Examining e-learning and its implications for expansive and restrictive learning environment in organisations

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Abstract

This thesis investigates the potential of e-learning to foster expansive-restrictive learning environments within organisations. Central to this exploration is the adaptation of the socio-technical productive systems theory. This framework highlights the significance of understanding the interplay between the productive system, organisation of work, learning environment, and technology in comprehending workplace learning. Focusing primarily on the productive system, this study delves into the expansive and restrictive nature of organisational learning environments, emphasising how underlying productive systems influence these environments. This study gathered insights from various organisational levels within two distinct case organisations through a qualitative research approach involving semi-structured interviews. These narratives form the basis for understanding the theoretical and practical applications of e-learning and its impact on organisational learning environments. The findings highlight how the productive system, regulatory influences, learning networks and organisational dynamics shape the development of expansive and restrictive learning capabilities. A notable revelation of this research is the pivotal role of line managers, shaped by productive structures, in facilitating expansive learning attributes. Through this comprehensive analysis, the research contributes to a deeper understanding of the mechanisms driving the potential for expansive e-learning in organisations. This includes assessing the impact of socio-technical interactions and the broader context within which e-learning is implemented, offering significant implications for enhancing organizational learning strategies.

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Chapter 1: Introduction

1.1 Background

The essence and operationalisation of e-learning within contemporary organisations are central to this thesis, which interrogates e-learning's role in the socio-technical productive systems of organisations and its capacity to foster within expansive and restrictive learning environment. The understanding of e-learning is a subject of considerable debate, with various scholars contributing perspectives influencing how it is implemented and perceived within the workplace. At its core, e-learning merges the traditional concept of learning with the advancements of technology. Aparicio et al. (2016) dissect this amalgamation by attributing 'learning' to acquiring knowledge and 'technology' as the facilitative tool enhancing this process. The European Commission (2006) offers a more utilitarian perspective, delineating e-learning as applying technology to boost and enable the learning process. Yet, this definition merely scratches the surface of the complexity inherent in 'technology', encompassing a wide array of digital tools and platforms.

Further probing into the operational definition, Lee et al. (2013) defined e-learning as using computer technology to disseminate information and instruction to employees, signifying a more focused understanding of the technological mediums involved. The myriad of definitions circulating in scholarly discourse demonstrates that e-learning is not a monolithic concept but rather a multifaceted one, with interpretations ranging from the general use of digital tools for educational purposes to the more specific application of computers for instructional dissemination. This divergence in understanding reflects significantly on the practical aspects of e-learning. If an organisation leans towards a broad interpretation, e-learning policies and practices may encompass a wide range of digital initiatives.

Conversely, an organisation that aligns with a narrower definition might focus its e-learning strategies around specific computer-based training programs. Such convergences or divergences in understanding e-learning's meaning can lead to varied implementations, with some organisations embracing an expansive approach. In contrast, others might inadvertently foster a restrictive learning environment.

E-learning, a complex tool deployed within organisations for many purposes, enters the organisational space fraught with potential shortcomings. This study acknowledges that such challenges may include technical malfunctions, change management issues, problematic implementation, content discrepancies, and misalignment with organisational or individual goals, as identified by Caudill and Reeves (2014). With these potential pitfalls in mind, the initial phase of this research concentrated on discerning the true essence of e-learning and its capacity to foster an environment conducive to expansive learning. The dichotomy of expansive and restrictive learning environments, as conceptualised by Fuller and Unwin (2004), arises from the understanding that the setting in which learning unfolds plays a crucial role in either promoting or impeding learning and development objectives. This dichotomy posits that a learning environment can be categorised on a spectrum ranging from restrictive to expansive, each with distinct impacts on the efficacy of learning initiatives and organisational utilisation of learning technologies. This research undertakes a nuanced analysis of the learning environments within each case study organisation. It probes the elemental conditions that allow e-learning to flourish, particularly how these environments align with expansive and restrictive learning principles. This analysis aims to outline the characteristics inherent in each organisational setting and how such lived experiences bolster or limit the environment in which learning takes place.

This research delineates e-learning through the lens of expansive-restrictive learning parameters. It draws on perspectives that characterise expansive e-learning as a system enabling self-directed and personalised learning through electronic means, with scholars like Kim et al. (2013) highlighting its self-learning and motivational aspects. Contemporary discourse by Lee et al. (2014), Gross (2016), and Liu et al. (2017) extends this notion to incorporate intelligent technologies and smart devices. Scott and Benlamri (2010) describe it as a context-aware ubiquitous learning accessible anytime, anywhere, aligning with Merrill's (2007) definition of smart learning as efficient and user-centric. While Spector (2014) and Huang et al. (2013) concur, that smart learning is an innovative and efficient technological application for disseminating knowledge, there is an ongoing debate about whether e-learning and smart learning are synonymous.

Prior research is split, with some equating the two, while others like Korucu and Alkan (2011) discern a distinction, suggesting that smart learning incorporates technology, pedagogy, and application. Spector (2014) also stresses the necessity of a conducive environment for learning to be deemed smart, proposing that such an environment should prioritise ease of access and the clarity of information. He further advocates for a learning environment tailored to individual preferences and abilities, highlighting the diversity of learner needs. However, a deeper exploration into Fuller and Unwin's (2004) expansive and restrictive learning reveals that many attributes of a smart learning environment intersect with expansive learning principles. These insights prompt a pivot in this thesis from focusing narrowly on smart learning to a broader examination of expansive learning environments, offering a more comprehensive framework for evaluating e-learning within a dynamic, learner-focused context.

The socio-technical systems theory employed in this study provides a multi-layered analytical framework that has been instrumental in discerning the complexities and subtleties of organisational learning environments. This theoretical approach is anchored in the understanding that an organisation's learning environment is a product of its socio-technical productive system. Hence, it is pertinent to state early that this study regards the organisation as a productive system and the words would be used interchangeably from time to time. The productive system is constituted by the interplay of social structure, technological infrastructure, work organisation, and the learning environment—each acting as a foundational pillar for comprehending the design and impact of training interventions. Underpinning this framework is the notion that the productive system—typically associated with economic models—is crucial in delineating how work relations influence learning policies and behaviours. Hordern (2012) asserts that the interdependencies within the productive system provide insights into the learning environment's operational mechanics. Moreover, the framework proposed by Felstead et al. (2009) echoes this concept, illustrating how production's structure and stages are moulded by the interactions among organisational actors across both macro and micro levels.

This study acknowledges and builds upon these frameworks, proposing that a deeper engagement with the socio-technical dimensions is essential for a nuanced understanding of organisational learning and development practices. By examining both vertical and horizontal dimensions of productive systems, this research elucidates the varying degrees to which e-learning environments are restrictive or expansive. The analysis reveals that these dimensions are pivotal in determining an organisation's potential to foster an expansive learning environment capable of adapting and thriving within the complex tapestry of contemporary organisational life.

As elucidated by Fuller and Unwin (2004, 2006), the concepts of restrictive and expansive learning environments offer a framework to examine the scope and efficacy of participation in organisational training programs. In line with Felstead et al. (2009), this study merges various conceptual perspectives to scrutinise e-learning within distinct productive systems. It investigates the conditions that may restrict or cultivate expansive e-learning opportunities in organisations. Recent technological advancements have significantly transformed organisational learning environments, with a notable surge in adopting e-learning methodologies (Cheng et al., 2012). E-learning is often introduced to enhance the delivery of instruction and training, reflecting an organisational impetus for skill enhancement integral to competitive viability (Castells, 2004). In the UK, the prevalence of e-learning is escalating across sectors (Patterson et al., 2009), with its adoption being partly driven by fiscal considerations and the quest for cost-effective training alternatives to traditional classroom settings (Galagan, 2000). Moreover, the strategic intent to optimise training within budgetary constraints is a compelling rationale for e-learning's integration into both public and private sectors, as noted by Felstead et al. (2013).

Echoing Spector's (2014) ‘Smart learning’ perspective, this study asserts that a smart learning environment is characterised by innovation, efficiency, and effectiveness. Moving beyond a narrow focus on smart learning, Chapter 2 discusses a shift towards expansive learning—embracing a comprehensive approach that extends past e-learning technology to incorporate organisational learning dynamics and learner preferences. The workplace, reflecting a nexus of social issues and orientations, is fundamentally a social construct (Felstead et al. 2009; Acker 1990, 2006; Healy et al., 2019; Avis, 2010). This understanding necessitates an exploration of e-learning that transcends its technological dimensions, advocating for a broadened analytical scope that recognises the capabilities of a distinctive learning environment.

By incorporating productive features, this approach emphasises the value of examining e-learning as a tool that is intertwined with and shaped by structural and social context within the workplace.

1.2 Knowledge Gap

The research gap identified in this study centres on the divergence of understanding regarding how e-learning is conceptualised within organisations and how this variance influences the design and enactment of policies and practices. There is a paucity of knowledge about the interplay between such policies and practices and the expansive and restrictive learning environments continuum. This gap is significant because these learning environments critically shape the context for utilising e-learning. This thesis posits that an in-depth understanding of the restrictive and expansive qualities inherent within an organisation's productive system is crucial. These qualities directly affect how e-learning is adopted and practised—whether with flexibility that encourages growth or with a rigidity that limits potential. Fuller and Unwin's (2004) exploration of learning environments suggests that the extent to which an organisation's policies and practices are aligned or in conflict with these environments can profoundly impact the success of e-learning.

Furthermore, there is an evident lack of comprehension of how these policies and practices interact with expansive and restrictive learning environments. Such an understanding is imperative to discern whether organisational strategies effectively support the context for e-learning, thereby facilitating its potential to contribute to expansive learning. This study aims to fill this knowledge gap by examining e-learning both as a theoretical concept and as an organisational practice, investigating the factors that facilitate or impede its capacity to serve distinct learning objectives particularly along the lines of being expansive or restrictive.

This exploration is guided by socio-technical systems theory, which provides a lens to analyse the organisational learning attributes and learner preferences beyond mere technological considerations. By doing so, the study seeks to shed light on the dynamic interrelations that influence the efficacy and reach of e-learning in organisational settings.

1.3 Research Questions

The key research questions that need to be explored to fulfil these aims are as follows:

1. What is the meaning of e-learning in contemporary organisations in the UK, and how is this reflected in organisational policy and practice?
2. How are organisations developing and infusing e-learning with their learning environments?
3. What are the implications of the situated context of e-learning in organisations on expansive and restrictive learning environments?

1.4 Research Aim and Objectives

This research aims to explore the potential of e-learning as situated in organisations from the perspective of expansive and restrictive learning. To achieve this aim, the following objectives are set for the study:

1. To critically examine the theory and practice of e-learning in organisations.
2. To explore the restrictive and expansive contours of organisational learning environments and understand their connection with the situated context of e-learning in organisations.
3. To investigate how e-learning can thrive in organisational learning environments, with key implications on the expansive and restrictive divide.

1.5 The Proposed Approach

In engaging with the research objectives, aims, and questions stated above, this study sought to deploy carefully chosen case study organisations. As discussed in Chapter 3, it was important to take a qualitative dual-case study approach using two case organisations.

Case 1 (herein referred to as Techco) is a corporate business solutions company located in the UK with a presence in key areas of the country. The organisation has a staff strength of over 500 scattered across different offices and outlets, for it is privately owned and controlled.

The second case organisation (henceforth referred to as Healthco) is a social business enterprise that offers and partners with the National Health Service (NHS) to deliver healthcare services across the Essex region. The company has a staff strength of over 500 scattered across several locations, including its remote workers. It is pertinent to state that Healthco is not immune from government and public scrutiny, as will be fully explored under the productive system analysis presented in chapters 4, 5, and 6.

1.6 Thesis Contributions

This research contends that the production structure and its impacts across the various facets of a socio-technical productive system are crucial for assessing the necessity and the potential for e-learning within different organisational learning environment. This study's central theme bothers on examining e-learning within the expansive and restrictive learning environment in organisations. As Felstead et al. (2009) have noted, a nuanced understanding of the productive system in organisations provides valuable insights into the interplay between work and learning and its ramifications for the organisational learning environment. This thesis acknowledges the significance of understanding both the stages and structures of production in comprehending the situated context of learning within the workplace. This includes how the amalgamation of learning and working experiences influences the learning environment.

This study will delve into the structural aspects of the organisational meso and micro levels within the productive system to explore how the interplay of tensions and contradictions between these levels can either facilitate or hinder the development of an expansive or restrictive e-learning.

Through this focused analysis, the research aims to uncover how organisations through their situated context of e-learning and organisational design, define the expansive and restrictive role of e-learning within their learning environment.

Building on the meso and micro levels, this research will engage with relevant organisational actors within these strata. Smetanova et al. (2018) underscore the importance of stakeholders' perceptions, lived experiences, and attitudes in shaping engagement with organisational activities and objectives. Mainardes et al. (2012) further elaborate that stakeholders and organisational policies and structures mutually influence each other, albeit with the organisation often wielding greater power over its stakeholders. This study posits that a deeper understanding of the role of key organisational actors in e-learning is essential to understanding the situated context, potentials, and drawbacks of e-learning engagement in organisations. Specifically, it highlights the critical role of line managers who act as a conduit between organisational policies and the practical implementation of e-learning by junior employees, who are the primary users of these platforms. Furthermore, this thesis seeks to explore the experiences of ordinary workers, illuminating how factors such as occupational class and gender amongst others, influence e-learning experiences. This approach facilitates an examination of potentially conflicting interests among organisational actors, advocating for better recognition and management of these tensions within organisations productive system. By focusing on the contexts that shape stakeholder and organisational actors' interests, the study explores avenues for reconciling these interests, thereby enhancing organisational cohesion and effectiveness.

Additionally, this research recognises the impact of external and internal workplace elements, as Castells (2011) suggested, on the implementation and efficacy of e-learning. It will investigate how characteristics of the digital divide influence engagement with e-learning and assess their implications for fostering or limiting learning environments in organisations.

This approach emphasises the necessity of understanding both the technological and socio-cultural dimensions of e-learning to fully harness its potential in enhancing organisational learning landscapes.

1.7 Thesis Outline

The remaining chapters are as follows:

Chapter 2: This chapter offers a review of academic literature with view to unpacking the parameters and situated context of e-learning in organisations. The chapter then delves into providing an overview and review of e-learning in practice, the learning environment, expansive and restrictive learning environment. The chapter also explores the dimensions of the parameters used to understand the situated application of e-learning in organisations. Chapter 2 also focused on the role of line management, workplace structure and the influence of other dynamics on the situated context of e-learning in organisations.

Chapter 3: This chapter provides an overview of the methodological approach employed in this study. The influences guiding the purpose and approach of the study are also discussed in this chapter. The chapter also explains the strategy and means used in collating and analysing data from case organisations.

Chapter 4: This chapter presents findings from case organisations. It predominantly discusses findings from junior and senior level respondents as regards their lived experiences and perception of e-learning. It also presents a critical discussion on how certain conditions and organisational design shape learning behaviour and attitude to e-learning programs.

Chapter 5: This chapter critically examines e-learning within the expansive and restrictive divide. Drawing from the findings from both case organisations, this chapter looked at the potentials of e-learning within both learning environment and how workplace contexts and

relationships were key in understanding how expansive or restrictive e-learning is in application.

Chapter 6: This chapter drawing from the context derived from case organisations findings, discusses the implication for e-learning in organisations. It discusses how the organisation of work; the productive system and organisational structures all contribute to the expansive and restrictive nature of e-learning as currently practiced in both case organisation.

Chapter 7: This chapter concludes the study by reflecting on how the study has answered the questions it sought to address. This chapter outlines and discusses the contributions of this research to both theory and practice. The chapter also considers the limitations of the study whilst advocating for future research. Figure 1 shows the flow of the rest of the thesis.

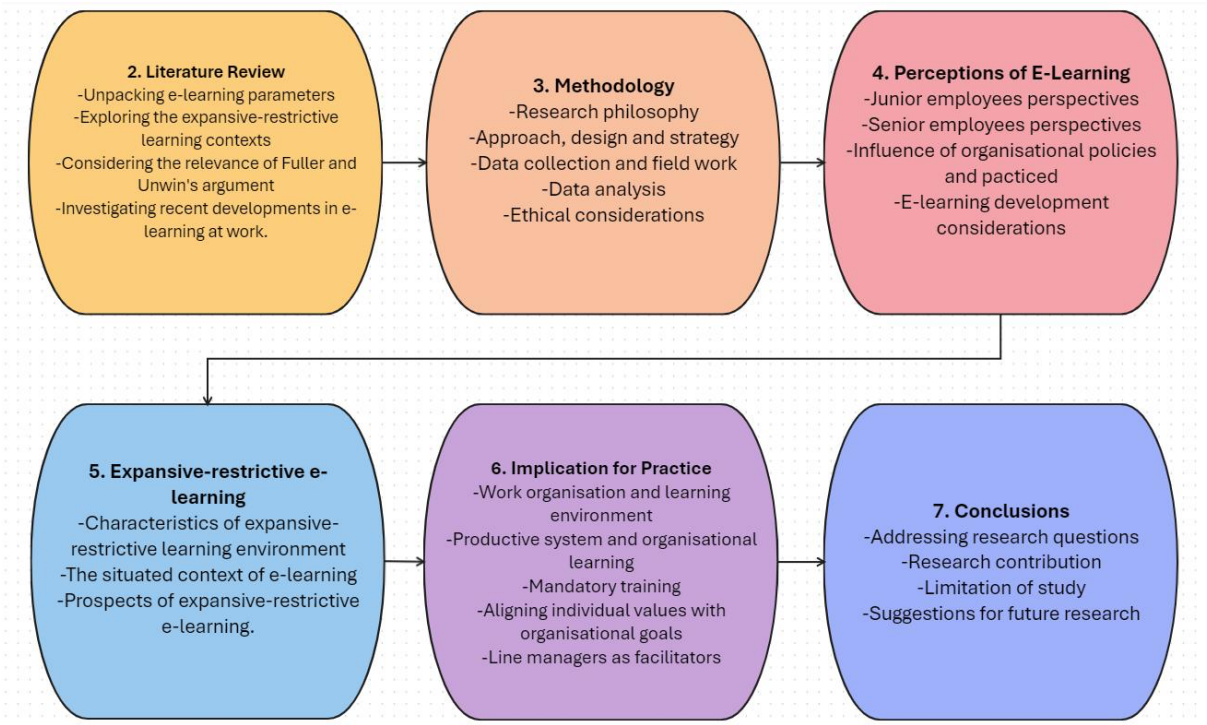

Figure 1:Thesis Outline

Chapter 2: Literature Review

2.1 Introduction

This literature review forms a coherent argument leading to the generation of pivotal research questions. It addresses the continuum between expansive and restrictive e-learning environments within UK organisations. Through critically examining the literature, this chapter seeks to dissect the implementation of e-learning and its repercussions for organisational learning cultures. It examines e-learning's embedded meaning within organisational policies and practices, evaluates the degree of its integration within learning environments, and assesses the impact on the continuum of learning expansiveness. This inquiry serves not merely as a descriptive account but as an analytical trajectory that lays the groundwork for posing fundamental research questions concerning the nature, incorporation, and implications of e-learning in organisational contexts.

Initially, this chapter unpacks the parameters of e-learning, dissecting its various components and how they intersect in diverse organisation and learning contexts (Goyal et al., 2012). This exploration is rooted in a holistic understanding of what constitutes e-learning, its evolving nature in the digital era, and how it adapts to different organisational settings. Also, Fuller and Unwin (2003) explore the concepts of expansive and restrictive learning in the workplace. As noted in the introduction, Expansive learning is an approach that encourages broad, holistic development, encompassing job-specific skills and personal and professional growth. In contrast, restrictive learning focuses on narrow, task-specific skill acquisition. The subsequent sections unpack the parameters of e-learning (2.2), followed by a deep exploration of expansive and restrictive contours of learning context (2.3), a review of contemporary research on e-learning (2.4) and an evaluation of the relevance of Fuller and Unwin's argument (2.5). This chapter will examine how e-learning strategies can foster an expansive learning environment or contribute to a more restrictive, task-focused learning culture (Vovides et al., 2007).

The discussion then transitions to a critical examination of contemporary research on e-learning at work. The next section (2.2) synthesises current scholarly insights and debates, highlighting how e-learning has been shaped by and continues to shape the modern workplace. It looks at the transformation of workplace learning cultures, the integration of technology in learning processes, and the implications of these changes for both employees and employers (Aberdour, 2016). It argues for the necessity of these systems in overcoming the limitations of current e-learning practices and theories, particularly in the context of learning. In essence, the next section addresses the important aspects of a productive system, such as the social context of e-learning, exploring issues such as the digital divide, inclusion and exclusion, and the impact of organisational gender dynamics and inequality regimes on e-learning experiences (Khalid and Pedersen, 2016).

