature by specifying cross-level mechanisms that connect micro-level adoption cognitions to macro-level capability development and performance

consequences, clarifying when and why HR technology initiatives succeed or stall under uncertainty (Autsadee et al., 2024; Deepa et al., 2024; Garg et al., 2022; Grimpe et al., 2023).

Ultimately, this research is motivated by its potential to contribute to both academic theory and practical application. Theoretically, it seeks to advance literature on technology adoption and strategic HRM by combining behavioural and strategic models in a unified framework applicable to volatile, cross-border environments. Practically, it aims to provide HR Professionals within MNEs with insights into how HR technologies may be evaluated for not only their functional utility, but also regarding their contribution to strategic alignment, employee engagement, and capability development (Caligiuri et al., 2020; Ruiz et al., 2024; Teece, 2007). Therefore, this research endeavours to enhance both scholarly understanding and awareness surrounding organisational decision-making in ways which foster sustained adaptability, and resilience to meet the needs of a non-ergodic new normal environment.

1.3 Identification and justification of research questions

A non-ergodic new normal environment has emerged through the contemporary and unpredictable dynamic business environment, shaped predominantly by rapid technological advancements and the COVID-19 pandemic. Thus, MNEs operating in the context of New Zealand must acknowledge and traverse through unstable environments where rapid advancements in technology must be leveraged as a strategic asset for shaping the development and engagement of employees. This research aims to address crucial gaps in how MNEs perceive and respond to the non-ergodic new normal environment, the thought process behind it, the role of technology in employee strategies and employee reconfiguration and adaptability as a dynamic capability, and the sustainability of these innovations in alignment with current and future business strategy.

The volatile nature of the non-ergodic new normal environment requires organisations to reconsider their traditional business strategies (Harney & Gubbins, 2024; Sun et al., 2024). The reviewed literature indicates that technology has become a strategic asset for organisations wishing to attain greater agility and resilience (Duan et al., 2024; Swarnakar et al., 2025). However, there is a research gap regarding how MNES empirically perceive and react to these disruptions, particularly

when considering the context of MNEs operating in New Zealand (Linares-Garcia & Roofigari-Esfahan, 2024). The literature indicates an increase in the integration of digital transformations and AI-driven decision making in organisations, therefore it is key to understand how MNEs identify, interpret, and strategize regarding technological advancements, particularly using the lens of the TAM by Davis (1986, 1989) (Stone et al., 2024; Olan et al., 2024). Therefore, the following research question is justified by the need to explore how MNEs perceive challenges and opportunities in a non-ergodic new normal environment, connecting to the dynamic capability of sensing (A. Malik et al., 2021, 2022; Gupta et al., 2024; N. Malik et al., 2022):

RQ1: "How do HR professionals in MNEs operating in New Zealand perceive and respond to the challenges and opportunities of the non-ergodic new normal environment, particularly in relation to using technology as a strategic asset toward employee development and engagement?".

The use of technology as a strategic asset for HRM is increasingly considered for enhancing the capabilities and engagement of employees, and therefore organisational agility (Safadi, 2024; Ruiz et al., 2024). The reviewed literature has viewed various technologies used, or which may be beneficial to consider, however there is a gap regarding a context-specific exploration of MNEs in New Zealand, demonstrating a further gap of how technology is integrated into broader business strategies and how these may contribute to long-term organisational resilience and dynamic capabilities (Asokan et al., 2022; John et al., 2024; Lukaszewski & Stone, 2024). Further, the reviewed literature indicates that digitalisation of HR processes, practices, and functions can contribute to business competitiveness through the cultivation of dynamic capabilities, thus aligning HR functions with strategic business objectives (Salvadorinho et al., 2024; Stone et al., 2024). However, there is a gap regarding limited empirical attention to how HR Professionals use TAM-relevant factors to evaluate technological solutions, connecting to the dynamic capabilities of seizing and transforming.

While the reviewed literature explores the benefits and potential of HR technologies, there is still consideration of challenges in implementation such as adoption barriers, change management issues, and ethical considerations (A. Malik et al., 2021, 2022, 2023; Harney & Gubbins, 2024).

Considering that MNEs operate across borders and markets, it is beneficial to gain an understanding of their localised challenges and contextual constraints, and whether there is a pattern indicated amongst the HR professionals from MNEs within New Zealand (Duan et al., 2024). Additionally, there is limited research on the long-term and sustained strategic impact of HR technologies beyond the initial stage of adoption. There are discrepancies regarding whether the implemented technology may accidentally create workplace inequalities, overcomplications, or disrupt pre-existing workforce dynamics (Ruiz et al., 2024; Swarnakar et al., 2025). The technologies effectiveness in cultivating continuous development, engagement, and adaptability continues to be a research gap, especially where empirical evidence is concerned (Salvadorinho et al., 2024; Sun et al., 2024). To address this gap, the following research question aims to provide practical insights into the experiences of MNEs in adopting and implementing technology as a strategic asset for employees, thus helping to determine whether these technologies are sustainable and transformative:

RQ2: "How do HR Professionals evaluate and implement HR technologies, and to what extent do their decisions shape the development of competitive advantages for the firm?".

The two research questions of this research aim to build on theoretical and empirical insights whilst addressing key knowledge gaps related to the non-ergodic new normal environment; The use of technology as a strategic asset for employee development and engagement; Increasing awareness of patterns in managerial-level decision-making of technology adoption and use; and Strategic HRM in MNEs operating in New Zealand. The findings will contribute to both academic and managerial spheres, with the ability to provide evidence-based insights into challenges, effectiveness, managerial perceptions, and potential future directions.

1.4 Thesis structure

The thesis is structured into six chapters. 'Chapter One: Introduction' provides an overview of the research, including the background, problem statement, motivation, the identification and justification of research questions, and the thesis structure.

‘Chapter Two: Literature Review’ presents the two main theoretical foundations of this research, the TAM by Davis (1986, 1989), and the dynamic capabilities framework by Teece et al., (1997). The chapter also reviews relevant contemporary literature on non-ergodic new normal environments, technological shifts in HRM functions, the strategic adoption of technology, and the decision-making behind it, identifying key gaps.

‘Chapter Three: Research Design’ justifies the selected ontology, epistemology, research paradigm, and methodology, outlining and justifying the methods of data collection and data analysis.

‘Chapter Four: Findings’ presents and thematically analyses the research findings, guided by the research questions.

‘Chapter Five: Discussion’ addresses research questions directly, contrasts and synthesises findings with existing literature, through the lens of dynamic capabilities and the TAM.

‘Chapter Six: Conclusion’ then summarises key insights, addresses the research questions, discusses implications, limitations, contributions, and future research avenues. A list of references presented in APA 7 format is then provided, and finally an appendix list.

CHAPTER TWO: LITERATURE REVIEW

To establish the context for this research, this chapter introduces the key theoretical foundations for this study, and defines the concepts of non-ergodic environments and new normal environments. A review is conducted on the literature regarding the non-ergodic new normal business environment, honing into technological shifts. This is followed by a review of the literature surrounding the current state of technology as a strategic asset to develop and engage employees, particularly from a human resources management (HRM) lens. Finally, the current state of theoretical contributions is analysed, and key research gaps are identified, particularly regarding the Technology Acceptance Model (TAM) by Davis (1986, 1989) and Dynamic Capabilities framework by Teece et al. (1997).

2.1 Key theoretical frameworks

This research is grounded in the dynamic capabilities framework by Teece et al. (1997), and Davis's Technology Acceptance Model (TAM) (Davis, 1986, 1989). Dynamic capabilities are the organisational processes of sensing, seizing, and transforming opportunities, while TAM examines individual-level factors like perceived usefulness and ease of use, driving technology acceptance. These may be linked as sensing opportunities requires the evaluation of a technologies' potential usefulness. Seizing them depends on the ease of use and the mobilisation of resources. Transformation is supported by the behavioural intentions to adopt and integrate technology. The feedback loops in TAM facilitate continuous learning, which is key in dynamic capabilities. Therefore, these frameworks complement each other and provide a holistic view in understanding how organisations adapt to, and leverage technology. These are suitable for the research as dynamic capabilities address strategic-level adaptation, thus ensuring alignment with unstable external conditions. Whereas TAM highlights how employee acceptance and utilisation impact the technologies effectiveness in achieving these. Using both will help determine whether the right technologies are chosen and implemented, but also if they are embraced and successfully used.

2.1.1 The Technology Acceptance Model

The TAM introduced by Davis (1986, 1989) proposes that two primary factors, Perceived Usefulness (PU), and Perceived Ease of Use (PEoU), influences users' attitudes toward technology adoption, which therefore affect behavioural intention and actual system usage. This model has been applied to HR technologies, and particularly in studies examining the adoption of e-HRM systems, AI-assisted tools, and remote onboarding platforms (Nasar & Ray, 2024; Wang et al., 2025). These studies generally support the predictive validity of the TAM, showing that employees are more likely to adopt digital HR systems when they perceive tangible improvements in efficiency, and require minimal cognitive effort when learning or interacting with the system (Dastane et al., 2024; Deepa et al., 2024). For example, Wang et al. (2025) notes positive adoption patterns when employees were supplemented by robotic applications across HR functions which simplified their workflows. Therefore, the TAM in itself is not a new theoretical framework to be applied to technology in HR through business disciplines.

Recent work in AI-HRD suggests pairing acceptance models such as TAM with richer contextual analyses to capture organisational and ethical nuances which shape use, such as social influence, trust, fairness. Hamouche et al. (2025) in particular, calls for shifting beyond purely quantitative mapping to combine bibliometrics with content analysis, case studies, and surveys, noting TAM as a suitable lens for examining employee responses to AI in HRD. It often underplays the organisational, cultural, and contextual variables which critically influence whether HR technologies take root. In many firms, even when digital HR platforms are user-friendly, poor implementation planning, lack of managerial support, and organisational inertia tend to limit adoption (A. Malik et al., 2021; Del Val Núñez et al., 2024). The TAM is often applied cross-sectionally, limiting its ability to capture the evolution of acceptance over time, namely the transition from initial adoption to sustained use (Davis, 1986, 1989; Garg et al., 2022).

Recent literature highlights that the integration of the TAM with broader sociotechnical or institutional lenses may yield more comprehensive insights. For example, Hamouche et al. (2025) suggests that social influence, trust in the system, and ethical considerations, which are often overlooked

by the traditional TAM, are critical in HR settings which involve AI-driven or assisted decision-making like performance evaluations or automated hiring. Additionally, scholars like Deepa et al (2024) critique TAM's inability to capture sector-specific dynamics, namely in emotionally complex domains such as HR, where perceptions are shaped not just by utility, but by fairness, privacy, and the role of human empathy.

A key research gap with the application of the TAM within HR technology literature lies in its predominant focus on end-users, often employees, while overlooking the perspectives of senior-level staff, such as HR professionals. Most studies utilising the TAM tend to assess adoption from the viewpoint of individuals which directly interact with, and use the technology, creating an emphasis on their perceptions of usefulness and ease of use (Davis, 1986; Nasar & Ray, 2024). Although this is valuable, this narrow lens tends to neglect the complex, strategic, and often political processes involved in the decision to adopt HR technologies in the first place. HR professionals must evaluate not only functional benefits but also its alignment with broader organisational goals, cultural readiness, cost implications, and risks related to change management and data governance (A. Malik et al., 2022; Hamouche et al., 2025; N. Malik et al., 2022). These considerations extend beyond individual acceptance and require a more nuanced understanding of organisational-level factors influencing the adoption, encouragement of, and sustained use of technology. Studies tend to rarely explore how perceptions of TAM variables are filtered through strategic priorities, institutional constraints, or leadership biases at the managerial level (Deepa et al., 2024). Consistent with this, a recent systematic literature review including 11 robot-HRM studies use an explicit theory, with TAM and sociotechnical systems appearing in just two studies each. Thus, outlining the need to incorporate managerial and organisation decision-making into adoption models. Therefore, this demonstrates a need for future research to expand the TAM or integrate it with strategic decision-making models to better capture how HR technologies are evaluated and adopted at the organisational levels, namely by those responsible for selecting, resourcing, and driving the use of such systems.

2.1.2 Dynamic Capabilities

The dynamic capabilities framework, originally developed by Teece et al. (1997) describes strategic advantage as stemming from an organisation's ability to sense environmental changes, seize opportunities through resource mobilisation, and transform internal processes to maintain or gain competitive advantage (Teece, 2007). Within HR, this framework provides a key lens in understanding how organisations adopt and continuously reconfigure their HR technologies to meet evolving demands (A. Malik et al., 2022; Autsadee et al., 2024; Goi et al., 2023). A. Malik et al. (2021) demonstrates how AI-assisted global talent systems allow organisations to dynamically allocate and reallocate talent based on shifting market and operational needs, which is manifested from the dynamic capabilities of sensing and seizing.

Dynamic capabilities are significant in contexts such as the non-ergodic new normal, where during COVID-19 firms had to rapidly shift to digital onboarding, virtual learning, and real-time performance tracking (Hitt et al., 2021a; Shet et al., 2021). Autsadee et al., (2024) further illustrates how maritime organisations leverage digital HR platforms not only for the purpose of operational efficiency, but also as tools for organisational learning and innovation, aligning to dynamic capabilities through continuous learning with iterations of sensing, seizing, and transformations. Del Val Núñez et al. (2024) also highlights that digital transformation lead by HR contributes to firm-wide innovation, namely when HR systems are integrated with knowledge-sharing and analytics infrastructure. Therefore, this demonstrates the usefulness of dynamic capabilities through HR technology in non-ergodic new normal environments.

Acknowledgement of the non-ergodic new normal environment either directly or indirectly demonstrates the need for businesses to adapt. Which is why it is surprising to see a relatively low amount of literature making explicit links to dynamic capabilities, which seems to address present and future circumstances well (Autsadee et al., 2024; Deepa et al., 2024; Gupta et al., 2024; Safadi, 2024). This is further unexpected as it is implicitly linked to in a wide range of the literature, but not committed to or mentioned as a theoretical framework (A. Malik et al., 2020, 2021, 2022; Asokan et al., 2022;

Brown, 2024; Contreras et al., 2024; Dastane et al., 2024; Del Val Núñez et al., 2024; Duan et al., 2024; Hao et al., 2025; Garg et al., 2022; Goi et al., 2023; Hamouche et al., 2025; Harney & Gubbins, 2024; Huang et al., 2024; John et al., 2024; Lee et al., 2025; Linares-Garcia & Roofigari-Esfahan, 2024; Lukaszewski & Stone, 2024; Malisić et al., 2025; Manroop et al., 2024; N. Malik et al., 2022; Nasar & Ray, 2024; Olan et al., 2024; Pašalić & Ćukušić, 2024; Ruiz et al., 2024; Salvadorinho et al., 2024; Stone et al., 2024; Sun et al., 2024; Swarnakar et al., 2025; Wang et al., 2025). This demonstrates a clear gap in theoretical application through its superficial engagement within the literature, although it can provide insights and directions suitable for addressing the current context of non-ergodic new normal environments, undermining academic rigour and practicality. By not employing the framework as a key theoretical lens, and not explicitly linking HR technologies to the three foundational processes of sensing, seizing, and transforming (Beletskiy & Fey, 2021; Goi et al., 2023), this limits the ability of dynamic capabilities in explaining and understanding how organisations dynamically configure their HR functions in response to external shocks or internal shifts. As an example, technologies used in workforce planning or real-time performance management are rarely examined in terms of how they enable ongoing transformations or capability renewal over time (Grimpe et al., 2023). Further, few studies offer empirical evidence and depth of the microfoundations, such as leadership cognition, organisational routines, and cross-functional integration, making dynamic capabilities actionable in HR settings. Ultimately, future research should utilise the dynamic capabilities framework as a central theoretical framework, mapping HR technologies to the capabilities of sensing, seizing, and transforming.

2.1.3 Connecting the Technology Acceptance Model to the Dynamic Capabilities Framework

Originating from separate research disciplines, the TAM from behavioural information systems, and the dynamic capabilities framework from strategic management, the integration of these two offer a powerful and wide-reaching lens for studying HR technology in organisations. The TAM provides insights into user-level acceptance, explaining how the perceptions of usefulness and ease of use influences attitudes and behavioural intention regarding new HR systems (Davis, 1986; Nasar & Ray,

2024). The dynamic capabilities framework addresses organisational level change, focusing on how firms sense technological opportunities, seize them through resource mobilisation, and transform capabilities to gain and maintain competitive advantages (Teece et al., 1997; Teece, 2007). When used together, these models allow for a bridge between micro-level behaviours and macro-level strategic outcomes, offering a more holistic view of why and how HR technologies succeed or fail in practice.

The TAM can explain the initial acceptance of a new HR technology by employees, and potentially managers, whereas dynamic capabilities can contextualise that acceptance within broader organisational efforts to reconfigure talent practices in response to market pressures (A Malik et al., 2021; Grimpe et al., 2023). The TAM helps in identifying friction points such as user resistance or low perceived value, which may hinder the seizing capability in the dynamic capabilities framework, where strategic intent fails to become more due to a lack of adoption (Hamouche et al., 2025). Further, dynamic capabilities offer a scaffold in evaluating whether technologies adopted through TAM-validated acceptance may evolve into sustained capabilities which enhance long-term agility and strategic alignment (Autsadee et al., 2024; Beletskiy & Fey, 2021).

The value of integrating the TAM and dynamic capabilities framework lies in capturing how individuals, namely HR professionals, accept and engage with HR technologies, and the link between how organisations can leverage this strategically and evolve these tools over time. While the TAM explains how HR professionals and employees evaluate and engage with new systems, these perceptions directly shape whether organisations can seize technological opportunities and translate strategic intent into realised capability (Davis, 1986, 1989; Hamouche et al., 2025). Likewise, dynamic capabilities uncover why organisations pursue and continually reconfigure HR technologies over time, yet these processes depend on the behavioural intentions and user experiences that TAM identifies as critical antecedents to adoption and sustained use (A. Malik et al., 2021; Grimpe et al., 2023). This interdependence is evident in the way that sensing opportunities requires the evaluation of a technologies' potential usefulness, and how transformation relies on users' willingness to integrate systems into everyday routines. Where successful sensing in dynamic capabilities may rely on TAM-

based insights regarding user needs, and transformation processes may be hindered without robust end-user engagement. In non-ergodic new normal environments, where rapid adoption, iterative learning, and continuous reconfiguration are key, linking individual behaviour to strategic renewal becomes crucial (Ahlstrom et al., 2020; Hitt et al., 2021b; North, 1999). Integrating TAM and dynamic capabilities therefore offers a more comprehensive theoretical foundation, capturing both the microfoundations of acceptance and the macro-level processes of organisational adaptation that underpin successful digital HR transformation.

2.2 Non-Ergodic New Normal environments

The non-ergodic new normal environment is a phenomenon with increasing relevance following the emergence of the Coronavirus-19 (COVID-19) pandemic in 2020, and rapid technological advancements thereafter. Non-ergodic environments are characterised through (a) Quantum, discontinuous changes; (b) Radical uncertainty, and; (c) Dynamic systems with dynamic equilibria (Hitt et al., 2021b; North, 1999). New normal environments are those which have faced significant shifts in institutional, technological, and sociopolitical spheres, altering the trajectory of future environments (Ahlstrom et al., 2020). This term was used to describe the distinct environment which arose from shifts in the worlds' economic, technological, and institutional factors after the global financial crisis (GFC) of 2008 (Ahlstrom et al., 2020). This environment emerged with the coexistence of developed countries facing deglobalisation and slowing economies while emerging economies experienced rising globalisation (Ahlstrom et al., 2020; Hitt et al., 2021a). Therefore, the post-2008 new normal environment was increasingly susceptible to shifts internationally, as opposed to the 'flatter' environment which was mainly susceptible to local shifts, thereby creating new and dynamic opportunities and challenges for firms (Ahlstrom et al., 2020).

After 2020, another new normal environment surfaced, with further institutional, technological, and economic shifts. These shifts are complex and attributable to the COVID-19 pandemic; The resultant global recession; Increased societal and stakeholder importance and awareness; The untraditional 'gig' economy; The rising popularity of remote and flexible work; Rising nationalism and

geopolitical tensions; and Rapidly accelerated advancements in technology such as artificial intelligence (AI), machine learning (ML), virtual reality (VR), etc (Asokan et al., 2022; Hitt et al., 2021a; 2021b; Loon et al., 2020; Minbaeva & Navrbjerg, 2023; Sigala et al., 2023). This demonstrates a crucial difference highlighting the complexities of the contemporary new normal, where studies regarding the new normal after 2008 were positioned as being resultant of the GFC, however the new normal of today does not maintain the same homogeneity within the literature (Ahlstrom et al., 2020; Asokan et al., 2022; Hitt et al., 2021a; 2021b; Loon et al., 2020; Minbaeva & Navrbjerg, 2023; Sigala et al., 2023).

Non-ergodicity is part of new normal environments, as it is assumed that a shift has occurred, or that it is anticipated to shift in the future. An inherent link is made between the two within the literature as studies may not mention non-ergodicity specifically, but may mention synonymous counterparts including sudden change, dynamism, instability, etc. (Ahlstrom et al., 2020; Hitt et al., 2021a; Loon et al., 2020; Sigala et al., 2023). Thus, the new normal and non-ergodicity are often tied together, though indirectly.

2.3 Reflecting on the use and application of technology in HR

In the literature, there tends to be a distinct lack of a primary theoretical focus in a relatively large number of articles and reviews, though it may briefly refer to other theories (Autsadee et al., 2024; Lee et al., 2025; Linares-Garcia & Roofigari-Esfahan, 2024; Ruiz et al., 2024; Stone et al., 2024). Literature that did have a primary theoretical focus or application tended to originate from various disciplines, including the knowledge-based view, from strategic management (A. Malik et al., 2021; Dastane et al., 2024; N. Malik et al., 2022); Knowledge-sharing theory, from knowledge management (Olan et al., 2024); The resource-based view, from strategic management (A. Malik et al., 2023; Gupta et al., 2024; N. Malik et al., 2022; Malisić et al., 2025); The dynamic capabilities view, from strategic management (A. Malik et al., 2023; Deepa et al., 2024; Malisić et al., 2025; N. Malik et al., 2022); Institutional theory from sociology (Gupta et al., 2024); The Theory, Context, Characteristics, and Methodology (TCCM) Framework, from research methodology research (Wang et al., 2025); Technology adoption and

diffusion models, from information systems (A. Malik et al., 2020; Pašalić & Ćukušić, 2024); Unified theory of acceptance and use of technology model (UTAUT), from information systems (Deepa et al., 2024); The Technology Acceptance Model (TAM), from Information systems (Nasar & Ray, 2024); Resource allocation theory, from Economics (Huang et al., 2024); Managerial capabilities and competency theories, from strategic management (Deepa et al., 2024); Gamification-based training and engagement approaches (Del Val Núñez et al., 2024; John et al., 2024); Empowerment theory, from psychology (Sun et al., 2024); FRAGILE (Fragmented boundaries, resurgent populism, accelerated digitalisation, growing inequality, inverted populations, loss of trust, ecological crisis) environments, from political sciences (Harney & Gubbins, 2024); LEAN methodologies, from operations management (Salvadorinho et al., 2024); The persona-based approach, from marketing (Duan et al., 2024); the SROP-Industry 4.0 Framework from industrial engineering (Asokan et al., 2022); AI-Mediated social exchange theory, from information systems (A. Malik et al., 2020; 2021); And global talent management (GTM), from human resource management (A. Malik et al., 2020, 2021, 2022; N. Malik et al., 2022). This demonstrates the complexity of the application of technology of employees in organisations, spanning beyond HRM literature and theories. This is further evidenced by explicit calls for interdisciplinary integration by authors (A. Malik et al., 2022; Hao et al., 2025; Hamouche et al., 2025; Wang et al., 2025). Therefore, the scope of disciplines used to address the use and development of technology for employees in organisations demonstrates the complexity and interconnectivity of this to the wider business strategy.

Since 2019, there has been a plethora of research regarding current and potential developments regarding the use of technology for employees in organisations. However, a significant number of literature tends to be review-based and conceptual or prospective, which provide valuable insights but provide a more optimistic lens in terms of what is available in present-day organisations. Common forms of analysis in these reviews include bibliometric analysis (Autsadee et al., 2024; Contreras et al., 2024; Deepa et al., 2024; Hamouche et al., 2025), thematic analysis (Dastane et al., 2024; Garg et al., 2022; N. Malik et al., 2022), and network analysis (Dastane et al., 2024; Garg et al., 2022). These

provide a comprehensive foundation for future research, but there is relatively less rigour in terms of empirical evidence and studies to address the future research avenues proposed, or the developmental state of new technology which are not yet suitable for organisations to adopt them in the non-ergodic new normal environment. This further raises the question of, what is being adopted right now? If a certain technology is adopted now, how and why did that come to be, as opposed to other technologies?

Existing empirical studies are mostly conducted through surveys (Nasar & Ray, 2024; Olan et al., 2024; Pašalić & Ćukušić, 2024; Sun et al., 2024) and experiments (Hao et al., 2025; Huang et al., 2024; Lee et al., 2025; Safadi, 2024). There are few instances of case studies and comparative case studies (A. Malik et al., 2021, 2022, 2023; Linares-Garcia & Roofigari-Esfahan, 2024). Though surveys may provide greater representations of the broader landscape, it tends to lack the depth achieved through a phenomenological approach. Phenomenological approaches tend to provide the opposite, where an exceptional amount of depth can be reached, but it lacks a greater representation of the broader landscape. With the current and developing state of the use of technology in organisations for employees, a suitable method of empirical study would be a phenomenological approach, especially when attempting to understand the broader shifts occurring in the non-ergodic new normal environment.