2.2 Unpacking the Parameters of E-Learning in a Productive System

For analytical purposes, an organisation is considered a productive system driven by goals, humans, and machines to produce specific products or services (Meier et al., 2010). Systems theory conceptualises a system as a collective of interrelated components functioning cohesively to fulfil a specific purpose (Halloun, 2023). Within this concept, a productive system can be described as a complex assembly of elements harmoniously composed to achieve predetermined goals in organisational or workplace contexts (Wilkinson, 2002; Felstead et al., 2019). Distinct in its dynamic nature, it integrates social structures with technological infrastructure, aiming to meet objectives centred around organisational efficiency and effectiveness (Birasnav et al., 2019). This integration often leverages technological innovations or engages in transformative learning processes. Understanding the evolving nature of a productive system is crucial, particularly in its capacity to adapt to changing goals and challenges (Felstead et al., 2019). A productive system's dynamic quality allows it to adjust to new requirements flexibly, underlining its significance in contemporary

organisational and educational landscapes (Redeker et al., 2012). E-learning potentially emerges as a pivotal element within this context, serving as both a catalyst and a beneficiary of the evolving productive system (Bezovski and Poorani, 2016).

Firstly, from a structural perspective, the focus lies on the composition of a system and the relationships among its components. This angle examines how different system parts, such as organisational departments, technological tools, or processes, interact and collectively contribute to the desired outcome (Haddad et al., 2022). Understanding the intricacies of these relationships is crucial for comprehending how the system functions as a cohesive whole (Hordern, 2014). Secondly, the hierarchical perspective of a productive system sheds light on the layers of organisational and social structures within it (Ferris et al., 1998). This aspect involves delving into the nuances of authority, decision-making, information flow and how these hierarchical layers influence the overall functionality and efficacy of the system (Dobrajska et al., 2015). Thirdly, the functional aspect of a system is concerned with its outputs - the products or services it generates (Hafat and Ali, 2022). These perspectives will evaluate the system's effectiveness in fulfilling its intended purpose and the value it delivers to its users or stakeholders. This holistic approach is essential for optimising performance and enhancing desired outcomes, particularly in the functionality and effectiveness of e-learning, thus impacting the quality of educational delivery and students' learning experience.

E-learning is potentially critical in introducing new agents into organisations' social structures and cultures. Owing to the socio-technical nature of modern organisations, e-learning incorporates a new method of skill and knowledge dissemination and reshaping the social dynamics to accommodate novel learning modalities (McKenzie and Wajcman, 1999; Dafoe, 2015; Hallstrom, 2020). Hence, conceptualising e-learning as an integral part of a productive system is necessary to unpack e-learning parameters regarding its relationship with restrictive-

expansive learning contexts within an organisation's social structure, strategic goals, technological infrastructure, work process and communication. E-learning has been argued to foster a more agile and responsive learning environment, enabling employees to quickly adapt to new information, technologies, and methods (Steele-Johnson and Hyde, 1997; Nedelkoska, 2018). This agility is suggested to be essential for organisations aiming to stay competitive in rapidly changing industries. The evidence suggests that E-learning can be a fundamental component of a modern productive system and can either be mandatory or voluntary based on external regulations and internal policies (Mythen and Janice, 2011; Sutha, 2016; Noe and Kodwani, 2018). Its ability to introduce new learning agents, enhance structural capabilities, and adapt to technological advances is vital in organisational and educational systems' overall functionality and success.

As depicted in Figure 2, e-learning within organisations has generally been influenced by four main dimensions: the Organisational Learning Dimension, the Social Dimension, the Technological Dimension, and the Work and Communication Dimension, which will be elaborated on in the following subsections.

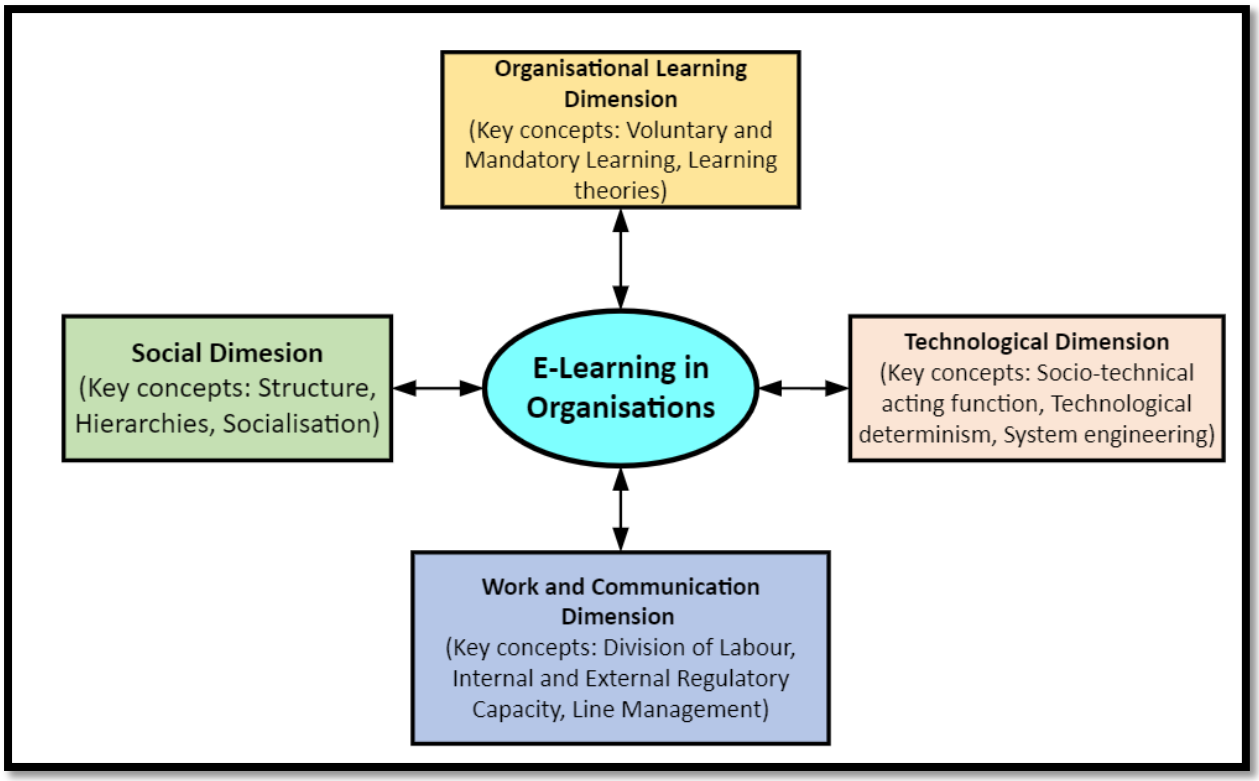

Figure 2: Interconnected Dimensions of E-Learning in Organisations (Compiled by Author)

This context encapsulates the multi-faceted nature of e-learning in organisations and serves as a guide for examining the various influences on organisational learning, including social, technology, learning theories and work relationships. The following subsections will unpack these dimensions in turn.

2.2.1 E-learning Parameters Related to the Social Dimension of the Productive System

The social dimension of a productive system encompasses a multi-layered hierarchical structure, ranging from micro to macro levels (Svedin, 2005). Authority structures and the division of labour across the organisation are key factors influencing individual learning and overall organisational performance (Pugh et al., 1968). The micro level focuses on the individual, where personal skills, attitudes, and behaviours are critical (Clarke, 2018). Moving

to the meso level, the emphasis shifts to teams or projects, where group dynamics, line management and collaboration become central (Valentine and Edmondson, 2015). At the macro level, the perspective widens to include the entire organisation, its culture, structural dynamics, and external influences (Seufert et al., 1999).

The hierarchical concept posits that a system is part of larger supersystems and contains smaller subsystems (Salthe, 1985). This concept is instrumental in examining influences from broader contexts like market, industry, and sector levels, which include extensive regulatory environments (Geels, 2014). Within this hierarchy, the interplay among different organisations in industry and the sector's regulatory and competitive landscape becomes pivotal in driving organisational performance goals (Lee and Klassen, 2016). Consequently, this dictates the mandatory learning and training requirements for compliance and competitiveness (Broderick and Boudreau, 1992). These multiple levels of interaction highlight the intricate relationship between learning, compliance with regulatory standards, and maintaining a competitive edge in the broader system.

It is argued that the various hierarchical levels within an organisation create distinct pressures and motivations for individuals to participate in both mandatory and voluntary learning (Rahman et al., 2009). Central to this is the dynamic interplay between individual agents and the broader social structure of the organisation (Reed, 2003). This relationship can be viewed through two lenses: unity, where the organisation is seen as a cohesive system operating within a larger supersystem, and diversity, where the organisation is understood as a system comprising numerous subsystems (Geels, 2014; Alter, 2018). The concept of unity emphasises the integrated role of individuals as drivers of performance of the holistic system, whereas diversity recognises each individual's unique and diverse contributions (Randel et al., 2018). This interplay is crucial for understanding the mutual influence of social structures and

individual behaviours and decisions. Socialisation plays a crucial role in this dynamic, acting as the mechanism by which individuals acquire the skills and capabilities necessary to assume their organisational roles effectively (Ashforth et al., 2007). This process facilitates understanding and the internalisation of organisational norms, values, and practices (Watkins and Marsick, 1992). Socialisation highlights the importance of voluntary learning as a means for individuals to enhance their fit and effectiveness within the organisation.

Expanding this discussion to encompass various organisational strata — from local workplace dynamics and regional divisions to senior management and extending to the broader contexts of organisational ownership, sector regulatory bodies, national/state governments, and international governance structures — underscores the crucial role of socialisation and associated learning (Felstead et al., 2009). This broad spectrum incorporates diverse motivations: mandatory ones, driven by top-down influences like performance targets, organisational policies and industry regulations, and voluntary ones, fuelled by bottom-up factors such as personal growth and career advancement (Daniels, 2010). These diverse motivations compel individuals to internalise organisational norms and pursue learning opportunities that enhance their suitability and effectiveness within these multi-level structures.

Exploring e-learning parameters linked to the social dimension has revealed the profound impact of social structure and hierarchy, socialisation and skill acquisition, fitness-enhancing learning, the regulatory and competitive landscape, and motivations for learning on e-learning initiatives (Pugh et al., 1968; Seufert et al., 1999; Svedin, 2005; Geels, 2014). These elements seem to collectively shape how e-learning is perceived, implemented, and engaged within an organisation, underlining the importance of aligning learning strategies with organisational culture, workforce development needs, and external influences (Lee and Klassen, 2016). The role of communication, which the evidence suggests is pivotal in these processes, facilitates

operational efficiency and learning across various specialisations. The following subsections will delve into the division of labour and specialisation, technological integration, and the socio-technical division of work, along with an examination of transformative, social, and experiential learning. This forthcoming analysis will further illuminate the multifaceted nature of e-learning within contemporary organisational settings, highlighting its critical role in both the operational and educational spheres.

2.2.2 E-learning Parameters Related to Communication and Work Processes Dimension of the Productive System

It is crucial to consider the fundamental function of an organisation: transforming raw materials and efforts into production outputs (Felstead et al., 2009). This system's social structure is not only hierarchical; it also manifests a complex differentiation into various departments, professional specialisations, and organisational divisions (Lawrence and Lorsch, 1967). Such a structure facilitates efficiency in the work process and discipline within the organisation. The division of labour within an organisation fundamentally shapes the nature of work and the potential for adaptability and learning (Hutchins, 1991).

Theoretically, this division can be categorised into two distinct models: one characterised by routine, repetitive tasks and the other by a more dynamic structure involving specialised roles with multifaceted responsibilities (Bahrami, 2009). The first model, rooted in Taylorism, emphasises efficiency through simplification and repetition of tasks, but at the cost of limiting workers' ability to manage disruptions and adapt to new situations (Holloway, 1991). While maximising short-term productivity, this approach potentially stifles innovation and restricts the development of broader skill sets. In contrast, the second model, which aligns more closely with human relations theories and human resource development, provides a more prosperous environment for learning and adaptation (Buller and McEvoy, 2012; Holbeche, 2022). This model fosters internal regulatory capacity by allowing workers to engage in various tasks and

granting them the autonomy to modify their work methods. This capacity is essential not just for personal development but also for organisational agility.

From an operational perspective, the internal regulatory capacity is critical for managing routine tasks and responding to non-routine changes (Huys and Van Hootegem, 2004). When workers are empowered to adapt their methods, they can respond more effectively to unforeseen challenges, enhancing the organisation's overall resilience (Lengnick-Hall et al., 2011). However, this adaptability must be balanced with the need for coordination and communication – fundamental tenets of systems theory (Mele et al., 2010). Effective communication channels are necessary to align these internal adaptations with the broader organisational goals and external regulatory requirements (Quirke, 2017).

The level of flexibility in work divisions, or internal regulatory capacity, can significantly impact external regulatory capacity (Majone, 1997). This interplay is particularly evident when non-routine changes demand a reconfiguration of established work patterns and exchange relations, thereby affecting the social dimension of the organisation and transcending hierarchical boundaries (Kremser and Blagoev, 2021). Moreover, the extent of workers' engagement in strictly standardised tasks or more flexible routines profoundly influences their learning styles and developmental trajectories (Wilkesmann and Wilkesmann, 2018). In restrictive environments, learning is often limited to task-specific skills. In contrast, more dynamic settings promote the development of a broader skill set, including coordination, communication, negotiation, and organisational skills, which are crucial for leadership and personal growth (Tether et al., 2005; Ashforth et al., 2007).

The role of line managers in executing internal and external regulations makes it crucial to develop and engage in e-learning within organisations. Line managers are strategically positioned within organisations, acting as the primary point of contact for non-managerial staff

(Hales, 2005). Their proximity to operational staff and daily interaction places them in a unique position to influence and lead learning initiatives (Alfes et al., 2013). Line managers significantly influence employee motivation, commitment, and participation in organisational activities (Brandl et al., 2009). Their management style shapes employees' perceptions, attitudes, and behaviours (Faber, 2014). This influence extends to the professional development of staff, particularly in the context of e-learning (Hassan et al., 2015). There is a close link between the two distinct models of work division and the dichotomy between operational involvement and strategic policy decision-making of line managers (Heraty & Morley, 1995; McGuire et al., 2008). There is also the challenge of balancing immediate operational pressures with the long-term development needs of employees (McGuire et al., 2008).

The parameters of e-learning discussed thus far highlight the dynamic nature of learning in organisational contexts (Lawrence and Lorsch, 1967). Adaptability and flexibility are key in e-learning systems, responding to changing educational needs and organisational shifts (Hutchins, 1991). These systems' internal and external regulatory capacities highlight the need to align learning initiatives with internal operational requirements and external regulatory standards (Huys and Van Hootegem, 2004). Effective communication and coordination are crucial for integrating varied learning methods and maintaining cohesive organisational learning (Mele et al., 2010). The distinction between task-specific and multifaceted learning highlights the necessity for e-learning systems to cater to immediate skill requirements while fostering broader educational objectives as seen in Figure 2

The following subsection will build upon the principles of division of labour to analyse e-learning parameters linked to the technological dimension as seen in Figure 2 of the productive system. This analysis will explore how technology enhances and interacts with various facets

of an organisation, including organisational learning, furthering our understanding of the role of e-learning in contemporary work environments.

2.2.3 E-learning Parameters Related to the Technological Dimension of the Productive System

The principle of division of labour within the operational level of an organisation plays a pivotal role in fostering internal regulatory capacity and cultivating a culture of voluntary learning (Huys and Van Hootegem, 2004). This internal regulatory capacity of work teams, characterised by autonomy and flexibility in how work is conducted, significantly influences its external regulatory capacity, affecting its ability to coordinate with other teams, respond to routine changes and communicate internal changes (Cross et al., 2008). This dynamic interaction between internal autonomy and external coordination can lead to innovative social change when non-routine changes transcend the organisation's traditional social structures and hierarchies (Wu et al., 2010; Claussen et al., 2019).

Understanding the division of labour is crucial, especially regarding the interaction between social agents (employees) and technical objects (technological tools and systems) in executing acting functions such as work tasks and communication processes (Parker and Grote, 2022). The socio-technical division of work emphasises the significance of this interaction, showing how humans and machines collaborate to accomplish these functions (Simmler and Frischknecht, 2021). This approach recognises technology as an integral component of the productive system, not merely as a tool but as a co-contributor to the work process. For example, modern organisations procure or subscribe to various technology service providers that offer similar capabilities using different platform designs, which makes platform-to-platform skills transfer difficult for individuals. The interplay between human skills and technological capabilities highlights the importance of considering both elements in designing and implementing work and associated learning processes (Juniu, 2005).

In developing e-learning strategies within organisations, the evidence suggests that it is essential to consider the principles of voluntarism and determinism (AbuRaya and Gomaa, 2020). Voluntarism, the belief in the primacy of individual choice and agency, can foster radical social change within the social dimension of an organisation (Osborne, 2013). This approach challenges the deterministic influences of external regulations and suggests that proactive, voluntary actions by individuals and groups can significantly reshape organisational norms and cultures (Leidner and Kayworth, 2006). Similarly, voluntarism can lead to a radical reconfiguration of technical objects and technological innovations, standing in contrast to the notion of technological determinism, which posits that technological development drives social change in a predetermined direction (Bimber, 1990; Leonardi and Barley, 2010). In e-learning, this implies that organisations are not merely passive recipients of technological advances but can actively shape and customise technological tools and systems to meet their needs and goals (Violante and Vezzetti, 2014).

To sum up the argument being made in this chapter thus far, it is crucial to align the analyses and development of e-learning systems with the socio-technical division of work principle (Martínez-Cerdá et al., 2018). E-learning initiatives must be crafted to enhance the synergy between human capabilities and technological advancements (Rosenberg, 2005). This involves ensuring that learning resources and methods are compatible with and actively support the organisation's operational realities (Garvin, 2003). Such alignment is instrumental in creating an effective and sustainable learning environment. It encourages a culture of continuous learning and adaptation, responsive to both the internal dynamics of the organisation and the external pressures it faces (Volberda and Lewin, 2003). This approach empowers organisations to leverage e-learning as a personal and organisational development tool, transcending social and technological determinism constraints (Costello, 2018).

The connection between systems theory and systems engineering is pivotal in understanding the bidirectional link between social change and the development of technical objects (Davidz and Nightingale, 2008; Facer. 2011). As introduced in section 2.2, systems theory, which emphasises the interdependence and interaction of elements within a complex whole, provides a foundational framework for systems engineering (Bahill and Gissing, 1998). This discipline extends the principles of systems theory into the practical aspects of designing and implementing complex systems, whether technological, organisational, or a blend of both (Davidz and Nightingale, 2008; Facer, 2011). This connection addresses how social changes can drive the development of technical objects and vice versa (Flitchy, 2008). Learning plays a crucial role in this dynamic. As systems evolve – technological advancements or social structure shifts – the need for continuous learning and adaptation becomes increasingly vital (Facer, 2011).

In the context of e-learning, the evidence suggests this adaptability is essential. E-learning strategies must be designed to accommodate and leverage these changes, ensuring that learning initiatives remain relevant and practical (Rosenberg, 2005). Systems engineering transcends traditional boundaries, encompassing not just hardware technical objects like machines and devices but also software elements such as operating systems, application systems, communication, and information systems (Wognum et al., 2019). Importantly, it also includes the social dimensions of work, business processes, organisational structures, and societal norms (Baxter and Sommerville, 2011). This holistic approach is crucial in developing e-learning strategies aligned with an organisation's technical and social aspects (Wang, 2011).

Key e-learning parameters that emerge from this perspective include adaptability to changing technological and social landscapes, integration of various types of learning content and alignment of e-learning initiatives with broader organisational and societal goals. The

following subsection of this analysis will delve deeper into learning theories within organisations, particularly considering the multi-dimensional nature of a productive system, as revealed so far. This exploration further discusses how different learning theories can be applied within a productive system's context, considering its technical, work division and social dimensions.

2.2.4 E-learning Parameters Related to the Organisational Learning Dimension of the Productive System

The impact of learning theories on e-learning in organisational settings presents a comprehensive study of the interrelations between educational principles and digital technology applications (Noesgaard and Ørngreen, 2015). The significance of technology integration in e-learning is underscored by Hameed (2022), who advocates for aligning information and communication technologies (ICTs) with educational objectives, a sentiment rooted in acceptance models like the technology acceptance model (TAM) and the unified theory of acceptance and use of technology (UTAUT), which emphasise technology's role in enhancing learning. Usability, a crucial factor in technology acceptance, is examined by Alshehri et al. (2020), who note the profound influence of user experience design on learners' engagement with learning management systems (LMS). These studies demonstrate the necessity of integrating social factors and system interactivity to encourage usage, aligning with UTAUT principles.

The concept of continuous learning in the workplace is critical to this dimension. Kapo et al. (2020) highlight the interplay between individual initiative and technological facilitation, suggesting that personal and environmental factors are essential for sustained e-learning engagement, affecting business performance. Li and Tsai (2020) explore the influence of goal orientation on e-learning outcomes within the organisational environment. These findings suggest that an organisation's commitment to fostering a learning culture and maintaining a

competitive organisational performance mindset are critical to successful e-learning. Furthermore, an organisation's preparedness for e-learning is intricately linked to its cultural ethos, as Sonatha and Azmi (2020) reveal through their application of the competing value framework (CVF) (Zeb et al., 2021). This indicates that organisational culture is a significant predictor of e-learning readiness.

It important to note the influence of various learning theories in understanding the complex relationships between individuals, technologies, and organisations. This understanding is critical for exploring the dichotomy between restrictive and expansive work organisations is reflected in the applicability of various learning theories. In restrictive environments where efficiency and standardisation are paramount, behaviourism and cognitivism are particularly relevant. Behaviourism and cognitivism align with structured learning approaches that emphasise clear objectives and measurable outcomes, suitable for such settings (Valverde-Berrocoso et al., 2020). In contrast, flexible work environments, which value autonomy, creativity, and a broad scope of tasks, align more with constructivism, humanism, and connectivism. These theories support e-learning strategies that foster active knowledge construction, personal growth, and networked learning. For instance, flexibility and autonomy in learning, as encouraged by these theories, promote authentic learning experiences and student autonomy (Cortes, 2020).

They understand that restrictive environments may benefit from more structured learning approaches. In contrast, expansive environments may thrive with approaches that encourage exploration and self-direction, critical in designing effective e-learning strategies. This understanding is fundamental given the rise of e-learning platforms and the need for adaptability in various organisational settings (Dang et al., 2021). This synthesis encapsulates the multifaceted nature of e-learning in organisational settings. It highlights the importance of

aligning learning theories with the organisational structure to enhance the effectiveness of e-learning initiatives, especially in the context of the evolving demands of the modern workforce.

2.2.5 An Overview of the Four Dimensions

So far, the four dimensions have helped to unpack various dichotomies in terms of the parameters of describing e-learning in organisations. Figure 3 shows the interplay between various dimensions of organisational structure and learning theories, which guides understanding the continuum of restrictive-expansive learning environments in terms of the approaches to enhancing individual efficacy, organisational competitiveness, and technological efficiency in organisations.

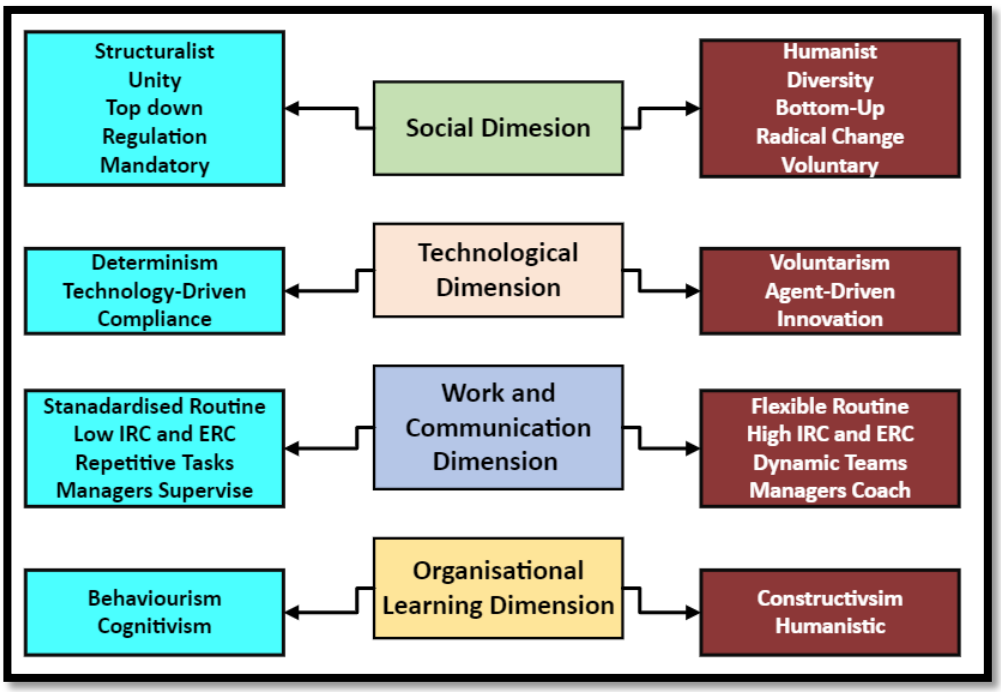

Figure 3: Showing Common Dichotomies of the Dimensions of Organisational E-Learning (Compiled by Author)

The social dimension emphasises a structuralist approach with top-down regulation and mandatory compliance, contrasting with a humanist perspective promoting diversity, bottom-

up initiatives, and voluntary, radical change. The technological dimension contrasts deterministic, technology-driven compliance with voluntarism and agent-driven innovation. The work and communication dimension presents a dichotomy between a standardised routine with low internal and external regulatory capacity (IRC and ERC) and a more flexible approach with high IRC and ERC, advocating for dynamic team structures where managers act more as coaches than supervisors. Lastly, the organisational learning dimension links learning theories to these practices, associating behaviourism and cognitivism with more traditional, structured environments. In contrast, constructivism and humanistic theories align with more flexible, learner-centred settings. These dichotomies unpacked from exploring the four dimensions of a productive system are reflective of the nature of e-learning in organisations as they show a common trend in describing the expansive-restrictive contours of e-learning.

The subsequent section will delve into the restrictive-expansive learning spectrum. It will explore how these dimensions and their associated learning theories can either constrain or empower learners within organisational settings, potentially influencing their ability to innovate, adapt, and evolve in their professional development.

2.3 Learning Contexts: Expansive and Restrictive Contours

In the evolving landscape of organisational learning, the spectrum of restrictive to expansive learning frameworks plays a pivotal role. The exploration of expansive versus restrictive e-learning environments presents an intriguing dynamic within the field of organisational learning. As delineated in various scholarly discussions, this dichotomy serves as a critical lens through which the strategies and outcomes of e-learning in corporate settings can be understood. This study aligns with the thoughts of several studies (Altman, 2015, Prameswari and Budiyanto, 2017) who posit that the environment in which learning takes place is instrumental to its effectiveness. As illustrated in Figure 2 in the previous section (2.2.4), the social dimension of learning within organisations can either foster a culture of shared

knowledge and participatory development or confine it to siloed role-specific skill acquisition (Wenger, 1998). This dichotomy extends across technological, work and communication, and organisational learning dimensions. Fuller and Unwin (2004) offers two distinctive learning environments within the workplace. Technology has been argued to catalyse innovation and skill diversification in expansive learning environments, integrating e-learning into high-performance work systems that promote engagement and inclusivity (Bates, 2015). Conversely, in more restrictive settings, the evidence suggests that technology is often relegated to a tool for ensuring compliance with mandatory training, lacking in developmental scope.

Workplace relationships mirror this divide, where expansive structures encourage open access to learning and managerial support for individual development (Garavan et al., 2016). At the same time, restrictive environments limit learning opportunities and emphasise managerial control (Ellinger, 2005, O'Leary, 2020). At the organisational level, expansive learning recognises and nurtures the learner in every employee, aligning personal growth with organisational objectives and fostering boundary-crossing competencies. Restrictive approaches, however, often overlook the individual's learning potential, focusing narrowly on organisational needs with limited scope for personal development (Appelbaum et al. 2000; Akkerman and Bakker, 2011). In expansive e-learning environments, compliance is incorporated into a larger continuous learning and development framework. This approach transcends the mere fulfilment of obligatory training requirements, fostering a culture of lifelong learning within the organisation (Smith and Sadler-Smith, 2006). In contrast, restrictive e-learning environments focus narrowly on compliance, often neglecting the broader developmental aspects of learning (Billett, 2001). This divergence underscores the varied strategic orientations organisations adopt towards learning and development.

The function of line management in shaping the e-learning landscape is multifaceted. In expansive environments, line managers are instrumental in catalysing employee development, acting as facilitators and mentors (Eraut and Hirsh, 2007). Their role extends beyond mere compliance enforcement to nurturing and supporting employee growth. Conversely, line management primarily ensures alignment with organisational e-learning agendas in restrictive setups, often needing more supportive elements crucial for holistic development (Armstrong and Taylor, 2014). Expansive learning environments prioritise employee engagement and inclusion, creating a supportive infrastructure that encourages diverse and inclusive learning communities (Wenger, 1998). This inclusivity ensures that e-learning systems cater to varied employee needs and backgrounds. In restrictive environments, however, there is often a lack of consideration for diverse learner profiles, leading to a one-size-fits-all approach that can exclude certain groups (Illeris, 2003).

In expansive e-learning frameworks, learning is seamlessly integrated into high-performance work systems, underlining the symbiotic relationship between learning and organisational performance (Appelbaum et al., 2000). This integration results in a learning culture supporting organisational and employee performance. Restrictive e-learning systems, however, are typically characterised by a narrow focus on compliance and operational efficiency, with little emphasis on leveraging learning for broader performance enhancement (Boxall and Purcell, 2011). The contrast between expansive and restrictive learning environments is also evident in the degree of employee voice and involvement. Expansive environments are characterised by participatory learning cultures, where employees actively contribute to and shape their learning experiences (Marchington and Wilkinson, 2005). Restrictive environments, however, tend to adopt a top-down approach to e-learning, with limited opportunities for employee input or involvement in shaping learning content or processes (Guest, 2017).

While presenting a binary perspective, these characteristics are not absolute endpoints but positions on a continuum. Organisations may exhibit varying degrees of expansiveness or restrictiveness in their e-learning strategies, influenced by organisational culture, leadership style, industry norms, and workforce demographics. Recognising this spectrum is crucial for understanding the nuances of e-learning in different organisational contexts and devising strategies that align with specific organisational needs and goals. In particular, the next five subsections will discuss aspects related to how these expansive and restrictive paradigms manifest within the practical realm of e-learning in organisations, shaping the experiences of employees, managers, and organisational top management teams.

2.3.1 Employees Role, Individual Learning and Collective Responsibilities

The expansive-restrictive learning framework offers a nuanced perspective on employee roles and responsibilities in organisational learning. Participation in communities of practice is a key differentiator; expansive environments promote extensive involvement, fostering a culture of shared knowledge and collaborative learning, while restrictive environments limit such interactions, often resulting in isolated learning experiences confined to specific roles or tasks (Wenger et al., 2002; Brown and Duguid, 2001). Access to learning opportunities is broader in expansive settings, allowing employees to explore various skills and knowledge areas, whereas restrictive environments confine learning to a narrow set of tasks or locations, potentially hindering professional growth (Billett, 2004; Kolb, 1984). The provision of time for learning and reflection also varies; expansive environments offer ample time and opportunities for reflection, enabling more profound learning and understanding, unlike restrictive settings where such opportunities are minimal (Schön, 1983; Eraut, 2000).

The transition to full participation in the workplace reflects these divergent learning approaches. Expansive environments advocate for a gradual transition, allowing employees to

acclimate and integrate fully, whereas restrictive environments push for a swift transition, often at the expense of comprehensive learning (Senge, 1990; Marsick and Watkins, 2003). Regarding the vision of workplace learning, expansive environments focus on career progression, aligning personal and organisational growth. In contrast, restrictive settings have a static view, concentrating solely on job-specific skills (Ellinger, 2005; Garavan, 2007). The role of organisational support in learning is crucial; expansive environments provide strong support for employee learning, unlike restrictive ones where such support is weak or absent (Engeström, 2001; Wenger, 1998).

Opportunities for identity extension and boundary crossing are more prevalent in expansive environments, facilitating a multi-dimensional view of expertise and innovation. Restrictive environments, however, offer limited opportunities for such development, often maintaining rigid specialist roles and a uni-dimensional view of expertise (Barley, 1996; Druskat and Wolff, 2001). Technical skills and teamwork are highly valued in expansive environments where diverse learning opportunities are encouraged, and innovation is necessary. In restrictive environments, these aspects are often taken for granted or rigidly defined, with limited access to qualifications and learning opportunities (Nonaka & Takeuchi, 1995; Tidd & Bessant, 2009). These contrasting characteristics between expansive and restrictive e-learning environments emphasise the importance of a holistic approach to employee training and development, integrating learning into organisational culture and performance systems (Fuller & Unwin, 2011; Billett, 2014).

A vital gap identified in current research, as pointed out by Lin et al. (2011), is the exploration of e-learning from the individual employee's perspective. While extensively debated for efficiency and effectiveness, the technological aspects of e-learning often overshadow the learners' personal experiences. This study aims to delve into these lived experiences,

understanding e-learning not merely as a technological intervention but as a process deeply influenced by social contexts and individual perceptions. This study posits e-learning as a multifunctional and dynamic organisational tool. It transcends its role as a mere medium for training and development, necessitating a comprehensive understanding of its broader social implications and the nuanced experiences of its users. Exploring these dimensions forms the crux of this research, aiming to contribute to a more holistic understanding of e-learning in organisational contexts.

Understanding the individual perceptions of e-learning, influenced by various learning theories and andragogy principles, is crucial for acceptance and engagement, as these perceptions can provide valuable insights into designing more effective, user-centric e-learning solutions. This approach aligns with Huang's (2014) emphasis on self-regulated learning, highlighting the importance of learners developing their learning plans in line with specific needs. The professional attitudes towards e-learning and opportunities for experiential learning significantly impact the effectiveness of e-learning initiatives. Encouraging a positive attitude and providing experiential learning opportunities can enhance the learning experience and outcomes. Hence, a comprehensive understanding of e-learning encompasses socio-technical dynamics, individual perceptions, and the broader organisational context. This holistic approach is essential for realising the full potential of e-learning as a strategic tool in enhancing organisational training and development.

2.3.2 The Workplace, Support Systems and Learning at Work

In organisational learning, expansive and restrictive learning environments are integral to understanding the implementation and challenges associated with e-learning. This review reveals various facets of this concept, intertwining the work environment, learning environment, and support systems.

The challenges associated with e-learning in organisations are multidimensional. Dobbs (2002) criticises e-learning platforms that merely serve as information repositories, emphasising the need to incorporate practice, feedback, and guidance. Falconer (2006) and Gillis (2000) emphasise the necessity of collaborative and interactive functions in e-learning programs to maintain learner engagement. Derouin et al. (2005) and Tavangarian et al. (2004) recommend that e-learning systems be user-friendly, contain high-quality content, and be supported by efficient IT infrastructure. The productive system's objectives significantly influence the distribution of skills and knowledge within an organisation, shaping the learning environment. Workplaces characterised by high trust and discretion delegate more regulatory capacity and are more conducive to expansive learning environments than those with low trust and discretion, as Felstead et al. (2011) noted. As per the division of labour and routine flexibility parameters, the nature and design of job rotation also play a crucial role in determining whether learning is expansive or restrictive (Green et al., 2022).

Work and communication, as influenced by routine flexibility, regulatory capacity, and other dynamics within the workplace, significantly impact learning environments. Felstead et al. (2009) and Li et al. (2017) discuss how the production structure, (i.e. operational, supervisory, support and administrative), creates a power hierarchy, affecting the distribution and accessibility of learning opportunities. Baird and Wang (2010) argue that specific organisational dimensions such as collaboration and formalisation are essential for employee empowerment and skill development, contributing to expansive e-learning environments. As highlighted by Wenger (2011), the role of communities of practice emphasises that learning is fundamentally a form of social participation. The success of learning and development activities relies heavily on the relationships between organisational actors and the balance of their interests.

The production structure also influences the provision of support systems to employees, such as IT, quality assurance, and competency or performance training. Technology integration in these support systems, particularly e-learning, is widely acknowledged. Findikli and Bayarcelik (2015) have observed the longstanding use of technology in managing human resources. However, Shobaki et al. (2017) and Stone and Dulebohn (2013) highlight the practical challenges and the need for more focus on underlying relationships and structures supported by technologies. This highlights a gap between an organisation's e-learning policies and its practical implementation within organisations. Studies also call for a greater focus on the social processes and relationships surrounding e-learning or human resource development in HRM. Wiblen (2016) and Parry and Tyson (2011) stress the importance of understanding stakeholder perceptions and relationships between organisational actors in developing and sustaining technology-enhance human resources management (e-HRM).

The integration of e-learning within e-HRM is not just about incorporating technology but also about understanding its impact on organisational dynamics and employee relations (Findikli and Bayarcelik (2015). Shobaki et al. (2017) also emphasise the practical challenges in applying e-learning within HRM, highlighting a gap between theoretical potential and practical execution. This perspective is crucial in understanding the limitations and possibilities of e-learning as part of an organisation's support system and a tool for human resource development. Stone and Dulebohn (2013) note that while the effectiveness of digital infrastructure is often highlighted, the relationships and support structures that underpin it are sometimes overlooked. This observation is critical for understanding technology's impact on organisational culture and employee engagement. Myllymaki (2021) further argues for a more nuanced approach that studies the social processes and relationships integral to e-HRM and, as such, e-learning.

The role of stakeholder perception in the effectiveness of digital assets and enabling technologies is highlighted by Wiblen (2016). Understanding and addressing the perceptions and objectives of various stakeholders, including employees and managers, is vital to successfully implementing support systems. Parry and Tyson (2011) also highlight the importance of relationships among actors within the productive system in determining the sustainability of support systems. Studies acknowledge the general support for e-learning but also identify significant challenges. As Dobbs (2002) suggests, e-learning platforms must go beyond mere information repositories and incorporate practice, feedback, and guidance elements. Falconer (2006) and Gillis (2000) emphasise the need for engaging and interactive e-learning platforms to maintain learner interest and motivation. Furthermore, the importance of user-friendly design and robust infrastructure, as highlighted by Derouin et al. (2005) and Tavangarian et al. (2004), must be considered in facilitating compelling e-learning experiences.

2.3.3 Technological Assets and Digital Infrastructure

This research further explores the varied dimensions of e-learning implementation and impact. The flexibility and consistency e-learning provides in delivering training across diverse geographical locations are significant drivers for its adoption in organisations. This aspect is highlighted by Welsh et al. (2003), who emphasise the role of e-learning in facilitating uniform training dissemination, a point echoed by Beamish et al. (2002), who note its effectiveness in transmitting standard training content across multiple organisational sites. The cost-effectiveness of e-learning, as opposed to traditional training methods, is a significant advantage. Roffe (2009) and Welsh et al. (2003) highlight the long-term financial benefits that stem from initial investments in e-learning infrastructure. This cost-benefit balance is particularly evident in the savings from reduced travel and physical training infrastructure, making e-learning a financially attractive option for organisations. The adaptability of e-learning in promptly updating and introducing new practices is noted by Burges and Russell

(2003). This agility is crucial for organisations in rapidly evolving business environments. Moreover, the flexibility of e-learning in catering to diverse learning styles and paces, as observed by Walton et al. (2005) and Bates (2005), adds to its appeal. It accommodates individual learner needs, offering a self-paced learning environment increasingly sought after in contemporary workplace settings.

The exploration of e-learning within organisations is deeply intertwined with the evolving dynamics of technology, social contexts, and organisational strategies. Technology integration in training and development has been a significant driving force, reshaping the landscape of organisational learning. Steele-Johnson and Hyde (1997) and Nedelkoska (2018) emphasise how technological advancements have transformed training and development, highlighting the need for organisations to adapt their learning strategies accordingly. However, as Zemsky and Massy (2004) and Dublin and Cross (2003) note, e-learning is often narrowly defined within educational and informational boundaries, with less emphasis on its broader social context. Traditionally associated with online, web-based, and computer-based learning, E-learning has expanded beyond these confines to include a broader range of electronic media applications (Alexander, 2001; Mayer, 2003). This evolution reflects a shift from a purely technological focus to a more inclusive understanding of the role of e-learning (Piskurich, 2003; The Tecnia Institute, 2014). It is not just the medium that defines e-learning but also the content, context, and delivery methods.

The social context of e-learning, which is crucial to the continuum of expansive and restrictive learning, is often under-explored. It is vital to fill this gap by investigating how e-learning impacts employee engagement and experience, contributing to expansive learning environments within organisations. Understanding the social dimensions of e-learning is also essential for designing and implementing effective learning strategies. Stakeholder

engagement and alignment with strategic organisational goals are fundamental in effective e-learning implementation. As Wiblen (2016) and Parry and Tyson (2011) noted, the sustainability of IT systems within organisations depends significantly on understanding stakeholder perceptions and the nature of relationships among organisational actors, including managers and employees.

The concept of socio-technical co-creation in e-learning is gaining traction, emphasising the importance of integrating social and technical aspects in e-learning system design. This approach ensures that learning solutions are technologically sound and socially relevant, addressing learners' diverse needs and preferences. One of the challenges in e-learning is overcoming routine rigidity, as noted by Dobbs (2002), and ensuring that e-learning platforms are not mere information repositories but facilitate interactive, practice-based learning (Falconer, 2006; Gillis, 2000). Derouin et al. (2005) and Tavangarian et al. (2004) further emphasise the need for user-friendly designs and high-quality content supported by efficient IT infrastructure to enhance the effectiveness of e-learning.

A study by Lee et al. (2014) highlights that mobility and personalisation are crucial for adopting smart learning in the workplace. It suggests that human resource development human resources development (HRD) managers and employees view the usefulness and ease of use of intelligent learning differently, emphasising the need for tailored approaches for successful adoption. Mekacha (2022) discusses integrating micro and hybrid learning with immersive technologies in intelligent learning environments. This approach aims to create personalised and gamified learning experiences that bridge school and work environments. Stuikys and Burbaite (2018) focus on a case study related to STEM-driven computer science education in innovative educational environments, highlighting the integration of intelligent components like generative learning objects and educational robot-based workplaces.