Studied industries include the maritime industry (Autsadee et al., 2024); hospitality (Hao et al., 2025); architecture, engineering and construction (Duan et al., 2024; Lee et al., 2025; Linares-Garcia & Roofigari-Esfahan, 2024); the public sector (Pašalić & Ćukušić, 2024); real estate (Huang et al., 2024); tertiary education (Del Val Núñez et al., 2024; John et al., 2024); information technology (IT) (A. Malik et al., 2020, 2021, 2022; Nasar & Ray, 2024); manufacturing and services (Ruiz et al., 2024; Swarnakar et al., 2025); And unspecified or cross-industry studies (Dastane et al., 2024; N. Malik et al., 2022; Olan et al., 2024; Salvadorinho et al., 2024; Sun et al., 2024). However, there was a lack of research regarding certain organisational contexts, especially the MNE context, with few authors studying this empirically (A. Malik et al., 2020; N. Malik et al., 2022; Salvadorinho et al., 2024). MNE strategies often had a foundation on the assumption of undisrupted and continuous globalisation, however they are increasingly required to respond to, and consider the external environments they

operate in as opposed to focussing on their strategies and goals for growth, resulting in increased expenditure on identifying potential threats and opportunities within the environment (Ahlstrom et al., 2020; Edwards et al., 2022; Hitt et al., 2021b; Mayrhofer et al., 2024). However, MNEs are widely considered to be in a good position to develop and or integrate technological innovations due to their ability to invest, access to domestic and international knowledge, their perceived resilience and their adaptability to non-ergodic new normal environments in comparison to smaller organisations, despite some concerns surrounding flexibility and the rates of adoption within the organisation (Beletskiy & Fey, 2021; Edwards et al., 2022; Ferreira et al., 2022; Grimpe et al., 2023). This tension demonstrates that empirical research is needed regarding the MNE context in non-ergodic new normal environments. Therefore, removing constraints of looking at specific industries, and instead looking at MNEs as an organisational context is somewhat overlooked in the literature, potentially hindering organisation-specific insights.

While the use of 'non-ergodic new normal environments' as an exact term does not appear in the literature, synonymous counterparts tend to be linked or referenced to within the literature, utilising language such as but not limited to 'post-COVID-19', 'turbulent', 'unstable', 'unpredictable', 'dynamic', 'FRAGILE' (Asokan et al., 2022; Autsadee et al., 2024; Del Val Núñez et al., 2024; Gupta et al., 2024; Harney & Gubbins, 2024). There are very few instances within the literature where no links or acknowledgement of the contemporary environment are made (Huang et al., 2024; John et al., 2024; Nasar & Ray, 2024). Therefore, this asserts a position that organisations do not operate in isolation of its environments, and acknowledging the environment is an increasingly important consideration.

The unpredictable nature of the non-ergodic new normal has pushed organisations to cultivate capabilities such as adaptive efficiency, organisational agility, hybridity, and dynamic capabilities to align with the evolving environment. These are interconnected and share a common foundation with an emphasis on agility, flexibility, and responsiveness in organisational resources and operations to effectively address external shifts (Ahlstrom et al., 2020; Ferreira et al., 2022; Hitt et al., 2021a; Kim et al., 2022; Minbaeva & Navrbjerg, 2023). Scholars argue that to achieve and leverage these capabilities,

developed and engaged employees is critical, further arguing for the importance of utilising technology as a strategic asset to achieve this, therefore bringing HRM to the table of the overall business strategy (Caligiuri et al., 2020; Fenech et al., 2019; Grimpe et al., 2023; Kim et al., 2022).

Business strategy refers to an organisations' plan to meet its goals and gain or maintain a sustained competitive advantage, guiding organisational decisions and actions. Within the literature, there have been explicit links to how technology can be or is used as a strategic asset for employees, and how this is linked to business strategy by increasing effectiveness, efficiencies, or proactivity (A. Malik et al., 2022; Asokan et al., 2022; Autsadee et al., 2024; Harney & Gubbins, 2024; Ruiz et al., 2024). In the literature that does not explicitly make links to business strategy, implicit links are made, often by referring to other outcomes which ultimately contribute to the business strategy (Contreras et al., 2024; Deepa et al., 2024; Hao et al., 2025; Hamouche et al., 2025; Malisić et al., 2025). Therefore, the occurrences of explicit or implicit links to business strategy in the literature strongly indicates the interconnectedness of the application of technology for employees and the overall business strategy.

Recruitment is often described as a reactive, short-term process, where current staffing needs are met by identifying and hiring candidates to fill immediate job openings, and talent acquisition tends to be described as a proactive, long-term process to plan for future needs, by finding, attracting, and hiring top talent by building relationships. Current and potential avenues for technology in recruitment and talent acquisition includes Artificial Intelligence (AI) and Machine Learning (ML) for the purposes of resume screening, candidate ranking, and predictive analytics (Autsadee et al., 2024; Deepa et al., 2024; Olan et al., 2024; Stone et al., 2024); Chatbots for automated communication and scheduling (Garg et al., 2022); And Big Data Analytics (BDA) for pattern recognition in candidate selection (Manroop et al., 2024). These tools streamline sourcing, enhance selection accuracy, and automate routine tasks, thereby improving efficiency and allowing HR professionals to focus on strategic decision-making (A. Malik et al., 2022; Brown, 2024). Digital platforms also support the proactive management of global talent pools, strengthening organisational responsiveness to evolving business needs and market conditions (A. Malik et al., 2021; Contreras et al., 2024; Goi et al., 2023). The

diversity of technologies in this area demonstrates a push towards technological development and automation towards efficiency in recruitment and talent acquisition, indicating that this is a continuous process to keep up with developments in the non-ergodic new normal environment while simultaneously improving organisations' competitive positioning in talent markets.

Onboarding is referred to as the process wherein a new employee is integrated into a company, learning about their role, the organisations' culture, and the tools needed to successfully work, whereas employee experience encompasses the employee's overall perception of their organisation, both informally and formally. Current and potential avenues for technology in onboarding and employee experience includes AI-enabled applications allowing for hyper-personalisation and individualised employee journeys (Brown, 2024; Deepa et al., 2024; N. Malik et al., 2022); Virtual agents allowing for interactive AI for onboarding (Linares-Garcia & Roofigari-Esfahan, 2024); And E-HRM platforms allowing for the seamless integration of digital HR practices (Contreras et al., 2024). Digital HR tools enhance onboarding by facilitating the timely integration of new hires and aligning them with organisational goals, thereby improving long-term engagement. Platforms that leverage AI and analytics strengthen early engagement and retention, which is associated with sustained competitive advantage (A. Malik et al., 2023; Del Val Núñez et al., 2024). Technology-supported onboarding also increases clarity and fosters early employee commitment and alignment with organisational expectations (Garg et al., 2022; Gupta et al., 2024). This demonstrates a shift toward using technology with an effective employee-centric approach to support rapid integration and adaptability, which is beneficial in non-ergodic new normal environments.

Training and development refers to the provision of avenues for employees to attain or improve the knowledge and skills needed to perform their current role effectively, and prepare them for future roles. Current and potential avenues for technology in training and development includes simulations and business games for Enterprise Resource Planning (ERP) and training simulations (Autsadee et al., 2024; Del Val Núñez et al., 2024; John et al., 2024); Virtual Reality (VR), Augmented Reality (AR), and Metaverse allowing for immersive training experiences (Dastane et al., 2024); and AI-driven

training programs for personalised learning pathways (Duan et al., 2024; Hamouche et al., 2025; Hao et al., 2025). Technology-supported training assists in aligning workforce skills with organisational strategic needs, ensuring that learning investments directly support capability development. VR and AI-assisted adaptive learning systems facilitate personalised, continuous learning environments that enable employees to adapt to rapidly shifting market demands (Dastane et al., 2024; Teece, 2007). Digital training platforms also support the global standardisation of training processes, improving organisational agility and innovation capabilities (Caligiuri et al., 2020; Edwards et al., 2022). This demonstrates a shift towards tailored uses of technology for employee learning and skill refinement, allowing for increased effectiveness and accessibility to a larger segment of the labour market, which would be especially beneficial in non-ergodic new normal environment where the market may be unstable.

Related to training and development yet often referred to as a function of its own, knowledge sharing and organisational learning refers to the process of making, retaining, and transferring information, and making this accessible to employees within an organisation. Current and potential avenues of technology for knowledge sharing and organisational learning includes AI-powered knowledge platforms for intelligent searches and knowledge retention (A. Malik et al., 2022; Olan et al., 2024); and Collaborative systems and digital tools to create HRM ecosystems for knowledge management (A. Malik et al., 2021; Safadi, 2024). This demonstrates the use of AI and related technologies as an assistive tool for knowledge organisation and processing, as opposed to AI for the use of knowledge creation, keeping employees at the forefront. This is especially important for organisations operating in the non-ergodic new normal environment where employees are increasingly valued for their unique knowledge and creativity. Technology-enabled knowledge sharing significantly strengthens organisational learning and innovation capabilities by supporting more effective knowledge exchange and enhancing organisational adaptability (Ferreira et al., 2022; Teece, 2007). AI-assisted knowledge management systems also streamline learning processes, enabling faster knowledge retrieval and contributing to long-term innovation and competitive positioning (Beletskiy & Fey, 2021;

Del Val Núñez et al., 2024). Overall, these developments illustrate how digital tools enhance the accessibility, fluidity, and strategic value of organisational knowledge.

Performance management and employee engagement refers to the process where an employee's work performance is monitored and evaluated against set objectives or goals, whereas employee engagement refers to how committed and enthusiastic an employee feels toward their organisation, job, and colleagues, often shown through the active participation and dedication to meeting company objectives. Current and potential avenues for technology in performance management and employee engagement includes AI-based performance analytics for employee behaviour insights and performance tracking (Autsadee et al., 2024; Harney & Gubbins, 2024); BDA and predictive analytics to assess employee contributions and trends (Gupta et al., 2024; Manroop et al., 2024); And digital platforms for engagement (Ruiz et al., 2024; Salvadorinho et al., 2024). This demonstrates a shift towards more accessible and transparent performance monitoring, evaluation, and feedback for both employees, managers, and HR departments. Technology-driven performance management systems are central to aligning employee engagement with strategic organisational outcomes, ensuring that performance insights directly inform capability development. Real-time, AI-assisted analytics provide ongoing feedback that supports dynamic and responsive management strategies, fostering continuous engagement and productivity (A. Malik et al., 2023; Gupta et al., 2024). Digital platforms further enhance transparency and efficiency in performance management, strengthening organisational agility and strategic responsiveness in competitive environments (Hao et al., 2025; Grimpe et al., 2023). This is beneficial during non-ergodic new normal environments as it allows for continuous and dynamic improvements, and the adjustment of capital to organisational aims when necessary.

Compensation, rewards, and benefits management encapsulates the process of designing and or implementing a fair system within an organisation to provide monetary and non-monetary rewards to attract, motivate and retain talent in line with organisational goals. Current and potential avenues for technology regarding the management of compensation, rewards, and benefits includes AI and algorithm-based decision making to optimise compensation and benefits plans (Manroop et al., 2024);

And BDA and predictive analytics for market-based salary benchmarking (Stone et al., 2024). This indicates that organisations are making conscious decisions toward more objective compensation, rewards, and benefits for their staff, mitigating bias and discrimination in non-ergodic new normal environments. Technology also enables the strategic alignment of compensation, reward, and benefit systems with organisational performance goals, ensuring that reward structures reinforce desired behaviours and outcomes. AI-assisted systems facilitate personalised compensation planning, transparent reward management, and performance-linked incentives, which strengthen employee satisfaction and retention, key contributors to sustained competitive advantage (A. Malik et al., 2022; Brown, 2024). Digital management tools further enhance the efficient and effective allocation of organisational resources, ensuring that compensation and benefits practices remain aligned with broader strategic objectives (Contreras et al., 2024; Duvivier et al., 2019). Thus, these developments illustrate how technology enhances fairness, transparency, and strategic value in compensation and rewards management.

Employee well-being refers to the employee's emotional, mental, and physical health within the organisation, relating to job satisfaction, stress, and work-life balance. Work-life balance refers to the balance in the employee's personal life and professional responsibilities, when this is not met it results in the employee feeling overwhelmed. Current and potential avenues for technology regarding employee well-being and work-life balance includes AI for burnout prediction by analysing work patterns to prevent burnout (Gupta et al., 2024; Olan et al., 2024); and Digital platforms and Enterprise Social Media (ESM) for employee empowerment and collaboration (Safadi, 2024; Sun et al., 2024;). Technology plays a central role in promoting employee well-being and work-life balance by enhancing health, satisfaction, and retention through digital wellness platforms, remote working tools, and AI-assisted health management systems (A. Malik et al., 2023; Hitt et al., 2021a). The strategic integration of these technologies reinforces organisational commitments to holistic well-being, strengthening sustainable productivity and employee loyalty (Ahlstrom et al., 2020; Deepa et al., 2024). This demonstrates organisations growing willingness to address and improve employee well-being and

work-life balance, despite not necessarily being obligated to, increasing retention of inimitable employee resources during non-ergodic new normal environments.

Workforce planning refers to the process of analysing current and future workforce needs of the organisation, identifying gaps in skills, and the development of strategies to ensure the right type and amount of employees is available to address business objectives. Strategic HRM refers to the alignment of HR practices to the overall business strategy of the organisation, often with a focus on long-term goals to manage employees, achieve effective performance, and to determine or predict future workforce needs. Current and potential avenues of technology include predictive workforce analytics for future workforce planning (Autsadee et al., 2024); and AI for strategic HR insights to assist real-time data processing for HRM decision making (Harney & Gubbins, 2024). Technology significantly enhances strategic HR management and workforce planning by enabling agile responses to volatile business conditions and supporting proactive management of future talent needs and skill gaps, thereby contributing to sustained competitive advantage (Ferreira et al., 2022; Teece et al., 1997; Teece, 2007). HR technologies also facilitate real-time, data-driven decision-making, strengthening the alignment of human resources with organisational goals and improving the overall strategic coherence of HRM practices (A. Malik et al., 2021; Edwards et al., 2022). This demonstrates a more analytical and data-driven approach to HRM decision making and forecasting, which may be especially beneficial during non-ergodic new normal environments.

Safety, compliance, and labour tracking refers to the continuous process of ensuring health and safety standards and policies are met, alongside the monitoring and recording of employee tasks and movements. Current and future avenues of technology for safety, compliance, and labour tracking includes AI-driven safety training, tailored to employee personas (Duan et al., 2024; Linares-Garcia & Roofigari-Esfahan, 2024); and labour tracking technologies to assist with the collection of data for processing and forecasting accident ‘hotspots’ (Duan et al., 2024; Lee et al., 2025). The strategic integration of technology enhances the management of safety, compliance, and labour tracking by enabling organisations to navigate complex and rapidly shifting regulatory environments through

automation and digital compliance systems, thereby reducing operational risks and ensuring ethical operations remain aligned with corporate strategy (Asokan et al., 2022; Duan et al., 2024). Real-time labour tracking and compliance monitoring systems further support the strategic optimisation of workforce productivity and safety, strengthening sustained organisational performance and resilience (Autsadee et al., 2024). This demonstrates a proactive approach to the safety of employees, where organisations are realising a positive cost to benefit ratio of investment.

HR operations and Digital HR transformations refer to the improvement and automation of HR functions in an organisation, completed through the use of novel data sources and modern tools and technologies as opposed to manual processes to streamline tasks. Current and future avenues for technology regarding HR operations and digital HR transformations include E-HRM systems which automate HR and administrative HR processes (Contreras et al., 2024; Nasar & Ray, 2024; Pašalić & Ćukušić, 2024; Ruiz et al., 2024); Blockchain and cybersecurity for data security in HR transactions; And cloud computing and the integration of the Internet of Things (IoT) to achieve scalable HR infrastructure (Goi et al., 2023). This demonstrates a shift where organisations are increasingly finding and capturing the benefits for investment in HR operations and transformations, which is beneficial in non-ergodic new normal environments as it allows HR staff members to have more time to focus on strategic issues and objectives. The digital transformation of HR operations significantly improves organisational agility and operational efficiency by reducing costs, enhancing data accuracy, and enabling more responsive decision-making through comprehensive digital HR platforms, automation, and AI-driven analytics (A. Malik et al., 2021, 2022). Organisations that invest in digital HR transformation also strengthen their capabilities for strategic agility and global competitiveness, as streamlined processes and accurate data support faster adaptation to evolving market conditions (Autsadee et al., 2024; Goi et al., 2023; Shet et al., 2021). Ultimately, these technologies demonstrate how digital HR transformation enhances both operational performance and strategic responsiveness.

2.4 Challenges in implementing technology

Although technological advancements in HR brings various strategic advantages and benefits, the implementation of these technologies presents considerable challenges which organisations must carefully navigate. Common barriers include resistance to change, stemming from employee apprehension and scepticism of management toward the adoption of unfamiliar or novel digital practices (A. Malik et al., 2021; Autsadee et al., 2024). Organisational culture also holds a key role, as long-standing traditional practices and mindsets may hinder the acceptance and integration of innovative solutions such as AI and digital HR tools, despite clear operational and strategic benefits (Brown, 2024; Garg et al., 2022). Furthermore, the implementation of advanced technologies often requires significant initial investment, continuous training, and resource allocation, which may be a barrier for many organisations (Asokan et al., 2022; Dastane et al., 2024). Challenges in maintaining data security and compliance, especially where extensive data analytics and real-time tracking is utilised, emphasises further risk, deterring digital transformations (Duan et al., 2024; Hao et al., 2025). Disparities in digital maturity and infrastructure across global operations in MNEs bring additional complexities and inconsistencies regarding technology adoption (Caligiuri et al., 2020; Duvivier et al., 2019; Mayrhofer et al., 2024).

When considering these challenges against the aforementioned benefits, which includes enhanced efficiency, strategic agility, greater employee engagement, and long-term competitive advantages and positioning, requires strategic leadership, clear communications, and robust change management processes (A. Malik et al., 2022; Hitt et al., 2021a; Teece et al., 1997). Ultimately, organisations which proactively address these barriers through thoughtful preparation, targeted training, and cultural alignment are more likely to leverage investments on technology and digitalisation, thereby translating challenges into strategic opportunities.

Ethical considerations for the implementation of technologies for employees in organisations remain. In robot-HRM specifically, evidence synthesised by Wang et al. (2025) shows resistance linked to job-loss anxiety and low trust, and practical constraints including high costs, skill shortages, and

cultural or structural change, implications that should be reflected in risk, training, and change management plans. However, these may be mitigated if organisations actively consider the following: Though the use of technology in this sphere may be viewed as mitigating bias and discrimination, it is important that organisations do not assume that the software, especially those powered by AI and ML, are entirely objective, and must remain critical of them (Brown, 2024; Lukaszewski & Stone, 2024; Manroop et al., 2024). Further, it is important that applicants, employees, and other relevant stakeholders have transparency regarding the use of technology at any point of their journey with the organisation (Brown, 2024; Lukaszewski & Stone, 2024; Manroop et al., 2024). Adhering to at least these two key actions will provide a good foundation for organisations implementing technology for their employees, and the creation of relevant policies in adherence with laws in their respective countries.

2.5 Key employee issues in the non-ergodic new normal environment

In today's non-ergodic new normal environment, organisations face greater challenges regarding the management of employees. Unlike previous business environments, the contemporary environment calls for agile and continuously evolving strategies to prepare and retain a workforce which can adapt to uncertainty (Ahlstrom et al., 2020; North, 1999). These are compounded by digital disruption, the rise of remote work, and shifting employee expectations, all of which complicate the traditional HR functions of training and development, and engagement (A. Malik et al., 2023; Ahlstrom et al., 2020; Hitt et al., 2021a). As time progresses, these HR functions are increasingly viewed as foundational to strategic resilience and organisational renewal (A. Malik et al., 2023; Ahlstrom et al., 2020; North, 1999).

2.5.1 Balancing urgency and uncertainty with training and development

Organisations are under growing pressures to deliver scalable and adaptable training that matches the pace of change brought on by the non-ergodic new normal environment. However, most existing corporate learning infrastructures remain outdated and insufficiently agile. Autsadee et al. (2024) found that traditional training programs in the maritime sector lack the flexibility required for organisations

which operate in dynamic, high-risk environments. They emphasise the necessity of modular, real-time digital HRD platforms which support continuous and adaptive learning, especially for organisations with cross-border operations. Emerging technologies such as AI-assisted training systems, VR-based simulations, and metaverse-enabled development environments are increasingly positioned as solutions to this growing strategic demand (Dastane et al., 2024; Deepa et al., 2024). These platforms offer personalisation, scalability, and engagement, thus enabling the creation of learning ecosystems which are not constrained by geography or linear timelines (Dastane et al., 2024; Deepa et al., 2024). However, real-world implementation may not necessarily match what is being suggested, as Deepa et al. (2024) report that while interest in immersive and intelligent learning systems is growing, these systems are hindered by fragmented and underfunded deployment, misaligned with strategic learning outcomes. While interest in immersive and AI-enabled learning is rising, bibliometric evidence primarily maps themes such as VR, AR, and learning analytics. Hamouche et al. (2025) recommend complementing bibliometrics with content analysis and case studies to capture contextual deployment realities.

The lack of an explicit link between training and development of dynamic capabilities, particularly the abilities to sense, seize, and transform in the face of environmental shifts, emerges as a key limitation in both academic literature and organisational practice (A. Malik et al., 2022; Beletskiy & Fey, 2021; Teece, 2007). For example, A. Malik et al. (2021) demonstrate that while some forms use AI to map global talent trends, these insights are rarely translated and transformed into structured development programmes which feed long-term capability building. Training tends to remain focussed on immediate tasks as opposed to building strategic agility, despite its potential in becoming a foundation for dynamic organisational learning (Ahlstrom et al., 2020; Goi et al., 2023).

In MNEs, the hindrance in deployment tends to be significant, where global talent pipelines require both standardised training across geographies and localisation to meet regional regulatory, cultural, and digital maturity differences (Caligiuri et al., 2020; Duvivier et al., 2019). A. Malik et al. (2021) show that global talent management systems often collect sophisticated data, but this insight rarely feeds back into structured development plans, especially in resource-constrained subsidiaries.

Ferreira et al. (2022) similarly find that knowledge transfer in MNEs is often constrained by siloed HR infrastructures, limiting both local responsiveness and global learning.

2.5.2 Preserving psychological safety through employee engagement

Similar to how training and development has needed to evolve, employee engagement has also. Firms are increasingly turning to AI-enhanced engagement platforms, continuous sentiment analysis, and personalised feedback systems due to the increasingly decentralised, hybrid, and remote environments where traditional indicators of engagement such as attendance and participation offer less reliable insights (Hao et al., 2025; N. Malik et al., 2022). AI-enhanced engagement platforms must be carefully calibrated and implemented to reduce unintended consequences such as employee surveillance perceptions or data fatigue. Brown (2024) and Deepa et al. (2024) both emphasize that engagement now involve complex psychosocial dynamics. Employees expect more than flexibility and recognition, they also seek ethical treatment, purposeful alignment, and psychological safety in conditions where workflows, expectations, and team structures are malleable. Meanwhile, Asokan et al. (2022) warn that many HR technologies are still designed without inclusivity in mind, especially for workers at the edge of formal employment such as those in gig roles, remote locations, or decentralised supply chains. When digital engagement tools are not accessible, context-aware, or culturally inclusive, they risk widening gaps in motivation, voice, and well-being.

In MNEs, the complexity of employee engagement grows due to a need to bridge differences in languages, culture, time zones, and digital infrastructures. Grimpe et al. (2023) note that high-value digital talent, especially in competitive global markets, expect meaningful engagement tailored to local contexts and needs. Yet, Del Val Núñez et al. (2024) show that engagement tools are inconsistently deployed across regions, undermining efforts to build a cohesive and inclusive culture. Asokan et al. (2022) also highlight that engagement practices often neglect contingent workers, gig economy participants, or outsourced labour, all of whom are essential to global supply chains but frequently excluded from core HR processes. Further, MNEs need to be mindful of cultural variation in engagement norms and feedback receptivity, as Caligiuri et al. (2020) emphasize that virtual teams

spanning national borders require customised approaches to psychological safety, conflict resolution, and recognition. Thus indicating that engagement strategies designed solely at headquarters may fail when imposed on decentralised and diverse workforces.

2.6 Summary of key gaps in research

Despite a growing body of literature examining the adoption of technology and digital transformation in HRM, significant research gaps persist. For instance, a critical gap emerges around empirical research focussing on MNEs in volatile environments. While MNEs are theoretically positioned to benefit from technology-driven agility due to their access to cross-border knowledge, capital, and talent (Beletskiy & Fey, 2021; Duvivier et al., 2019), empirical research consolidating these claims remain relatively sparse. Most existing studies generalise findings across industries or MNEs, with few deeply examining the interaction between global structure and local responsiveness in MNEs (A. Malik et al., 2020; Salvadorinho et al., 2024). This is a key gap, as MNEs are simultaneously hindered by rigidities from scale and bureaucracy, and are provided with opportunities through international reach, which are conditions highly relevant in non-ergodic new normal environments.

The existing literature has predominantly explored the adoption of technology for employee development and engagement through specific industry lenses, including but not limited to the maritime industry, hospitality, information technology (IT), the public sector, tertiary education, real estate, and manufacturing (Autsadee et al., 2024; Del Val Núñez et al., 2024; Duan et al., 2024; Huang et al., 2024; Nasar & Ray, 2024; Ruiz et al., 2024; Swarnakar et al., 2025). Although these studies provide valuable sector-specific insights, they may not adequately capture broader, cross-industry patterns of technology adoption, acceptance, and strategic integration (Dastane et al., 2024; Salvadorinho et al., 2024). By honing into specific and individual sectors, existing research tends to overlook existing dynamics which are critical for theoretical and managerial insights, notably regarding strategic frameworks such as the dynamic capabilities framework by Teece et al. (1997), and behavioural frameworks such as the TAM by Davis (1986, 1989). Further, insights into how various industries sense environmental shifts, seize technological opportunities, and transform internal processes to sustain competitive advantage can be

critically valuable for strategic management theory and practice (Autsadee et al., 2024; Deepa et al., 2024). Cross-industry studies also assist in capturing the interaction between factors of organisational size, maturity, culture and geography, thus offering a holistic view which deepens theoretical and empirical understandings of organisational adaptability (Ahlstrom et al., 2020; Ferreira et al., 2022; Minbaeva & Navrbjerg, 2023). Cross-industry studies are further beneficial for the opportunity to identify best practices or common pitfalls, potentially enabling the identification of universally beneficial technological applications, thus facilitating strategic agility and technological acceptance (Deepa et al., 2024; Safadi, 2024).