Reflecting on the progressive intersections of technology and education, the work of Bitonto et al. (2015) resonates with an innovative blend of game-based learning and social dynamics intricately woven into the fabric of e-health education. This integration underscores the potential of engaging learning experiences and highlights a sophisticated nexus between intelligent learning environments, social networks, and recommender systems. Such advancements suggest a shift from traditional learning paradigms to deeply personalised and interactive ones. In parallel, the conceptualisation of EDucation-research-industry Integration through Simulation On the Net (EDISON) by Lee et al. (2012) serves as a testament to the transformative power of intelligent learning systems in highly specialised fields such as Computational Fluid Dynamics. The EDISON framework allows learners to transcend conventional boundaries through experiment-based learning, implying that the future of education relies heavily on the ubiquity and adaptability of learning technologies. Moreover, Huang et al. (2017) envision intelligent city learning environments seamlessly integrating formal and informal educational experiences. Their exploration into the educational fabric of urban settings illuminates the profound impact that innovative learning environments can have on a learner's interaction with the immediate and extended environment. It prompts contemplation on how learning can be both a deliberate and incidental outcome of interaction with intelligent city infrastructure, reinforcing the idea that education can be as omnipresent as our cities. Collectively, these studies describe technological advancements and provoke a deeper consideration of how these intelligent systems redefine the spatial and social contexts of learning, signalling a transformative era in educational methodologies.

2.3.4 Line Management and Supervisory Responsibilities

As argued in this section, the successful implementation and engagement of e-learning in organisations rely heavily on line managers' nuanced roles and responsibilities. These individuals, strategically positioned within the organisational hierarchy, are pivotal in shaping

the learning culture, particularly in expansive versus restrictive learning environments. Alfes et al. (2013) highlight the strategic position of line managers as a bridge between the higher management and non-managerial staff. Their proximity to general employees uniquely positions them to influence and guide learning initiatives directly, making their role crucial in the effective deployment and adoption of e-learning within organisations (Hales, 2005).

Due to their direct contact with non-managerial staff, line managers are uniquely positioned to influence and guide learning initiatives within organisations. Their strategic position is not merely administrative but also a critical link in communicating and implementing organisational policies and practices, including e-learning (Hassan et al., 2015). Their proximity to the general employees allows them to understand their teams' unique needs, challenges, and potential in relation to e-learning initiatives. The involvement of line managers in human resource development, especially in learning and development, has seen a notable increase (Fletcher, 2019). This evolution signifies transitioning from traditional supervisory duties to roles more aligned with strategic organisational objectives, including facilitating and supporting e-learning initiatives.

The role of line managers has evolved significantly over time, transitioning from traditional supervisory duties to roles that encompass strategic organisational objectives, including the facilitation and support of e-learning (Brandl et al., 2009). This evolution reflects an increasing responsibility in human resource development functions, especially learning and development (Sawdon and Sawdon, 1995). Beyond their primary managerial responsibilities, line managers are critical in identifying and addressing employee needs and supporting personal and organisational objectives. Ash (1995) highlights the importance of line managers in encouraging and facilitating learning opportunities, including e-learning. Their expanded role includes overseeing the operational aspects of e-learning and actively participating in its

strategic planning and policy-making processes. The influence of line managers extends to motivating and increasing the participation levels of employees in various organisational activities. Faber (2014) asserts that line managers' behaviour significantly shapes employees' perceptions and attitudes towards organisational initiatives such as e-learning.

As supervisors, line managers play a critical role in employees' personal and professional development. The expanding role of line managers includes involvement in the design and recommendation of training and development initiatives (McGuire et al., 2008). This involvement empowers them to tailor e-learning programs to meet the specific needs of their teams, thereby enhancing the effectiveness and relevance of these programs within the organisation. Gilbert et al. (2011) emphasises the influence of line managers on the effectiveness and relevance of e-learning programs within the organisation. This influential role underscores line managers' need to possess the necessary skills and knowledge to support and guide their teams through e-learning processes effectively.

Line managers also play a crucial role in internal communications related to training and development. They serve as the primary source of information for their teams regarding e-learning opportunities and expectations. Mishra et al. (2014) and Kuvaas and Dysvik (2010) discuss how line managers can significantly impact the motivation and engagement of employees with e-learning platforms, thereby influencing the overall learning culture within the organisation. Their ability to effectively communicate and motivate employees is crucial in fostering a positive and proactive learning environment.

Despite their strategic role, line managers often need help with challenges such as increased workload and pressure to deliver immediate results. These pressures can affect line managers' approaches to promoting and supporting training activities, including e-learning initiatives (Heraty and Morley, 1995). These challenges can impact their approach to promoting and

supporting training activities, including e-learning initiatives (McGuire et al., 2008). The pressures line managers face highlights the need for organisations to provide adequate support and resources to fulfil their evolving roles effectively. Line managers are vital in shaping and influencing the e-learning culture within organisations. Their strategic position and evolving responsibilities place them at the forefront of fostering an environment conducive to effective learning and development. However, the challenges they face in fulfilling these roles must be acknowledged and addressed by the organisation to ensure the successful implementation and engagement of e-learning initiatives.

2.3.5 External Pressures, Organisational Standards and Other Dynamics

In e-learning within organisational settings, the interplay between compliance-based learning and the broader productive system's structures is critical. Felstead et al. (2009) shed light on how regulatory pressures shape organisational training objectives, with compulsory training being a central element. This aligns with the definitions of training by Noe and Kodwani (2018) and Shah (2012), which emphasise its importance in enhancing employee capabilities to meet organisational objectives. The focus on compliance or mandatory training, highlighted by Sutha (2016), reflects its strategic role in organisations. Exploring employees' perceptions of mandatory e-learning training is vital, particularly across different sectoral contexts. Similarly, Mythen and Janice (2011), and Becker et al. (2012) describe compliance-based learning as training designed to meet regulatory and organisational standards. Sweeney and Martindale (2012) argue that such training often aims to meet legal, safety, or regulatory requirements.

As Felstead and Jewson (2014) pointed out, the discussion around mandatory training suggests it can act as a ceiling limiting the features of an expansive learning environment. Therefore, this study investigates employees' perceptions of non-voluntary e-learning modules and the balance between mandatory and voluntary training in e-learning systems. The role of

personalisation and learner control in e-learning, as discussed by Grund and Martin (2012), will also be explored, particularly in terms of how participation in training programs is influenced by the organisation's level of compliance or seriousness.

Gender dynamics in the workplace and their impact on e-learning environments are also explored, drawing insights from various researchers and theorists. Eldis (2009) and Bryson (1999) present gender as a socially constructed concept, while Acker (1990, 2006) emphasises the gendered nature of organisational culture and practices. Acker (2006) further identifies six components of inequality regimes within organisations, which influence the learning environment and engagement with development opportunities like e-learning. Gender discrimination's impact on e-learning engagement is also examined, exploring both direct and indirect forms of discrimination. The balance between work commitments, family responsibilities, and training opportunities, especially for women, is crucial. This is further elaborated by examining gendered perceptions of ICT and e-learning, highlighting differences in comfort and perception between genders regarding using ICT for training.

The social dimensions of e-learning are addressed, emphasising the workplace as a social construct (Boud and Garrick, 2012; Avis, 2010). This includes discussions on the digital divide (Bagchi, 2005; Gunkel, 2003), digital inclusion and exclusion (OECD, 2001; Enyon and Helsper, 2011; Livingston and Helsper, 2007), generational differences in e-learning engagement (Volkom et al. 2014; Nawaz and Kundi, 2011; Naidoo, 2017), and the sociocultural impact on e-learning (Rooksby, 2002; Choudrie et al., 2005). This evaluation has provided insights on a variety of factors influencing e-learning in organisational contexts, ranging from compliance-based learning and gender dynamics to broader social dimensions. Building on this, section 2.4 provides a review of recent developments on e-learning at work.

2.4 The Relevance of Fuller and Unwin's Arguments to Research on E-learning at Work

This review rigorously engages with Fuller and Unwin's (2004) expansive-restrictive learning continuum as a central theoretical framework, thereby providing a focused analysis of workplace learning environments within organisations. The framework distinguishes between environments that are 'expansive', promoting broad-based learning opportunities and growth, and 'restrictive', which are narrowly focused on immediate or specific tasks. In workplace learning, the dichotomy of expansive and restrictive learning environments, as conceptualised by Fuller and Unwin (2004), provides a nuanced understanding of how learning is structured and facilitated within organisations. This review integrates various scholars' insights to elucidate the dynamics of these learning environments. Expansive learning environments are characterised by their ability to foster robust communities of practice based on social learning theories (Wenger, 1998). Feeney (2016) emphasise that such environments encourage collaboration and actively reduce barriers to learning, promoting inclusivity and diversity.

The richness of learning opportunities in expansive environments further explains the critical role of context in facilitating accessible and diverse learning experiences (Marsick and Watkins, 2003). Central to the functioning of expansive learning environments is the organisational support and culture of collaboration they foster. Fuller and Unwin (2004) and Nielsen (2009) articulate the importance of organisational backing in nurturing a conducive learning culture. Autonomy and self-regulated learning are also pivotal in expansive environments. Huang (2014) delves into the significance of learners having control over their learning trajectory, resonating with the principles of andragogy that advocate for self-directed learning (Knowles, 1984). This approach to learning is complemented by observations on the need for organisations to balance their goals with individual employee development in planning

of workplace practices and learning environments (Billet, 2004; Andersen and Andersen, 2007).

In contrast, restrictive learning environments present a more confined scope. These environments often limit learning to specific, immediate tasks or roles, lacking the holistic approach seen in expansive environments. Gherardi (2000) discusses how a rigid organisational structure, typical of restrictive environments, can impede employee autonomy and stifle innovation. These settings frequently adopt a top-down approach to learning, focusing heavily on compliance and mandatory training at the expense of a broader, more integrative learning strategy. Furthermore, restrictive environments are characterised by minimal emphasis on comprehensive professional development. The focus is predominantly on meeting immediate organisational needs rather than fostering long-term employee growth and development. This limited approach extends to the community of practice within these environments, which often needs more collaborative and supportive elements essential for collective learning and knowledge sharing.

This reflection on Fuller and Unwin's dichotomy thus anchors the discussion on learning environments in the organisational context. It lays bare the implications for practice, particularly in how learning strategies are conceptualised and implemented. In underscoring the centrality of Fuller and Unwin's arguments, this review critically interrogates the interplay of learning contexts, line management roles, skills development, and the influence of other organisational actors in shaping these learning environments. Exploring expansive versus restrictive learning environments reveals crucial insights into how organisation’s structure and support learning. It underscores the importance of understanding the interplay between organisational goals, employee autonomy, and the cultural context of learning in shaping effective and conducive workplace learning environments. This understanding is vital for

organisations aiming to leverage e-learning and other educational strategies to foster a culture of continuous learning and development.

2.5 Recent Development on E-Learning at Work

The adoption of e-learning in organisations has been widely studied, focusing on various aspects, including employee experience, technology acceptance, and the overall impact on organisational strategy. Lee et al. (2013) applied the technology acceptance model to examine employees' attitudes towards e-learning systems in organisations. It highlighted factors like organisational support, computer self-efficacy, and prior experience influencing employees' perceived usefulness and ease of use of e-learning systems. Zornada (2005) examined how e-learning technologies have been used by organisations like Cisco Systems, Motorola, and Qantas to overcome the logistical problems of conventional training and develop innovative e-learning approaches. Wang et al. (2010) proposed a performance-oriented approach for e-learning in the workplace, emphasising the alignment of individual and organisational learning needs and connecting learning with work performance.

Tadimeti (2014) highlighted the emerging trend of using e-learning for soft skills training in corporations, discussing challenges and effectiveness compared to traditional classroom methods. Sawang et al. (2013) focused on factors affecting learners' satisfaction and intention to continue using e-learning in a rail-sector organisation, demonstrating the importance of content quality and technological support. Balakrishnan et al. (2021) assessed the levels and differences in organisational learning, e-learning quality, and e-learning use according to demographic groups within a Malaysian oil and gas company. Fleming et al. (2017) examined the impact of age on the future use of e-learning, finding that age is not a significant factor. Low complexity, authenticity, and technical support are critical predictors of future e-learning adoption. The literature on workplace e-learning as a complex dynamic system highlights the

need for a systemic, holistic, and adaptive approach to understanding and managing the diverse elements of e-learning environments. The following subsections explores insights on the design, development and implementation of e-learning systems in organisations.

2.5.1 Conceptualising and Designing E-learning Systems

The exploration of workplace e-learning as a complex dynamic system provides a multifaceted understanding of the intricacies involved in implementing e-learning in the workplace (Wang, 2018). Workplace learning is a complex system involving multiple stakeholders and dynamic relationships. The interconnected nature of organisational learning environments encompasses various actors, processes, and technologies, each contributing to the overall learning dynamics (Marquardt and Waddill, 2018). Applying systems thinking to workplace e-learning is essential for understanding the holistic nature of these environments. Systems thinking allows for a broader understanding of how different elements in an e-learning environment interact and affect each other (Senge, 2017). Johnson et al. (2019) demonstrate how systems modelling can help develop effective strategies for handling the complexities inherent in workplace learning environments. Adopting systems modelling in designing and managing e-learning is vital to reflect the multifaceted needs of the productive system.

The dynamic and interdependent nature of learning in technology-enabled environments calls for an integrated approach (Cross, 2018). The interdependencies in learning technologies require adaptive and flexible strategies to cater to diverse learning needs. Building a comprehensive understanding of all facets of e-learning, including its technological, pedagogical, and organisational aspects, is crucial to enhancing workplace effectiveness (Siemens, 2020). Anderson (2019) emphasises the importance of data-driven decision-making in managing e-learning systems. Technology's role in shaping workplace learning dynamics is

critical to how technology integration in e-learning environments can enhance learner engagement and improve learning outcomes (Salmon, 2021).

Hattinger and Eriksson (2018) explored the co-construction of knowledge in work-integrated e-learning courses, offering a nuanced understanding of the intersection between academic and industrial learning environments. The focus on blended e-learning strategies in higher education, particularly for continuous competence development in the manufacturing industry, can effectively bridge the gap between theoretical knowledge and practical skills required (Garrison and Kanuka, 2018). The challenge of tailoring university education to workplace knowledge demonstrates the importance of integrating real-world experiences into academic curricula, thereby enhancing the relevance and applicability of higher education (Coll and Zegwaard, 2018). The concept of mutual knowledge construction between practitioners and researchers is further examined by Wenger et al. (2018), highlighting how collaborative environments foster a more profound and practical understanding of theoretical concepts. The evaluation of case-based methodologies in industry-targeted e-learning courses present an effective tool for contextualising academic knowledge in real-world scenarios (Herreid and Schiller, 2018). The practical implications of industry and university collaboration emphasise the mutual benefits of such partnerships for both academic research and industrial innovation. (Ankrah and AL-Tabbaa, 2018).

In examining the cases provided by Clark and Mayer (2018), Moore et al. (2018), and Billett (2018), a nuanced understanding of the expansive-restrictive continuum in e-learning emerges. Clark and Mayer's exploration into high-technology learning via digital simulations reveals an expansive learning approach. It capitalises on the capabilities of digital environments to simulate complex, technology-driven scenarios that might be inaccessible in a traditional classroom. This method exemplifies expansiveness in its ability to push the boundaries of

learning beyond physical and conceptual limits. Conversely, Moore et al.'s investigation into online collaborative negotiation using web-conferencing tools could be closer to the continuum's midpoint. While the method encourages interactivity and engagement, it operates within the confines of the web-conferencing format, which can impose restrictions due to technical limitations or the nature of digital communication itself. However, it offers a more expansive experience than conventional methods by enabling remote, synchronous collaboration. Billett's case of work-integrated learning through real workplace scenarios is inherently expansive, yet it contains elements of restrictiveness due to its grounding in real-world professional contexts. While experiential learning is facilitated, it is bounded by the realities and limitations of the workplace environment. This approach merges academic learning with industrial pragmatism, creating a blend that expands learners' experiences and contains them within the professional practice framework.

Mitsakis and Karageorgakis (2020) offers a critical examination of the role of e-learning in the workplace during the Covid-19 pandemic. The global uncertainty caused by the pandemic led to rapid and unprecedented changes in the global business and education sectors due to Covid-19 (Goller, 2020). The necessity of shifting to e-learning methods during lockdowns compelled organisations and educational institutions to adopt online learning modalities to maintain continuity. (Rapanta et al., 2020). The debate on whether the pandemic-induced adoption of e-learning is a long-term shift, or a temporary solution led to the analysis of the sustainability and effectiveness of e-learning post-pandemic (Hodges et al., 2020). The potential for lasting changes in how businesses approach learning, and work was explored by looking at how the pandemic could lead to rethinking workplace training strategies (Boud et al., 2020). The call for HRD professionals to adapt to these changes and propose strategies for HRD professionals to navigate the evolving landscape of workplace learning (Garavan et al., 2020).

Exploring how past crises have shaped organisational learning practices suggests that historical lessons can guide the evolution of HRD practices (Ellström, 2020). Exploring contemporary students' evolving learning characteristics offers guidance for future e-learning development in higher education (Bogoslov and Georgescu, 2019). Tailoring e-learning environments to learner preferences involves understanding learner needs to enhance engagement and learning outcomes (Becker et al., 2013). The shifting learning styles due to technological influences continue to evolve and require understanding how digital natives' educational experiences are shaped by their constant interaction with technology (Prensky, 2010). The influence of integrating social media and how this can cater to the unique learning preferences of modern students was explored by Gikas and Grant (2013). Dabbagh and Kitsantas (2012) argue that familiar digital environments can facilitate deeper engagement and learning. Understanding the learners' characteristics is pivotal for designing effective e-learning courses and developing of e-learning systems (Lee and Tsai, 2011).

2.5.2 Developing E-Learning Systems

In e-learning development, particularly in the workplace and educational settings, contemporary research offers nuanced perspectives on how these systems are conceptualised, developed, and implemented. This literature review synthesises key findings from recent studies to understand e-learning's evolving landscape comprehensively. The development of an e-health education program in the workplace, as explored by Maciel et al. (2019), shows the significance of e-learning in promoting health and well-being in occupational settings. The approach, centred on focus group discussions, aligns with the principles of participatory design, emphasising the importance of stakeholder engagement in e-learning development (Gagnon et al., 2012; Krueger and Casey, 2014). Also, the approach of Alomran et al. (2020) to developing an e-learning platform highlights the critical role of technological adaptability and interoperability.

The focus on accessibility and usability is crucial in e-learning development (Wiley et al., 2014). Employing robust technologies like ASP.Net and SQL aligns with Botturi et al. (2006), who stress the need for a solid technical foundation in e-learning platform development. Moreover, Roll and Wylie (2016) argue that integrating AI points to the future of personalised learning experiences, a significant trend in contemporary e-learning research. Supriana (2021) brings a unique perspective by applying the work system method to the design of e-learning in private universities. This approach improves lecturer delivery and addresses the evolving dynamics of student-teacher interactions (Bernard et al., 2009; Means et al., 2010). The focus on e-learning's role in business entities is particularly relevant, as it impacts the quality of business education (Arbaugh, 2010).

Alter's (2013) system thinking in information system design is pertinent here, showing the need for a holistic approach in e-learning system development. The evolving e-learning landscape requires a multifaceted approach encompassing understanding users' needs, robust technological infrastructure, and innovative pedagogical strategies. These studies collectively highlight the importance of a holistic approach to e-learning development, which is adaptive, user-centred, and responsive to its deployed contexts.

The integration of corporate e-learning and its impact on team performance, particularly in virtual software teams, as explored by Subramaniam and Nakkeeran (2019), represents a critical area in e-learning research. Corporate e-learning in software organisations has become increasingly vital in the rapidly evolving digital era. Hug et al. (2006) emphasise the need for ongoing learning and upskilling, especially in IT and software development sectors, reflecting the changing demands of the industry. Nistor et al. (2014) further support the need for customised e-learning solutions to address specific organisational needs. Subramaniam and Nakkeeran (2019) highlight the significance of e-learning in enhancing the performance of

geographically dispersed virtual teams. Bergiel et al. (2008) also propose how virtual teams can use technology to improve collaboration and performance. Examining the challenges and opportunities presented by virtual teamwork is essential, underlining the importance of effective e-learning strategies in such environments (Hertel et al., 2005).

2.5.3 Implementation of E-Learning in Organisations

The challenges of geographical dislocation in virtual teams shows the importance of exploring innovative ways to manage and collaborate across distances (O'Leary and Mortensen, 2010). Pawlowski and Bick (2012) also emphasise the significance of knowledge management in virtual team environments, highlighting the critical role of e-learning in facilitating practical training and knowledge transfer. Enhancing team performance through the effectiveness of e-learning in organisational training is also crucial (DeRouin et al., 2005). Alavi and Leidner (2001) also discuss the role of information technology in organisational learning, further supporting the importance of e-learning in virtual team settings. Contemporary studies show the importance of tailored e-learning solutions, effective knowledge transfer, and the management of geographical dislocation in virtual team settings.