While dynamic capabilities are conceptually aligned with organisational responses to uncertainty (Teece, 2007), many studies treat technological deployment in HRM as a tactical initiative as opposed to a strategic reconfiguration process. This neglects the role of HR technologies as enablers of transformation, especially in realigning workforce strategies amidst shifting geopolitical, economic, and institutional conditions (Ferreira et al., 2022; Minbaeva & Navrbjerg, 2023). Technologies such as predictive analytics, digital onboarding, and adaptive learning platforms have the potential to grow and leverage dynamic capabilities, yet these links tend to be rarely empirically or theoretically explored (Deepa et al., 2024; Gupta et al., 2024). Further, the application of the dynamic capabilities framework within the HR literature tends to be inconsistent, where agility, adaptability, or innovation are referenced instead (Asokan et al., 2022; Dastane et al., 2024). This superficial engagement limits depth and hinders the development of insights into how HR technologies enable strategic renewal. Empirical studies also rarely explore the microfoundations, such as leadership cognition or cross-functional routines, required to make dynamic capabilities operate in HR settings (Beletskiy & Fey, 2021; Teece, 2007).

Another key gap is the limited integration of behavioural technology adoption models such as the TAM, with strategic frameworks like dynamic capabilities. The TAM provides insights into user-level determinants of adoption, but rarely extends to strategic decision-making processes. This individual and often employee centric approach neglects the role of HR professionals in evaluating

technologies not only for functionality, but also for strategic fit, risk mitigation, and cultural compatibility (Hamouche et al., 2025). Thus, decisions regarding platform implementation often remain under-theorised, despite being critical inflection points in organisational transformation. Further, HR professionals decisions are influenced by not only usability, but through alignment with organisational priorities, stakeholder expectations, regulatory constraints, and perceived legitimacy (A. Malik et al., 2022; Hamouche et al., 2025). Existing models also fail to accommodate the complexity and multidimensional aspects of adoption at this level. Thus, presenting a missed opportunity to refine or extend TAM in ways that reflect organisational level-dynamics, especially within MNEs navigating diverse institutional landscapes.

CHAPTER THREE: RESEARCH DESIGN

This chapter discusses and justifies the ontology, epistemology, research paradigm, and methodology of the research. It then explains and justifies the methods of data collection and analysis. The chapter follows this respective order as Grix (2002) suggests it as its directional and logical relationship. By following this order, adequate justifications and judgements are able to be made regarding the research design. Starting broadly with the ontological position, clarifying beliefs about what can be researched, then the epistemological position, connecting to what can be known about it, and discussing and justifying the approach to acquiring the knowledge through the methodological approach (Grix, 2002).

3.1 Ontology

The ontology is the foundational starting point for research, after which epistemological and methodological positions and claims follow (Grix, 2002; Smith, 2012). Ontological claims are the "*claims and assumptions that are made about the nature of a social reality, claims about what exists, what it looks like, what units make it up, and how these units interact with each other*." (Blaikie, 2000, p. 8). There are two key ontological claims: 'Realism', which assumes a single, stable, true, and objective reality; And 'relativism' which assumes various types of realities which are dynamic in nature (Gray, 2022).

This research adopts a relativist ontological position, which is appropriate in exploring the experiences, strategic responses, and decision-making of individuals within non-ergodic new normal environments. These environments, which are characterised by discontinuity, radical uncertainty, and unstable equilibria (Ahlstrom et al., 2020; Hitt et al., 2021a; North, 1999), are inconsistent with the assumptions of stability and uniformity which underlies realist ontological positions. Instead, the non-ergodic new normal environment calls for a recognition of multiplicity, emergence, and contextual variability in the ways social and organisational phenomena are understood and navigated. Relativism further enables the acknowledgment that different MNEs, departments, and HR Professionals may perceive and respond to technological change in various ways due to differing individual and contextual factors. This is especially relevant in a post-COVID-19 context where hybrid work models, accelerated

digitalisation, and workforce restructuring have manifested in different forms across organisations (Ahlstrom et al., 2020; Minbaeva & Navrbjerg, 2023). Therefore, assuming a singular, objective reality would fail to capture the richness and complexity of these shifts.

From a theoretical perspective, relativism aligns with the use and application of the TAM and dynamic capabilities framework, where both require sensitivity to context. The TAM highlights individual-level perceptions of usefulness and ease of use, which are inherently subjective and shaped by social, cultural, and organisational settings (Davis, 1986, 1989). The dynamic capabilities framework discusses how firms uniquely sense, seize, and transform in response to external volatility (Teece, 2007). Thus, a relativist ontology allows for the exploration in how individuals perceive and make sense of technological opportunities and constraints, how meaning is constructed around digital tools, and how these vary.

3.2 Epistemology

Epistemologies relate to the nature of knowledge, methods of attaining the knowledge, and what is considered acceptable knowledge (Audi, 2010; Grix, 2002). Given the relativist ontological position adopted in this research, which acknowledges multiple, context-dependent realities, the corresponding epistemological approach must also recognise the subjective and socially constructed nature of knowledge (Feast & Melles, 2010). The 'objectivism' approach is not suitable for this study as it assumes that knowledge exists independently of human perception and can be discovered through detached observation, flowing from the realist ontological position (Feast & Melles, 2010; Gray, 2022). As the relativist ontology has been adopted, the epistemological positions of 'subjectivism' and 'constructivism' offer suitability (Feast & Melles, 2010; Gray, 2022).

This research adopts a 'constructivist' epistemological position, which asserts that as opposed to the 'objectivist' epistemological position, there is not one true reality to be discovered, in fact, phenomena and their meanings are constantly being produced, altered, and revised by social actors and interactions (Grix, 2002). In contrast to subjectivism, which implies that meaning resides solely within the consciousness of the individual, constructivism acknowledges that knowledge arises through

ongoing interactions between individuals and their environments (Feast & Melles, 2010; Gray, 2022). Thus, constructivism is a suitable epistemological position as it recognises that both researcher and participant co-construct meaning through dialogue and reflection.

The constructive epistemological position is particularly appropriate within the context of this research, which investigates how MNEs in New Zealand perceive, evaluate, and respond to technological opportunities and challenges in non-ergodic new normal environments, and how HR professionals evaluate technologies for use and recommendation. In this context, MNEs are not only reacting to an objective external reality, but are actively making sense of volatile conditions, reframing their strategic assumptions, and co-creating responses based on internal logics, organisational cultures, and leadership interpretations (North, 1999; Teece, 2007).

Constructivism allows the research to explore how individuals within MNEs construct meaning around technology adoption, employee development, and strategic adaptation, not as isolated, value-neutral decisions, but as embedded in complex social, cultural, and institutional narratives. Within the TAM, perceptions of usefulness and ease of use are shaped by not only functional attributes, but also by broader organisational discourse and user experience (Feast & Melles, 2010; Venkatesh & Davis, 2000). Similarly, the dynamic capabilities framework assumes that firms build and deploy capabilities in response to their interpretations of the environment, which may be ambiguous and contested (Teece, 2007). Therefore, constructivism enables an exploration of the sensemaking processes whereby HR professionals interpret change, negotiate meaning, and formulate strategic responses.

3.3 Research paradigm

Research paradigms concern the frameworks which can be used to attain knowledge by combining ontological and epistemological positions into a way of viewing the world, and the appropriate methodologies for generating that knowledge (Davies & Fisher, 2018; Gray, 2022). A research paradigm is not only a philosophical orientation, it informs every stage of the research process, shaping how problems are framed, data is collected, and findings are interpreted (Creswell & Poth, 2018). By adopting a relativist ontological position, assuming multiple, context-dependent realities, and the

constructivist epistemological stance, which positions knowledge as socially constructed and co-created through interactions, this research requires a paradigm which is coherent and practically applicable to the non-ergodic new normal environment. Two research paradigms which most align with constructivism are critical inquiry and pragmatism, with each offering distinct assumptions and research aims (Gray, 2022).

Critical inquiry can have various meanings; However, it views knowledge as being a culmination of various factors including but not limited to history, society, culture, the economy, politics, and ethnic and gender values, often seeking to challenge dominant ideologies and exposing how social, political, economic, and cultural pressures shape knowledge and power structures (Denzin, 2016; Denzin & Lincoln, 2018; Gray, 2022). Although critical inquiry provides valuable insights into power dynamics, its normative and activist orientation, focusing on social justice or systemic critique (Denzin & Lincoln, 2018; Erciyes, 2020), this does not entirely align with the applied and strategic objectives of this research, which seeks to generate actionable insights for organisations navigating technological change in non-ergodic new normal environments, as opposed to primarily advocating for structural change.

The pragmatic research paradigm is recognised to be flexible across most ontologies, epistemologies, and methodologies as it is viewed as a 'problem-focused' approach with the ability to generate practical implications and the ability to make or inform action (Gray, 2022, Morgan, 2014). Pragmatism as a research paradigm accommodates pluralism and complexity, recognising that knowledge is provisional and context-sensitive (Elgeddawy & Abouraia, 2024; Gray, 2022; Kelly & Cordeiro, 2020), thus making it especially relevant for research aimed at organisational strategies and guided decision-making.

Ultimately, pragmatism aligns strongly with the aim of this research, which aims to understand how HR professionals within MNEs in New Zealand perceive and respond to technological challenges and opportunities in non-ergodic new normal environments. The nature of this environment requires frameworks acknowledging dynamism and prioritising adaptability. By utilising the pragmatic research

paradigm, it supports a focus on actionable knowledge, the integration of theory and practice, and methodological flexibility (Denzin & Lincoln, 2018; Elgeddawy & Abouraia, 2024; Morgan, 2014). Further, pragmatism acknowledges the interaction between experience, knowing, and acting (Kelly & Cordeiro, 2020). This aligns with the research focus on how organisations interpret technological opportunities and act upon them strategically in response to uncertain conditions. By privileging practical consequences and decision-making processes, the pragmatic research paradigm ensures that the research outputs are not only theoretically sound, but also practical in guiding MNEs toward effective technology-driven strategies for employee management. Thus, while critical inquiry offers valuable critiques and insights, the favoured research paradigm is pragmatism due to its emphasis on problem-solving, contextual relevance, and the ability to translate findings into actionable strategies within the non-ergodic new normal environment.

3.4 Methodology

This research utilises a qualitative phenomenological approach. This design was chosen due to the need of a deep understanding of socially constructed realities, and the meanings participants assign to their experiences, which is better conveyed with qualitative as opposed to quantitative data (Taylor et al., 2015). Quantitative research is effective for measuring the extent of phenomena across large samples but often fails to capture the contextual complexity, nuances, and interpretative processes which go in hand with organisational responses to rapid technological shifts (Flick, 2018; Flyvbjerg, 2006; Roessner, 2000). Thus, this research prioritises depth as opposed to breadth, aligning with the ontological and epistemological foundations of relativism and constructivism as HR professionals in MNEs are having to actively interpret and negotiate meaning in response to evolving conditions. Therefore, capturing this effectively requires a methodology which allows for interpretation, reflexivity, and co-construction of knowledge, which are features integrated in qualitative research design (Creswell & Poth, 2018; Maxwell, 2013).

A phenomenological lens is adopted in this research due to the aim of understanding how organisational actors experience, interpret, and assign meaning to technological adoption and employee

development strategies in non-ergodic new normal environments. Phenomenology emphasises the lived experiences as opposed to imposing external theoretical structures, which aligns with the constructivist epistemology (Gray, 2022; Grix, 2002; Roulston & Choi, 2018; Van Manen, 2016). This is further suitable as subjective perceptions are being researched, as opposed to objective measurements. In research, the way HR professionals perceive usefulness, ease of use, and strategic alignment of HR technologies, which are central to the TAM, and how this influences strategic sensing, seizing, and transforming capabilities are explored. These are arguably interpretive and context-dependent, thus making phenomenology an appropriate methodological foundation (Roulston & Choi, 2018).

Phenomenology also allows the research to go beyond surface-level descriptions and investigate the meanings and organisational narratives which shape technological adoption in uncertain environments (Braun & Clarke, 2006; Roulston & Choi, 2018). For instance, understanding why a particular HR technology is perceived as a strategic enabler requires delving into the organisational culture, institutional logics, and individual sensemaking of HR professionals, which are factors that cannot be captured through quantitative surveys or purely descriptive approaches.

By utilising phenomenology, depth and breadth are better addressed. Phenomenology allows for an expanded exploration of lived experiences, focusing on how participants interpret and construct meaning around technology adoption and workforce strategies, which may allow similarities and contrasts within sensemaking processes to surface, improving the applicability of these findings to similar organisational contexts (Eisenhardt, 1989; Gray, 2022; Roulston & Choi, 2018; Yin, 2018). Therefore, phenomenology is a suitable methodology for this research.

This research adopts an inductive reasoning approach due to its exploratory nature, seeking to develop a rich and empirically grounded understanding of how MNEs in New Zealand interpret and respond to technological change and employee challenges within non-ergodic new normal environments. Inductive reasoning is appropriate in qualitative research when the aim is to allow patterns, categories, and themes to emerge from the data as opposed to imposing pre-existing theoretical constructs (Kennedy, 2018; Thornberg & Charmaz, 2014). Kennedy (2018) argues that inductive

reasoning provides flexibility and openness in exploring phenomena that are not well understood or under-researched, enabling researchers to surface new concepts and relationships without the constraints of rigid theoretical frameworks. This is suitable for this research because the intersection of TAM, dynamic capabilities, and employee strategies in non-ergodic environments remains empirically underexplored, especially within the New Zealand MNE context. Induction allows the research to avoid premature closure, thereby remaining sensitive to emergent meanings and organisational narratives. However, although the approach is inductive, it acknowledges Kennedy's (2018) point that pure induction, where data is assumed to be theory-free, is unfeasible and is not desirable.

With this research, data collection and analysis are intermingled with theory as a literature review with theoretical foundations has been conducted. However, when considering other reasonings such as deductive or abductive, inductive is still the most appropriate for this research. Deduction would limit the research to testing whether the TAM and dynamic capabilities frameworks apply, overlooking novel or context-specific insights, which are essential within the non-ergodic new normal environment context (Hayes et al., 2010; Kennedy, 2018). Abduction, although valuable for theory building, is more suited toward research with a grounded theory methodological approach (Kennedy, 2018; Mirza et al., 2014). Induction, however, provides the openness required to capture contextually rich, socially constructed meanings, whilst still allowing for interpretive integration with existing theories during later stages of analysis (Kennedy, 2018). Therefore, although it is not feasible or desirable to use strict and pure reasonings, the induction approach is best suited for this research.

3.5 Research method

This research utilises semi-structured in-depth interviews in line with a qualitative approach as the primary method of data collection. Qualitative research fundamentally seeks to understand participants' lived experiences, subjective realities, and the meanings that are constructed within specific contexts as opposed to measuring predefined variables or testing hypotheses (Creswell & Poth, 2018; Maxwell, 2013; Taylor et al., 2015). This approach recognises that understanding social phenomena requires an exploration of the subjective realities, meanings, and interpretations individuals, in this case HR

professionals, assign to their experiences within specific contexts (Flick, 2018; Tomaszewski et al., 2020). As opposed to attempting to generalise through statistical methods, qualitative research prioritises depth and complexity, capturing the nuances in how participants understand and interpret their lived experiences.

According to Flick (2018), qualitative research involves studying phenomena in their natural settings, and or interpreting them in terms of the meanings participants attribute to their experiences. This aligns with the phenomenological methodology of this research, which seeks to explore how HR professionals within MNEs perceive, interpret, and respond to technological shifts and disruptions within the non-ergodic new normal environment. Further, phenomenological approaches explicitly aim to uncover participants' detailed descriptions and interpretations of their lived experiences, making in-depth interviewing appropriate for the data collection method of this research (Roulston & Choi, 2018; Seidman, 2015; Tomaszewski et al., 2020).

In-depth interviewing involves face to face interactions where the researcher engages participants in meaningful conversations directed toward understanding how they perceive, reflect upon, and articulate their experiences and interpretations (Johnson et al., 2012; Taylor et al., 2015). These types of interviews are valuable as they provide rich, detailed, and contextually grounded data, thus capturing aspects of organisational experiences, decision making processes, and strategic sensemaking which are often missed by more structured or quantitative methods (Johnson et al., 2012; Taylor et al., 2015). Further, qualitative interviewing allows for flexibility, enabling the researcher to explore emergent themes and to probe deeply into the complexities of the participants' responses (Flick, 2018; Roulston & Choi, 2018; Seidman, 2015; Taylor et al., 2015). This adaptability ensures that the researcher can remain responsive to new insights, ambiguities, or contradictions arising during data collection, which enhances the depth and validity of the findings (Barbour, 2018).

Semi-structured interviews are utilised as they allow for the structure required to address specific research topics and provide the necessary flexibility for areas that participants deem important (Barbour, 2018; Roulston & Choi, 2018; Johnson et al., 2012). Semi-structured interviews use a

prepared interview guide with a set of open-ended, exploratory questions and prompts, but they allow the researcher to deviate and probe deeper as necessary (Taylor et al., 2015). This enhances the researchers' ability to produce data that is relevant and rich, ensuring the resultant dataset aligns with the theoretical objectives and empirical requirements of the research (Barbour, 2018). Further, semi-structured interviews support methodological rigour by providing opportunities for cross-checking and clarification, thereby strengthening the credibility of qualitative analysis (Barbour, 2018; Taylor et al., 2015).

Semi-structured in-depth interviews are further beneficial for the research due to their methodological alignment with the constructivist epistemology and inductive reasoning approach. Qualitative research grounded in constructivism recognises that meaning and knowledge are socially constructed through interaction, discourse, and interpretation as opposed to existing independently or objectively (Braun & Clarke, 2006; 2019). Semi-structured interviews provide the ideal setting to capture these interpretative and socially constructed aspects, allowing participants to freely articulate their organisational realities and strategic perspectives. This method thus aligns with inductive reasoning, where insights, patterns, and theoretical understandings emerge organically from empirical data as opposed to being constrained by pre-existing theoretical frameworks or hypotheses (Johnson et al., 2012; Kennedy, 2018).

The effectiveness of qualitative interviewing in organisational studies stems from its ability to uncover the subtle, contextually sensitive dimensions of human experiences that quantitative methods may overlook (Johnson et al., 2012; Taylor et al., 2015). For instance, organisational realities, strategic responses, and technological adoption decisions are arguably interpretative phenomena, heavily influenced by subjective perceptions, organisational culture, and institutional context (Weick et al., 2005). Qualitative interviews also align with best practices for methodological rigour and ethical standards. The research ethics principles by the Auckland University of Technology (AUT) (2019), outline that when conducted and planned for in line with their standards, interviews conducted ethically and responsibly uphold values such as informed consent, participant confidentiality, integrity, and

respect, this ensures that participants can feel secure and comfortable in sharing their experiences openly, thus enhancing the quality and authenticity of the data collected (Roulston & Choi, 2018).

Ultimately, semi-structured, in-depth qualitative interviews are most appropriate for this research, effectively aligning with its phenomenological orientation, constructivist epistemology, and inductive reasoning approach. This method enables the deep exploration of, and understanding of participants lived experiences, strategic interpretations, and organisational realities within the complex context of technological and employee disruptions characteristic of non-ergodic new normal environments.

3.5.1 Data Collection

This section outlines the procedures involved in participant selection, sampling strategy, ethical considerations, and detailed logistical processes employed to ensure rigorous, transparent, and credible qualitative research practices (Flick, 2018; Taylor et al., 2015).

Participants targeted for this research included HR managers, senior HR managers, directors of HR, and managers involved with people-consulting or HR-related consultancy who work within MNEs operating in New Zealand, employing over 250 individuals. Participants of this level in the organisational hierarchy were primarily selected as these individuals are expected to possess detailed, strategic, and organisational-level insights regarding employee and technology adaptation within non-ergodic new normal environments (Roulston & Choi, 2018).

Data was collected from several industries (such as logistics, consulting, electrotechnology, software and data, and retail) rather than focussing on a single industry. These industries have been selected as they provide insights into high-to-medium digital intensity work systems, and both frontline and knowledge-intensive labour; and offers contrasting use cases of HR technologies relevant to employee development and engagement. Adopting this cross-industry focus strengthens qualitative research by enabling purposeful “maximum variation” sampling to surface patterns held across contexts, and to document diverse adaptations or perceptions, which are insights that may be obscured

within the focus of a single industry (Palinkas et al., 2019). Further, because organisations are influenced at the same time by firm-level, industry-level, and society-level forces, guidance on qualitative research recommends sampling across different settings, not just one industry, to allow for contextual effects, pattern comparison, and evolutions of these to arise and be compared (Köhler, 2024). Finally, implementation research explicitly values the attention to context and engagement of multilevel stakeholders, alongside triangulation methods, and thick, rich descriptions which are approaches supporting transferability beyond a single industry (Hamilton & Finley, 2019). Thus, these factors combined with the exploratory foundations of this research resulted in a multi-industry lens.

Initial contact was primarily conducted through professional and business-oriented platforms such as LinkedIn, or publicly available email addresses listed on the companies' website. Information provided on this stage included a brief description of the research, anticipated outcomes, and the participant information sheet. The participant information sheet outlined the scope, procedures, participant rights, confidentiality measures, and ethical protocols, thereby ensuring informed decision-making at the outset (AUT, 2019; Roulston & Choi, 2018).

Following initial contact, interested participants were required to secure organisational clearance from an authoritative figure or body within the MNE, which was commonly represented by the senior-level participant themself, to confirm support for participation. This step was necessary both for ethical compliance and to ensure that research is conducted transparently and with organisational approval (AUT, 2019). This authoritative figure or body also received the same information and participant information sheet, to further facilitate informed consent at the organisational level. Only upon completed receipt of this organisational access form, were participants officially cleared to partake in the research.

Ethical approval and informed consent were essential aspects of this research, adhering strictly to the AUT (2019) guidelines on ethical research conduct. Prior to each interview, participants were required to read through and complete a formal printed consent form confirming their overview and consideration of the participant information sheet, their rights (including the right to ask questions at

any time, and the right to withdraw at any stage without penalty) were also outlined, and to confirm permission to record and transcribe the interview. Upon signing of these forms, these forms were securely stored separately from data in the AUT postgraduate office to ensure the highest ethical standards and compliance with data protection requirements (AUT, 2019).

Data was then collected through semi-structured in-depth interviews, either online through Microsoft Teams or Google Meet, or face-to-face in accessible venues within Auckland such as cafes, AUT campus facilities, or corporate offices, which was dependent on participant preferences and practical considerations. Semi-structured interviews allowed for the maintenance of thematic consistency across participants while offering flexibility to probe, clarify, verify responses, and explore emergent themes in-depth, thereby enhancing the robustness and credibility of collected data (Barbour, 2018; Roulston & Choi, 2018). An interview guide was created and designed (See Appendix B), with open-ended questions strategically structured around the research objectives and theoretical considerations but had the flexibility to be adapted to pursue participant insights and maintain a conversational, reflective dynamic (Taylor et al., 2015).

As the researcher did not have direct access into the HR sector, HR professionals in MNEs operating in New Zealand were manually invited to participate via LinkedIn and company emails or enquiries. Regarding refusal of the invitation, most did not respond, however those that did respond but did not participate noted unavailability within their schedule. After realising the circumstances for inviting participants, new HR professionals in MNEs were continuously contacted until a minimum of seven participants were secured, thereby allowing for a greater diversity of perceptions and viewpoints.

Semi-structured qualitative in-depth interviews were conducted amongst seven participants from various industries, as illustrated in Table 1. All participants held a managerial level position within, or adjacent to human resources departments of MNEs operating within New Zealand, as illustrated in Table 1. participants' responses allowed the researcher to better understand their perceptions of the environment from a technological standpoint, and what factors go into their own implementation and use of technology for employee development and engagement.

Table 1. Participant overview and interview length

No.	Industry	Role	Minutes	Interviewed via
1	Logistics	National HR Manager	57	Online
2	Consulting	National HR Manager	60	Online
3	Electrotechnology	National HR Manager	48	In-person
4	Electrotechnology	Organisational Learning & Development Manager	61	Online
5	Software & Data	Organisational Learning & Development Manager	61	Online
6	Consulting	Employee Consultancy Manager	42	In-person
7	Retail	National HR Manager	40	Online

Following the observations of Lim (2024), utilising in-depth interviews as a technique has its own shortcomings of being time consuming, relying on participant recall and honesty, and has the potential for interviewer bias. These have been mitigated through the strategies of recording interviews for accuracy, and validating transcriptions with recordings before use, ensuring a neutral and comfortable environment for the interview to occur, such as in environments the participant is familiar, whether they prefer for this to be online, or within their organisational base of operations, and giving them enough time to think about their answer. All interviews strictly adhered to the one-hour maximum time limit to also respect participant schedules. Therefore, care was taken to mitigate limitations regarding the in-depth interview process.

To avoid premature interruption of participant though processes and to ensure the collection of rich detailed accounts, the researcher was mindful of timing probes and follow up questions, demonstrating sensitivity and patience, especially during participant silences or reflective pauses (Barbour, 2018). This not only captures richer qualitative data, but also ensures that participants remained comfortable and encouraged to express themselves freely (Johnson et al., 2012; Taylor et al.,

2015). This is evidenced through effective use of the one-hour allotted meeting time for the semi-structured interviews with participants, as seen in Table 1.