The exploration of workplace e-learning within the dynamic workplace environment provides an insightful understanding of the complexities involved in implementing e-learning within an organisational context (Beno et al., 2022). Ellinger and Cseh (2007) emphasise the need for continuous learning to adapt to changing workplace demands. Noe (2017) also discusses the crucial role of technology in facilitating learning and development in contemporary organisations. The flexibility and cost-effectiveness of e-learning are crucial for realising the economic advantages and adaptability of e-learning solutions (Rosenberg, 2001). Welsh et al. (2003) further reinforce the cost-effective nature of e-learning compared to traditional training methods.

Clark and Mayer (2016) emphasise the importance of instructional design in e-learning. Gagne et al. (2005) further stress the need for effective instructional strategies to engage learners. Bates (2015) discusses the necessity of maintaining a human element in technology-enhanced learning, aligning with Beno et al.'s findings.

Studies predict that future e-learning trends, such as cloud-based solutions and mobile learning, will take more prominence (Huang et al., 2019). Bates and Poole (2003) also provide guidelines for effective e-learning strategy and deployment, supporting recommendations for careful e-learning implementation. This review broadens the understanding of workplace e-learning. It highlights its role in organisational learning strategies, the importance of quality and interactivity, and the need for a balanced approach to digital and human interactions in learning environments. Yasa (2022) conducted studies on using e-learning assisted by social media in teaching contemporary Indonesian literature, providing vital insights into integrating digital platforms in educational settings. Siemens (2014) also examined broader educational trends towards digital learning platforms, emphasising the increasing role of technology in education. Recent trends highlight the potential of social media to enhance student engagement and learning outcomes (Greenhow and Lewin, 2016).

The Technological Pedagogical Content Knowledge (TPACK) framework builds on previously developed frameworks that aim to understand technology integration in teaching (Koehler and Mishra, 2009; Yasa, 2022). Archambault and Barnett (2010) also emphasise the importance of this framework in guiding teachers in the effective use of technology. Students exhibited strong skills in literary analysis through the e-learning approach due to the interactive and collaborative learning environments. Mayer (2009) also discusses the role of multimedia learning in enhancing students' analytical abilities. Gikas and Grant (2013) observe the

transformative potential of social media in enhancing education and enriching learner's experience.

2.6 Chapter Conclusion

In concluding this chapter, the parameters of e-learning have been insightfully unpacked and critically aligned with Fuller and Unwin's expansive-restrictive learning continuum. This alignment has allowed for a rich dissection of the variable configurations of e-learning within UK organisations and facilitated a nuanced understanding of how these configurations reflect and are reflected in organisational policy and practice. The review has explored the contested and multifaceted meaning of e-learning, revealing it as a dynamic concept that shapes and is shaped by the organisational learning environment. Exploring the extent of e-learning development within organisations has underscored a pivotal transition—where e-learning is not merely an educational tool but a strategic asset that organisations are increasingly seeking to integrate and align with broader learning and developmental goals. In this exploration, three main research questions arise, viz:

1. What is the meaning of e-learning in contemporary organisations in the UK, and how is this reflected in organisational policy and practice?
2. How are organisations developing and infusing e-learning with their learning environments?
3. What are the implications of the situated context of e-learning in organisations on expansive and restrictive learning environments?

This chapter has delved into the essence of e-learning, discovering that its meaning extends beyond digital platforms to foster adaptable and resilient organisational cultures. This resonates with how policies and practices evolve to support e-learning initiatives that reflect an expansive approach, promoting accessibility, learner autonomy, and continuous professional development. Furthermore, the extent to which organisations develop and infuse e-learning

into their learning environments has been critically examined. The emerging narrative depicts a landscape where innovative organisations leverage e-learning to transition towards more expansive learning environments. These environments, as characterised by Fuller and Unwin, actively engage in shaping learning as a continuous, collaborative, and reflective practice underpinned by a culture of support and empowerment.

Finally, the implications of the situated context of e-learning in organisations on expansive and restrictive learning environments have been profoundly contemplated. It has been noted that the adoption and implementation of e-learning are deeply contingent upon an organisation's situational factors—ranging from its cultural ethos to structural dynamics. This, in turn, has profound implications for developing learning environments that either enable a spectrum of expansive learning opportunities or restrict them to narrowly defined competencies and roles. In synthesising recent developments in the field, this chapter leverages Fuller and Unwin's argument to highlight that the trajectory towards more expansive e-learning environments is desirable and necessary for organisations' adaptive, innovative, and competitive future. The implications for practitioners and policymakers alike point to the need for strategic foresight in designing e-learning systems that serve the present needs and the future aspirations of both organisations and their employees. Thus, the literature reviewed here casts both a reflective gaze on the current state of e-learning and a prospective one on its potential, marking this discourse as a foundational reference for ongoing and future explorations into the transformative power of e-learning within organisational contexts. Chapter 3 will explore the appropriate methods, theoretical perspectives, and underlying research philosophy to address the research questions.

Chapter 3: Methodology

3.1 Introduction

The preceding chapter has provided a comprehensive examination of the complex nature of e-learning within the workplace, shedding light on its social, technological, workplace, and learning dimensions. This exploration has revealed a series of dichotomies that align with the expansive-restrictive continuum, a concept pivotal to understanding organisational learning dynamics. This study has formulated critical research questions based on a theoretical framework centred on this continuum. These questions delve into the nature of e-learning across UK organisations, investigate the processes involved in designing, developing, and implementing e-learning initiatives, and assess the impact of these initiatives within the spectrum of expansive to restrictive learning environments. Building on these inquiries, this chapter seeks to identify the most suitable methodological approaches and theoretical frameworks to effectively address the study's aims, ensuring a robust investigation that aligns with our research objectives. To recall, the research objectives are:

1. To critically examine the theory and practice of e-learning in organisations.
2. To explore the restrictive and expansive contours of organisational learning environments and understand their connection with the situated context of e-learning in organisations.
3. To investigate how e-learning can thrive in organisational learning environments, with key implications on the expansive and restrictive divide.

This chapter will explore philosophical orientation and methodological choices to explain the nature of the fieldwork, the data collection process and the procedures followed. Next, it describes how the collected data were organised, transcribed, thematically coded, and analysed. Finally, it outlines the importance of ethical considerations during the research process.

3.2 Research Philosophy

The research philosophy refers to the beliefs (ontological, epistemological, and axiological) about how scientific knowledge is generated, which informs methodological approaches in research studies (Saunders et al., 2019). Ontology refers to beliefs regarding the nature of existence (i.e. reality); epistemology, on the other hand, refers to the assumptions about the nature and scope of knowledge, while axiology relates to beliefs about the nature of values and ethics and what is considered ethical (Killam, 2013; Saunders et al, 2019). Trochim (2006) notes that in any research work and the process involved, the researcher's beliefs will reflect in the methods and approaches used in designing, gathering, and analysing data and in the outlook of its findings and conclusions.

The research philosophy provides a framework for the researcher to situate their beliefs in one or more research paradigms adequately and subsequently identify the suitable methodology for the research questions (Howell, 2012). Several research paradigms are commonly used in business research, such as positivism, interpretivism, postmodernism, critical realism, and pragmatism (Lewis, 2015; Saunders et al., 2019). Of these, the most prominent are positivism and interpretivism (Lewis, 2015), which are discussed in further detail in this section. Positivism is based on the ontological assumption of a real, objective, and observable reality independent of the researcher, which can be understood through scientific methods based on insights that can be deduced, and law-like generalisations can be made (Saunders et al., 2019; Walliman, 2018). Interpretivism, however, believes that reality is subjective and socially constructed and, therefore, can have multiple meanings, interpretations, and realities (Berger and Luckman, 1966; Grix, 2010). Research-based on interpretivism is typically concerned with understanding narratives and interpretations from different viewpoints using an inductive approach involving small samples to allow for in-depth investigations of the phenomena of interest and provide new insights and understandings (Saunders et al., 2019; Walliman, 2018).

The interpretivist view holds that knowledge in research is derived from meanings influenced by a social and cultural context (Grix, 2010).

This study aligns with the interpretivist paradigm (Gichuru, 2017) for the following reasons. Firstly, the study's objective is to provide an understanding of e-learning within UK organisations, the extent to which e-learning is embedded in organisational policy and practice, and the extent to which organisations build expansive learning environments to facilitate e-learning. Therefore, the nature of the questions will require collecting information about different narratives and viewpoints from organisations to generate answers to the questions. Secondly, the methods will revolve around an inductive approach involving small samples to allow for an in-depth investigation upon which research questions can be answered. Finally, based on the emerging subjective reality (Pervin and Mokhtar, 2022) gleaned through the eyes of an array of organisational actors, this study is aligned towards the interpretive approach as it aims to understand and examine e-learning in UK organisations from the viewpoint of those associated with it (Denzin and Lincoln, 1994). The interpretivist assumption derives substance and understanding from the personal experiences of those who have encountered the phenomenon under study (Weber, 2004).

3.3 Research Methodology

The research methodology refers to the framework guiding the execution of the research. Gardner and Lehmann (2002) explain research methodology as the logical approach used in conducting research and the combination of methods and activities that helps collate and analyse data sourced for the specific research. This section provides a discussion on the methodological choices made to guide the execution of the study, including the research approach, research design, and research strategy.

3.3.1 Research Approach

Following the identification of the interpretivist philosophy in the previous section, it is essential to highlight the research approach. The three main research approaches are deduction, induction, and abduction. Deduction involves collecting data to test pre-existing theories (or assertions); meanwhile, induction involves collecting data to develop or refine existing assertions. At the same time, abduction combines deduction and induction so that data is collected based on which theory is developed or refined and then subsequently tested (Kennedy and Thomberg, 2018).

This study adopted an inductive approach because it considered the experiences of organisational actors to develop a conclusion about the use of e-learning in UK organisations (Thomas, 2006). Secondly, the inductive research approach tries to create a general assertion from specific instances, in the sense that it progresses from the observations or experiences of the individual to develop a general conclusion about the study, as is the case in this research (Saunders et al., 2019; Trochim, 2006). Third, Saunders et al.'s (2019) position that the inductive approach seeks to primarily understand the meanings/constructions humans give to things suits the objectives of this study and provides an opportunity to observe how e-learning exists in organisations. Furthermore, the induction approach is flexible and allows for the study to react to changes that emerge during the research process (Saunders et al., 2019). Finally, the inductive approach also allows for the researcher to explore a wide range of sources, themes, and options before concluding and in this study, as will be seen in the findings in Chapters 4 and 5, I explored the views of multiple individuals across different levels and backgrounds in respective case organisations before developing my conclusions.

3.3.2 Research Design

The research design provides a framework for collecting and analysing data to answer the research questions (Gray, 2017; Walliman, 2018). Following the clarification of the inductive

approach, the research design, which can be either quantitative, qualitative, or mixed methods, must be selected. Quantitative design involves collecting and analysing numerical data, while qualitative design involves collecting and analysing non-numerical data (such as text, speech, images, etc.). Mixed methods design combines quantitative and qualitative research designs (Bell et al., 2019; Saunders et al., 2019). The dichotomy between the positivist and interpretivist philosophy can also be understood through the quantitative and qualitative research divide. While the positivist philosophy aligns more with the quantitative design, the interpretive philosophy aligns with the qualitative design (Easterby-Smith et al., 2012).

In line with its interpretivist philosophy, this study adopts the qualitative research design. The interpretivism philosophy is concerned with the meanings and construction of reality or what is in existence by the individual, and the qualitative approach recognises the influence of humans on the construction of reality by facilitating the collection of qualitative data about the views and experiences of individuals (Gichuru, 2017; Pham, 2018). This design thus allows for the collection of qualitative data about the use of e-learning in UK organisations. Furthermore, Yin (2009) posits that qualitative design is richer in terms of description and detailing and is also less complex to undergo and cheaper, while it is most appropriate at giving insight into the behaviours and experiences of humans, as is the intention of this study.

According to Krauss (2005), a qualitative approach is suitable for making sense of meaning given to issues and situations. This research, particularly its data, is hinged on the lived experiences which form the perceptions and meanings constructed by organisational actors. This explains why seeking to understand the participants' views in organisations is essential, as it is drawn from the sense they make of certain organisational practices. This shows and strengthens the case of this study employing a qualitative interpretive approach (O'donoghue, 2006). In interpretive-based research, participants' input was used to understand the practice of

e-learning in organisations, the participants' views on the potential of e-learning for achieving expansive learning and employee perception of activities within the respective organisation's learning environment.

As a study that sought to understand perceptions and behaviours in a realistic organisational setting, this study aligns with the views of Shaw (1999, p. 60), who notes that employing an interpretive approach "allows firms to be viewed in their entirety and permits researchers to get close to the participants, penetrate their internal logic and interpret their perceptions". This is exemplified in this study as I was able to get deeper insights into the perceptions of organisational actors across different levels and positions within the organisation, and these insights form the basis of exploring the possibility of e-learning being used to advance expansive learning attributes in organisations and the extent to which the productive system decides these potentials. The interpretation and analysis of these perceptions feed into this study's contributions in theory and practical terms.

The selection of a qualitative research design for this study directly corresponds with the research objectives, aiming to bridge the knowledge gap by exploring multiple subjective perspectives. The prevailing use of quantitative and mixed methods designs in existing literature often falls short of uncovering the nuanced theoretical perspectives and more profound understanding that varies among individuals and organisations (Grix, 2010). In alignment with the research aims, a qualitative approach is favoured for its ability to deliver a detailed and unfiltered view of the actual thoughts and perceptions of organisational actors from whom data was sourced. This method facilitates a profound understanding of e-learning in practice within organisations and allows for an analysis of the extent to which it engages and supports expansive learning features. Moreover, this approach offers an opportunity to address

a methodological gap in the e-learning literature by contributing detailed, complementary insights to existing research grounded in alternative methodological choices.

3.3.3 Research Strategy

The research strategy details the precise plan for how the study will answer the research questions (Saunders et al., 2019). There are several different strategies, including experiments (Johannesson et al., 2021), surveys and case studies (Gable, 1994), action research and narrative inquiry (Heikkinen et al., 2012). These strategies have different strengths and weaknesses, which makes them suitable for different kinds of studies. For instance, experiments and surveys are most associated with positivist studies, while action research, case study, ethnography and narrative inquiry are some of the strategies most associated with the interpretivism philosophy (Saunders et al., 2019). Having compared all the strategies, I concluded that a case study design was most appropriate for understanding e-learning and learning environments within organisations.

A case study research approach involves an in-depth study of a single group, incident, or community (Hyett et al., 2014). Robson (2002) and Saunders et al. (2019) agree in their definition of a case study that it is an approach designed to understand a contemporary phenomenon in its specific unadulterated context. This means that case study research is concerned with understanding issues and perceptions in their natural environment, and the study aims to understand e-learning within UK organisations.

Case studies can be quantitative or qualitative or use elements of both; this study is concerned with the qualitative aspect of the case study. A case study approach is usually employed in management and organisational research as the emphasis is mainly on the organisation or industry, which is the unit of analysis (Stake, 2013). Engaging in case study research often means the researcher embarks on some fieldwork, which Scapens (1990) describes as the study

of social practice in the field of activity where it takes place. This fieldwork collects data through interviews, observations, documents, and reports (Cresswell, 2007).

The decision to carry out case study research is often influenced by the need to have an in-depth understanding of processes in a specific case (Noor, 2008), to explore a poorly/less researched phenomenon, to reveal the distinctions between rhetoric and reality and finally to gain insight into issues in a particular setting. All these reasons were relevant to this study and further strengthened the need for a case study approach. Further, case studies help the researcher to explain the 'how' and 'why' of a phenomenon, which is the goal of this study (Gray 2017; Yin, 2009).

Drawing on these insights from the research methods literature, I employed a case study approach in this research for several reasons. First, this research uses empirical means to explore the perceptions and engagement of employees referred to as organisational actors towards activities and initiatives within the learning environment, one of which is e-learning. Seeking to understand these views from the natural context makes a case study approach viable. The data gathering is not set in a controlled environment whereby respondents' views are controlled or scientifically expected to align (Tsang, 2013).

Secondly, in this study, I sought to understand the 'how' of e-learning practice in organisations and the influences defining policies guiding the organisational learning climate; and the 'why' aspects sought to understand reasons for employees or organisational actor's attitudes to issues and events related to the learning environment and e-learning. In addition, visiting the case organisations at different interview sessions allowed me to observe and understand how the organisation works and to feel its social relations first-hand. This helped provide a feel for the degree to which a community of practice surrounds e-learning. (Swanborn, 2010)

Yin (2009) notes that case studies can either be single (based on a single case or object) or multiple (based on various cases or objects). For the current research, I decided to take a multiple case study approach as it allows me to analyse data from different contexts (Yin, 2009). This is important because this study intends to engage with case organisations from different dynamics and operational environments. According to Baxter and Jack (2008), multiple case studies generate reliable findings as information from broader and perhaps differing scenarios can be harnessed to generate robust findings.

This research was a multiple case study as it sought to understand e-learning from two case organisations. Given the interest in a multi-level analysis and the learning environment, engaging with different organisational contexts was crucial, particularly given that this was a less researched area.

The case study process involves several stages, including selecting a suitable organisation(s) or sector(s) and preparation by the researcher in getting ready to examine the case study, such as gaining access and designing the data collection tools, e.g. interview protocol (Gillham, 2000). Evidence or data is then collected and assessed from the case study. At the same time, the researcher gets to identify emerging patterns or themes, which are then used to develop a theory or conclusion. The case study protocol, which notes that a case study protocol reflects the processes and steps employed throughout the research process, is provided in Table 1 below. Yin (2009) asserts that this protocol includes information that details each stage and its essence, as this is integral in proving the reliability of the case study research.

Table 1: Case Study Protocol

	Stages	**Key activities and actions**

1	Introduction of case study	We are developing the objectives and research questions for the case study based on gaps identified in extant literature.
2	Case selection	Choice of case organisations includes the decision to use multiple case organisations (2). Details of the case organisations and rationale for the choice are provided in section 3.4.4.
3	Data collection process	Obtaining access to the case organisations Participants were selected across various organisational levels (i.e., low, medium, and senior-level employees) and job functions. Design data collection tool: Interview protocol Further details on the above are provided in section 3.5 Ethical considerations (further information in section 3.7)
4	Data collection: Case study interviews	Interviews were executed with the staff of the case organisations. The case study interview guide is provided in Appendix 1.
5	Data analysis	1. Transcribing interview sessions 2. Taking note of interesting insights observed during interview sessions 3. Thematic coding of critical themes across both case transcripts

		4. Comparing key themes with theoretical notions.
6	Presentation and discussion of findings	1. Iterative connection of data with literature 2. Aligning key themes with theory.
7	Conclusions	1. Concluding data 2. Recommendations on theory and practice as derived from data and secondary research.

3.3.4 Choosing a Case Study Organisation and Overview of Selected Organisations

Eisenhardt and Graebner (2007) agree that certain factors must be considered when deciding which case or cases to select. I considered organisations where I could source rich data, especially as both have e-learning systems. They seemed to have unique systems and processes under which the learning approach and environment are defined and influenced. Keeping this in mind, I believe that choosing these organisations allowed me to derive data that could lead to contributions to the theoretical and practical aspects of e-learning in an expansive learning environment.

As noted earlier, this study adopts a dual case study approach as it involves two organisations. The first organisation is a large ICT solutions service business (hereafter referred to as Techco for anonymity and confidentiality), and the second is a large NHS services partner and provider (hereafter referred to as Healthco for anonymity and privacy), adopting fictional names to protect anonymity. Both cases are located and operate in the United Kingdom, with over 500 staff operating across different locations and staff working from home (or on a hybrid basis). Both Techco and Healthco are privately owned; Healthco, however, being a social enterprise, also operates under guidelines and parameters designed by the UK Government, the NHS, and other regulators within the Health and Social Care sector.

Techco is an innovative multinational organisation in several countries worldwide, including the UK. The company provides services that cut across human needs and uses technology to resolve global needs and development. Their core business operations cut across information and communication, Automotive, telecoms environment, energy, Medicare, AI and research and development for improved business solutions. The UK arm of the organisation aligns with its global operations, though their coverage is much focused on IT business solutions and development; specifically, they provide advanced cloud services, communication managed document services, and managed security services. Techco UK employs over 200 full-time employees, doubling the number of fixed-term and temporary employees.

TechCo employees must be highly skilled and competent in IT. As such, there is a high demand for continuous professional development, which encompasses learning and development and is a key feature of the context of e-learning within such organisations. From this, one can infer that TechCo employees are continually pressed for results and productivity regarding skill development and realising organisational outcomes tied to securing clients and enhancing optimal business services to partners and clients.

HealthCo, on the other hand, is a community interest company that delivers a broad range of health and social care services within the community. They provide services from various settings such as community hospitals, community clinics, nursing homes, primary care locations, private homes and locations while offering online healthcare services to their clients. On behalf of the NHS and Social care services, they operate across the East of England part of the UK, including counties such as Essex, Norfolk, Cambridgeshire, and Suffolk. Healthco services communities have a population of about 5 million people. This healthcare services provider meets this demand with over a thousand employees, most of whom are direct and indirect. The organisation has a central team provides coordinated healthcare provision to its

clients and customers. This centre offers services to the community, including Urgent community response team services, assessment and rehabilitation, cardiac service, children community nursing, occupational and language therapy, community paediatric and rehabilitation service, etc.

This research engages the Essex local arm of this organisation. The focus was mainly on those in the community healthcare services, which cuts across domiciliary healthcare workers, community nurses, and local hospitals that the organisation manages on behalf of the NHS. Most of the employees were female and mainly in roles requiring medium/low skills and IT knowledge. However, due to the nature of their work being in the health sector, they needed to be engaged in continuous learning and development to ensure the delivery of high-quality healthcare services is maintained. These learning and development activities are often delivered using e-learning (Pool et al., 2016) and, therefore, provide an interesting environment to observe the learning environment within which e-learning is being deployed and shaped in low IT skill settings. The fact that the job roles in Healthco mostly do not require a high level of IT knowledge but involve the use of e-learning and other learning tools for employees to remain in their jobs and progress points to the potential issues around the context of e-learning and the connection between career and individual career progression and engagement with e-learning platforms that this study can explore.

The difference between the IT proficiency and general skill levels in both case study organisations and the similarly important role of e-learning and learning and development provides an exciting setting to understand how e-learning and learning environments are shaped in different kinds of organisations. In addition, this also allows for a comprehensive study of the differences and similarities in how each sector engages with e-learning and how specific industry or organisational practices shape the experiences and attitudes of their

employees to organisational practices. As explained in Chapter 2, this study suggests that social contexts are crucial in the use and philosophy behind e-learning. Hence, it is interesting to study how societal influences shape the contours of these respective organisations.

3.4 Data Collection and Fieldwork

This section details the means I employed in collecting data during the fieldwork stage and the instruments used to ensure that the data collected addressed the aims and questions of this study. It begins by discussing how access to the case organisations was obtained. This is followed by examining the recruiting process and then the interview process. The section ends with a discussion of the field observations completed.

The data collection process involved gaining access to the two case organisations and then recruiting participants to participate in the study. The required data for the study was collected using interviews with staff across various levels in the case organisations and observations during the field interviews. A voice recorder was used to record the interviews and field notes. A research diary was used to document observations during the interviews and the visit to the site of the case organisations. Table 2 below summarises the data collection process in the two case organisations: Techco and Healthco.

Table 2: Data collection plan

1st Case organisation: Techco	2nd Case organisation: Healthco
1. Secure ethical approval from university ethics officer	1. Secure ethical approval from university ethics officer
2. Initial contact with the case organisation	2. Initial contact with the case organisation

3. Submit research information and a sample of the participant information sheet	3. Complete research and ethical approval form for NHS/medical researchers
4. Phone interview with HR Director to clarify and cement access negotiations	4. Submit research information and a sample of the participant information sheet
5. Exchange of correspondence with the organisation resource person.	5. Granting of approval
6. Sourcing of participants and scheduling of interviews at the various locations.	6. Physical meeting with Learning and Development (L&D) management
7. Data collection – first field visit to conduct the first round of interviews and observe the organisation	7. Engagement with organisation resource person
8. Data collection – telephone interviews with off-site participants	8. Sourcing of participants and scheduling of interviews at several locations
9. Data collection: Field visit to another office location to interview different participants and observe the organisation at the site.	9. Data collection – Fieldwork visits and interviews at several locations
	10. Data collection – Telephone interview with community employees (off-site)

Interviews were the dominant method used during fieldwork to understand participants' views and attitudes regarding e-learning and the organisation's learning and development activities.

Interviews are avenues for getting detailed information from research participants/populations in their own words. Bryman and Bell (2011) noted that getting the research participants' perspectives is important. Using interviews during research allows the researcher to have a broad and rich insight stemming from conversations during the interview process (Orb et al., 2001). Using interviews makes it easy for participants to recollect their experiences, which cannot be observed as the researcher was not present then (Patton, 2002).

A benefit of conducting interviews during research is that it allows the researcher to have in-depth coverage of specific issues. Kvale and Brinkman (2009) note that interviews help the participant to understand the context and knowledge the researcher seeks. Hence, I agree with Qu and Dumay's (2011) position that using an interview allows the researcher to understand the participant's points of view and their reasons for seeing things from such a perspective. Furthermore, interviews are more ethical than observations, especially if the researcher is undercover and less intrusive, as the participants are at liberty to participate and end the process when they deem fit (King and Horrocks, 2010).

3.4.1 Gaining Access

Gaining access to the case organisations was quite different for the two cases. Techco was the first case organisation I contacted; they were the first to grant access and the first I had interview sessions with. In Techco, I was privileged to get connections to a top management level employee who facilitated access whilst also emphasising my research's benefit on their learning and development approach and use of the current e-learning platform, which is under review. I was later assigned a local resource person within the organisation who helped secure participants and arranged the interview schedule. I was given a designated private room in all the offices I visited, and the privacy of these rooms helped make participants comfortable participating in the interview.

I reached out to Healthco after I had concluded my access and interview schedule with Techco. As a healthcare organisation, I was required to obtain ethical approval from the organisation as is necessary of researchers in the health sector (more details on the ethical approval is provided in section 3.7). Getting the approval took some time, but eventually, access was granted. I met with the top learning and development team, where I shared my research aims and its potential for their use of e-learning and organisational development, which they all agreed is key. Like Techco, I had a local contact who helped arrange interview sessions in all their locations and helped to chase up virtual participants. Healthco also offered facilities such as interview space, internet connectivity and telephone use all of which made my fieldwork successful.

3.4.2 Sampling Research Participants in the Case Study Organisations

This thesis is focused on the perception and experiences of organisational actors or participants as regards their engagement with e-learning within the learning environment of their respective organisations and how the respective case organisations support or restrict their behaviour and attitude to learning and development activities and initiatives. Therefore, I needed to collect information from the employees in Techco and Healthco. Due to the nature and complexities associated with accessing and securing participants, I employed a mix of purposive and snowballing methods in selecting participants.

Bazeley (2015) notes that getting the correct set of participants is crucial in any form of research, and this has informed my use of both methods. In this research, it was essential to have employees representing the organisation at all levels and job functions, i.e. low, mid and senior-level employees. It was, therefore, imperative to employ purposive sampling to ensure that all levels within the organisation (Sharma, 2017). The purposive sampling ensured that I could obtain appropriate samples and information that reflected the views and behaviour of critical levels within the organisation, which this study argues is vital for understanding e-learning in practice. This is mainly because while those employees on the higher levels give

life to learning and development activities, the lower-level organisational actors experience and feel the effects of organisational policies on e-learning relatively more.

Further, the inclusion of senior management, who are typically involved in setting the organisation's policies and direction, is also helpful in understanding and gaining insight into the values and reasons guiding the organisation's learning and development policies and the framework upon which certain decisions were made. I also understood the expectations of these top-level officials and the connection such demands had with the learning environment, which then defined the extent of its potential in terms of being restrictive or expansive.

In addition, interviews with actors across various levels within the case organisations allow the researcher to observe relations and power structures within each case organisation.

Snowball sampling is a non-probability sampling technique that involves identifying initial participants within a population. The initial participants refer other subjects who meet the study criteria to participate (Gray, 2017). The snowball sampling aspect of this study relates to other participants who joined the study voluntarily after learning of the research from their colleagues in the organisation and then contacted me to partake in the study (Etikan et al., 2016).

3.4.3 Interview Protocol

The interviews were approached using a semi-structured interview style, which allows the researcher to probe the participant based on the list of topics or questions pre-prepared but steer the conversation flexibly to ensure a good flow of conversation whilst addressing all the necessary issues and exploring the issues in the depth that may be required (Gray, 2017). The semi-structured interview also allows the researcher to restructure the interviews based on the answers previously provided by already interviewed participants in the same study.

The semi-structured interview gives the researcher or interviewer freedom to decide the question to ask, the probes that should follow and the questions to be withdrawn or rephrased (Grix, 2010). Further, Yates (2004) notes that a semi-structured interview allows the researcher to explore and note incomplete or uncomfortable questions.

Oppenheim (2000) adds that direct contact between the researcher and the interviewed participant allows the researcher to clarify or explain questions to the participant to get a proper answer, not a misconstrued response. This is because the interview process has an intended outcome, and as such, it is guided by pre-designed themes as represented in the interview guide. During the sessions, I employed a reflective interview methodology (Qu and Dumay, 2011), considering the context and characteristics of the specific respondent. A semi-structured approach allowed me to keep on track with the themes I aimed to cover through my probes and to modify the questions as necessary.

The interview procedure of this study had several phases as it concerns two different case organisations with dispersed workforces in different locations across the UK. The interviews were held at intervals and in batches over 6 months to allow for a dynamic process (Benlahcene and Ramdani, 2020) whereby I could amend the interviews based on my previous experience with a participant, thereby enriching the interview results. The interviews were mainly face-to-face, with a few over the phone. The decision to have a mix of face-to-face and telephone interviews was necessitated by the fact that some of the employees of the case organisations were fully working away from the offices of the organisation (remote or third-party sites); hence, their inclusion in the study will allow me to gain insights into how the nature of their role being remote interacts with their e-learning perception and experience.

A total of 44 interviews were held across the two case organisations, including 3 with senior-level management, 9 with mid-level management, and 32 with lower-level employees. Table 3 presents a breakdown of the interviews in Techco and Healthco.

Table 3: Case Study Interview Summary

Interviews Undertaken at Techco	**Interviews Undertaken at Healthco**	**Total**
2 Senior management level interviews	1 top-level interview	3 senior level interviews
6 Line manager/ supervisor interviews	3 Line manager/ supervisor interviews	9 Line manager/ supervisor interviews
13 General employee level interviews	19 General employee-level interviews	32 General employee-level interviews
Total: 21	**Total:** 23	**Total:** 44

The interview process at Techco occurred in multiple stages. Initially, a set of questions was drafted, and a pilot interview with the HR director was conducted. The insights gained from this preliminary interview were instrumental in refining the general topic guides intended for subsequent sessions with participants within the organisation. Subsequently, interviews in Techco were organised in batches, providing the opportunity to explore new perspectives by questioning respondents on issues that had surfaced in earlier interviews with their colleagues. For instance, insights from the earlier interviews allowed me to explore the problems of the influence of management and organisational pressure and expectations (Wins and Kofinas, 2019) in the subsequent interviews. As the research progressed, the final round of interviews targeted top management staff, offering a valuable opportunity to revisit and delve deeper into

specific responses obtained during previous interviews with line management and employees at the general level. For example, I explored the differences between lower- and management-level employees regarding the purpose and objectives of e-learning in the organisation.

The interview process at Healthco followed steps like Techco's, except for the need to modify the questions frequently. The organisation had different levels of employees with diverse responsibilities and functions. For instance, some staff were purely clinical, some were administrative, and some were based off-site (community practitioners); hence, there was a need to modify the questions to reflect the context of the respective participants.

3.4.4 Observations, Research Field Notes and Research Diary

Observation is another means used in this study to acquire additional research information (Angrosino, 2012) during the field trips. For example, at Techco, I was able to view their learning pods/suites where employees can privately engage with the e-learning platform. This helped me understand the forms of support the organisation gives towards learner independence and flexibility. I took notes of my observations on the site using my research field notes and recorded my thoughts and opinions in my research diary.

I took notes from each interview session throughout the interview stage and with the respondent's permission. This helped me modify the topic guides in reaction to exciting quotes from the respondents. This note also contains reminders to engage with specific literature and issues as they come to mind, particularly from a respondent's response. Flick (2014) agrees that researchers cannot withdraw from the social world they are investigating. I accept that my judgements and conclusions during these sessions were influenced by participants' responses, which impacted my thoughts, particularly on the digital divide and the gendered nature of organisations. My thoughts during the sessions were also noted and fed into the research diary.

I kept a research diary all through the duration of this study. This was expedient as I needed to record my thoughts and feelings during each stage of the research, especially during the fieldwork stage.

The research diary also helped detail my changing views at each stage of analysis, keeping in mind the iterative process employed by the researcher, which played a key role in the evolution of the research objectives from smart learning to expansive learning and the broad working and learning framework.

3.5 Data analysis

There are several processes and procedures for analysing qualitative data. Silverman (2013) and Bryman (2012) agree that the techniques employed during the data collection stage align with certain data analysis methods. They agree that data analysis involves an iterative process where the researcher continually moves between total data collated, coded excerpts from data and those analysed in general.

In this study, I employed the thematic analysis style to identify major findings from my collated data, particularly on dominant and recurring themes emerging from each case organisation and combined. I believe this approach helped me understand the overall perception and attitude of participants in respective case organisations about e-learning and the learning environments within the organisations, which was the objective of this study. Thematic analysis identifies patterns or themes within qualitative data (Maguire and Delahunt, 2017). This method is used to identify themes, especially interesting patterns from the data, that help narrate the research aims or answer the research questions/objectives. I was able to use this approach to understand the pattern of participants' responses and the implications of these responses on the aims of the study. This does not mean I solely focused on recurring themes as it would deprive isolated responses that do not align with the popular response of others. I ensured that my presentation

of results covered dissenting views to accommodate issues of leaving out non-recurring responses.

The use of thematic analysis is also favoured in this research because it gives a high level of flexibility and ease of discussion (Javadi and Zarea, 2016). It allows for direct quotes that allow the reader to verify that conclusions were drawn from the themes interpreted from the quotes (Castleberry and Nolen, 2018). Symon and Cassell (2012) state that thematic analysis can be used to examine the perspectives of different research participants, as described below in the discussion of themes, especially from different stakeholder perspectives.

Braun and Clarke (2006) propose a six-way framework guide for conducting thematic analysis, which includes getting familiar with the data, generating initial codes, searching for themes, reviewing themes, defining the themes, and finally writing up the analysis. Braun and Clarke (2006) note that these phases are not necessarily linear, and one can move between each stage at different levels of the research analysis. Following Braun and Clarke's (2006) framework, I organised my thematic analysis in the following phases:

In the first stage, which involves becoming familiar with the data, I employed a professional transcription service to ensure that my transcripts were professionally organised without losing or misinterpreting any interview session. I then compared the transcribed interviews with my recollection of the interviews, the recordings, and my field research notes kept in the respective interviews, further assuring the accuracy of the transcribed output used in my analysis. I then read and reviewed the transcribed interviews, and my observation notes multiple times to understand the nuances and patterns in the information (Saldana, 2021).

Next, I inputted the data into the Nvivo software 1.0 to aid my data analysis process. I spent time on this software as it allowed me to master the systematic style of thematic analysis and generate some initial codes before switching to a manual coding process to conclude the study.

Following my continued review of the data (i.e. transcribed interviews and observation notes), I developed initial codes that captured the key elements of e-learning practices and the learning environment and matched these initial codes to different sections of my interview transcripts and observation notes. These included issues such as the use of technology, training methods, user experiences, etc.

Next, I identified overarching themes and their related subthemes by observing the patterns and connections among the initial codes and grouping them into potential themes. I explored several codes and subthemes enriched by the quality and breadth of the data obtained via the organisations I engaged with. Both case transcripts provided a rich data set, and I needed to stay on course and not get distracted by potential themes that did not relate to the focus of my study. From the initial coding via Nvivo and the manual coding process (using Microsoft Word), some of the subthemes that emerged revolved around reasons why e-learning was introduced, types of training it was used for, the learning approach of the organisation and employee, the feelings and experiences of end-users and organisational actors that engaged with the system. In addition, I tried to explore issues around the technical engagement with the system and the enabling and constraining factors affecting the development of e-learning in the organisation.

I then refined and reviewed themes by returning to the data and ensuring nothing important was omitted. I also assessed the validity and coherence of the themes to ensure that the themes were clear and relevant to the objectives and context of the study. Once I was confident of identifying the relevant themes and subthemes, I proceeded to define and rename the themes. Specifically, the main themes that I explored revolved around:

1. Concept, perception, experience, and practice of e-learning by organisational actors within organisations

2. The Influence of e-learning's meaning and perception by key stakeholders and senior management on organisational policy and practice

3. The role of expansive and restrictive policies and organisational practices in the design, development, implementation, and management of e-learning in organisations.

4. The interaction between expansive-restrictive learning environments and the situated context of e-learning within the organisation.

The final step of the thematic analysis is writing up the analysis based on the results. The results of the analysis are presented in chapters 4 and 5.

3.6 Ethical Considerations

I needed to ensure that this research was conducted ethically. Therefore, I approached the research with the guidance of the UK Research and Innovation (UKRI) Economic and Social Research Council (ESRC) principles and the University of Essex guidelines for ethical research. Ethical approval was obtained from the University of Essex Research Ethics Officer before the case study organisations were contacted and the interviews held. Furthermore, Healthco, a highly regulated healthcare organisation, conducted checks and approval before granting permission to engage participants. I was required to complete an ethical form which detailed my research objectives and the nature of the information I was looking to collect in the research.

The process also involved meeting with the top learning and development team, where I shared the aims of my research and its potential benefits to their use of e-learning and organisational development, which they all agreed is key. They gave their approval before I proceeded to carry out the interviews.

One key principle for conducting ethical research is obtaining informed consent from the participants. All respondents and their organisations were provided consent and participant information forms to help them understand the research's aims and the adherence to research ethical standards. Though all participants had given consent and agreed to the provisions of the consent and information sheet, at every interview session, I re-echoed the provisions of the participant information sheet and consent form to give them a chance to withdraw or decide to continue the interview session.

I also need to ensure that the research did not put any participant in harm's way. Participants were always assured that they were free to express their thoughts and that their research contributions had no negative implications on their careers and personal well-being. To ensure this, the identity of case organisations and research respondents is protected using pseudonyms. I have also ensured that at no time does a quotation directly reveal a participant's job role in a way that might compromise their anonymity. However, senior management employees from both case organisations were happy for their positions to be noted but not their names or 'off the record' views about certain employee behaviours or attitudes.

A secure and trusted company conducted the transcription of interviews. The transcribed documents were securely saved on an encrypted file, and no external party had access to those files.

3.7 Conclusion

This chapter started by discussing the philosophy underpinning the approaches and methods employed in this research. The interpretive paradigm was used as it allowed the researcher to gain deeper insight from participants and provided clues on reasons behind issues affecting the learning environment and engagement with e-learning. This approach allowed me to directly

understand issues relating to e-learning from the purview of the participants in organisations that used e-learning for their learning and development activities.

The chapter further justified using a case study approach and the means to gather data samples. Two case organisations were used, and as will be seen in the following chapters, they have similarities and differences that enriched the exploration and findings of this study. A case study approach also strengthened this study's empirical contribution, as it provided insights into the concept and practice of e-learning and the nature of learning environments in organisations.

The chapter also discussed the use of thematic analysis to analyse collated data, and this process was guided by Braun and Clarke's (2006) six-stage framework, which helped identify key sub-themes of this study. Lastly, the chapter outlined adherence to ethical procedures in research, which were always followed at all stages of this research. Chapters 4 and 5 will present the findings from both case organisations.

Chapter 4: Perceptions of E-learning and Influence of Organisational Policy and Practice

4.1 Introduction

This chapter explores two of the four themes initiated in Chapter 3 by delving deeper into the experiences and perceptions of e-learning among employees at the operational level based on the organisational contexts previously outlined. This chapter starts with the ground-level experiences of junior employees within the case organisations to address *Theme 1: "Concept, perception, experience, and practice of e-learning by organisational actors within organisations".* This chapter's first aspect (section 4.2) provides a comprehensive view of how e-learning is perceived, experienced, and implemented at the junior level, offering a nuanced understanding of the learning culture and philosophies underpinning attitudes towards e-learning initiatives. The insights from junior employees are invaluable for unpacking the orientations towards learning and the dynamics influencing their engagement with e-learning environments. These perspectives are crucial, as junior employees often interact extensively with e-learning platforms, making them primary recipients of the organisational learning policies crafted at the strategic level. Through a comparative analysis of learning environments across different organisations and sectors, this chapter elucidates the similarities and differences that shape the efficacy and reception of e-learning.

Building upon this, the second aspect (section 4.3) explores how the perceptions of e-learning held by mid-to-senior-level employees influence organisational policies and practices. This second aspect discusses *Theme 2: "The Influence of e-learning's meaning and perception by key stakeholders and senior management on organisational policy and practice".* By juxtaposing these managerial insights with the ground-level experiences of junior employees, this examination offers a comprehensive understanding of the multifaceted impact of e-learning perceptions across different organisational strata on developing and implementing e-

learning strategies. This nuanced approach enables a richer appreciation of how e-learning is conceptualised and operationalised within organisations, highlighting the critical role that employee perceptions at various levels play in shaping effective e-learning environments and policies.