All interviews were audio-recorded to ensure data accuracy, consistency, and completeness, minimising the risk of losing crucial information and details (Jenks, 2018, Flick, 2018). Participants were informed of audio-recording procedures clearly in the consent form, and again verbally prior to the interview. Interviews were recorded simultaneously using one of two transcription software applications, Otter.AI if the interview occurred in person or on Google Meet, or if the interview occurred on Microsoft teams, the built-in transcription functionality was utilised. Additionally, a separate audio recording was captured on the researchers' personal device as a contingency measure. After each interview, the audio recordings were validated against transcriptions to ensure accuracy, after which the recordings on the researchers' personal device were permanently deleted, ensuring confidentiality (AUT, 2019; Jenks, 2018).

Participant confidentiality was rigorously maintained throughout the research. Once transcriptions were validated, all data was pseudonymised using an alphanumeric coding system to eliminate potential identification risk. For example, interviews were referred to by participant order, such as Participant One, coded as P1. This ensures consistent confidentiality between MNEs and individuals in data handling, analysis, and subsequent reporting (AUT, 2019; Taylor et al., 2015). In addition, a researchers' journal was maintained to document emergent notes, reflections, and key observations. This handwritten journal minimised potential distractions to the participant which may occur from the sounds of typing or long periods of no eye-contact, maintaining an uninterrupted conversational dynamic while enriching the depth of qualitative insights (Johnson et al., 2012; Taylor et al., 2015).

Following the validation and pseudonymisation of transcriptions, interview data was securely stored on AUT's dedicated H:Drives, complying with university and national guidelines on secure data storage, ethical handling, and participant confidentiality (AUT, 2019). Identifiable data such as audio

recordings and consent forms were securely and separately stored from data and managed according to strict confidentiality protocols.

In qualitative research, saturation is driven by information power as opposed to numerical sample size, meaning that when participants hold highly relevant expertise and the interview guide is focussed, fewer interviews are likely required for themes to stabilise, which occurred in this instance (Malterud et al., 2015). Empirical methodological studies demonstrate that core thematic patterns often emerge within the first six to nine interviews, with additional interviews likely providing minimal new insights before full saturation occurs (Guest et al., 2006). Consistent with this evidence, iterative coding conducted immediately after each interview showed that no new major themes or sub-themes emerged after the seventh interview, indicating that saturation had been reached.

3.5.2 Data Analysis

Thematic analysis was selected as the primary method of data analysis due to its appropriateness for qualitative, constructivist, and phenomenological research (Braun & Clarke, 2019). Braun and Clarke (2006) describe thematic analysis as a rigorous, theoretically flexible, and accessible method for identifying, analysing, and reporting meaningful patterns (themes) within qualitative data. This is particularly beneficial for its ability to deliver detailed, nuanced, and complex accounts of data, which go beyond descriptive analysis, aligning closely with the objective of exploring organisational experiences, interpretations, and meaning making processes (Braun and Clarke, 2006; 2019; Terry et al., 2017).

The flexibility provided with thematic analysis allows it to function effectively within various epistemological frameworks, including constructivism, as it can focus on the socially constructed nature of participants' realities (Braun & Clarke, 2006). Unlike methods strictly bound to predetermined theoretical frameworks, thematic analysis can be inductive, allowing the emergence of themes from the dataset itself as opposed to forcing data into predefined theoretical categories (Braun & Clarke, 2006; Kennedy, 2018). Thus aligning with the inductive reasoning approach of this research, which aims to

understand participants' strategic decision-making processes and experiences in non-ergodic new normal environments without preconceptions causing analytical constraints.

The thematic analysis process adopted in this research followed the comprehensive six phases outlined by Braun and Clarke (2006). These provide structured guidance to ensure methodological transparency, consistency, and analytical rigour:

The first phase, familiarising with data, begins with a detailed and repeated reading of transcripts. Braun and Clarke (2006), emphasise that immersion in the data corpus through repeated active reading is foundational, describing this phase as the bedrock for all subsequent analytical activities. Data was familiarised with by transcribing interviews, reading transcripts multiple times, noting initial impressions, and reflecting on emerging patterns of themes. This engagement with the data allowed the researcher to begin forming preliminary interpretations and understandings (Braun & Clarke, 2006; Jenks, 2018).

The second phase, generating initial codes, occurred when the researcher identified initial codes from the dataset, which are units of meaning reflecting interesting or significant features of the data relevant to the research questions (Braun & Clarke, 2006). Open coding, an inductive, bottom-up approach, was utilised, allowing codes to emerge from the data as opposed to imposing predetermined categories. This enhanced the capture of authentic expressions, experiences, and meanings, thereby preserving the richness and complexity inherent in qualitative data (Braun & Clarke, 2006; Kennedy, 2018; Terry et al., 2017).

The third phase, searching for themes, involved reviewing the initial generated codes and organising them into broader potential themes. According to Braun & Clarke (2006), a theme captures something significant about the data in relation to the research question and represents a pattern of meaning. Therefore, related codes were sorted into themes and subthemes. This approach ensured that themes reflect prevalent and meaningful patterns across the dataset (Braun & Clarke, 2006).

Additionally, theoretical coding explores potential relationships among emerging themes, thus enhancing depth and theoretical coherence within the analysis (Braun & Clarke, 2006; Kennedy, 2018).

The fourth phase, reviewing themes, consisted of refining and validating themes identified previously. Themes and subthemes were reviewed and adjusted iteratively, checking for internal coherence, such as ensuring that coded extracts meaningfully aligned with their theme, and external differentiation, where clear distinctions between separate themes were ensured (Braun & Clarke, 2006; 2019). This reflective, iterative refinement process enhances analytic credibility through the verification that themes accurately represent participant experiences and directly address research objectives.

The fifth phase, defining and naming themes, consisted of further refinement, definition, and clear naming of each theme (Braun & Clarke, 2006). Braun & Clarke (2019), emphasise this phase involves detailed analytical narratives, explaining precisely what each theme encompasses, and how it contributes to answering the research questions. Clear definitions and illustrative thematic maps were produced, outlining the hierarchy and relationships between themes and subthemes, further enhancing transparency, rigour, and interpretive clarity (Braun & Clarke, 2006).

The final and sixth phase, producing the report, involved the integration of refined themes into a coherent, compelling, analytical narrative. Braun and Clarke (2006; 2019) emphasise that a good thematic analysis goes beyond describing data, but it provides an interpretative, theoretically informed, account which convincingly communicates the complex story emerging from the data. Illustrative data was utilised to articulate how themes contribute insights and address research objectives. Braun & Clarke (2006), caution against common pitfalls which were considered during this final phase which includes superficial descriptions, mismatch between claims and data, and weak theoretical connections. To avoid these, the narrative argues how and why each theme matters, thus reinforcing the analytical rigour and validity of the research.

Thematic analysis was conducted using NVivo, a specialised qualitative analysis software package, facilitating systematic organisation, coding, and retrieval of data (Braun & Clarke, 2006).

NVivo enhances analytic transparency, consistency, and assists in streamlining the thematic analysis process. Transcriptions remain secure, being accessible only within AUT's dedicated H: Drives, ensuring compliance with ethical guidelines on data security, confidentiality, and participant protection (AUT, 2019).

Ultimately, thematic analysis, following Braun & Clarke's (2006; 2019) comprehensive framework, provides methodological robustness, interpretative flexibility, and the theoretical coherence necessary to attain credible and nuanced insights from the qualitative data. This aligns with the research's qualitative phenomenological, constructivist, and inductive orientations, enabling the ability to uncover meaningful patterns reflective of participants lived organisational experiences and strategic interpretations.

3.6 Issues of trustworthiness

This research seeks to maintain trustworthiness using the framework dictated by Lincoln & Guba (1986), which pertains to credibility, dependability, confirmability, and transferability in qualitative research. Lim (2024) further builds on this by emphasising that trustworthiness adapts the idea of rigour to the distinctive nature of non-numerical data, thus providing a principled way to ensure that findings are warranted despite differences from statistical validation. In this research, the unit of analysis is individual HR professionals working within MNEs operating within New Zealand, thus processes and procedures of trustworthiness are oriented toward securing warranted interpretations of leaders' accounts and the organisational settings they describe.

Credibility

Credibility surrounds the confidence that the analysis faithfully represents HR professionals' meanings and organisational realities (Lincoln & Guba, 1986). Following Lincoln & Guba (1986), credibility is actively worked toward by conducting the research in ways which enhance accuracy and validity, and thereby strengthen the interpretive validity or "truth value" of the research. Several strategies were employed to ensure credibility. To confirm that the dataset was representative, both the digital

recordings and transcriptions of interviews were reviewed to ensure that the data for analysis were accurate and sufficient. Coding categories and the examples used to present the data were also reviewed in iterations for consistency and representativeness across transcripts, with adjustments made where categories or excerpts did not adequately reflect the broader data.

The effect of biases was considered, but deemed to have minimal negative impacts as HR professionals were not necessarily asked about challenges, issues, or any information which may put the organisation in a negative light, but their own perceptions of what holds importance to them when considering technology for learning and development or engagement. Member checks are another factor contributing toward credibility, which is outlined as continuous, informal testing or clarification of information by observing respondent reactions to the researcher's reconstruction of gathered information (Alexander, 2019; Lincoln & Guba, 1986). Member checks were also conducted via probing questions, where the researcher would retell what has been discussed, or confirm clarification to confirm that both individuals are on the same page.

Dependability

Dependability surrounds the stability, reliability, and coherence of the inquiry process, and is key to attaining credibility (Alexander, 2019; Lincoln & Guba, 1986). As the unit of analysis are individual HR professionals' accounts within certain organisational circumstances, this research emphasises transparent and traceable procedures that would support comparable interpretations in similar conditions. A comprehensive, reviewable record of design decisions, data collection protocols, and analytic moves, as well as justifications, enables external viewers to examine methodological consistency and decision logic.

Confirmability

Confirmability surrounds the extent to which findings derive from leaders' testimonies and the corpus of evidence as opposed to researcher predispositions (Alexander, 2019; Lincoln & Guba, 1986). The analysis is anchored through pseudonymised, but otherwise raw data via transcription excerpts,

reduction and analysis products, process notes, and data reconstruction outputs, such as drafts or a Table of Themes (Appendix E), so an independent reviewer could trace or gain a sense of reason surrounding how interpretations were produced. These practices demonstrate a defensible link between evidentiary materials and claims regarding HR professionals' experiences within the context of MNEs operating in New Zealand.

Transferability

Transferability refers to the extent to which insights may be applicable to other organisational settings or groups (Alexander, 2019; Lincoln & Guba, 1986). Given the qualitative approach adopted in this research, generalisation of findings was not sought. In this research, transferability is addressed through detailed accounts of the New Zealand MNE context, the roles and responsibilities of HR professionals, and the digital HR infrastructures enabling the assessment of relevance and applicability to similar contexts. Consistent with this stance, context-bound extrapolations may be considered, which are defined by Patton (2002) as speculations surrounding the likely relevance of findings in contexts that are similar, though not the exact same.

Collectively, these criteria articulate how rigour is established for a phenomenological research design, wherein HR professionals are the unit of analysis. The framework preserves interpretive depth whilst providing readers transparency regarding the evaluation of the quality of findings grounded within leaders' accounts and the organisational contexts which they navigate.

CHAPTER FOUR: FINDINGS

This chapter presents the empirical findings derived from the thematic analysis of interviews with HR professionals in MNEs operating in New Zealand. Following data collection and analysis, themes and subthemes were discovered which directly address this study's research questions (See Appendix E):

RQ1: "*How do HR professionals in MNEs operating in New Zealand perceive and respond to the challenges and opportunities of the non-ergodic new normal environment, particularly in relation to using technology as a strategic asset toward employee development and engagement?*". Thus, the findings outline how HR professionals perceive and respond to the challenges and opportunities of the non-ergodic new normal environment, including their preparedness for technological advancement and their interpretations of technology as a strategic asset. Key subthemes below the major theme of "Opportunities of the non-ergodic new normal environment" include a) Technological development, b) Accessibility, and c) Instrumental gains. Whereas key subthemes under the major theme of "Challenges of the non-ergodic new normal environment" include a) Contextual issues, and b) Responsible innovation.

Technological development involves HR professionals viewing rapid digitalisation, cloud migration, and emerging AI tools as accelerating infrastructure shifts that expand strategic possibilities for HR work. Accessibility surrounds the perception of technology as enabling anytime-anywhere access to HR processes, learning, communication, and knowledge for diverse, dispersed, and workforces of various abilities. Instrumental gains surrounds the perception that digital systems provide richer, timelier, and more actionable data that strengthen decision-making, reporting, compliance, and strategic alignment.

Contextual issues involve economic constraints, local resource limitations, technological literacy gaps, and New Zealand's slower innovation pace being perceived as a restriction on the feasibility and speed of HR technology adoption. Responsible innovation surrounds the emphasis on the need to balance technological efficiency with human judgement, trust, soft-skill development, and practical scalability to avoid over-automation and preserve authentic people practices.

RQ2: "*How do HR Professionals evaluate and implement HR technologies, and to what extent do their decisions shape the development of sustained competitive advantage for the firm?*". Thus, the findings outline how HR professionals evaluate and implement HR technologies, highlighting the criteria shaping adoption decisions, the mechanisms and processes used to drive sustained use, and the organisational transformations that follow. The chapter is organised around these key areas and their emergent themes, moving from perceptions of HR professionals, to evaluation and implementation processes, and finally to the broader organisational implications of HR technology integration. Key subthemes below the major theme of "Evaluation" include a) Institutional influence, and b) Use of technology. Under the major theme of "Implementation", key subthemes include a) Feedback-driven configuration, and b) Driving sustained adoption of technology. Beneath the major theme of "Organisational Transformation", key subthemes include a) Systemic reunification, b) The transformative impact of technology on professional roles and work tasks, and c) Future considerations of technological development.

Institutional influence surrounds HR professionals' technology decisions being shaped by global directives, vendor ecosystems, and organisational governance expectations that frame what is feasible, legitimate, and strategically aligned. Use of technology involves evaluation centring on whether a tool meaningfully improves HR workflows, data quality, and employee experience, balancing functionality, usability, and alignment with organisational needs.

Feedback-driven configuration surrounds the view of implementation as an iterative process where systems are adapted based on user feedback, practical constraints, and real-work workflow insights to ensure relevance and usability. Driving sustained adoption of technology includes long-term uptake being dependent on training, communication, leadership modelling, and embedding tools into everyday routines so the technology becomes a natural part of work as opposed to an imposed change.

Systemic reunification includes the view of technology integration as a way to consolidate fragmented processes and platforms into coherent, connected systems supporting consistency, visibility, and organisational alignment. The transformative impact of technology on professional roles and work

tasks involves the perception that digital tools reshape HR and managerial work by automating routine tasks, elevating analytical responsibilities, and redefining expectations for capability and judgement. Future considerations of technological development surrounds the anticipation of ongoing shifts in roles, skills, and organisational structures as emerging technologies evolve, creating uncertainty but also opportunities for redesigning work.

4.1 Opportunities of the non-ergodic new normal environment

4.1.1 Technological development

Accelerated digitalisation is a widely acknowledged point of opportunity, where a current tools, roles, and practices feel relatively insecure. Participant 1 supported this, stating "*I mean, it's moving at a pace now it's just crazy.*", extended toward with a future outlook by Participant 7 with "*I think it's a space that's moving at pace. And I think what we have in place now probably won't be here in five years' time. I think it's just the natural evolution of things.*". This indicates a change where technology has become infrastructural, and "*...is fundamental to every business nowadays.*" (Participant 3). Participant 2 had a similar viewpoint but framed it as a pre-inflection point where the technology "*...probably hasn't hugely changed in the business at the moment, but I think everyone knows that it's coming and everyone's just sort of preparing for that.*". However, major systems such as learning platforms and HRIS systems are expected to remain dynamic to stay competitive, as Participant 5 states "*Learning management systems are constantly improving. They've got to, because you've got HR information systems trying to catch them.*". Practical decisions were described which signalled how foundational systems are continuously being reconsidered. Participant 4 noted that rapid vendor progress and projections can affect choices of buying and integrating, responding to the opportunity by increasing vigilance surrounding current and potential HRIS and LMS, "*Great tool love it. But BambooHR is developing their own tools and things, and I would imagine if they keep going at the pace that they're going at, we might be able to get rid of [PUBLICLY PARTNERED EMPLOYEE EXPERIENCE SOFTWARE]and start using BambooHR.*".

Participants also viewed cloud migration as an essential infrastructure for flexible, resilient HR work. This shift removes location bottlenecks and equalises access across roles and schedules. Participant 1 explained the shift off local servers just before the COVID-19 pandemic, "…*luckily we moved on to cloud based systems. So, you know you can access it from anywhere, you don't need to be in a certain physical location, so it's important to be able to access it from wherever and whenever.*". Participant 2 tied this to day-to-day continuity, where "…*all our current drives will disappear, everything in the cloud. So, we see that as much more efficient because then it doesn't matter who's at work and who's not at work, we'll have access to all the information.*".

Amidst this flux, AI emerged as a target of anticipation and experimentation. For some, AI is viewed as an intuitive accelerator of search and sense-making, as "*a supercharged Google to drill down on information.*" (Participant 1). Others emphasised organisational learning, where Participant 3 described the current challenge as moving beyond using it as Google, through "*...trying to work out how can we get the most of ChatG- sorry AI in a safe way for us as a business. So, we're still exploring that at the moment, how that could help push us forward.*", while Participant 5 highlighted plans to further ingrain it within learning and development, where "*We've used it for a long time, and now it's a case of how can we support our team members with it as well.*". Thus, participants are actively looking at opportunities regarding AI, and are considering how and where this may be integrated.

4.1.2 Accessibility

Mobile accessibility is an opportunity arising from technological developments, which emphasises anytime and anywhere access across devices, particularly when considering dispersed and field or trade staff. Participant 1 stressed that tools should be "…*something people can use, and be mobile with, so you know cloud based systems, but it could be used on multiple platforms whether it's a laptop, PC or mobile phone, these sort of things are quite important as well.*", predominantly referring to flexible work trends, and the ability to continue desk-based work out of the office. Expanding on flexible work trends, Participant 5 stresses the importance of learning and development technologies being accessible at any time for managers, where traditional scenario-based simulations would need to be acted, with the

advent of AI where custom-generated scenarios with real-time feedback is an option,"*...the managers being able to do that in their own time to make it accessible is fantastic.*". Participant 3 builds on this, but in the perspective of trades staff, where "*…they don't sit at a desk, they're out.*", so for annual appraisals and conversations around employee development, they have developed a platform where they can complete these from their phones, as "*…communication with our employees are really difficult when so many of them don't, they probably do have access to emails, but they don't actually look at them, in many cases.*". Participant 4 shares a similar outlook, outlining "*If they can sit in the van. Or in the truck, or in the car or whatever, or on site somewhere and they can complete what they need to do for their job. I'm really happy.*". Building on this viewpoint, Participant 4 expands on training and performance management specifically, "*Ohh accessibility. I want it. Browser mobile, iPad. I want demo sites. I want, for training, I want to be able to proxy in so that I can show them one to one so that impacts on how you train. You can train as a group, train individually.*". Thus, demonstrating a significant emphasis on opportunities in reaching employees at all levels, anywhere, anytime.

Technology-enabled accessibility to knowledge also meant the ability to easily find consistent information, without extra barriers or indirect routes. This was also initially framed with the problem-focused approach, where "*We were finding that we were doubling up sometimes with what we were doing. Not everyone had the right information. That information wasn't able to be easily shared or accessed.*" (Participant 2). This drove investment into the implementation of an AI chatbot for the HR department, to better and easily access information, resulting in consistent information and "*…one source of truth from this platform.*" (Participant 2). Using a similar technology, but instead of for the doubling up of tasks or inconsistent information, was Participant 1, who was trialling an AI chatbot to free up time for the HR department, allowing employees to access knowledge anytime and from anywhere, as opposed to via an HR employee, thereby freeing up their time through self-serviced, consistent knowledge access, as "*…one thing that I get a lot of requests for is providing information further up the chain whether its regional, global and being on the one platform now, they'll be able to access that information, a lot of that information themselves.*". In parallel, Participant 7 curated common

questions regarding frameworks for certain scenarios, "*Let's say from an HR perspective, I want to have a conversation with a team member who is being consistently late. What do I do? How do I do it? And the Chatbot will give you a response.*". Thus, opportunities in technology-enabled knowledge accessibility were viewed as a practical opportunity allowing for consistent learning and employee outcomes.

Technology enabled connectivity was another accessibility-based opportunity; Despite acknowledging it may not fully replace face-to-face contact. As Participant 1 outlines, "*I guess just because we deal with people all around the world and, like I say, since COVID a lot of people aren't sort of working in office spaces-office locations so, the technology is really important for us to stay connected.*". Common stacks such as Teams, Sharepoint and Forms-supported appraisals, surveys, town halls, are all avenues of digitally enabled connectivity, though video offerings providing "*…a bit more of a personal touch as well*" when compared to traditional emailing (Participant 1). Platforms were also used to maintain culture through bravos, and broadcast timely operations and communications where "*Whatever else is kind of topical and important, then we can share it with them on that platform as well. So yeah, it kind of does both.*" (Participant 2). Yet, distance reshapes leadership and team dynamics, where "*…it changes management style, it changes your communication style effectively.*" (Participant 5), as leaders and managers need to shift their communication styles to better accommodate avenues where indicators such as body language are not as easily interpreted. Further, attempts to build championship-style teams within MNEs are more easy to point out flaws in, where considerations of "*so how do we forcibly make that connection, but also try and make it seem natural that an effective team needs, so that's a bit of a challenge at the moment that we're certainly facing.*" (Participant 5), thereby realising the unique challenges of building strong teams with a strong culture within the opportunity of digitally enabled connectivity.

Technology is further allowing for the design of development and engagement platforms for diverse roles, contexts, and preferences. For inclusion across types of roles, "*…we need to make sure that we look after all of our staff, not just the professional staff.*" (Participant 3), with straightforward

systems so "*the managers will actually engage as well.*", taking into consideration the time and resources they have on job sites. The context of roles also matters, as Participant 4 stresses, "…*60% of our workforce are trades and 40% are non-trade or behind a desk and in an office*.", with many completing feedback or appraisals from their tablet or phones, as opposed to from a laptop or computer at a desk, "*The reality is that these people are doing it on their lunch break or they're doing it at the end of the day, sitting on a project office or a shipping container that's been set up that has Wi-Fi…*" (Participant 4). Generational preferences also diverged, where balances need to be struck, as "…*you've got people who are a very older mindset who still like to have that face to face, still need that interaction and still think being in the same room is a priority whereas younger generations, now, it is by far preferable for them to do everything online.*" (Participant 5). This is further expanded on by Participant 7, who considers "*Are our older workforce scared about it? How do we support them? Are our younger people really excited about it? How can we leverage their enthusiasm and their knowledge?*" Neurodivergent needs are also increasingly being considered, where "…*if they're watching a video, [they] need to be able to have that video on 2 speed or they'll lose their attention.*", broader flexibility in terms of "*being able to do it in their own time and at their own pace.*" (Participant 7), and the constant adaptation to meet learners' needs, where "*…now there's so much research into different needs of different learners that. Yeah, you're constantly taking on board feedback from who needs what…*" (Participant 7), indicating a dynamic goalpost that is continuously being considered and worked toward in employee development and engagement.

4.1.3 Instrumental gains

There was an emphasis on opportunities to gain richer, timelier data for decision-making. Technology enabled "…*more accurate and complete information when we're making decisions as well. So yeah, it's definitely been a positive impact that the technologies have had.*" (Participant 2), being able to work with more up-to-date data for pathways, remuneration modelling, and strategic initiatives. HRIS and engagement tools also allowed for longitudinal and comparable data capture, as "…*it helps us to build a picture in terms of the levels of engagement.*" (Participant 3). Participant 4 noted the importance of

having effective data in regards to learning and development, where "*The data that you can get out of it, we weren't able to really effectively measure a person's performance, the potential, how they were doing, and their role, so that made Learning and development decisions really difficult.*". Choices in suitable platforms for data collection stemmed from the need to survey onboarding and exits, and there was a lack of the ability "*…to crunch the data to say, here's your data, this is what it means. This is how you do things to adjust or shift the dial on this. So, we shifted in order to gain some of those other that other functionality.*" (Participant 4). Put simply, "*Technology brings you information. And that information helps you to do things like governance, make decisions…*" (Participant 3). Thus, the emphasis was on consolidating signals and raw feedback into a usable evidence base for governance and improvement.

Reporting was viewed as an area of consideration for development and engagement, offering multi-level visibility. Bespoke reporting facilitated by technology, with expert analyses, replaced manual effort and helped to act as a diagnostic tool, in contrast to "*…kind of having to analyse it by ourselves, everything was manual, we were having to kind of type up reports, and none of it was scientific per se…*" (Participant 3). With broader analytics, managers have "*…so much more data and analytics that we can play with that help managers make proper business decisions…*" (Participant 4). Compliance reporting was a standout, the LMS provided "*…an easy win in this part because it's taken, it's given us complete visibility…*" (Participant 5) in demonstrating adherence to policy and legal development. Thus, reporting was framed as not just a legal matter, but as an opportunity to evidence impact, lower risk in operations, and to align with strategy.

Linked to better data collection, technology also brings opportunities of greater reporting functionalities which give "*…the countries, regions and Global Head office a lot more visibility as well, better reporting, all this sort of stuff to help steer the company, and you know in the right directions and making sure we're meeting our strategic goals.*" (Participant 1). Manual survey analysis could also be contrasted with configurable dashboards and expert interpretation where "*…we can create bespoke reports for each business unit, talking about all the different scores they have, areas they should be*

looking at, and that sort of thing, and it can be done for every single business unit." (Participant 3). Managers were also able to gain "*…so much more data and analytics that we can play with, that help managers make proper business decisions about the teams and their people.*" (Participant 4). Reporting also strengthened compliance narratives, where learning modules with checks and leaderboards for progress were visible, not only for other employees but to also show that employees are being actively educated, "*…so all of these things we are able to prove very quickly and easily to auditors or to regulatory bodies what's been achieved.*" (Participant 5). In practice, reporting was able to shift from static documents to living views by cohort, business unit, and objective, thereby supporting course corrections and resourcing conversations.

4.2 Challenges of the non-ergodic new normal environment

4.2.1 Contextual issues

Participants consistently located challenges regarding a tightening economic climate. There were descriptions of how macro-pressures shifted priorities from "nice-to-have" innovations to viability. As Participant 1 described it, "*You know, sort of reflected in the cost of living, you know people are struggling out there, so excess income to buy things is not there like it used to be.*", thus laying a foundation for a risky climate where cash preservation may be prioritised over significant investments. This was echoed by Participant 2, where "*There's still challenges with the economy, but I think things are starting to look more positive. We're not there yet, but they're starting to.*", and Participant 4 stating "*...wages go up and then cost goes up because there's some, you know, you gotta pay for those things obviously and so service providers are handing that off to the customers and then all of a sudden you've got a tool that is far more expensive than a competitor.*".

The local business environment realities in New Zealand further sharpened these constraints. One reality of the New Zealand business environment is emphasised as the oversight of available resources in implementing or driving new programmes or technologies, "*I mean, probably one thing that maybe they didn't look at is locally, what resources are available to have this thing done and what amount of work is required to get it done?*". Another is the technological literacy of non-office-based

staff in Australia and New Zealand, where it is "*a bit different to some of our overseas offices where warehouse workers might not have a computer or have a have a smartphone or anything like that, and are not used to it. So, for us in Australia and New Zealand, it's fairly straight forward for the end user.*" (Participant 1). This is further resonated and expanded on by Participant 6, who states in regards to technology for development and engagement, "*In terms of New Zealand organizations I think we're still quite behind the rest of the world so sort of say we're probably like five or 10 years behind the UK,…*", who further attributes it to "…*the barriers to entry are obviously cost and the scale so you need like quite a large workforce in order to make that investment more plausible.*", and "*…the approach that L&D hasn't really been reinvented too much in New Zealand and so organizations typically go to their vendors who provide the same type of content over and over again. And so, innovation in that space has been quite slow to improve.*". Further, a local preference of human contact and auditing tends to be preferred, as outlined by Participant 1, "…*particularly in New Zealand there's still a preference towards speaking to a real person about things like parental leave and HR policies and things like that, I feel like the answer is more trusted and it does come from an actual human.*". Therefore, combined with the challenge of economic constraints, participants are likely to hold-off on radical innovation within the HR department in employee-centric functions such as development and engagement.

4.2.2 Responsible innovation

Despite the opportunities for technology in development and engagement, boundaries are an increasingly crucial consideration and challenge for participants. This theme captures a pragmatic boundary between the capabilities of technology, and where human judgement or input remains non-substitutable. These boundaries demonstrate themselves in differing ways. Some emphasise the social aspects of technological implementation, where an increase of digitalisation is acknowledged, but also the point that "*Nothing beats face to face, though I think that's the other thing.*". After the COVID-19 pandemic, and shifts to development and engagement going fully online, Participant 4 noted that, "*I think people are starting to circle back to going well actually there's really something quite special about meeting face to face and just realising the value of that…*". This is supported by Participant 2,

"*...we're starting to see a lot more people back in the office as well. So, I think we've kind of almost gone sort of full cycle with it in terms of getting things back to normal*.". Participant 1 also elaborates on the uniqueness of in-person contact when available, acknowledging that "*We had people come back to the office once everything was sort of freed up, yeah. So, the majority of staff are based in the office and we have a good strong culture, where it's all, you know, everyone's friendly and having a good chat with each other and things like that. So that that's nice to have that environment.*". Thereby demonstrating a shift from hype and excitement from this initial acceleration and adoption of digitalisation, to now weighing out which avenue is most appropriate, indicating the maturity of technological implementations and innovations regarding employee development and engagement.

Another point where boundaries between technology and humans are drawn includes aspects of employee engagement and development. Participant 2 remarks the importance of "*It needs to remain kind of with a human focus. So it's not we're not sending chat bots to talk to our new staff members.*". This is expanded on by Participant 4, who acknowledged efficiencies in processes, and "*things are more polished when you've got people talking about things. I'm not necessarily sure that that's a really good thing though. Because you miss the real conversation when things are over polished.*", going on to explain that some features in their systems were manually switched off, as "*I really want to understand where that manager is at on their journey, where they are as a people leader. And if you've got a really polished AI generated or tweaked answer. It doesn't actually help me see what's really at the core of it.*". This resonates with Participant 7, who notes that although technology and systems can be used for streamlining and automating performance management reviews, "…*you still need context. You still need the human eye over it, tone and texture and things like that. It still requires a person to review it, and it also requires a person to have the skills and knowledge to be able to do that.*". Participant 6 further emphasises boundaries, where issues that do arise from AI use tend to be due to the way it is used as "…*a replacement versus like a tool that employees can use to accelerate their workflow.*", and Participant 4 provides a different view, along the same lines where they mention that they believe system improvements and efficiencies should be removing inconveniences and tasks they do not want

to do, "*That's actually what's so frustrating about AI. You know, I don't want it to tweak my letters. I want it to do my dishes and my laundry at home. For me, you know what I mean?*". Thus, demonstrating an awareness that some processes or tasks shouldn't be fully digitalised, even if they can be, as it can hinder genuine interactions, gloss over nuances from raw data and feedback, and may take away from tasks where human thought processes would be beneficial.

A big contributor to the challenge of responsible innovation is the trustworthiness of AI, especially as in its current form. There is a trend of using AI for research or helping create a foundation for lessons, trainings, engagement communications, etc., but wariness of its validity and responses are constantly acknowledged, thus being used as a guide or baseline as opposed to a final product, "*And I don't always take what it gives me verbatim, but I think it's important not to, at least at this stage, fully rely on it…*" (Participant 1), Participant 3 also recalls using AI for developing outcomes or descriptions, where "*…it gives me the structure and then I can add to it a lot quicker.*". Participant 4 demonstrated deeper beliefs toward AI usage, where they acknowledged its benefits, but also the importance of not substituting the knowledge of AI for your own, "*When it got it wrong, it got it really, really wrong. And if you didn't understand the methodology or the framework behind it, it was a problem like, you would be none the wiser.*". Therefore, distrust in AI in its current form may hinder wider scale or deeper integration within organisational processes for development and engagement.

An emergent consideration was the focus on human-centred soft skills, even as tools, technologies, and systems develop. There was a notable gap regarding frontline leadership, where "*…we're educating and developing our managers so that they're seeing things differently…*" (Participant 3), demonstrating a shift from traditional style leadership to ones that are more attentive to the feedback of those working in their teams. This is further stressed by Participant 4, "*Talking to people, relating to people, all of these people skills are the things that as a general role. They're lacking in and it seems to be an impact from COVID.*". This was applied as an industrial issue by Participant 5, where "*…particularly in tech companies, soft skills is seen as an afterthought and that shows a lot in how managers are perceived, and how managers are seen, and how the managers rely on HR or people*

in culture to have difficult conversations.". Technology was positioned as a scaffold, as opposed to a substitute, where "…*things like the AI conversational pieces to improve the soft skills will continue to grow and come down in price.*" (Participant 5). Ultimately, leadership capability was described as balancing tools with care, to "…*utilize the technology, but it's got to stay connected, and people have to stay connected on a human level. Because at the end of the day, I think that's what we actually really all crave.*" (Participant 7).

Responsible innovation also weighs preferences for reliable and practical delivery, as opposed to "cool" or "radical" features. VR and AR in training is a common test case, which was promising in concept but deemed impractical at the scale of New Zealand, "*But you can't do that one at a time. You need at least like two or three thousand. And most businesses in New Zealand don't have the scale in order to be able to provide that experience.*" (Participant 6). Participant 5 recalled a tender with upsells, with various add-ons marketed as new and innovative being proposed, however, they recalled *"...why would I add further things to our internal ecosystem that's not needed?*". Therefore, the prevailing stance tends to lean toward options the organisation can operate today, with today's devices and governance, before chasing novelty.

Uncertainties and questions regarding the future of the business environment are another key challenge. Participant 1 reflected on labour market volatility, "…*there's a lot of talk about the future of work, and what that's gonna look like, and what jobs are gonna be around, and what's not. So it's just, it's really hard to predict.*", later adding "…*new jobs get created and you know, whether that will be the same as AI progresses, I don't know but, you know, I guess history tells us that, you know, when some jobs disappear, new jobs get created…*". Participant 4 framed operational uncertainty, where if automation reshapes tasks, leaders must decide "…*what are you gonna do with those people? You're not just gonna let them go? They're skilled, talented people. How can we use those skills in a different way? What can they be focusing on to help us in a different way?*". This resonated with Participant 7, who also recognised heightened worker anxiety and a likely reshaping of roles, "*And there's a lot of*

stuff that you can find on LinkedIn now around, you know, what are the jobs in 2, 5, 10, 15 years. I don't even think that we can possibly kind of imagine what it looks like…".

4.3 Evaluation of technologies

4.3.1 Institutional influence

Decision making and evaluation rights tend to sit with global or group-level bodies, thereby constraining local experimentation. This is demonstrated with Participant 2 remarking, "…*we are quite restricted with what we can use at [COMPANY] because we are a global firm. So, pretty much anything that we want to use has been mandated by the global firm, to say, you know, this is the technology you can and can't use…*", further supported by Participant 1, "*And we do have, I guess, limited ability to implement our own local technologies now because we are going more global with our systems.*", "…*we've got teams that sort of work on these parts of the business yeah?*". Decisions tended to cascade from global headquarters, where "*…they would do all the testing, they would do all the risk analysis and everything from their perspective, then that would flow on and they would say, you know, to [COMPANY] Asia-Pacific okay, you're able to use this tool, and then that would flow down to us.*" (Participant 2). This was not always the case with others, where internal gateways to formalise this control were described, where the HR department would put forward a business case and this would go up the hierarchy as appropriate, "…*normally we would put a proposal with the preferred system and the cost, the pros and cons, and that sort of thing, but there's an IT governance group at quite a senior level.*" (Participant 3). This may not necessarily be a negative thing, as Participant 4 anticipates further scale in the organisation, arguing "*…I think we're growing to a size where that centralised resource that I don't know if it's coordinates or assesses but, essentially does what I do for people and culture, but at that organisational level is going to be a real benefit.*".

Information flows also tend to be affected by institutional structures, where information regarding new tools and technologies tends to be disseminated through formal channels as opposed to individual tinkering, though the latter does still exist. Participant 1 remarks a structured discovery layer where "*We've got IT development and yeah, all these teams that are, that's their day job, is to find these*

new ways of doing things. So, if I'm totally honest, it's more just a personal interest in technology and things like that.". Participant 2 resonates with this, where "*...each sort of sub team within the business has a group of people that are kind of focused on upcoming trends with technology and things*", adding later that "*It's just whatever I hear and is explained to us at work. Like, I'm not, as I said, I'm not a huge tech focused person. So, the information that I get on new technologies and things, it does come from my work at [COMPANY].*". Others, however, tend to take personal interest in it, where "*I did some market insights. I do market insights every year to understand themes.*" (Participant 4), *I attend all of the learning events in [LOCATION]…*" (Participant 5), and "*Obviously like reading about new technologies that come through, experimenting with different tools when they're released, just being curious about trying different things.*" (Participant 6). Therefore, despite rigid structures of implementation and decision making, participants can continue to express their personal interests in technologies for employee development and engagement.

Technology was also commonly evaluated based on wider needs, often in response to visible pain points or fissures. This was evident when double handling, inconsistencies, or errors in a certain task or process are acknowledged, "*…then you can maybe start to think about actually is technology better to bring in here to replace what we're doing or update what we're doing.*" (Participant 2). Scoping tended to focus on concrete needs at each level within the organisation, and whether efficiencies or compliance adherence justified change, and "*…really just sitting down with a group of stakeholders to understand what is that core need? Why do we need to do this?*" (Participant 4). This needs-based approach is further highlighted through "*There's always a time for these things and then the need grows to a point that you invest or you start doing something about it*." (Participant 4). Feature creep, where unnecessary features may be added on, were resisted through this needs-based, more reactive mindset as, "*…a lot of people wanted to sell us creation tools, including AI and including gamification and including social learning and social aspects.*" (Participant 5), being wary of this, it is common for a needs-based mindset for technology adoption to not only be reactive, but also protective, prioritising success metrics and operational efficiencies. Further, pressures of budget translate into stricter cost-

benefit scrutiny at the level of considering technologies. Participant 4 explained the immediate trade-offs, where "*They had some changes in service levels and I just went this is too much. We have to pull the plug. What are we paying for?*" and "*…if you're not getting the outcomes you need, then why do we pay for something that is giving us no value.*". In practice, this meant shifting to competitors, or downsizing implementations that added marginal value or had similar functionality elsewhere, and concentrating spend on platforms that effectively address needs.

Cyber security was a prioritised criterion for any tool or technology, with formal ICT approval processes and alignment to internal controls. This is supported by Participant 5, who considered "*There is the main part of, does it hit all of our internal security systems and would our ICT company, our IT team, be happy with it?*". Beyond technical controls, adoption pace was tied to risk appetites, and the reputational exposure of "bandwagon" moves, where Participant 6 noted a foundational caution of "*I think there's always like a hesitation to adopt technology without first seeing like the established use cases.*". Participant 7 drew on past management trends and fads to justify restraint regarding novelty technologies or diving into AI, such as an organisation in New Zealand that invested heavily into AGILE working when it first emerged, but "…*on the whole, [it] didn't work. And so I do think that businesses are possibly a little bit hesitant around jumping onto a bandwagon again of something like AI without actually really understanding what does it mean.*". In this governance frame, security sign-off, proven use cases, and measured timing limits financial, operational, and reputational risks before at-scale decisions are escalated.

Reporting was viewed as an area of consideration for development and engagement, offering multi-level visibility. Bespoke reporting facilitated by technology, with expert analyses, replaced manual effort and helped to act as a diagnostic tool, in contrast to "*…kind of having to analyse it by ourselves, everything was manual, we were having to kind of type up reports, and none of it was scientific per se…*" (Participant 3). Combined with benchmarking, systems are better able to capture longitudinal data and are able to compare results to industries and regions, "*and it's using industry norms, so it will look at the industry that we're in, it'll look at New Zealand, it'll look at Asia Pacific,*

and give us data that we can compare ourselves to, or benchmark ourselves against. And that's been my game changer." (Participant 3). The effect was practical legitimacy, when methods are based on data and benchmarking, both internal and external, "*People, their questions go away and people just feel, 'Yep, I feel valued'…*" (Participant 4). With broader analytics, managers have "*…so much more data and analytics that we can play with that help managers make proper business decisions…*" (Participant 4). Compliance reporting was a standout, the LMS provided "*…an easy win in this part because it's taken, it's given us complete visibility…*" (Participant 5) in demonstrating adherence to policy and legal development. Thus, reporting was framed as not just a legal matter, but as an opportunity to evidence impact, lower risk in operations, and to align with strategy, whereas external and internal benchmarks facilitated by technologies turn sentiment and performance into evidence which travels in executive forms.

Brand integration was also identified as a driver of familiarity, trust, and relevance. There was a consideration of wanting platforms to feel native and integrated within the organisation, as opposed to using generic technologies and systems, where "*…we needed complete customization because we don't want people to log in and know they are logging into an LMS. We want people to log in and think that they're learning something from [COMPANY].*" (Participant 5). Practical configurations linked HRIS data to personalised pathways, where "*…we had things like categorisation, and the ability to have data points come over from our HRIS to be able to say right you are a new starter in our [LOCATION] office. Here are the courses that automatically are assigned to you to minimise administrative tasks.*" (Participant 5). Thus, a visual identity reinforced this sense of ownership and cohesion which was "*…completely branded us, you wouldn't know it's not ours.*" (Participant 5). Together, branding and data-driven assignment of learning positions the system as an organisational space as opposed to an external tool, which suggests improved willingness to engage and makes development and engagement feel closer to day-to-day work.

A distinct point of evaluation surrounded uncertainty surrounding compatibility of new technologies or tools supporting employee development and engagement. Many acknowledged there

are no true indicators or ways to measure readiness or fit for technology, with "*I guess you never know until you get rolling with it, right?*" (Participant 1), "*I think it's a matter of rolling things out, understanding where those pain points are and trying to fix those, but I don't. I think it's really hard to kind of take a measure of you know, are we ready for this type of change? Yes or no.*" (Participant 2), and "*...that's about having and making sure that we are a sustainable business and trying to anticipate what that future looks like. We may get it right. We may get it horribly wrong. I don't think we're going to know until we're actually in it.*" (Participant 7). This ambiguity exists, and is a large consideration, but due to how common it is, it allows for greater preparation for tackling teething issues which may arise.

4.3.2 Use of technology

Ease of use surfaces as the predominant gauge of value in technologies and systems. Participant 1 sets the tone for this, with a more problem-focused view of "*If you're always battling against the system, you kind of wonder why? Why am I going through this pain and suffering? So yeah, it's gotta make the job easier...*", this further resonates with Participant 3 who stated the reason for changing their previous HRIS system, which "*...had an appraisal system attached to it, and it wasn't very good, it wasn't user-friendly*.", and Participant 6 who noted that if the system wasn't user friendly, and the value of content was not high enough, they would "*...probably go down the path of less resistance.*", seeking information elsewhere. Ease of use is also heavily attributed to the front end of systems and technologies, notably in the design of the user interface (UI) and user experience (UX), where "*the customer experience or the UX, UI kind of design and how that's been designed to enhance the process around using the software, that's another one.*" (Participant 6), further emphasised by Participant 5 with "*And then the learners have got very clear navigation. So they've got stuff which they need if they need to redo courses, mandatory courses which they need to complete...*", and Participant 1 "*...it has to have like a good user experience, whether it's end user or you know the upfront user or admin users. So, it has to be quite intuitive in that sense…*". The importance of this is usually linked to the users themselves and their confidence with technology, where "*...I'm not super tech savvy. So, I guess it would be, is it easy to*

use? Is it easy to understand? Is it easy to, you know, not make mistakes, kind of things?" (Participant 2), and "…*we need to make sure that we look after all of our staff, not just the professional staff. So yeah, and also the system's quite straightforward to use.*" (Participant 3).

Ease of use is further considered regarding the ease of deployment, ease of access, and the ease of using features and functions. As Participant 7 outlines, "*Obviously, the ease with which we can deploy it, and the ease with which our people can access it. The ease of the equipment.*". This is elaborated on by Participant 2, who considers, "*Is it gonna make things easier? Am I gonna be able to communicate and connect with the people that I need to be able to connect with more easily? I guess that that's kind of front and centre for me…*", and "*...I can literally just send someone a link and they'll have that ready to go.*". Thus, demonstrating the importance of technologies and systems having ease of use, not only within a single dimension, but multiple.

Efficiency was the immediate litmus test, where good systems prevent frustration and flight, "*If you've got a bad IT system with its operation system or whatever that frustrates you, then that's a quick way to annoy your employees, and then they get a bit frustrated and they look to go elsewhere, right.*" (Participant 1). Others were more direct in their request for efficiencies, "*I guess my want is with you know, is it gonna make things more efficient for me? Is it gonna make things faster?*" (Participant 2), across multiple roles also, "*If you're thinking about the manager, what makes their time easier? If we think about the [TRADESMAN] or the supervisor standing in the dusty room while his employees pull cable or do whatever they're doing. What makes his or her role easier, quicker to do?*" (Participant 4). This is further echoed by Participant 2, who states "…*there is definitely an element of working smarter, not harder. So I think, yeah, we are seeing people freed up particularly at the lower levels in the organisation*…". Slow or inefficient tools have been noted to invite workarounds and increase risk for some, "*Things that slow people down, they're more likely then to not do it, and just go do the job, and then that's where we then strongly feel that's placing the company at risk, because they're not following the safety procedures that have been determined for that job*." (Participant 3), thereby decreasing engagement on apps and platforms designed to keep employees safe or assist with their

development. Overall, technology was judged by whether it made jobs at various levels easier, quicker, or added value, as ultimately, "…*these tools save us time.*" (Participant 4).

In its current form, participants predominantly positioned technology as an aid as opposed to a force which radically reshapes work. AI was described as "…*a supercharged Google to drill down on information.*" (Participant 1), but care was taken to immediately address its limitations, where "…*then you may make the wrong decisions based on the information it gives you. So, I use it as more of a guide moreso than anything, …*". Others utilise AI for drafting, and structural purposes, where "…*it gives me the structure and then I can add to it a lot quicker.*" (Participant 3), to act as a tool to inform, as opposed to being a replacement. Stronger perceptions are discussed, where "…*the technology's just tech right. At the end of the day it's just a system that's storing stuff. Let's be honest, it's big filing cabinet. It's what you do with that. It's the story that goes with it.*" (Participant 4), Participant 6 shares a similar sentiment, as they view implementing AI in existing systems more objectively, where "…*that's one example of like taking something that already exists and overlaying a new technology on top of it.*". Participant 7 is also aware of its limitations and acknowledges that when using AI for information searching or development, "…*the information that's provided back is only as good as the question that's asked.*", further concreted with the view, "*for me personally, I think it's a great tool to accompany you on whatever piece of work it is that you're doing, but it's not leading the work. It's not directing that.*". Ultimately, technology is primarily used for the acceleration of access, structure, and service, whilst judgement, narratives, and relationships remain with a human-centred approach.

A continuous adjustment, and adaptation to the needs of employees was also prevalent. A difference was noted between roles where "*We do have our tech audience who love gamification in learning, we do have our salespeople who love the gamification from the point of view of leaderboards, you know, they like to be on top...*" (Participant 5), showing different responses to different mechanics, and making progress visible could keep attention and accountability high. In parallel, the type of language used was also adjusted for learners, as "*We have a lot of people in our business, who English is not their first language. And so we need to make sure that we're using language that simplifies things,*

without making it too directive…" (Participant 7). More broadly, there was a rejection of a single way to learn, "…*learning is not a one-shop-fits-all. Some people are visual learners, some people are auditory, some people like to learn on the job. So it's a mechanism that allows you to have, or to address all those ways that people learn differently.*" (Participant 7). Therefore, adaptation, in this view, surrounds ongoing tuning to keep different learners engaged.

4.4 Implementation of technologies

4.4.1 Feedback-driven configuration

During implementation, teething issues would emerge, linked to the uncertainty of compatibility when evaluating, which surrounds the everyday friction of dependencies, latency, or updates. As Participant 1 notes, "*...you get a few teething issues as you're trying to roll things out and things not quite working. We do testing and things, but sometimes things happen, but you gotta try and work out what went wrong there and how to work around it."*. Participant 2 added, "*...I think there's always kind of glitches, and you know things running slowly. You know sometimes one system will rely on another system, but that system hasn't updated yet, so just small things like that.*", who then looks deeper than the surface and asks, "*Are they having any challenges when they use the tools? If they are, is it not the right fit or is it, you know, user error, or are we not training people correctly?*". These responses to teething issues indicate that participants are not caught by surprise when teething issues do arise, due to it now becoming an expectation, with readily available thought processes toward action.

Fit and effectiveness were primarily tracked by whether tools and technologies were being used and why, with questions around "…*do people actually use the tools? Are they having any challenges when they use the tools? If they are, is it not the right fit or is it, you know, user error or are we not training people correctly?*" (Participant 1). This is supported by Participant 3, who mentions "…*the percentage of people that are actually using it. So, that's one of the things that, certainly that I'm looking at…*". Participant 3 also noted that adoption climbs across cycles in not only managerial uptake, but employee-level uptake also, especially when supplemented with adequate resources and trainings as it indicates that "…*they're starting to believe in it, and the managers are getting better at it*…". Participant

7 further mentioned "…*we would monitor it over a period of time and review the stats and the feedback and then in all probability look to do a review*." to better understand what works and what does not. Participant 5 also acknowledges the importance of monitoring uptake, but also looking at more cultural indicators of uptake also, where "*...rather than people saying it's on SharePoint, meaning that content is on SharePoint, they're saying it's on the learning management system and I think that that is a real achievement for my department.*". Overall, uptake metrics and qualitative feedback were used together to discern friction, target enablement, and maintain momentum.

Participants also positioned HR development and engagement-related technologies as enablers whose impacts tend to be noticed indirectly, such as smoother workflows, freed up time, conversation quality, and client or leader responses, as opposed to hard financial or numerical metrics. Impact was frequently gauged through what people noticed day to day. For some, the measurement was simple, to "…*compare how easy my life is now compared to what it was, yeah?*" (Participant 1). There was also observation toward fewer repeat mistakes and smoother use of tools, through "…*are we seeing the same mistakes made from people or are we seeing people not, you know, making mistakes when they're using technology*…" (Participant 2). Qualitative, informal shifts were also described, where, "…*you can hear it in conversations. You can see it in people and how they conduct themselves.*" (Participant 4). External signals from other departments mattered too, where, positive feedback is provided from clients to outward facing departments, "…*they won't thank me directly, the client, because they don't know who I am, but if they thank the head of the cinema team or the contact centres. I know that I've had a part in that, or my system's had a part in that*." (Participant 5). Others looked for faster cycle times as leaders self-serve more, impact would show, "…*if we saw that things were being dealt with quicker from an HR perspective because our leaders were feeling more empowered by it*." (Participant 7). Overall, observation tended to focus on ease, flow, and visible informal behaviours across teams.