By examining the lived experiences of these employees and their influence on policy and practice, this chapter aims to identify the key factors contributing to the expansive and restrictive learning environments facilitated by e-learning. This exploration is pivotal for answering research question 1, *"What is the meaning of e-learning in contemporary organisations in the UK, and how is it reflected in organisational policy and practice?"* Thus, the narratives of employees serve as a critical lens through which the interplay between e-learning, organisational learning environments, and the broader productive system is examined, providing essential insights into the overall landscape of e-learning within organisations. This chapter applies the four productive system dimensions identified in Chapter 2 to analyse the perceptions and experiences of employees and key stakeholders regarding e-learning within their organisations.

4.2 Junior-Level Employees' Perceptions and Experience of E-Learning in Organisations

This section explores how junior-level employees understand the positioning and implementation of e-learning initiatives beyond mere procedural aspects, including their lived experiences and the intrinsic nature of e-learning as they perceive it. Furthermore, this analysis will explore the perspectives of social, technological, work relations, and organisational learning and development dimensions experienced by junior staff. This approach aims to reveal how the orientation of junior employees towards integrating e-learning shapes their perceptions and engagement levels with e-learning systems, offering insights into the broader organisational implications of these perceptions.

4.2.1 Bridging Organisational Social Structures for Junior-Level Employee Development with E-Learning

The relationship between junior-level employees and the organisation's social structure, particularly in the context of e-learning perceptions, unfolds across a spectrum of considerations that intertwine with mandatory training requirements, technological adeptness, and professional development. This complex interplay reflects not only the compulsory nature of e-learning within organisational settings but also navigates through nuances of a desire for professional growth and the balancing act between obligatory and voluntary engagement with e-learning platforms. Junior employees perceive E-learning as a mandatory element within their professional ecosystem, often associated with compliance, policy refreshment, and meeting competency requirements. While essential for organisational compliance and maintaining up-to-date professional standards, this mandatory aspect occasionally bears a less engaging, more solitary learning experience. However, there is an acknowledgement of the necessity for a flexible approach encompassing mandatory (restrictive) and voluntary (expansive) learning techniques, potentially enhancing engagement and personal development.

4.2.1.1 Motivations and Perceptions of the Organisational Benefits of E-Learning

Junior-level respondents from both case organisations shared their perspectives on the introduction and rationale of e-learning within their organisations. The inquiry sought to uncover whether these employees grasped the underpinning motives for adopting e-learning practices, focusing on its perceived benefits and relevance to organisational learning and development needs.

The examination revealed that responses predominantly centred around the advantages and fundamental purposes of e-learning, as understood by junior staff members. This reflects a general awareness among junior employees of the strategic importance of e-learning in meeting their respective organisations' educational and developmental objectives.

Illustrative responses from Techco's junior employees regarding the introduction of e-learning are as follows:

"*At first, it was mainly (through) email that we were going to have a new online service, which we will be using for our training going forward."*

-Respondent 4, Junior Employee, CS 1

"*It was introduced quietly company-wide, just saying this is a new thing."*

-Respondent 7, General Employee, CS 1

The exploration into junior respondents at Techco revealed a notable ambiguity regarding the specific policies and foundational strategies underpinning the introduction of e-learning. Most of their reflections were centred on the advantages of e-learning and how the organisation incrementally introduced the platform. These observations suggest that while junior-level employees were engaged in the early stages of e-learning implementation, their involvement was primarily limited to awareness and user testing rather than a comprehensive grasp of the platform's core purpose and strategic significance.

Similarly, in Healthco, junior employees' perceptions regarding the motivations behind adopting and utilising e-learning mirrored the concerns identified within the Techco case. Many respondents below the management level expressed uncertainty about the policy-driven reasons behind establishing e-learning platforms. Their explanations often extended beyond mere training and development considerations. One respondent highlighted a lack of clarity concerning the initial phase and fundamental understanding of e-learning's purpose, though acknowledged a perceptible transition in the mode of training delivery.

These findings indicate a broader trend of limited clarity among junior staff regarding the strategic intent behind e-learning initiatives despite recognising the shift towards digital learning platforms and their benefits:

"*I don't even remember; it was ages ago, and it was just how we now do our training instead of going class-based."*

-Respondent 19, Junior Employee, CS2

Some employees noted that they were mandated during their induction into the organisation to complete the mandatory courses which are vital to their employment, as illustrated:

"*(E-learning was introduced) when I had my induction, and we covered all mandatory courses that I have to complete as part of my employment."*

-Respondent 3, Junior Employee, CS2

"*When I first started, I had induction, and they told me how to get onto e-learning."*

-Respondent 14, Junior Employee, CS 2

The data collected from junior-level employees at Healthco highlighted their awareness of the e-learning platform, attributed mainly to the need to fulfil mandatory training requirements, a critical component within the highly regulated health and social care sector. Similar feedback from junior staff at Techco and Healthco pointed to either a lack of involvement or a partial understanding concerning the policies and strategies driving the adoption and implementation of e-learning within their organisations. This perspective starkly contrasts the narrative presented by senior respondents, where senior managers displayed a deep understanding and awareness of the policies and strategic orientations underpinning the decision to adopt e-learning. This will be explored further in section 4.3.

4.2.1.2 Perception and Experience of E-learning as Regulatory Requirement in Organisations

The aspect delves deeper into the perceptions of junior-level employees regarding e-learning. It explores their viewpoint that the primary function of e-learning within the organisation is to enhance and facilitate a platform for comprehensive compliance and regulatory training. This

perspective further illuminates the complexities surrounding the implementation and reception of e-learning initiatives, particularly in how different tiers within the organisational hierarchy perceive them.

Within both case studies, junior-level employees concurred that e-learning serves as a vital mechanism within their organisations for undertaking necessary training and skills development, aligning with the essential requirements of their respective sectors. Techco respondents noted that during the initial phase of the e-learning introduction and how management directed their interaction with the platform, there was a pronounced focus on completing mandatory courses. These courses were identified as critical for strict compliance within their operational framework. The following excerpt encapsulates the perspective of junior employees, highlighting e-learning as a predominantly mandatory learning tool. This perception has largely been shaped by the organisation's directive focusing employees' attention on engaging with key modules on the e-learning platform:

"*So, we (the staff) got an email that says can we go on the e-learning and complete these units (compulsory ones) by a certain time and that whoever didn't complete it by then would be reminded by their manager that they must complete it within a certain period."*

-Respondent 4, Junior Employee, CS 1

This excerpt's implications reveal the nature of e-learning within the organisation and the lengths the organisation is willing to go to enforce compliance with the mandatory modules, as exemplified by involving managers to also enforce and ensure that their subordinates get on the platform and at least complete the mandatory modules.

Insistence on mandatory e-learning compliance within Techco is not restricted to just the junior employees, as line managers are whipped in line to comply, as the excerpt below illustrates:

"*Occasionally, we get emails saying these are mandatory courses that we should do, such as GDPR and the email comes with the time frame that we are expected to complete the courses."*

Respondent 2, Line Manager, CS 1

The perspectives of junior employees at Healthco resonated with Techco's, emphasising e-learning as a critical tool for addressing mandatory and regulatory training requirements. Given the stringent regulations governing the healthcare sector in the UK, employees at Healthco, irrespective of their level, acknowledged the imperative to fulfil their mandatory training obligations, whether through online platforms, classroom settings, or other non-electronic formats.

In discussions regarding their exposure to, awareness of, and understanding of e-learning, junior employees at Healthco described the platform as a necessary medium for completing their required courses and for the annual renewal of their training. One respondent highlighted that the learning and development team at Healthco strictly enforces compliance with the e-learning mandatory modules, underlining the organisation's commitment to ensuring that all employees meet their regulatory training requirements through the e-learning platform:

"*I went through training (with the L&D Team), and they tell me to complete the compulsory courses and to update them regularly."* (Respondent 24, Junior Employee, CS 2).

The narrative among respondents at Healthco universally underscored that their engagement with e-learning was primarily driven by the regulatory mandates specific to employees in the health and social care sector, notably within the NHS, to complete and refresh their mandatory training periodically. This regulatory backdrop elucidates the organisation's insistence on using e-learning for compulsory education, highlighting the significant role of mandatory e-learning components. The implications of this necessity, particularly its interaction with both the

productive and learning systems of the organisation, are subjects for deeper exploration in the forthcoming sections of this study.

The investigation reveals that regulatory requirements significantly shape the motivation behind employees' interaction with e-learning platforms at Techco. Junior-level employees indicated that the organisational push and the expectation of fulfilling essential modules on the e-learning platform predominantly guided their engagement with the platform. Consequently, their utilisation of the e-learning platform was confined mainly to compulsory training, with a marked disinterest in optional modules. When questioned, respondents explicitly mentioned that their visits to the e-learning platform were solely to complete compliance training, as exemplified in the subsequent excerpts:

"I haven't had a chance to do more (non-compulsory modules) ….it is more of a case of going there for guidelines or regulatory things."

-Respondent 21, Junior Employee, CS 1

"*I have done some courses but only for things which were mostly compliance and sorts…it was more (e-learning engagement) on the basis of the company being legally competitive."*

-Respondent 7, Junior Employee, CS 1

The quote from the respondent below shows how forceful and intentional the organisation was with regard to enforcing general staff-wide engagement with e-learning platforms:

"*They (the organisation) made everyone complete GDPR and other compulsory course. There was no avoiding it and they set a deadline."*

-Respondent 6, Junior Employee, CS 1

The regulatory and enforced engagement with e-learning platforms due to mandatory demands also showed from the Healthco data as junior respondents noted that they had to go on the

system and complete the mandatory modules while ensuring that they continually renew those trainings as at when due. The excerpts below reinforce this view:

"*I have only done (attempted compulsory e-learning modules) what is required, I have not had time for other things."*

-Respondent 10, Junior Employee, CS 2

"*I only go on it (e-learning platform) to update my courses when they run out, but I have not had time to do optional courses."*

Respondent 14, Junior Employee, CS 2

Furthermore, the integration of e-learning into the organisation's social structure is seen through its alignment with internal policies, professional competencies, and the broader training framework. E-learning modules, especially those focusing on GDPR, cybersecurity, and health and safety, are tailored to reflect the company's culture and compliance needs while catering to personal development goals. This fosters a shifting perception of e-learning—from a purely mandatory tool to a valuable professional and personal growth asset. Active participation, internal competitions, and peer recommendations are highlighted as strategies to transform the e-learning experience from compliance-focused to a more interactive, self-paced, and engaging journey. The linkage of e-learning assignments to tangible outcomes within the organisation and its relevance to job roles encourages curiosity and a more profound engagement with the material, suggesting that a blend of compulsory and voluntary elements can enhance job performance and stay abreast of industry developments.

4.2.2 Performance or User Experience as Drivers of User Engagement in E-learning

According to insights from both case studies, performance and user experience are pivotal determinants of user engagement with e-learning platforms. These investigations reveal that

users' engagement with e-learning platforms is significantly influenced by the ease of use of e-learning platforms and how much the modules enhance employees' competencies or knowledge. From Techco, junior respondents explained that technological factors like platform performance, navigation and complexity affect the experience and determine engagement in e-learning.

"The new e-learning platform is very easy to use. From a user perspective, it's very simple and good to use. The old platform was pretty hard work, and it was very slow and clunky"

-Respondent 2, Junior Employee, CS 1

"We use something called e-learning… which is the most ridiculous system ever. Nobody knows how to-- You can't use it... Everyone dreads it coming around again... because they know they're going to have to use this system"

-Respondent 7, Junior Employee, CS 2

This shows the importance of intuitive design and efficient performance in fostering a conducive learning environment. This strong language reflects a profound dissatisfaction beyond minor usability issues, suggesting deep-rooted systemic problems that render the platform virtually unusable. Such a situation not only impedes learning but can also foster a sense of dread among users, as indicated by the anticipation of engaging with the e-learning system. Another respondent highlighted the importance of having a support system in place for such difficulty:

"Yes. When it's working. It does have its moments, but generally, it's okay... Learning and development is always available if you get stuck to come and help you"

-Respondent 13, Junior Employee, CS 2

The critical insights derived from the studies emphasise the vital role that the relevance and impact of e-learning courses have on their effectiveness and attractiveness to users. In particular, the practical utility of the e-learning content is paramount, as it directly influences an employee's ability to apply acquired skills and knowledge to their job roles and responsibilities. When perceived by users, this utility significantly enhances the value of e-learning initiatives, transforming them from mere organisational requirements to essential tools for professional development and competency enhancement. At Techco, junior respondents' motivation to engage with the e-learning platform extends beyond fulfilling mandatory training requirements. Their engagement is primarily driven by the perceived value of the courses offered on the platform, especially regarding skills and knowledge development. This perception highlights the importance of aligning e-learning content with the actual needs and goals of employees, ensuring that the training provided is relevant and capable of fostering professional growth and improvement in job performance. Several respondent narratives, for example evidence these claims:

"*I have basically gained from excel and power point presentation software that I can use to present or pitch sales to customers. These two courses have been handy for me."*

-Respondent 4, Junior Employee, CS 1

"*I did a really good course on the difference between being passive and assertive, which relates to my role."*

-Respondent 10, Junior Employee, CS 1

There was an interesting distinction in engagement in the two case study organisations. Techco respondents engaged more with the e-learning system based on performance potentials than their colleagues in Healthco, who engaged mostly due to compliance demands. As will be discussed shortly, the health and social care sector relies more on the capabilities and

knowledge of the employee in providing quality care and support to the service user. The nature of the sector means some of its courses were classroom-based, as they required physical training or practice. This probably explains why most of the courses on the e-learning platform within the health and social care sector were based on information and knowledge development rather than on performing certain tasks, which was mostly common in the e-learning system used in Techco.

Another interesting theme was that employee's engagement with e-learning beyond the mandatory scope was defined by its impact on their specific job role and not just the general knowledge required within the profession. For example, when asked if courses on the e-learning platform improve their job function, the following employee responded:

"I suppose it depends if it's applicable to the role that you're doing. I would imagine that, yes, it would be completed anyway because we're dealing with children's records all the time so something like information governance is important in that respect."

-Respondent 3, General Employee, CS2).

The respondent added that engagement with e-learning was limited as few modules on the platform would have improved efficiency and job tasks:

"I would say so particularly the information governance and customer service course, other than that, nothing else. It is just the compulsory ones."

-Respondent 3, General Employee, CS 2

The importance of e-learning modules being designed to increase specific role development and competency is further amplified by the illustrations below:

"Because there's nothing on there for us, if we want to learn something, like the immunisation for example, that wouldn't be on the learning platform, so I would have to go to my manager and say, "Actually, I'm keen to learn about blah, blah, blah." I would have to go

down that route. If it was available on the platform, then yes, fantastic. I'd go on there all the time."

-Respondent 2, Line Manager, CS 2

"My job is clinical based, so not everything is relevant to my job."

-Respondent 24, General employee, CS 2

This was also the reality in Techco case whereby employees have engaged with the courses on the e-learning platform but have not found it to be of relevance to their specific job function as illustrated:

"Yes, maybe because certain things on there are kind of like for everyone around the business in general, so it would be useful if there was one just for my unit, and some for other departments, other than, "Oh, yeah, there is some training on there, go have a look at it, and get it done."

-Respondent 4, General Employee, CS 1

"Well, I've been doing this role for eight years, so I kind of know it inside out. So I don't think it has much impact, it's not really to my job role. It's probably more about meeting compliance and new standards. That's when it helps me out but to be honest, I've been at sales for eight years, so it doesn't really teach me from my actual job role."

-Respondent 5, General Employee, CS 1

Respondent 5 further equipped that engagement with e-learning would have improved if the system offered tangible additions with regards to skills and knowledge required to carry out their tasks:

"*There hasn't really been courses that would develop my job role, so far if there was on there, then I would use it.*"

-Respondent 5, General Employee, CS 1

The narratives from several respondents at Techco serve as compelling evidence of this claim, highlighting how the content and ease of use of e-learning platforms can be a significant motivator for user engagement. When employees see a direct link between the e-learning courses and their potential for career advancement or skill improvement, their enthusiasm and commitment to completing these courses naturally increase. This connection between the content's relevance and its impact on professional development is a critical determinant in the success of e-learning initiatives, emphasising the need for organisations to carefully curate and tailor their e-learning offerings to meet the evolving needs of their workforce. As will be discussed later, certain elements of the productive system influence the design of e-learning and the learning environment from which the implementation and attitude given to e-learning draws.

4.2.3 Integrating Learning with Work Relations for E-learning User Engagement

Integrating learning with work relations presents a unique challenge and opportunity for enhancing e-learning user engagement, especially in dynamic workplace environments. The successful onboarding of employees, coupled with a clear progression path from learning development to team leadership roles, highlights the necessity of aligning e-learning initiatives with practical work relations and career advancement objectives. Such alignment facilitates reliable tracking of learning progress and ensures that learning activities fit seamlessly into employees' schedules, suggesting an expansive approach to professional development. This section explores the junior-level respondents' perspectives about aligning e-learning to their work.

"Some of it forced but then it has to be done by a certain date and others I've done on my own... because they were sales related and I'm in sales so I thought I'd take a look at them"

-Respondent 9, Junior Employee, CS1

"I guess because of being an engineer I'm very much hands-on a kinaesthetic learner... Smart learning can adapt itself to your requirements as you learn"

-Respondent 7, Junior Employee, CS1

Organisations can support employee development by incorporating e-learning with routine work activities, such as dedicating weekly hours for continuous learning and knowledge sharing. Moreover, the support from learning and development teams, flexibility in workload management, and active engagement from line managers regarding the learning process are pivotal in creating a conducive learning environment. Felstead et al. (2009) highlight the pivotal role of line managers and those with supervisory duties in shaping their subordinates' attitudes and engagement levels towards e-learning. This study reveals that line managers were instrumental during the e-learning introduction phase, guiding team members through the process. Junior employees in both case studies acknowledged their managers as crucial influencers and facilitators of their engagement with e-learning platforms and overall learning and development initiatives. An excerpt from junior respondents at Techco reinforces the idea, showcasing line managers not only as leaders but also as crucial conveyors of information and initiators in the e-learning process.

"*Actually, it's my manager that told me about the platform. Yeah, and he gave us all the log in details and everything, telling us the compulsory ones to do, the time frame and additional ones we can do if we are interested.*"

-Respondent 13, General Employee, CS 1

This excerpt relays the influence and role of managers within the Techco case and how these line managers have access to information and resources that help enhance the awareness and engagement of e-learning by employees for whom they are responsible. The excerpt below

from another junior-level respondent notes the partnership role taken by the line manager regarding prompting junior employees to take up e-learning and engage with the modules as much as they can:

"*The introduction (of e-learning) was by HR notifying us of the availability of the e-learning platform as well as our line managers prompting and encouraging us to go and take some courses*."

-Respondent 16, Junior Employee, CS 1

Line managers in Healthco were also active in the introductory phase of e-learning to their junior colleagues as respondents noted that their supervisors and direct bosses were involved in their awareness of the e-learning platform and the type of courses they should attempt when they get on the platform. The excerpt below corroborates this claim:

"*I wasn't sent an email but was told by my line manager that I have to go on e-learning and do some courses*."

-Respondent 10, Junior Employee, CS 2

Though this respondent's testimony supports the active involvement of line managers in the awareness and information dissemination of e-learning modules to junior-level employees, it recalls the challenge of line managers' bias or misinformation reflected in the information and instruction they pass on to employees they are responsible for.

However, the data from both cases suggest that the organisation itself mandates and tasks line managers and senior team members to ensure that employees they supervise are up to date as regards their e-learning. This is reflected in the excerpts from both case organisations as shown below:

"*I had to do my e-learning because HR mostly contacts our line managers to remind us to complete our e-learning on time*."

-Respondent 4, General Employee, CS 1

"I think our managers get like a notification of when we're about to run out and we get an email notification. We get a warning."

-Respondent 6, General Employee, CS 2

While further adding that the said manager, upon receipt of a reminder email, will:

"*Tell us to log on and do it as soon as we can*."

This data further suggests that line managers can influence employee's engagement with learning activities by recommending modules they want their subordinates to attend on the e-learning portal. Managers in Techco, as the quote of the junior employee below suggests have the influence and authority to enjoin their subordinates to complete modules, they feel is of benefit to the job function or personal development of the employee. The quote is illustrated below:

"*Also, our managers can allocate us courses if my manager said, "Oh, I want you to do this course on presentations or something because it's specific to your role, then he could allocate that to me and then I would have to do that one."*

-Respondent 10, General Employee, CS 1

Beyond collaborating with junior team members on the completion of additional and non-mandatory e-learning modules, respondents from both case organisations further assert that line managers from time to time act as reminders and supporters of e-learning, as demonstrated in the quotes below:

"*Managers do try and encourage employees, as they should, to try and squeeze in learning and development where they can."*

-Respondent 6, General Employee, CS 1

"I have been in the past reminded by my manager that I need to go in a particular course or do it online, to be up to date on my E-learning."