Participants paired observation with ongoing feedback loops, as "…*feedback's always a powerful thing to find out whether it's really doing what it needs to be doing,*" (Participant 1). Much measurement remained experiential, as "…*it would mostly just be the feedback that we get from people*

and also what are we seeing." (Participant 2), supplemented by surveys embedded in appraisal and engagement cycles, where "…*we use it for appraisal system and for engaging with our staff through surveys*." (Participant 3), and "…*regular touch points where employees can provide their feedback, which can be used to understand whether the desired outcome is being worked towards.*" (Participant 6). Return on investment was acknowledged as difficult to tangibly pin down, "*Quantifiably when it comes to learning and development is very, very hard. We do have our staff survey which would show upticks and certain metrics around staff training. I think also we will be looking at anecdotal feedback and qualitative feedback when it comes to the improvement in that.*" (Participant 5), thereby utilising different avenues to track effectiveness and value of these platforms and systems, and to respond to areas of concern when they arise.

4.4.2 Driving sustained adoption of technology

Technology literacy was increasingly framed as an essential resource and support avenue when implementing technologies, and developing learning and engagement initiatives. Trainings and eLearnings provides employees with "…*the knowledge and tools that they need to do the job, it gives them confidence to do it.*" (Participant 1), covering compliance and systems so staff are able to familiarise themselves with tools and know how to use them properly, alongside workshops to "…*understand what the system does and doesn't do and how we roll it out and how do we train people.*" (Participant 1), for HR staff who undertake the rollout. Organisations are increasingly educating employees on when, where, and how to use AI or technologies, to "…*communicate with our staff where they can't use, or shouldn't use technology and AI and sharing client data or anything like that.*" (Participant 2). This is reflected with Participant 5 also, who states "*let's use the AI policy. So [COMPANY] is massively into its AI policy, super important for us.*". These policies and trainings prove to be important as "…*we as a business as fast as we are learning about it, we're also trying to embed that in with our staff as well.*" (Participant 2), reflecting the non-ergodicity of the technological environment. Thus, trainings and eLearnings aim to protect the organisation and its clients "…*from a*

risk and reputation perspective…" (Participant 2) by informing staff on when, where, and how to use emerging technologies, systems, and tools.

Engagement outcomes were linked to how data and reporting informed design and follow-through of implementation. Without adaptation and reinforcement throughout implementation processes, "…*the engagement drops, the impact drops. Nothing works. Yeah. And then you lose paper.*" (Participant 4). Participant 5 emphasised working on making topics engaging for employees, but acknowledged that some, especially those to do with policies regarding AI, are not as easy to make engaging and comprehensive simultaneously, thereby needing to approach engagement differently, "…*and it's not always possible cause some of the topics are really dry, but with other ones you can talk to the subject matter experts and just say right, let's break that down into bitesize chunks.*". Participant 5 remarks the ability to also track time spent on modules, allowing observant managers to ask "…*you just clicked through that course, didn't you?*", when completion times seemed implausible, alongside "…*some questions at the end to make sure that the learning is taken on board. And again, that's linked to leaderboards as well.*". Data on completions, time taken during modules, and quiz results underpinned quick tweaks while the predominant principle was clear, making progress tangible, and having frequent feedback loops to maintain interest.

Changing habits proves to be another consideration when implementation occurs, especially for teams migrating from manual input and sorting spreadsheets and emails, to formal systems, where Participant 2 states "…*in my team in HR we're very used to using a different system and its system being a really unsophisticated use of Excel spreadsheets, e-mail reminders, etcetera.*", further adding "*we've now had to make it kind of just a force of habit where we, you know, go on and we check this system and we make sure we're doing the correct tasks and make sure we're marking off the correct tasks in the system.*". Familiarity and training proved to mitigate this issue, shifting initial resistance into routine, with "*Even more training to the extent that this year we found that the managers actually have got used to the system. And that they've got used to it and it's really easy to use. They're not afraid*

of it, so there's more of them to do it." (Participant 3), who goes on to further solidify this point "*But like everything else, the more you can use something, the more familiar you are.*".

Over time, it proves beneficial to be mindful of the volume and timing of initiatives, not only in HR, but across other organisational functions also. When accidentally treated as an oversight, "*...we've had so many different systems from different parts of business, whether it's finance, or operations, or people in culture, health and safety, that people start to become change-fatigued.*" (Participant 3). This connects to a wider consideration of the organisation and what stages of technological development other departments are in, and demonstrates a need for change management at an organisational level to assist.

4.5 Organisational transformation

4.5.1 Systemic reunification

Centralising platforms indicates a shift away from regionalisation and toward a more unified approach to strategy and reconfiguration. Participant 1 noted, "*Since the last six months, we've been rolling out the new HR system, called Workday, which is a fairly well known global one and that's rolled out on a global scale, so all countries will be using it rather than certain countries in certain regions using different systems.*". Links were then further made between consolidation to workflow consistency, where "*…things like performance management process will help to be a lot more streamlined cause we're all on the one platform. So that should give a better consistent experience for everybody.*" (Participant 1). From the view of the end-user, everyday accessibility was a clear benefit, where having "*a platform that enables someone just to pick up their phone and do their appraisal on their phone is brilliant.*" (Participant 3), alongside considerations of, "*It's what does it connect to? What's the reporting mechanisms? Has it got a reporting suite or reporting functionality that's going to be useful for us? How well supported is it?*" (Participant 3). The compatibility of a new technology or tool in fitting the existing stack and remaining future proof within centralised structures was another consideration, where "*...any system needs IT or the tech part of the company to ensure that it will be able to be incorporated into the organisation's existing kind of system architecture.*" (Participant 6).

This is further supported with the acknowledgement that "*Oracle, Workday, SAP, etcetera, all allow integrations with each other. And so if you are able to open that loop and invite different, or enable, I should say, different technologies to be integrated, that makes you inherently more sustainable going forward.*" (Participant 6).

Adopted technologies and systems often needed to align with strategic goals, "*I mean, strategic goals, it has to align with those*." (Participant 1). When alignment between strategy and technology was not as obvious, others prioritised "…*a lens on everything we do now with a technology bent. I suppose so, I would just say it's becoming increasingly more important and more sort of front of mind for us in everything we do.*" (Participant 2). Integrated platforms supported pillars of attracting, developing, and retaining staff, through engagement platforms which are "…*able to pull data from these appraisal meetings that are online that helps us to identify what the learning and development needs are to help us with planning.*", thereby being able to address signals from employees (Participant 3). Participant 4 described a shift from "…*a lot of systems that I personally didn't think they were fit for purpose because they weren't leading to proper quality of discussions for people, and there wasn't real outcomes. It was more of a tick box process.*", towards systems which are able to facilitate real change within the organisation. Yet, proving the contributions to the overall business strategy still seemed difficult, where "*I'd love to be able to show that more effectively, and the return the investment because so often learning and development is seen as a black hole. And yeah, I would love to see to have that kind of attitude change a little bit.*" (Participant 5). Best practice in general, was attributed to assessing "…*those needs against a broader strategic direction, rather than just responding to what the business needs in the moment…*" (Participant 6).

4.5.2 The transformative impact of technology on professional roles and work tasks

Automation emerged as a primary aim for technology implementation in employee engagement and development. Demonstrated by Participant 1, who described the goal being to make tasks easier, with "…*less touch points for myself as well because it can get quite, you can get quite bogged down on administrative tasks as well with paperwork and things like that, so having that streamlined and*

automated, will save quite a bit of time as well.", further emphasised by Participant 2 who "…*got a process going on within the firm at the moment to what we're calling streamline and simplify all our processes.*", where shifts were being made from paper-based, manual tracking of onboarding and related tasks toward digitalised tracking. Participant 3 makes links to HR as a department in general, "*HR is more about automation. It's simplification automation.*", referring to the automation of offer letters, cloud-based shifts, online recruitment, potential use of an LMS, and automation of outputs from employee engagement surveys. Participant 7 frames the integration of chatbots as a way to automate the information and development searching capabilities for leaders, "…*so it's really about upskilling, developing them, and then not relying so much on my team directing and taking sort of the accountability for leaders leading people*.". Participant 6 goes on to explicitly mention that although there is a lot of discourse surrounding AI, "*...sort of below that are your more standard things like robotic process automation, sort of your typical kind of systems implementation. So your SAP's, Oracles, Workday, that type of thing.*", acknowledging that a majority of technological developments within the HR space in practice tend to be robotic process automations.

Efficiencies from streamlining and automation freed capacity for higher-value, or value-adding tasks, "*So, then I can spend more of my time with more value-added tasks rather than just filling out Excel spreadsheets.*" (Participant 1). Time that was saved shifted effort to strategy through actions such as "…*looking at our high talent people, making sure there's good progression available for them. We do different talent initiatives*." (Participant 2). Participant 6 noted a unique resource reallocation that arose from efficiencies, where online learning and development "…*reduces the time that trainers and things need to spend in the classroom. But on the other hand, it increases the time spent ensuring that everyone's actually undertaken their training independently.*", thereby requiring a balance of monitoring versus facilitation.

4.5.3 Future considerations of technological development

Future proofing was described as selecting and shaping systems that can evolve, scale, and in some areas, transform practice while remaining sustainable. There was a growing trend for prioritising

platforms and systems which can grow in stages and stay relevant. Rollouts of technologies and systems tended to be sequenced as opposed to all-in, choosing to release modules incrementally, "*So that's kind of like a progressive stage to build up the capability of it.*" (Participant 1). Technologies and systems were expected to "…*evolve and change, and we'll find better ways to do things, or you know, other bits of information that would be useful to add.*" (Participant 2), but were deemed sustainable due to this adaptability. This was further emphasised by Participant 3, "*But the systems that we're putting in, we believe are a little bit more sustainable, and able to be future-proofed*…" and Participant 4, "…*making sure that your systems are fit for purpose now but also they're primed already for some of those future things that you want to be doing is really, really key*.", with requirements such as diversity and pay-parity reporting. Development and engagement stacks were perceived as durable, where "…*a learning management system is vital for any global organisation nowadays. Will it continue to be used? Yes. Will it continue to develop? Yes. Learning management systems are constantly improving.*" (Participant 5). Avoiding lock-in was part of sustainability, where systems and platforms need to be able to be expanded upon, as if "*...you pick a particular ecosystem and that's completely closed and your entire organization only uses one piece of technology from one vendor, then it becomes really hard to replace those in the future if something bigger does come along.*" (Participant 6), and with major suites enabling integrations for different technologies, these can make the organisation "…*inherently more sustainable going forward.*" (Participant 6).

Future proofing also meant coping smoothly with growth and volume. There was an emphasis on "…*a stronger reliance on good systems that can allow that to happen*…"(Participant 1), as opposed to locally built tools for development initiatives which "…*can't cope with certain volumes of work or users and things like that. So, we are constantly growing as a business, so we need something that can grow with us*…" (Participant 1). Similarly, Participant 5 mentioned, "*We want to make sure that it was scalable and that our management population had a very clear visibility of what was being achieved*.". Thus, systems were chosen not only for the team of today, and their content loads, but proactively, for predictable expansion without rework.

Agility is constructed in forms of proactivity and reactivity. Agility through reactivity tends to be prevalent through project-based or customer-based needs which may need immediate attention, such as "…*if there's urgent shipments or there's issues that we need to let the customer know. You know that having the ability to be able to do that from wherever and whenever, we've got the access on our work mobile phones*" (Participant 1), or within Participant 5's industry, where departments will need to learn about bug fixes or altered product offerings as soon as they happen, where another team leader would mention that "…*we need this module out as soon as possible, and she would have already created the video and such. She will send me the details and then I will create a module and all of this can happen within hours.*". Participant 7 further builds on immediate agility through "*It's been able to really live our best experience for customers, been able to serve better, respond quicker, find things quicker.*". In terms of proactive agility, Participant 3 senses a shift in demand in other industries, where "*The agility question in a business like ours is not the business being agile, it's the workforce being mobile.*", therefore actively working toward having a more mobile workforce in anticipation for jobs in various industries and locations, expanded on by Participant 4 who states "…*the resourcing tool from my team will help with making sure we've got the right people in the right place at the right time.*".

Future proofing also related to continuous and tailorable training, where there is value in being "…*able to create our own training programmes within that, which is helpful, so that's quite customisable.*" (Participant 1), using platforms which are "…*quite helpful to get people up to speed quickly, and gives them that confidence early as well.*" (Participant 1). Technologies and systems facilitate the curation or assignment of learning pathways where "*People can go in and either create their own learning journeys or you can go and create one for them.*" (Participant 2), with more compulsory modules being "…*driven down from global…*" (Participant 2), and periodic updates being housed within the intranet. Flexibility also assisted in filling downtime productively, "…*to keep people busy too. Like, if there's any down time it should be, you're not sort of sitting on your phone. You know these things you could be learning.*" (Participant 2). Participant 6 also tied tailorability to performance and capacity, which included "…*enhancing the capabilities of existing workforce or employees that*

form part of the current workforce." to lift productivity. Thus, continuous and tailorable learning positioned technology as a configurable layer that personalises pace, sequence, and depth, while anchoring development in real work needs and timing. Proactive aims were centred on experience and growth, where "…*we want to be an employer of choice.*" (Participant 1). Upskilling the workforce was core, so they could "…*be as proficient and able as they could.*", regardless of their learning needs (Participant 2). These were linked, with happiness, performance, progression, and retention being perceived as mutually reinforcing, as "…*if they're happy, they will be high-performing, and you'll spend less time doing recruitment because more of them will stay. And the longer they stay, the better at the job they get. It's a no-brainer.*" (Participant 3).

Data was used to validate needs, shift mindsets, and reduce bias. Appraisal data "…*helps us to identify what the learning and development needs are to help us with planning*." (Participant 3), further highlighting "*...business units that we need to pay more attention to...*" (Participant 3). Data validation put emphasis on volume and methodology for buy-in, with a wider database of around 300 companies within New Zealand for comparability "…*it really gives some really good, clear indications to where we're at*." (Participant 3). From technology-enabled data validation, there has also been an observable shift from opinion to evidence in pay and development, where decisions should be based on data, and if not, "*It's not solid, it's open to bias, right? It becomes a manager's view of something when it should be about what they've actually done*." (Participant 4). Thus, validated data facilitated by technology enhanced coaching, fairness, and targeted action. With an enhanced system of data validation moving forward, this may also indicate a better ability to sense opportunities and challenges moving forward.

An appetite was expressed toward future systems which could anticipate needs, with Participant 3 looking toward "…*technology to start proactively telling me what I should be looking at. Rather than me asking it what I should be looking at. It should be actually gathering information.*". There was also an interest in systems or technologies which support change adoption as scale, "*Kiwis hate change like we are terrible with change, right? And I think change management and behavioural changes. I don't think that's a system, but if there was a technology that supported that or helped with that.*" (Participant

4). Vendors are also increasing the diagnostic abilities of AI overlays for different systems, increasing interest within these as they "… *give you feedback on how you use Microsoft Excel, how you use Copilot, how you use various other pieces of software and will then say 'I notice you can't do pivot tables. Do you want to a course on pivot tables?'*" (Participant 5), potentially transforming the way learning and development needs are surfaced.

CHAPTER FIVE: DISCUSSION

This chapter discusses the findings of the study by contrasting and synthesising them against the literature with the theoretical lenses of the TAM by Davis (1986, 1989) and the dynamic capabilities framework (Teece et al., 1997; Teece 2007). The research questions are explicitly addressed in the discussion.

5.1 How do HR professionals in MNEs operating in New Zealand perceive and respond to the challenges and opportunities of the non-ergodic new normal environment, particularly in relation to using technology as a strategic asset toward employee development and engagement?

Within the non-ergodic new normal environment, participants perceived opportunities regarding technological development, accessibility, and instrumental gains. HR professionals employed in MNEs operating in New Zealand characterise the non-ergodic new normal environment as a volatile yet opportunity-laden context in which digital technologies have become more infrastructural. Participants emphasised the accelerating pace of technological change, and the expectation that current solutions will evolve rapidly, with Participant 7 noting that currently technologies may not be the same in five years' time, and Participant 3 noting that technology is now fundamental to every business. Core platforms in development and engagement, such as Human Resources Information Systems (HRIS) and Learning and Management Systems (LMS), are treated as dynamic and competitive domains in which vendors are constantly improving and stacks are periodically reconsidered, as mentioned by Participant 4 and Participant 5. This aligns with the literature which describes a discontinuous, opportunity-laden non-ergodic new normal environment, and the strategic role digitalisation can hold (Ahlstrom et al., 2020; Hitt et al., 2021a, 2021b; Minbaeva & Navrbjerg, 2023; Sun et al., 2024). Cloud migration emerged as a foundational move which removes physical bottlenecks and supports continuity, enabling access anywhere, and at any time, as Participant 1 and Participant 2 outlined. In parallel, AI was widely framed as an anticipatory and exploratory space, as a "…*supercharged Google*…" (Participant 1), with Participant 3 and Participant 5 also utilising it for searching and sense-making, with active experimentation focused on integrating it safely, getting the most out of it, and extending its use to

learning and development. The findings also further solidify the literatures' survey of HR technology functions by positioning these platforms as infrastructural as opposed to add-ons (Goi et al., 2023; Ruiz et al., 2024; Stone et al., 2024).

Perceived opportunities have strong ties to accessibility, where participants prioritised flexible use across devices and locations to reach dispersed and field or trades-based workforces, as illustrated by Participant 1, Participant 3, and Participant 4. Mobile-enabled appraisals and feedback cycles were designed for on-site completion, reflecting the realities of workers who are out of office, and often rely on phones or tablets during breaks or after shifts (Participant 3; Participant 4). As Participant 1, Participant 2, and Participant 7 noted, access to knowledge was similarly re-engineered, where chatbots and consolidated repositories reduced duplication, provided a consistent source of information, and freed HR capability by enabling employees and managers to self-serve routine information. Connectivity tools, such as video and collaboration suites supported geographically distributed teams and facilitated culture-building broadcasts and townhalls, even as leaders adapted communication styles to compensate for reduced non-verbal cues (Participant 1; Participant 2; Participant 7). Accessibility was also framed inclusively across role types, generations, and neurodiversity, with flexible pacing, modality control such as playback speed, and on-demand practice intended to widen engagement and reduce barriers to learning (Participant 4; Participant 5; Participant 7). The findings operationalise inclusion, the ability to use platforms and systems across various devices, mobile appraisals, and neurodiversity-aware pacing, which the literature flagged conceptually, but did not detail at the workflow level (Caligiuri et al., 2020; Safadi, 2024; Sun et al., 2024).

Instrumental gains centre on data and reporting. Participants described improvements in the timeliness and completeness of people-based data used for pathways, remuneration modelling, and strategic initiatives. As Participant 3 notes, configurable dashboards and analyses replaced manual processing, enabling bespoke reporting by unit or cohort, supporting ongoing diagnostics as opposed to one-off assessments. For many, compliance reporting was a key and pragmatic benefit, where learning systems provided complete visibility that could be demonstrated quickly and easily to auditors or

regulatory bodies (Participant 5). Participant 4 acknowledged that managers benefitted from an expanded scope of analytics that were perceived to improve business decisions about teams. Collectively, these developments shifted reporting from static documents to living, multi-level views capable of informing course corrections and resourcing conversations. Participants shifting from static reports to configurable, multi-level dashboards and compliance visibility advances the literatures' arguments about the strategic value of analytics, with auditable, governance-ready uses (Grimpe et al., 2023; Gupta et al., 2024; Stone et al., 2024).

In contrast to these opportunities, participants articulated a cluster of challenges. Macro-economic pressure and cost discipline reoriented attention from nice-to-have innovation toward viability (Participant 1, Participant 2, Participant 4). As Participant 6 illustrated, New Zealand's scale, economics, and market structure were repeatedly cited as barriers to high capital expenditure or scale-dependent technologies such as VR and AR facilitated training, and as factors contributing toward slow local learning and development innovation relative to larger markets. Cultural preferences for human contact in sensitive HR matters persisted, shaping choices to retain human touchpoints alongside self-service (Participant 1; Participant 2). Concerns surrounding AI trustworthiness constrained deep integration, where AI tools were useful for providing a structure and guidelines, but are not at a stage to be fully relied on (Participant 1), especially where users may miss methodological errors or lack existing knowledge in the area (Participant 4). Post-pandemic gaps in frontline leadership and people skills reinforced a human-centric foundation in which technology builds upon, as opposed to substitutes for, managerial judgement and relationship building (Participant 3; Participant 5; Participant 7). Finally, participants favoured practical deliverability over novelty, illustrated by Participant 5 who declined upsells that added complexity without clear value, and Participant 6 who openly questioned solutions that do not match the scale of organisations within the New Zealand context. These findings align with the literature, where New Zealand's small market, access to capital, and talent scarcity appear here as selection and scope boundaries, whilst preference of human contact and AI-trust concerns reinforce the

need for human-centred guardrails (EY, 2019; Harney & Gubbins, 2024; New Zealand Productivity Commission, 2020, 2021; The Treasury, 2022, 2024)

In practice, responses were disciplined and incremental. Organisations modernised and digitalised foundations to guarantee reach and continuity through expanded self-service and chatbots to reduce duplicated effort and concentrate HR time on coaching, institutionalised analytics, and configurable dashboards to produce multi-level visibility for governance and improvement. AI adoption was deliberately bounded, used to accelerate drafting, search, and practice while retaining the human review for tone and texture, and in some cases, switching off features that over-polish and obscure genuine managerial capability. Design choices explicitly accounted for role context, generational preferences, and neurodiversity. Throughout, portfolio choices reflected New Zealand specific constraints, prioritising supportable functionality that can be operated with todays devices and governance rather than speculative features. This is the practice-level counterpart of the literature's strategic rhetoric, of modernising foundations, freeing HR staff for value-added tasks, maintaining human touchpoints, and turning off over-refining AI features, precisely the kind of context-sensitive operationalism the literature often calls for but rarely evidences (Beletskiy & Fey, 2021; Edwards et al., 2022).

The findings extend the TAM's usual end-user focus by surfacing external conditions that shape managerial TAM assessments in an MNE context. The literature notes TAM's predictive utility and its limits when organisational and institutional factors are underplayed (Davis, 1986, 1989; Hamouche et al., 2025; N. Malik et al., 2022; Nasar & Ray, 2024). Economic constraints, New Zealand's scale economics, governance and compliance obligations, and cultural preferences for human contact act as powerful boundary conditions that tilt perceived usefulness toward auditability, visibility, and duplication-reduction; And perceived ease of use toward cloud integration, mobile access, and self-service (Caligiuri et al., 2020; Harney & Gubbins, 2024; New Zealand Productivity Commission, 2020; The Treasury, 2022, 2024). Thus, novel contributions here include: Maintaining human touchpoints for sensitive HR matters despite chatbot deployment, operationalising ease as mobile accessibility for

trades and field staff, and explicitly weighing local implementation capacity when global tools are mandated, which are granular dynamics rarely visible in survey-based TAM applications, which is argued to be under-examined within the literature (Davis, 1986, 1989; Hamouche et al., 2025; Lukaszewski & Stone, 2024; N. Malik et al., 2022; Nasar & Ray, 2024).

While some literature calls for stronger integration of dynamic capabilities, they often stop at broad applications of agility or resilience without tracing capability processes (Autsadee et al., 2024; Deepa et al., 2024; Gupta et al., 2024). The findings align with the dynamic capability of sensing, with vigilant scanning of vendor roadmaps, experimentation with AI to scope affordances, conversion of diffused engagement signals into legible dashboards, and crucially, widening the sensing aperture by engaging and developing hard-to-reach cohorts into data-producing interactions via mobile platforms or self-service (A. Malik et al., 2021, 2022; Beletskiy & Fey, 2021; Grimpe et al., 2023; Teece et al., 1997; Teece, 2007). This form of sensing answers the literatures' call to trace capability processes beyond generic agility (A. Malik et al., 2021, 2022; Del Val Núñez et al., 2024; Grimpe et al., 2023; Teece et al., 1997; Teece, 2007). Two sensing-related insights that are overlooked in the literature emerges clearly in the findings: Compliance reporting is a low-effort, early win that both surfaces where completion is lagging, improving sensing capabilities, and demonstrates compliance to stakeholders, thus enhancing legitimacy; And inclusive design that broadens participation while improving signal quality (Del Val Núñez et al., 2024; Hao et al., 2025).

5.2 How do HR professionals evaluate and implement HR technologies, and to what extent do their decisions shape the development of sustained competitive advantage for the firm?

HR professionals evaluate HR technologies within governance arrangements that range from globally mandated stacks to locally argued business case processes. In several firms, decision and evaluation processes sit with group-level bodies that conduct testing and risk analysis, and then cascade approved tools to regions, narrowing the scope for local experimentation (Participant 1; Participant 2). As mentioned by Participant 3, elsewhere, proposals originate in HR, but must clear senior-level, and IT clearance, where costs, risks, and alignment are considered. These institutional structures also shape

information flows, where many participants learn about emerging tools and technologies via formal channels and specialist teams that scan trends and vendors, although some supplement this with their own market research and professional networks. This results in an evaluation environment that favours standardisation, security, and operability, while still allowing practitioner curiosity to surface possibilities for development and engagement use-cases. The centralisation of testing and risk analysis, and subsequent cascade to regions reflect the global integration to local responsiveness tensions flagged within the literature for MNEs, with information flows influenced by specialist scanning and compliance regimes (Caligiuri et al., 2020; Mayrhofer et al., 2024; N. Malik et al., 2022).

Within those structures, the dominant evaluative logic is problem-first and needs-based. Technology consideration tends to be triggered by visible pain points, such as double handling, inconsistent information, slow cycles, or compliance gaps, and are judged on whether they remove friction, reduce risk, and improve fit to organisational routines (Participant 2; Participant 4; Participant 5). Cost-benefit discipline is outlined, where Participant 4 and Participant 5 describe ceasing use with under-performing vendors, resisting feature creep, and concentrating spend on platforms that deliver concrete efficiencies or regulatory visibility. Cybersecurity and reputational risk are non-negotiable thresholds, with formal IT sign-off, and a preference for proven use-bases tempering any appetite for novelty or "bandwagon" adoption (Participant 5; Participant 6; Participant 7). At the same time, brand integration and data interoperability are treated as positive criteria, with systems that can be skinned to feel native, and draw upon HRIS data to personalise pathways being viewed as more trustworthy, relevant, and administratively efficient (Participant 5). Evidence of resisting feature creep, leaving under-performing vendors, and prioritising interoperability and brand integration gives concrete criteria to the constructs of fit and risk discussed within the literature (Goi et al., 2023; Ruiz et al., 2024; Stone et al., 2024).

User-centred criteria then refines selection. Ease of use, experienced as intuitive user interfaces and user experiences, minimal steps, dependable performance, and straightforward access, dominate personal evaluations of value across participants. Participant 1 and Participant 4 link poor usability to

workarounds, safety, risk, and disengagement, especially for field or trades staff who are time-constrained and mobile. Efficiency is another key source of value, where tools and technologies must make tasks faster and simpler for managers and employees across contexts, otherwise adoption stalls and non-compliance rises (Participant 1; Participant 2; Participant 4). In this frame, AI is primarily an assistive layer for search, drafting, and structure, participants emphasise human oversight and reject substitution where judgement, tone, and contextual understanding are key (Participant 1; Participant 3; Participant 4; Participant 7). Design choices also reflect individualised learning preferences, language backgrounds, and motivational enablers such as leaderboards for sales or gamification for technology audiences, reinforcing the emphasis on fit rather than novelty (Participant 5; Participant 7). Participants linking poor UX directly to risk, disengagement, and non-compliance turns perceived ease of use into measurable adoption risk, which is a sharper managerial interpretation than typical end-user TAM surveys within the literature (Davis, 1986, 1989; Deepa et al., 2024; Nasar & Ray, 2024). Thus, adoption risk emerged as a user experience and perceived ease of use construct tied to safety and compliance, not just convenience, thereby extending TAM's practical risk framing (Davis, 1986, 1989; Nasar & Ray, 2024).

Implementation is executed as iterative, expectation-managed change. As illustrated by Participant 1 and Participant 2, teams anticipate teething issues and treat early mishaps as signals to refine training, diagnose fit, or fix integrations rather than as reasons to abandon systems. Adoption is tracked through a mix of uptake metrics and qualitative indications, with periodic reviews to identify friction points and recalibrate enablers (Participant 1; Participant 2; Participant 3; Participant 4; Participant 7). Feedback loops, such as embedded surveys, comments, and experiential observations are integral to this monitoring, given the acknowledged difficulty of isolating hard returns on investment in learning and engagement (Participant 2; Participant 3; Participant 5; Participant 6). These loops help sustain momentum beyond launch, and ensure that measured value reflects everyday experience as opposed to one-off rollouts. The tracking of uptake and qualitative signals, recalibrating enablers of

technology, and sustaining momentum post-launch supplies the process detail that was found missing within various empirical studies within the literature (A. Malik et al., 2021, 2022; Grimpe et al., 2023).

Capability building is deliberately paired with rollout. Participants invest in technology literacy, compliance-oriented policies, particularly around AI, and practical eLearnings that give staff the knowledge and tools to use systems correctly and confidently (Participant 1; Participant 2; Participant 5). Participant 3 and Participant 5 describe implementation tactics which include shaping engagement content into bite-size modules, using completion time and quizzes to deter click-through behaviour, and re-training until new routines replace spreadsheet and email habits. Change-fatigue is actively considered across the organisation to avoid fatigue where multiple functions are being digitalised in parallel (Participant 3). Over time, centralisation on global platforms and attention to integrations and reporting suites are used to standardise workflows, improve experience consistency, and future-proof against growth and architectural change (Participant l; Participant 3; Participant 6). Pairing adoption with complementary assets such as training and policies is exactly the bundling Teece (2007) argues as underpinning successful seizing and later transforming.

In these findings, the TAM operates as the micro-foundation of seizing, where manager and end-user perceptions of usefulness, and ease of use shape favourable attitudes and behavioural intentions, which, at scale, lower perceived adoption risk and unlock commitment to a specific solution (Davis, 1986, 1989; Hamouche et al., 2025). In the findings, these attitudes are expressed in highly practical terms, such as increased efficiencies, mobile accessibility, ease of deployment, and are reinforced by early usage signals such as uptake, less instances of error, and qualitative feedback, thereby creating credible internal evidence for investment reports and governance sign-off, building the empirical bridge toward literature (A. Malik et al., 2022; Davis, 1986, 1989; Hamouche et al., 2025). In dynamic capabilities terms, this is the point at which dispersed, TAM-driven intentions solidify into seizing moves through resource allocation, vendor selection, security accreditation, and portfolio choices privileging interoperability and brand-integrated experiences over novelty of features (A. Malik et al., 2022; Teece et al., 1997; Teece, 2007). Thus, TAM attitudes and behaviours do not sit adjacent

to strategy, they feed into seizing by converting perceived value into the organisational willingness to commit capital investment, create policies, and stage rollouts that are proportionate to contextual constraints.

Once commitments are made, the same TAM pathways continue to matter, as high perceived ease of use, and perceived usefulness sustain early adoption, generates stable usage data, and keeps feedback loops active, which are conditions under which seizing can evolve into transforming (Davis, 1986, 1989; Hamouche et al., 2025). Amongst participants, seizing decisions are deliberately bundled with complementary assets, such as training and literacy programmes, AI policies, bite-size content, leaderboards where appropriate, and usage and completion analytics so that positive user attitudes are repeatedly reinvested into practice (Teece, 2007). This bundling enables the reconfiguration that defines transforming, as workflows are redesigned through mobile access and learning adaptation, shifts in roles through managers and staff being able to access knowledge autonomously and allowing HR to focus on more value-adding tasks, and restructuring through global suites with open integrations, staged module releases, and audit ready reporting. Because the platforms and systems selected during seizing are likely to be interoperable and branded to feel native, transforming is not a one-off change, but an iterative routinisation, where usage evidence informs tweaks to UI, policy refinements, and training cadence, dashboards can turn sentiment into comparable indicators that travel in executive forms, and playbooks encode the new way of working across cycles (Grimpe et al., 2023; Goi et al., 2023; Teece et al., 1997; Teece, 2007). Keeping perceived ease of use and perceived usefulness high through enabling, configuration, and interoperability sustains usage data and feedback, allowing iterative reconfiguration of workflows and roles, which is the transforming phase often missing in prior work (Grimpe et al., 2023; Teece, 2007).

These evaluation and implementation choices cumulatively reconfigure HR work toward automation and simplification, freeing capacity for coaching, talent progression, and targeted interventions. Participants describe programmes to streamline and digitalise onboarding, performance cycles, and survey outputs, whereas chatbots and self-service knowledge push routine queries to the

edge, enabling leaders to act without HR intermediation (Participant 1; Participant 2; Participant 3; Participant 7). Participant 3, Participant 4, and Participant 5 describe that data and reporting through dashboards, benchmarking against industry and region, and audit-ready reporting, converts dispersed sentiment and performance signals into evidence that travels across executive forums, improving governance conversations and reducing compliance exposure. The emphasis on mobile accessibility and inclusive design increases reach into previously hard-to-engage cohorts, broadening feedback loops and elevating the visibility of local risks and opportunities (Participant 3; Participant 4). Thus, the findings translate technology choices into firm-specific routines, which are difficult to copy as they rest on architecture, governance, content, and culture, not a single asset or product (Beletskiy & Fey, 2021; Edwards et al., 2022; Ferreira et al., 2022; Teece et al., 1997; Teece, 2007).

Over time, this cascade of TAM to seizing to transforming renews capabilities as opposed to merely digitalising legacy routines. Recurrent, high-quality use enabled by perceived ease of use and perceived usefulness supplies the longitudinal data that underpins continuous learning, for example, shifting from manual collation to benchmarked, audit-ready views, replacing spreadsheet and email habits with systemised flows, reallocating HR effort from administration to talent progression and coaching, thereby institutionalising new coordination mechanisms and decision rights (A. Malik et al., 2021; Grimpe et al., 2023). Crucially, transforming remains conditional on the persistence of the TAM antecedents that started the process; If unaddressed glitches accumulate or perceived usefulness wanes, adoption frays and routines regress. Conversely, when organisations keep ease of use and experienced usefulness high, through continuous enabling, configuration, and interoperable architecture, the predicted behaviours of the TAM reliably drive seizing, and the outputs of seizing provide the foundation for ongoing transformation under non-ergodic new normal conditions (Davis, 1986, 1989; Teece et al., 1997; Teece, 2007). Further, the cascade produces longitudinal data, standardised flows, and redeployment of HR effort to higher-value work, evidencing capability renewal under non-ergodic new normal environment conditions (A. Malik et al., 2021; Ahlstrom et al., 2020; Teece, 2007).

Ultimately, by converting engagement and development into data-rich, inclusive, and mobile accessible routines, firms build hard to imitate operating patterns that compound over time: Digitally enabled onboarding and personalised learning shorten time taken to learn, and widen internal mobility (Deepa et al., 2024; Del Val Núñez et al., 2024; Duan et al., 2024); Role aware self-service knowledge and development reduces administrative inefficiency and shifts managerial attention toward coaching and redeployment where demand from customers or projects spike (Contreras et al., 2024; Ruiz et al., 2024); And continuous feedback and performance analytics surface links between emerging skill gaps and customer needs early enough to adjust content, staffing, and service design at pace (A. Malik et al., 2023; Gupta et al., 2024; Harney & Gubbins, 2024). Audit-ready reporting and policy guardrails lower compliance and reputational risk, protecting the institutional "license to operate" needed to scale change (Duan et al., 2024; Stone et al., 2024), while branded, interoperable platforms concentrate personnel data into a single source of truth that travels across units and accelerates decision speed (Goi et al., 2023; N. Malik et al., 2022). In dynamic capabilities terms, these adoption behaviours and routines enable faster seizing and ongoing transforming, through the reconfiguration of workflows, roles, and resource deployment that lets organisations reconfigure workforces with less cost and downtime, and to respond to customer and project needs faster and more precisely (A. Malik et al., 2021; Grimpe et al., 2023; Teece et al., 1997; Teece, 2007). Because these routines are reinforced by usage data, continuous enablement, and context-fit design, they accumulate into durable, path-dependent advantages in talent pipelines, retention, service quality, and innovation responsiveness, even as technologies and customer expectations keep shifting (Beletskiy & Fey, 2021; Caligiuri et al., 2020; Edwards et al., 2022; Ferreira et al., 2022; Sun et al., 2024).

CHAPTER SIX: CONCLUSION

This research examined how MNEs operating in New Zealand perceive and respond to the non-ergodic new normal environment and how HR Professionals evaluate and implement HR technologies as strategic assets for employee development and engagement. The analysis intentionally bridged micro- and macro-levels with the development of the conceptual framework which is an integration of Davis' (1986, 1989) Technology Acceptance Model, treating perceived usefulness and perceived ease of use as managerial cognitions, with the dynamic capabilities framework by Teece et al. (1997), which examines how organisations sense, seize, and transform under conditions of discontinuous change and radical uncertainty. This combined lens shifts beyond tool functionality to questions of strategic fit, routinisation, and performance relevance within the context of New Zealand.

Methodologically, the research adopts a qualitative, phenomenological design centred on semi-structured interviews with HR managers and above, and HR-aligned consultants in MNEs operating in New Zealand. This design leverages lived experiences and sensemaking, consistent with a relativist ontology and constructivist epistemology, and supports an inductive thematic analysis of the data (Braun & Clarke, 2006, 2019; Creswell & Poth, 2018; Gray, 2022; Grix, 2002; Roulston & Choi, 2018; Taylor et al., 2015). The resulting themes are thus interpreted as situated managerial understandings as opposed to universal laws, allowing for an indication toward how New Zealand's small-market dynamics, talent constraints, and global-local integration pressures condition technology choices, implementation pathways, and outcomes (New Zealand Productivity Commission, 2021; The Treasury, 2024). Importantly, the research utilises the HR professionals' perspectives within MNE settings as a unit of analysis, allowing for the synthesis of cross-organisational patterns in managerial cognition and practice.

HR professionals in MNEs operating in New Zealand portray the non-ergodic new normal environment as volatile yet opportunity rich. Digital HR infrastructure is treated as foundational as opposed to discretionary, with cloud migration removing physical bottlenecks and enabling anywhere, anytime access. AI is adopted as a bounded, assisted layer for search, drafting, and sense-making, kept

under human judgement and policy guardrails. Accessibility is engineered into workflows, with mobile appraisals for dispersed and field staff, self-service knowledge to cut duplication, and inclusive features to widen engagement. Instrumental gains centre on configurable dashboards and audit-ready reporting that shift decisions from static snapshots to near real-time visibility. Constraints exist, regarding New Zealand's scale and capital limits, cultural preference for human contact, and AI trust concerns, these constraints hinder ambition and preserve human touchpoints. Responses tend to be disciplined and incremental, focusing on modernising foundations, expanding self-service, institutionalising dashboards, and disabling over-refining features

Theoretically, context reshapes TAM, where perceived usefulness leans toward auditability and reduction of errors, ease of use leans toward cloud integration, mobile access, and self-service. Dynamic capability sensing appears in vendor scanning, low-effort compliance, and inclusive designs converting hard-to-reach cohorts into data-producing participants, which fuels later seizing and transforming (Davis, 1986, 1989; Teece et al., 1997; Teece, 2007)

Evaluation sits within MNE governance from globally mandated stacks to locally argued business cases, funnelling proposals through security, risk, interoperability, and fit. The dominant logic tends to be pragmatic, by removing double handling, closing compliance gaps, streamlining routines, resisting feature creep, and discontinuing weak vendors. There is also a preference toward interoperable, brand-integrated experiences. Ease of use is treated as adoption-risk and safety, not only convenience, with intuitive UX, minimal steps, and dependable mobile performance for time-pressed field and trades staff. AI remains assistive under human vigilance, and enablers of motivation are applied contextually. Implementation is iterative and expectation-managed, with anticipation of teething issues, tracking uptake and qualitative signals, recycling feedback into training, configuration, and integration fixes, staged enabling, and pairing rollouts with complementary assets.

These choices convert technologies into firm-specific, hard to imitate routines, thereby accelerating decisions, freeing HR for coaching, widening participation, reducing exposure, and allowing for more value-added tasks. Conceptually, TAM connects to the micro-foundation of seizing,

while interoperable platforms plus complementary assets enable transforming, sustaining renewal and advantage under non-ergodic new normal conditions (A. Malik et al., 2022; Davis, 1986, 1989; Goi et al., 2023; Teece, 2007).

6.1 Contributions

This research contributes to the evolving body of knowledge at the intersection of digital HRM, organisational strategy, and behavioural technology adoption. While both the TAM by Davis (1986, 1989) and dynamic capabilities framework by Teece et al. (1997) are widely cited in their respective domains, their integration within human resource management remains limited. This study addresses that gap by developing a multi-level analytical lens connecting individual perceptions of technology (TAM) with strategic processes of sensing, seizing, and transforming (dynamic capabilities), thus offering a more holistic understanding of how HR technologies succeed or fail within complex contexts such as the non-ergodic new normal environment.

Further, this research contributes to existing literature by bringing empirical depth to a field dominated by conceptual and review-based literature, or in terms of the TAM, bringing a qualitative study to a field saturated with quantitative studies (Autsadee et al., 2024; Dastane et al., 2024). By focusing on real-world practices of MNEs operating in New Zealand, a relatively overlooked context, this study provides grounded insights into how digital HR initiatives are evaluated, implemented, and adapted in response to dynamic institutional, technological, and economic conditions. This directly addresses calls for more context-specific, empirical, and cross-industry research which examines strategic HRM responses to the non-ergodic new normal (Ahlstrom et al., 2020; Hitt et al., 2021b; Salvadorinho et al., 2024).

For businesses, particularly MNEs, this research delivers insights into how technology can be effectively leveraged as a strategic asset for employee development and engagement. In an environment where agility, resilience, and responsiveness are essential for survival, organisations must go beyond adopting and perceiving technology solely for operational efficiencies. This study helps to bring clarity and awareness to how leaders, such as HR professionals, evaluate technological options not only in

terms of perceived usefulness and ease of use (TAM), but also for their alignment with long-term organisational strategy, cultural fit, and transformative potential (Dynamic capabilities).

By exploring grounded realities, challenges, and strategic considerations of MNEs operating in New Zealand, this research provides valuable guidance on best practices, common pitfalls, and organisational conditions which influence success in digital HR transformation. This includes insights into the selection of technology, change management, workforce readiness, and the role of strategic leadership in aligning HR technologies with broader business goals. These findings may help organisations and senior managers design more thorough and future-proof approaches to HR technology adoption in the non-ergodic new normal environment.

Stakeholders of the wider community benefitting from this research include policy makers, HR professionals, and technology developers. By providing a focus on how MNEs operate within and adapt to the New Zealand context, the study may support local policy development and workforce planning initiatives. Policy makers benefit from better understanding which technologies are being used, and how they are considered and applied in non-ergodic new normal environments, affecting government investments in technological innovations. HR professionals may garner ideas from the awareness of the application of, and consideration behind technology in MNEs within the contemporary environment, providing practical insights.

6.2 Limitations

Securing access to organisations and individual HR professionals proved challenging during the data-gathering stage. Organisational gatekeeping, confidentiality concerns surrounding HR practices, and competing managerial priorities resulted in limited opportunities to recruit participants and schedule interviews. These constraints extended recruitment timelines and may have introduced non-response bias, as organisations with greater openness to external inquiry or with more resources HR functions were more likely to participate. Although professional networks and repeated contact attempts were used to facilitate entry, these pragmatic steps cannot fully eliminate the risk that the resulting dataset reflects the perspectives of more accessible or engagement-oriented organisations.

The evaluative and interpretive approach of qualitative inquiry entails an inherent risk of subjectivity in data interpretation and theme construction. Researcher positionality, prior assumptions and interactional dynamics in interviews may have shaped both what was said and how it was understood. Though actions were taken to address this as described in Section 3.6 of this thesis, it remains an important consideration.

6.3 Future Research Avenues

This research served as an exploratory study to examine how HR professionals in MNEs operating in New Zealand address technology adoption and acceptance, and how these choices operate as strategic capabilities and assets. The research was grounded in two theoretical lenses, the technology acceptance model and dynamic capabilities, which together informed the understanding of issues regarding adoption and acceptance in MNEs operating in non-ergodic new normal environments.

Findings show perceived usefulness skews toward auditability and minimisation of error, and ease of use leans toward cloud or mobile accessibility, with adoption risk tied to safety and compliance, especially for dispersed trades and field or trade staff (Davis, 1986, 1989). The findings also evidence dynamic capabilities: Sensing via vendor scanning, AI experimentation, and instrumentation of engagement signals; seizing via pragmatic or needs-based business cases, bundling of enablers, and interoperable platform choices; and transforming via routinised workflow or role reconfiguration and audit-ready reporting that legitimises change (Teece et al., 1997; Teece, 2007). Therefore, future research may consider investigating the following questions:

RQ1a. "*What user experience and mobile accessibility thresholds reduce adoption risk and non-compliance events in field settings?*".

RQ1b. "*How do gains in auditability mediate the link between perceived usefulness, perceived ease of use, and behavioural intention in regulated HR processes?*".

RQ1c. "*How do sensing, seizing, and transforming at individual, team, and firm levels convert improvements in auditability and mobile accessibility into sustained HR capability renewal and reduced compliance risk?*".

Findings also showed deliberate human-centric use, disabling over-polishing features to preserve managerial judgement. Therefore, the following questions may be addressed in future research:

RQ2a. "*When does disabling generative AI features improve learning transfer, judgement quality, and trust relative to full-assist modes?*".

RQ2b. "*Which AI policy or technology literacy bundles best sustain perceived usefulness and perceived ease of use while mitigating hallucination and privacy risks?*".

RQ2c. "*Which transforming routines reconfigure HR workflows to embed generative AI under clear risk and compliance thresholds?*".

REFERENCE LIST

Ahlstrom, D., Arregle, J., Hitt, M. A., Qian, G., Ma, X., & Faems, D. (2020). Managing technological, sociopolitical, and institutional change in the new normal. *Journal of Management Studies*, *57*(3), 411–437. https://doi.org/10.1111/joms.12569

Alexander, A. P. (2019). Lincoln and Guba's quality criteria for trustworthiness. *IDC International Journal August–October 2019*, *6*(4). https://idcinternationaljournal.com/0ct-2019/Article_6_manuscript_IDC_August_October_2019_Dr_Annie_full.pdf

Asokan, D. R., Huq, F. A., Smith, C. M., & Stevenson, M. (2022). Socially responsible operations in the Industry 4.0 era: post-COVID-19 technology adoption and perspectives on future research. *International Journal of Operations & Production Management*, *42*(13), 185–217. https://doi.org/10.1108/ijopm-01-2022-0069

Auckland University of Technology [AUT]. (2019). *Auckland University of Technology Code of Conduct for Research*. https://www.aut.ac.nz/data/assets/pdf_file/0006/274371/AUT-CODE-OF-CONDUCT-FOR-RESEARCH-2019.pdf

Audi, R. (2010). Epistemology: A contemporary introduction to the theory of knowledge [eBook]. *In Routledge eBooks* (3rd ed.). Routledge. https://doi.org/10.4324/9780203846469

Australian Business Deans Council [ABDC]. (2023). *2022 ABDC Journal Quality List* [Dataset]. https://abdc.edu.au/abdc-journal-quality-list/

Autsadee, Y., Jeevan, J., Salleh, N. H. M., & Othman, M. R. (2024). Digital wind of changes: navigating competitiveness in the maritime sector through the transformation in human resource development. *Maritime Business Review*, *9*(3), 204–228. https://doi.org/10.1108/mabr-11-2023-0079

Barbour, R. S. (2018). Quality of data collection. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications Ltd. https://doi.org/10.4135/9781526416070

Beletskiy, A., & Fey, C. F. (2021). HR ambidexterity and absorptive capacities: A paradox-based approach to HRM capabilities and practice adoption in MNC subsidiaries. *Human Resource Management*, *60*(6), 863–883. https://doi.org/10.1002/hrm.22039

Blaikie, N. (2000). *Designing social research - the logic of anticipation*. Polity.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676x.2019.1628806

Brown, J. G. (2024). The impact of artificial intelligence in employee onboarding programs. *Advances in Developing Human Resources*, *26*(2–3), 108–114. https://doi.org/10.1177/15234223241254775

Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. (2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of International Business Studies*, *51*(5), 697–713. https://doi.org/10.1057/s41267-020-00335-9

Chatterjee, S., Chaudhuri, R., Grandhi, B., & Galati, A. (2023). Evolution of strategy for global value creation in MNEs: Role of knowledge management, technology adoption, and financial investment. *Journal of International Management*, *29*(5), 101057. https://doi.org/10.1016/j.intman.2023.101057

Clougherty, J. A., Duso, T., Seldeslachts, J., & Ciari, L. (2020). Transformational strategies and productivity growth: A transformational-activities perspective on stagnation in the new-normal business landscape. *Journal of Management Studies*, *57*(3), 537–568. https://doi.org/10.1111/joms.12519

Contreras, F., Jauregui, K., & Rank, S. (2024). The intellectual structure of human resource management and digitalization research: A bibliometric-mapping analysis. *Journal of Engineering and Technology Management*, *73*, 101829. https://doi.org/10.1016/j.jengtecman.2024.101829

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (revised 4th edition). SAGE Publications.

Dastane, O., Rafiq, M., & Turner, J. J. (2024). Implications of metaverse, virtual reality, and extended reality for development and learning in organizations. *Development in Learning Organizations an International Journal*, *38*(5), 27–32. https://doi.org/10.1108/dlo-09-2023-0196

Davies, C., & Fisher, M. (2018). Understanding research paradigms. *Journal of the Australasian Rehabilitation Nurses Association, 21*(3), 21. https://search.informit.com.au/documentSummary;dn=160174725752074;res=IELHEA

Davis, F. D. (1986). *A technology acceptance model for empirically testing new end-user acceptance of information technology* [PhD thesis, Massachusetts Institute of Technology]. https://dspace.mit.edu/handle/1721.1/15192

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319. https://doi.org/10.2307/249008

Deepa, R., Sekar, S., Malik, A., Kumar, J., & Attri, R. (2024). Impact of AI-focussed technologies on social and technical competencies for HR managers – A systematic review and research agenda. *Technological Forecasting and Social Change*, *202*, 123301. https://doi.org/10.1016/j.techfore.2024.123301

Del Val Núñez, M. T., De Lucas Ancillo, A., Gavrila, S. G., & Gandía, J. a. G. (2024). Technological transformation in HRM through knowledge and training: Innovative business decision making. *Technological Forecasting and Social Change*, *200*, 123168. https://doi.org/10.1016/j.techfore.2023.123168

Denzin, N. K. (2016). *Critical qualitative inquiry. Qualitative Inquiry, 23*(1), 8–16. https://doi.org/10.1177/1077800416681864

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2018). *The SAGE Handbook of Qualitative Research* (5th edition). SAGE Publications Ltd.

Department of Internal Affairs [DIA]. (2025, July 22). *Digital workforce data and evidence.* Retrieved August 4, 2025, from https://www.digital.govt.nz/standards-and-guidance/strategy-

and-planning/digital-capability-public-service-workforce/digital-workforce-data-and-evidence

Duan, P., Zhou, J., & Fan, W. (2024). Safety tag generation and training material recommendation for construction workers: a persona-based approach. *Engineering Construction & Architectural Management*, *31*(1), 115–135. https://doi.org/10.1108/ecam-12-2021-1143

Duvivier, F., Peeters, C., & Harzing, A. (2019). Not all international assignments are created equal: HQ-subsidiary knowledge transfer patterns across types of assignments and types of knowledge. *Journal of World Business*, *54*(3), 181–190. https://doi.org/10.1016/j.jwb.2019.02.003

Edwards, T., Tregaskis, O., & McDonnell, A. (2022). Towards an understanding of configurational and national influences on international integration in the HR function in MNCs. *The International Journal of Human Resource Management*, *33*(7), 1463–1488. https://doi.org/10.1080/09585192.2020.1771399

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, *14*(4), 532. https://doi.org/10.2307/258557

Elgeddawy, M., & Abouraia, M. (2024). Pragmatism as a research paradigm [eBook]. In M. Lehto (Ed.), *Proceedings of the 23rd European Conference on Cyber Warfare and Security* (pp. 71–74). Academic Conferences and Publishing Ltd. https://books.google.co.nz/books?hl=en&lr=&id=pj8XEQAAQBAJ&oi=fnd&pg=PA71&dq=pragmatism+research+paradigm&ots=C3IE8tMxCZ&sig=NIyweG64uf0MkSJy_C_HrX1HFIQ&redir_esc=y#v=onepage&q=pragmatism%20research%20paradigm&f=false

Erciyes, E. (2020). Paradigms of inquiry in the qualitative research. *European Scientific Journal ESJ, 16*(7). https://doi.org/10.19044/esj.2020.v16n7p181

Ernst & Young [EY]. (2019). *Growing New Zealand's Capital Markets 2029.* https://www.fma.govt.nz/assets/Reports/Growing-New-Zealands-Capital-Markets-2029.pdf

Feast, L., & Melles, G. (2010). Epistemological Positions in Design Research: A Brief review of the literature. In *Swineburne*. 2nd International Conference on Design Education, Sydney, New South Wales, Australia. https://doi.org/10.25916/sut.26225351.v1

Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *Academy of Information and Management Sciences Journal*, *22*(2). https://www.abacademies.org/articles/The-changing.-role-of-human.-resource-management-an-era-digital-transformation-1532-5806-22-2-139.pdf

Ferreira, J. J., Fernandes, C. I., Guo, Y., & Rammal, H. G. (2022). Knowledge worker mobility and knowledge management in MNEs: A bibliometric analysis and research agenda. *Journal of Business Research*, *142*, 464–475. https://doi.org/10.1016/j.jbusres.2021.12.056

Flick, U. (2018). Doing qualitative data collection - charting the routes. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications Ltd. https://doi.org/10.4135/9781526416070

Flyvbjerg, B. (2006). Five misunderstandings about Case-Study research. *Qualitative Inquiry*, *12*(2), 219–245. https://doi.org/10.1177/1077800405284363

Garg, S., Sinha, S., Kar, A. K., & Mani, M. (2022). A review of machine learning applications in human resource management. *International Journal of Productivity and Performance Management*, *71*(5), 1590–1610. https://doi.org/10.1108/ijppm-08-2020-0427

Goi, V., Ahieieva, I., Mamonov, K., Pavliuk, S., & Dligach, A. (2023). The impact of digital technologies on the companies' strategic management. *Economic Affairs*, *68*(2), 1291–1299. https://doi.org/10.46852/0424-2513.2.2023.33

Gray, D. E. (2022). *Doing research in the real world* (5th Edition). SAGE Publications Ltd.

Grimpe, C., Sofka, W., & Kaiser, U. (2023). Competing for digital employee: The retention effect of digital expertise in MNC subsidiaries. *Journal of International Business Studies*, *54*, 657–685. https://doi.org/10.1057/s41267-021-00493-4

Grix, J. (2002). Introducing students to the generic terminology of social research. *Politics*, *22*(3), 175–186. https://doi.org/10.1111/1467-9256.00173

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods, 18*(1), 59–82. https://doi.org/10.1177/1525822x05279903

Gupta, P., Lakhera, G., & Sharma, M. (2024). Examining the impact of artificial intelligence on employee performance in the digital era: An analysis and future research direction. *The Journal of High Technology Management Research*, *35*(2), 100520. https://doi.org/10.1016/j.hitech.2024.100520

Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry Research, 280*, 112516. https://doi.org/10.1016/j.psychres.2019.112516

Hamouche, S., Rofa, N., & Parent-Lamarche, A. (2025). Systematic bibliometric review of artificial intelligence in human resource development: insights for HRD researchers, practitioners and policymakers. *European Journal of Training and Development*, *49*(1/2), 43–62. https://doi.org/10.1108/ejtd-10-2023-0152

Hao, F., Ng, W., Aman, A. M., & Zhang, C. (2025). Technology for sustainability: The impact of Avatar-led Green Training on OCBE and green creativity. *International Journal of Contemporary Hospitality Management*, *37*(1), 140–160. https://doi.org/10.1108/ijchm-12-2023-1927

Harney, B., & Gubbins, C. (2024). Human Resource Development (HRD) meets Human Resource Management (HRM): a skills based agenda for a FRAGILE world order. *Advances in Developing Human Resources*, *26*(4), 160–178. https://doi.org/10.1177/15234223241267922

Hayes, B. K., Heit, E., & Swendsen, H. (2010). Inductive reasoning. *Wiley Interdisciplinary Reviews Cognitive Science, 1(*2), 278–292. https://doi.org/10.1002/wcs.44

Hitt, M. A., Arregle, J., & Holmes, R. M. (2021a). Strategic Management theory in a Post-Pandemic and Non-Ergodic world. *Journal of Management Studies*, *58*(1), 259–264. https://doi.org/10.1111/joms.12646

Hitt, M. A., Arregle, J., & Holmes, R. M. (2021b). The (COVID-19) pandemic and the new world (dis)order. *Journal of World Business*, *56*(4), 101210. https://doi.org/10.1016/j.jwb.2021.101210

Huang, T., Su, Q., Yu, C., Zhang, Z., & Liu, F. (2024). Strategic team design for sustainable effectiveness: A data-driven analytical perspective and its implications. *Decision Support Systems*, *181*, 114227. https://doi.org/10.1016/j.dss.2024.114227

Jenks, C. J. (2018). Recording and transcribing social interaction. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications Ltd. https://doi.org/10.4135/9781526416070

John, A., Kwak, D., Benitez, J., Zhao, Y., & Park, S. (2024). Determinants of gamification effectiveness: perspectives of technology affordances and coping responses in the context of team-based gamified training. *European Journal of Information Systems*, 1–26. https://doi.org/10.1080/0960085x.2024.2398600

Johnson, J. M., Rowlands, T., & Gubrium, J. F. (2012). The interpersonal dynamics of in-depth interviewing. *In The SAGE Handbook of Interview Research: The Complexity of the Craft* (pp. 99–113). Sage Publications Ltd. https://books.google.co.nz/books?hl=en&lr=&id=VCFsZsvZdwkC&oi=fnd&pg=PA99&dq=in-depth+interviewing&ots=aSWnMwLwze&sig=lri9F058rSE_yCZ3Gb1jKcx2n3w&redir_esc=y#v=onepage&q=in-depth%20interviewing&f=false

Kelly, L. M., & Cordeiro, M. (2020). Three principles of pragmatism for research on organizational processes. *Methodological Innovations*, *13*(2). https://doi.org/10.1177/2059799120937242

Kennedy, B. L. (2018). Deduction, induction, and abduction. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications Ltd. https://doi.org/10.4135/9781526416070

Kim, S., Vaiman, V., & Sanders, K. (2022). Strategic human resource management in the era of environmental disruptions. *Human Resource Management*, *61*(3), 283–293. https://doi.org/10.1002/hrm.22107

Köhler, T. (2024). Multilevel qualitative research: Insights from practice. *European Management Journal, 42*(4), 503–514. https://doi.org/10.1016/j.emj.2024.03.011

Lee, T. Y., Ahmad, F., & Sarijari, M. A. (2025). Exploring labor presence in work zone and tiling trade Labor Productivity: The Moderating Role of Skilled-Labor Proportion. *Journal of Construction Engineering and Management*, *151*(1), 04024188. https://doi.org/10.1061/jcemd4.coeng-14585

Lim, W. M. (2024). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal (AMJ)*. https://doi.org/10.1177/14413582241264619

Linares-Garcia, D. A., & Roofigari-Esfahan, N. (2024). Practical deployment of BIM-Interoperable Voice-Based Intelligent Virtual Agent Support construction worker productivity. *Journal of Construction Engineering and Management*, *150*(11), 04024153. https://doi.org/10.1061/jcemd4.coeng-14475

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, *1986*(30), 73–84. https://doi.org/10.1002/ev.1427

Loon, M., Otaye-Ebede, L., & Stewart, J. (2020). Thriving in the new normal: The HR Microfoundations of Capabilities for Business Model Innovation. An Integrated Literature review. *Journal of Management Studies*, *57*(3), 698–726. https://doi.org/10.1111/joms.12564

Lukaszewski, K. M., & Stone, D. L. (2024). Will the use of AI in human resources create a digital Frankenstein? *Organizational Dynamics*, *53*(1), 101033. https://doi.org/10.1016/j.orgdyn.2024.101033

Malik, A., Budhwar, P., Mohan, H., & Srikanth, N. R. (2023). Employee experience – the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. *Human Resource Management*, *62*(1), 97–115. https://doi.org/10.1002/hrm.22133

Malik, A., Budhwar, P., Patel, C., & Srikanth, N. R. (2020). May the bots be with you! Delivering HR cost-effectiveness and individualised employee experiences in an MNE. *The International Journal of Human Resource Management*, *33*(6), 1148–1178. https://doi.org/10.1080/09585192.2020.1859582

Malik, A., De Silva, M. T., Budhwar, P., & Srikanth, N. (2021). Elevating talents' experience through innovative artificial intelligence-mediated knowledge sharing: Evidence from an IT-multinational enterprise. *Journal of International Management*, *27*(4), 100871. https://doi.org/10.1016/j.intman.2021.100871

Malik, A., Pereira, V., Budhwar, P., Froese, F. J., Minbaeva, D., Sun, J., Nguyen, A. T., & Xue, S. (2022). Multilevel relational influences on HRM practices: a cross-country comparative reflective review of HRM practices in Asia. *Asian Business & Management*, *21*(5), 745–779. https://doi.org/10.1057/s41291-022-00208-z

Malik, N., Tripathi, S. N., Kar, A. K., & Gupta, S. (2022). Impact of artificial intelligence on employees working in industry 4.0 led organizations. *International Journal of Manpower*, *43*(2), 334–354. https://doi.org/10.1108/ijm-03-2021-0173

Malisić, B., Tinaj, S., Popović, J., Lukovac, L., & Vlačić, B. (2025). Internal dynamics and innovation: A cross-disciplinary review and future research agenda. *Technology in Society*, *81*, 102773. https://doi.org/10.1016/j.techsoc.2024.102773

Malterud, K., Siersma, V. D., & Guassora, A. D. (2015). Sample size in qualitative interview studies. *Qualitative Health Research, 26*(13), 1753–1760. https://doi.org/10.1177/1049732315617444

Manroop, L., Malik, A., & Milner, M. (2024). The ethical implications of big data in human resource management. *Human Resource Management Review*, *34*(2), 101012. https://doi.org/10.1016/j.hrmr.2024.101012

Mayrhofer, W., Biemann, T., Koch-Bayram, I., & Rapp, M. L. (2024). Context is key: A 34-country analysis investigating how similar HRM systems emerge from similar contexts. *Human Resource Management*, *63*(2), 355–371. https://doi.org/10.1002/hrm.22205

Maxwell, J. A. (2013). *Qualitative Research Design: An Interactive Approach* [eBook]. SAGE Publications Ltd. https://books.google.co.nz/books?hl=en&lr=&id=DFZc28cayiUC&oi=fnd&pg=PR5&dq=qualitative+research+design&ots=LMyFaHvF9f&sig=5XL_mzTQdyG1CC3QZcC2Lg4BXrc&redir_esc=y#v=onepage&q=qualitative%20research%20design&f=false

Minbaeva, D. (2021). Disrupted HR? *Human Resource Management Review*, *31*(4), 100820. https://doi.org/10.1016/j.hrmr.2020.100820

Minbaeva, D., & Navrbjerg, S. E. (2023). Strategic human resource management in the context of environmental crises: A COVID-19 test. *Human Resource Management*, *62*(6), 811–832. https://doi.org/10.1002/hrm.22162

Mirza, N. A., Akhtar-Danesh, N., Noesgaard, C., Martin, L., & Staples, E. (2014). A concept analysis of abductive reasoning. *Journal of Advanced Nursing, 70*(9), 1980–1994. https://doi.org/10.1111/jan.12379

Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry*, *20*(8), 1045–1053. https://doi.org/10.1177/1077800413513733

Nasar, N., & Ray, S. (2024). A user acceptance model for e-HRM system implemented in IT and Non-IT business organizations. *Human Systems Management*, *43*(1), 99–123. https://doi.org/10.3233/hsm-220177

New Zealand Productivity Commission. (2020). *Technological change and the future of work.* https://www.treasury.govt.nz/sites/default/files/2024-05/pc-inq-tcfw-final-report-technological-change-and-the-future-of-work.pdf

New Zealand Productivity Commission. (2021). *New Zealand firms: Reaching for the frontier.* https://www.treasury.govt.nz/sites/default/files/2024-05/pc-inq-nzfrff-final-report-frontier-firms.pdf

North, D. C. (1999). Dealing with a non-ergodic world: Institutional economics, property rights, and the global environment. *Duke Environmental Law & Policy Forum*, *10*, 1–12.

NZTech. (2023). *Digital Skills for Tomorrow, Today.* https://nztech.org.nz/wp-content/uploads/sites/8/2023/08/NZTech-Digital-Skills-Report_final.pdf

Olan, F., Nyuur, R. B., & Arakpogun, E. O. (2024). AI: A knowledge sharing tool for improving employees' performance. *Journal of Decision System*, *33*(4), 700–720. https://doi.org/10.1080/12460125.2023.2263687

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2019). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Pašalić, I. N., & Ćukušić, M. (2024). Understanding E-participation adoption: Exploring technological, organizational, and environmental factors. *Technological Forecasting and Social Change*, *207*, 123633. https://doi.org/10.1016/j.techfore.2024.123633

Patton, M. Q. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage Publications.

Roessner, D. (2000). Quantitative and qualitative methods and measures in the evaluation of research. *Research Evaluation, 9*(2), 125–132. https://doi.org/10.3152/147154400781777296

Roulston, K., & Choi, M. (2018). Qualitative interviews. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications Ltd. https://doi.org/10.4135/9781526416070

Ruiz, L., Benitez, J., Castillo, A., & Braojos, J. (2024). Digital human resource strategy: Conceptualization, theoretical development, and an empirical examination of its impact on firm performance. *Information & Management*, *61*(4), 103966. https://doi.org/10.1016/j.im.2024.103966

Safadi, H. (2024). Balancing affordances and constraints: Designing enterprise social media for organizational knowledge work. *MIS Quarterly*, *48*(1), 347–374. https://doi.org/10.25300/misq/2023/16499

Salvadorinho, J., Ferreira, C., & Teixeira, L. (2024). A technology-based framework to foster the lean human resource 4.0 and prevent the great resignation: The talent management lift. *Technology in Society*, *77*, 102510. https://doi.org/10.1016/j.techsoc.2024.102510

Seidman, I. (2015). *Interviewing as Qualitative Research* (4th edition). Teachers College Press.

Shet, S., Poddar, T., Samuel, F. W., & Dwivedi, Y. K. (2021). Examining the determinants of successful adoption of data analytics in human resource management – A framework for implications. *Journal of Business Research*, *131*, 311–326. https://doi.org/10.1016/j.jbusres.2021.03.054

Sigala, M., Ren, L., Li, Z., & Dioko, L. A. (2023). Talent management in hospitality during the COVID-19 pandemic in Macao: a contingency approach. *International Journal of Contemporary Hospitality Management*, *35*(8), 2773–2792. https://doi.org/10.1108/ijchm-06-2022-0793

Smith, B. (2012). Ontology. In G. Hurtado & O. Nudler (Eds.), *The Furniture of the World: Essays in Ontology and Metaphysics* (pp. 47–68). Editions Rodopi. https://philpapers.org/archive/SMIOJD.pdf

Stone, D. L., Lukaszewski, K. M., & Johnson, R. D. (2024). Will artificial intelligence radically change human resource management processes? *Organizational Dynamics*, *53*(1), 101034. https://doi.org/10.1016/j.orgdyn.2024.101034

Sun, Y., Zhong, Y., Jeyaraj, A., & Zhu, M. (2024). The impact of enterprise social media affordances on employees' thriving at work: An empowerment theory perspective. *Technological Forecasting and Social Change*, *198*, 122983. https://doi.org/10.1016/j.techfore.2023.122983

Swarnakar, V., McDermott, O., Sony, M., Bhat, S., & Antony, J. (2025). Unveiling the path to sustainable quality 4.0 implementation in organisations: Insights from an exploratory qualitative study. *The TQM Journal*, *37*(2), 566–591. https://doi.org/10.1108/tqm-07-2023-0201

Taylor, S. J., Bogdan, R., & DeVault, M. L. (2015). *Introduction to Qualitative Research Methods: A Guidebook and Resource*. John Wiley & Sons Incorporated.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, *28*(13), 1319–1350. https://doi.org/10.1002/smj.640

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. In *Oxford University Press eBooks* (pp. 268–285). https://doi.org/10.1093/oso/9780198781806.003.0019

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic Analysis. In C. Willig & W. S. Rogers (Eds.), *The SAGE Handbook of Qualitative Research in Psychology* (pp. 17–37). SAGE Publications Ltd. https://books.google.co.nz/books?hl=en&lr=&id=AAniDgAAQBAJ&oi=fnd&pg=PA17&dq=thematic+analysis+benefits&ots=dpl8lsziLV&sig=Pmvgx-HB9Bo_RW2aiB9Bb_Q1Df0&redir_esc=y#v=onepage&q=thematic%20analysis%20benefits&f=false

The Treasury. (2022). *New Zealand's Productivity Performance: Taking a Broader View.* https://www.treasury.govt.nz/sites/default/files/2022-09/an22-05.pdf

The Treasury. (2024). *The Productivity Slowdown: Implications for the Treasury's forecasts and projections.* https://www.treasury.govt.nz/sites/default/files/2024-05/tp-productivity-slowdown-implications-treasurys-forecasts-projections.pdf

Thornberg, R., & Charmaz, K. (2014). Grounded theory and theoretical coding. In *The SAGE Handbook of Qualitative Data Analysis* (pp. 153–169). SAGE Publications Ltd. https://doi.org/10.4135/9781446282243.n11

Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning Qualitative research: design and decision making for new researchers. *International Journal of Qualitative Methods, 19.* https://doi.org/10.1177/1609406920967174

Van Manen, M. (2016). Researching Lived Experience: Human science for an action sensitive pedagogy. In *Routledge eBooks* (2nd edition). Routledge. https://doi.org/10.4324/9781315421056

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, *46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926

Wang, S., Lim, W. M., Cheah, J., & Lim, X. (2025). Working with robots: Trends and future directions. *Technological Forecasting and Social Change*, *212*, 123648. https://doi.org/10.1016/j.techfore.2024.123648

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, *16*(4), 409–421. https://doi.org/10.1287/orsc.1050.0133

Yin, R. K. (2018). *Case Study Research and Applications: Design and methods* (6th edition). SAGE Publications Incorporated. https://us.sagepub.com/en-us/nam/case-study-research-and-applications/book250150

APPENDICES

Appendix A: Ethics Approval

Auckland University of Technology Ethics Committee (AUTEC)

27 February 2025

Anca Yallop
Faculty of Business Economics and Law

Dear Anca

Re Ethics Application: **25/13 Aligning technology and strategy for human capital development and engagement during non-ergodic new normal environments: MNEs operating in New Zealand**

Thank you for your responses to AUTEC's conditions.

Your ethics application has been approved for three years until 27 February 2028.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.
7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online http://www.aut.ac.nz/research/researchethics

For any enquiries, please contact the Secretariat at ethics@aut.ac.nz
(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: Hjh1558@autuni.ac.nz

Auckland University of Technology, D-88, Private Bag 92006, Auckland 1142, New Zealand.
T: +64 9 921 9999 ext. 8316: E: ethics@aut.ac.nz: www.aut.ac.nz/researchethics

Appendix B: Interview Guide

INDICATIVE INTERVIEW QUESTIONS

These questions serve as a guideline for the discussion of the interview and are intended to be discussed in greater depth with participants. Please note that these exact questions or orders may not be used. To ensure a smooth interview process, it is recommended that participants note key points addressing these questions prior to the interview.

INTRODUCTION

Brief introduction of the primary researcher and the aim of the interview session. Explanation of the structure of the interview and confidentiality measures.

INTERVIEW

- What are some changes, either positive or negative, that you have noticed in the last few years within the business environment from a technological standpoint?
- How have these changes impacted your organisation?
- How does the current business environment impact your view and use of technology, particularly regarding employee development and engagement?
- What technologies have been implemented to support employee training, development, or engagement in your organisation?
- When considering a new HR technology, which factors influence your decision?
- Who is typically involved in these decisions, and how are these decisions made?
- What do/did you aim to achieve with the use of [technology]?
- What is your opinion surrounding the technologies that have been implemented?
- What impacts do the implemented technologies have?
- How do you assess whether a proposed HR technology is a good fit for your business?
- Has there been an instance where an implemented technology has not worked, been removed, replaced, or has faced challenges? Why do you think this happened?
- Do you believe your implementation of technology has contributed to, or was designed to contribute toward your organisations' overall business strategy? If so, how? How do you know this?
- How do you know if a new HR technology contributes to broader strategic goals?
- In your eyes, how do these technologies support agility or flexibility?
- Do you believe that the technologies you have implemented are sustainable and will continue to be used? Why or why not?
- How do you perceive the role of technology in your organisations' future strategies regarding human capital?
- What broader effect have the technologies had on your organisations culture, if any?
- Looking ahead, what do you believe is required for HR technology to truly support long-term organisational transformation?
- Are there any technologies that you don't necessarily use that you are interested in? If so, why?

CLOSING AND THANKS

Final thoughts or questions from the participant. Explanation of the next steps and how the information will be used.

This research project has been approved by the Auckland University of Technology Ethics Committee (AUTEC) on the 27th of February 2025. AUTEC Reference Number: 25/13

Appendix C: Participant Consent Form

PARTICIPANT CONSENT FORM

Project Title:

Aligning technology and strategy for human capital development and engagement during non-ergodic new normal environments: MNEs operating in New Zealand.

Project Supervisor:

Dr. Anca Yallop

ANCA.YALLOP@AUT.AC.NZ

Primary Researcher:

Faaizah Ali

HJH1558@AUTUNI.AC.NZ

- I have read and understood the information provided about this research project in the Participant Information Sheet produced on 10 January 2025.
- I have had the opportunity to ask questions and have them answered.
- I understand that I may ask questions at any stage of the research project.
- I understand that notes will be taken during the interviews, and that there will be transcriptions which will be securely stored on the AUT network after being pseudonymised and cleared of identifiable data.
- I consent to an audio recording being taken during the interview for the purpose of validating the transcription, which will then be permanently deleted after the transcription has been validated.
- I understand that taking part in this research project is voluntary, and that I may withdraw from the research project at any time without facing repercussions or disadvantages.
- I understand that if I withdraw from the study, then I will be offered the choice of removing identifiable data of my own, or allowing it to be used without providing further information. However, once the findings have been produced, it may not be possible to remove my data.
- I agree to participate in this research project.
- I wish to receive a one-to-two-page summary of the research findings emailed to the email address listed in the Participant Contact Details (please select) [YES] or [NO].
- I wish to receive a copy of my pseudonymised transcription emailed to the email address listed in the Participant Contact Details (please select) [YES] or [NO].

Participant Signature: ..... Participant Name: .....

Participant Contact Details: .....

.....

Date: .....

This research project has been approved by the Auckland University of Technology Ethics Committee (AUTEC) on the 27th of February 2025. AUTEC Reference Number: 25/13

Appendix D: Organisational Consent Form

PERMISSION TO ACCESS THE ORGANISATION

Project Title:

Aligning technology and strategy for human capital development and engagement during non-ergodic new normal environments: MNEs operating in New Zealand.

Project Supervisor:

Dr. Anca Yallop

ANCA.YALLOP@AUT.AC.NZ

Primary Researcher:

Faaizah Ali

HJH1558@AUTUNI.AC.NZ

- I have read and understood the information provided about this research project in the Participant Information Sheet produced on 10 January 2025.
- I give permission for the researcher to undertake research within the organisation.
- I give permission for the researcher to access the employees of the organisation.

Name of the Organisation: .....

Authorising Person's Signature: ..... Authorising Person's Name: .....

Authorising Person's Contact Details: .....

.....

.....

Date: .....

This research project has been approved by the Auckland University of Technology Ethics Committee (AUTEC) on the 27th of February 2025. AUTEC Reference Number: 25/13

Appendix E: Table of Themes

Major Theme	Opportunities of the non-ergodic new normal environment	Challenges of the non-ergodic new normal environment	Evaluation	Implementation	Organisational Transformation
Sub-theme -Associated Code	**Technological development** -Accelerated pace of technology and digitalisation -Cloud adoption -AI anticipation **Accessibility** -Mobile accessibility -Data accessibility - Digital connectivity and collaboration - Adapting to learners needs **Instrumental gains** -Reporting opportunities -Data collection ability	**Contextual issues** -Recession environment -New Zealand context -Human preference **Responsible innovation** -Boundaries of technology -AI trustworthiness -Soft skills -Practicality versus novelty -Uncertainty	**Institutional influence** -Information flows -Cyber security, risk, and reputation -Business case process - Global Headquarters -Cost to benefit ratio -Reporting -Brand-ability -Uncertainty of compatibility -Benchmarking -Needs-based **Use of technology** -Ease of use -Efficiency -Technology as a tool -Catering to different needs	**Feedback-driven configuration** -Monitoring: Observation -Monitoring: Feedback -Monitoring: Uptake -Teething issues **Driving sustained adoption of technology** -Habit building -Technology literacy -Engagement -Change fatigue	**Systemic reunification** -Centralising systems -Strategy tensions **The transformative impact of technology on professional roles and work tasks** -Streamlining and automation -Resource reallocation and savings **Future considerations of technological development** -Evolvability -Scalability -Mobility and flexibility -Continuous and tailorable learning -Wanting proactive technology -Data validation