-Respondent 10, General Employee, CS 2

Overall, this segment relays line managers' influences and roles in supporting user engagement of e-learning modules and other learning initiatives in the organisation. Data from both cases show how line managers can encourage or dissuade their junior colleagues from engaging with e-learning modules. This study also notes that line managers, by their learning philosophy and state of mind, are special as their subordinates can draw inspiration and interest, or lack of it, from what they perceive from their superior's disposition to e-learning and other learning initiatives within the learning environment.

4.2.4 Perceived Usefulness and Users' Learning Preference

The concept of perceived usefulness and users' learning preferences plays a critical role in shaping the effectiveness and adoption of e-learning platforms within organisational contexts. As insights reveal, learners show a marked preference for learning methods that are not only effective but also align with their individual and organisational goals. Integrating content that resonates with learners' roles and the strategic objectives of their organisations is crucial. Some respondents pointed out that they prefer other learning methods:

"I'm more...if it's job related e-learning then I'm probably better off learning it as part of the role rather than going away learning it separately and then coming back and trying to integrate that knowledge into the role"

-Respondent 15, Junior Employee, CS 1

"I prefer being in a classroom...over individual but then when you have issues and any questions you have an individual that will guide you through them. Whereas with the e-learning...there's nothing that's made available to you."

-Respondent 13, Junior Employee, CS 1

However, the full potential of this alignment is often compromised by issues such as system inaccessibility and technical glitches, which overshadow the relevance of content and deter engagement. Despite the flexibility and convenience e-learning promises over traditional classroom settings, users strongly prefer interactive, classroom-based learning for deeper content engagement and the value of hands-on, practical experiences. Blended learning approaches, combining online modules with face-to-face interactions, are emerging as a preferred solution to bridge the gap between theoretical knowledge and practical application.

This highlights the necessity for e-learning systems to be user-friendly and conducive to a diverse and comprehensive learning experience. This highlights an evolving landscape where the utility of e-learning is measured not only by its ability to deliver content conveniently but also by how effectively it facilitates real learning through engaging, practical, and interactive methods that cater to the diverse preferences of learners. This subsection builds on the previous by stressing that employees, especially those within the junior cadre, also have the intuition to decipher which non-mandatory courses are useful to their job role, future career interests or personal skills and knowledge development.

"I think e-learning has positives in the sense that you can do it at any time you can do it at any location if you've got a laptop etc. I think it's convenient. I think in the working environment where people can't always travel and trying to get rooms booked so I think it's a great convenience"

-Respondent 11, Junior Employee, CS 1

Respondents from Healthco suggested that their engagement with the e-learning platform beyond mandatory requirements was premised on the benefits or lack thereof on their personal development or career and job prospects. The quote from the respondent below conveys the strength of the perceived usefulness of e-learning modules and how their potential beyond the mandatory scope defines and influences the level of engagement and perception:

"Not since I've been here in this role. I have done previously where I wasn't clinical, but I went and did things like the CPR courses, the basic and advanced, things like that. Because of the nature of the job, I was in a position where I might be in a clinic with the clinician, it felt like it was a good thing for me to have that kind of training as well. It wasn't mandatory for me, not being a clinical member of staff, but I undertook it, and that was through ESR (e-learning platform) as well."

-Respondent 21, Junior Employee, CS 2

In summary, the discussion thus far shows the perceived usefulness and potential of the e-learning module and how it enables or constrains junior-level engagement with e-learning. This is the case, particularly beyond regulatory demands and compulsory levels of engagement, which appear to be of priority to both case organisations.

4.3 Senior-Level Employees Context of E-learning and Impact on Policy and Practice

Participants' accounts reveal the deployment and engagement with e-learning platforms across both case organisations, illustrating the context and guiding philosophies from senior respondents' viewpoints. The contrast between the two organisations is highlighted by their respective approaches to developing and implementing e-learning. This distinction is critical for understanding how e-learning flourishes in various productive systems. Furthermore, examining e-learning across different or similar sectors enhances our insight into its viability

within diverse learning environments, pinpointing the necessary components determining expansive and restrictive e-learning in policy and practice.

4.3.1 The Rationale for Greater Use of E-learning Platforms in the Case Study Organisations

Respondents noted that there are several reasons responsible for the use of e-learning platforms within the organisation. According to the respondents from both case organisations, several factors are responsible for engaging with e-learning, which cuts across policy demands and benefits associated with the practice of e-learning.

Policy demands relate to regulatory needs and pressure, which necessitates organisational learning approaches to be developed. The benefits associated with the experience of e-learning account for one of the cardinal reasons behind e-learning engagement in organisations. An HR Director from the Techco case noted that e-learning was developed to improve work-based learning and to help improve employee personal development, as captured in the quotation below:

"One of the needs identified was that people were getting frustrated with their personal development and not getting access to their work-based learning. The system was brought in to plug these gaps where people have access to workable resources that helps them to learn."

-Respondent 1, HR Director, CS 1

This narrative from a macro-level respondent suggests that there are several reasons behind the adoption and practice of e-learning in organisations. Certain rationales are much more important, and they underpin the extent to which e-learning is developed and utilised in organisations. The excerpt further emphasises that policy and improvement to work are one of the key drivers of e-learning engagement in organisations.

From Healthco, a senior respondent also emphasised that policies and standards set by the organisation dictates the extent of e-learning engagement, whilst adding that the personal learning objectives of the employees were factors in deciding the length of engagement and the perception ascribed to e-learning.

As described:

> *"There are some standard objectives that we set … at the end of the day, it is a balance between duty to the organisation and the employee's personal aims."*
>
> -Respondent 9, L&D Manager, CS 2

As this quote suggests, a combination of reasons accounts for the introduction and continued practice of e-learning in organisations. Managerial respondents agree that employees and the organisation have their rationale for engaging with and perceiving e-learning. They allude that regulatory policies and organisational learning directives at times provide the dominant basis for e-learning engagement, and these factors shape employee perception and experiences of e-learning, which are essential to the development of an expansive learning environment.

4.3.2 Performance as a Rationale for Introducing E-learning in Organisations.

The development of e-learning seemed to have strong connections with performance and support the workforce's ability to carry out job-related responsibilities. A key attribute that shows how expansive and restrictive the learning environment is relates to how e-learning platforms influence work design and employee performance. In both cases, management-level respondents indicated a link between e-learning and their ability to perform their job functions. The excerpt below from the Learning and Development Manager in Techco case shows that e-learning was designed to increase the performance of employees and organisational competence in general:

"*The previous e-learning system was pretty limited as it was focused solely on product-based training. The organisation also realised that people were feeling frustrated with the personal development as none of the courses on it offered work-based learning."*

-Respondent 12, L&D Manager, CS 1

The data from Healthco deviates slightly as e-learning was mostly engaged as an information acquisition and mandatory learning platform and not necessarily one that improves job function and skills development. The excerpt below illustrates that e-learning engagement and attitude to learning and development activities are defined by the approach and extent to which such a learning platform contributes to the performance and competencies of actors within the organisation. The first and second quotations are from participants within the Learning and Development unit of Healthco who are privy to the e-learning objectives, and they convey the performance demands associated with the introduction of e-learning in the organisation. The quotation from the line manager also affirms the importance of performance development as regards the practice and engagement of e-learning in Healthco:

"We've got a set amount of training, which is mandatory. Everybody has to do that. There are other ones that you can do, and they will go on your training record, but it's not something you need specifically to do your role."

-Respondent 23, L & D Team member, CS 2

"Well, a lot of the training is mandatory, so they can't really do their job without doing it."

-Respondent 9, L & D Manager, CS 2

"It works for me; it fits in with my role. I don't find it too difficult."

-Respondent 1, Line Manager, CS 2

4.3.3 Facilitating Standardised Training

In the Techco case, respondents explained that e-learning was introduced to serve as a medium whereby staff members could visit the learning platform, complete courses, and regularly update their training qualifications. Both organisations conveyed how they had consciously adopted e-learning as a virtual learning tool rather than face-to-face learning.

From the Techco case, data gathered explains that e-learning was introduced as a need to facilitate consistent training and development programmes that address the organisation's competence and personal development requirements. The excerpts below capture some of these standardised training reasons:

"E-learning was introduced for product-based training and personal development."

-Respondent 1, HR Director, CS 1

"E-learning was introduced as a platform where people can learn product knowledge and other soft skills."

-Respondent 12, L&D Manager, CS 1

There appeared to be logistical reasons for introducing e-learning in both organisations, linked to work organisation. For example, in the Healthco case, e-learning was introduced as a platform whereby standardised training could be offered to every staff member, cascading key information supporting their knowledge and awareness. This was in a context where several departments and services were scattered in different locations. The Learning and Development Manager explained this as follows:

"Some of the reasons [for introducing e-learning] are a standardized approach, people doing the same training. It works very well for the information given, which is why we've chosen to use e-learning for some things."

-Respondent 15, L & D Senior Partner, CS 2

Data from both cases, as noted in the excerpts above, provide a consensus on the deployment of e-learning initiatives and platforms in organisations to provide standardised learning opportunities for employees within the organisations, and this helps maintain the integrity of learning and knowledge materials with reduced chances of employees learning from conflicting learning resources.

4.3.4 Meeting Regulatory Requirements: E-learning for Compliance-Related Training

E-learning, in both case study organisations, appeared to be compliance and regulatory-driven to meet regulatory training needs and requirements. Techco is more knowledge-based and owned privately. Healthco is more of a hybrid organisation, being corporately owned and governed, though heavily influenced by governmental regulations as a healthcare services provider. From Techco, a senior respondent opined that the e-learning platform within the organisation hosts compliance and other mandatory training. This experience makes junior employees perceive e-learning as a tool for pushing compliance training. The excerpt corroborates this:

"I think some employees see e-learning as a stick because we mostly do compliance training on that."

-Respondent 12, L & D Manager, CS 2

In Healthco, e-learning was introduced to the organisation to ensure all employees completed their compulsory training as required by professionals within the healthcare sector. For example, in the following quotation, a line manager describes how, on joining the organisation, certain courses needed to be completed and subsequently repeated on an annual basis:

"We had to do information governance and fire safety and we had to have all of these completed and we had to do it on a yearly basis. That's how it was first introduced when we first joined."

-Respondent 2, Line Manager, CS 2

The compliance aspects of e-learning within the organisation resulted in the organisation using their e-learning platforms to monitor staff performance and learning targets, as the following line manager explained:

"*As part of our appraisals and PDR's, we're expected to fulfil certain mandatory training requirements each year and that involves e- learning.*"

-Respondent 1, Line Manager, CS 2

The Learning and Development Manager reinforced these themes in conveying that e-learning, in offering unified training across the organisation, supported the organisation in achieving its key regulatory objectives:

"Some of the reason is to offer a standardized approach to training and being an NHS driven organisation and as part of our Key Performance Indicators, we have to comply with a lot of regulations and training."

-Respondent 9, L &D Manager, CS 2

These excerpts and illustrations from the case study interviews strengthen the notion outlined in Chapter 2 that the adoption and engagement with e-learning within organisations are often compliance-led. Regulatory demands regarding the product and service being provided by the organisation help to shape the mandatory orientation of training opportunities.

4.3.5 Design Considerations for Enhancing of E-learning in Organisations

There appeared to be other drivers for the shift to e-learning, including perceptions that it could help to strengthen learning content. The Learning and Development Manager in Techco

observed that the current e-learning portal was introduced as a solution to the previous e-learning system that lacked enough content.

The lack of content was felt to have been contributing to low e-learning engagement and poor employee perception of learning opportunities. As explained:

"*So, we've had the previous system, which is very basic, very old, very dated technology. The courses are generally just PowerPoint, animated and then they have a voice over which generally is native English. So, the translation isn't very good. So, it's very unfriendly and it was rarely ever used for mandatory training and not for product knowledge or other soft skills."*

-Respondent 12, L & D Manager, CS 1

The Learning and Development manager further reflected on the limitation of the e-learning system previously in use and noted that the system had user experience issues which were mostly because of poor learning content on the platform, which hindered the expressive wish of learners to learn beyond the limited contents available on the previous system. The limitations of the previous system are:

"*The previous e-learning system was pretty limited as it was focused solely on product-based training. The organisation also realised that people were feeling frustrated with the personal development as none of the courses on it offered work-based learning".*

-Respondent 12, L & D Manager, CS 1

The testimony from the senior respondent suggests Techco's new e-learning platform was designed to support the organisation in adding its bespoke modules to the e-learning platform, to encourage employee engagement and perception of e-learning beyond a tool for compliance learning and as a system that offers a wide range of learning opportunities to address personal development interest and work-related learning.

When quizzed on the factors responsible for the adoption and outlook of e-learning in their respective organisations, senior respondents from Healthco said that e-learning was adopted due to the benefit of being able to access training materials from different locations and that it also serves as a form of on-demand knowledge acquisition portal.

In this regard a senior manager respondent noted that e-learning was introduced due to the flexibility it offered as illustrated by the following quotation:

"*There is flexibility in that it enables people to do the e-learning at a convenient time for them. For some of them, that means it occurs outside of their working day, which is not okay."*

-Respondent 15, L&D Senior Partner, CS 2

Some Healthco employees welcomed the flexibility, for example, the following quotation is from a general employee reflecting on the benefits of e-learning and conveying how it allowed employees to train at their own pace whilst also avoiding having to commute for training purposes as was previously the case:

"I imagine is really to save traveling time, that would be one positive I should think. It saves paying a trainer so that's another positive. Third positive would be that the person can do it in their own time when it fits in with their own work schedule."

-Respondent 8, General Employee, CS 2

From the excerpts in this chapter, junior respondents do not fully understand the beneficial reason for introducing e-learning. Most of their responses evolved from a personal engagement and experience level other than responses from senior-level respondents that give a clear understanding of the benefits of e-learning to the organisation, especially the time and resources it saves whilst noting the flexibility it offers as one of its greatest strengths. These realisations call into question how involved and trusted junior-level employees classified along

the microstructure within the productive system are in the design of learning environment-related activities and policy development, arguably a crucial element in developing an expansive learning environment.

4.4 Chapter Summary

This chapter emphasises and attempts to unravel the perceptions and lived experiences of junior respondents, complementing the views of senior respondents while balancing perceptions of e-learning through the lens of different stakeholders. Based on the organisational contexts outlined, this chapter has detailed the feelings and attitudes of junior employees within the productive system to explore their views, which in many ways contrast with those of senior respondents and those in positions of responsibility and influence.

Most respondents gave their views, and most related to the attendant benefits of the e-learning system and the mode in which it was introduced to them. Interestingly, the data revealed that, unlike senior respondents, junior-level respondents from both case organisations had a poor understanding of the theoretical and philosophical or policy assumptions guiding the use of e-learning in their organisations. The data showed a clear contrast between senior and junior respondents' policy understanding of e-learning. This indicates a clash of interest between organisational actors who are both important and undervalued in the structure of production. This chapter shows how organisational policies and practices are influenced by key actors depending on the perception of e-learning. Chapter 5 will delve into the expansive-restrictive contexts of such policies and practices and how this influences the design, development, and implementation of e-learning in organisations to enhance workplace e-learning.

Chapter 5: Enhancing the Prospects for E-learning within an Expansive or Restrictive Learning Environment

5.1 Introduction

Building on Chapter 4, this chapter explores the other two of the four themes initiated in Chapter 3 by discussing the learning environment and the employee experience within the e-learning context. This chapter explores the expansive and restrictive characteristics of organisational learning environments to address *Theme 3: "The role of expansive and restrictive policies and organisational practices in the design, development, implementation, and management of e-learning in organisations."*. This chapter seeks to explore further by taking a closer look at the combined organisational experience of both meso and micro levels and discussing major findings that relate to the productive system and organisational actors within the structured system of the organisation. It also addresses *Theme 4: "The interaction between expansive-restrictive learning environments and the situated context of e-learning within the organisation."*

The chapter draws to a close by summarising the overall findings from both cases by discussing the push and pull factors of e-learning towards an expansive or restrictive learning environment. The push and pull factors represent enablers and constraints of e-learning within the learning and productive cycle. This chapter draws from respondents' views across all levels to conclude and unravel factors that enhance the practice of e-learning for expansive learning purposes. This chapter helps answer research questions 2 and 3: *how are organisations developing and infusing e-learning with their learning environments?* and *what the implications of the situated context of e-learning in organisations are for expansive and restrictive learning environments?*

In answering these questions, this chapter explores e-learning in more detail within its situated context, illustrating the links and influences of the productive system and the extent to which

key aspects of that situated context might help amplify and support the development of an expansive learning environment.

5.2 Expansive and Restrictive Characteristics of the Learning Environment in Case Organisations

This section aims to provide an analysis of the learning environment within each case organisation as gathered from a thematic analysis of the data. It is pertinent to scrutinise the contours of the learning environment by exploring respondents' learning and development experiences, which are vital as they give an early notion of the restrictive and expansive aspects of both case organisations' learning environments. This is useful for developing a framework to align organisational actors' interests and experiences within the learning environment and associated practices, such as e-learning.

5.2.1 Restrictive Learning Environment: Regulatory Demands And E-learning

This section re-enforces the notion that mandatory learning demands and the need to enforce compliance training within the learning environment indicate how e-learning is practised and the reasons it is introduced and designed. From both cases, the accounts of key respondents showed that e-learning was used to advance compliance and standardise industry training. The requirement to achieve compulsory training was a key element of the learning environment in both organisations. The Techco case, for instance, revealed that the learning environment focused on achieving compliance training regulations and thereafter using the same e-learning platform to address further competence gaps within the business:

"The e-learning system was adopted as there was a need to address developmental gaps in the business, to keep ahead with new compliance regulations and add some innovation to learning."

-Respondent 1, HR Manager, CS 1

This is the same in the Healthco case. They must complete several industry-regulated courses as a key health and social care player. As the excerpts below would suggest, the learning environment within a health and social care company is dictated by mandatory training which everyone within such an organisation is expected to comply with:

"Some of the reason is to offer a standardized approach to training and being an NHS driven organisation and as part of our KPI's, we have to comply with a lot of regulations and training."

-Respondent 9, L & D Manager, CS 2

"it's really important and particularly in our area of where we're dealing with patient confidentiality. Obviously, all the regulations around keeping patients' information secure. All of us will have to ensure that we have completed mandatory courses."

-Respondent 1, Line Manager, CS2

Regulatory learning demands influenced the introduction and experience of e-learning within both case organisations. However, both cases have further ensured that e-learning goes beyond mandatory and regulatory demands by designing a system that addresses regulatory demands and the competence gap of employees.

In Techco, the Learning and Development manager equipped that the objective of e-learning within the learning environment was to address both organisational, and regulatory demands and to also serve as a platform where employees can develop their knowledge and capabilities:

"We are looking at the system benefitting both the organisation and employees, because it will benefit the organisation if your employees are constantly learning and developing themselves and you're getting smarter."

-Respondent 12, L&D Manager, CS 1

The respondent further asserted that the demand to provide a wide array of training content which addresses several knowledge and skills needs influenced the introduction of e-learning, particularly ensuring that everyone has something to learn from it whether from an organisational perspective or for their personal growth:

> *"The system has about 790 courses that cut across various topics. Some are business related and some are personal as well."*

-Respondent 12, L&D Manager, CS 1

E-learning beyond mandatory and regulatory influences also factored in the experience and objectives of e-learning within the learning environment at Healthco. Senior respondents opined that e-learning was primarily used to push standardised training. However, it also has other uses, including being used as a tool for personal development review in which employees' knowledge and skills development are periodically evaluated. A junior-level respondent corroborates this claim:

> *"Yes, we have mandatory training, and we do Personal Development Review (PDR) which is done every year. As part of your Personal Development Review which everybody must do, is a yearly review and you do a six-month update. Part of your PDR and keeping up to date with that is that you're compliant with your mandatory training."*

-Respondent 11, General Employee, CS2

The regulatory-driven use of e-learning within the learning environment in Healthco appears conflicting. Even though the organisation introduced other uses for e-learning beyond the compliance scope, some employees perceive it as just a compliance tool and do not engage with the e-learning modules beyond completing their compulsory training. The excerpts below reflect the narrow-focused engagement of e-learning within the Healthco case:

"No, I don't do anything else other than compliance."

-Respondent 22, General Employee, CS 2

"No, it's just the mandatory, I just use e-learning literarily for mandatory training."

-Respondent 11, General Employee, CS2

The excerpts further reflect how organisational learning policies and priorities within the learning environment shape junior-level employees' notions, perceptions, and engagement. These accounts reinforce the need to explore how expansive use of e-learning can be achieved in a learning environment whereby stakeholders, particularly junior-level employees, are compliance learning inclined.

5.2.2 Expansive Learning Environment: Learning Champions and Community of Practice Strategies

In both case organisations, there were signs of efforts to build a community of practice to support engagement with learning and e-learning. One of the key benefits of e-learning is the individual possibility of engaging in learning activities at one's pace. Employees may require support to facilitate their engagement and positive orientation towards learning and development platforms such as e-learning. This support can come in the form of communities of practice, formal or informal, that recognise and strengthen the notion of workplace learning as a social process enabling engagement in e-learning.

A key indicator of organisations developing e-learning support evolved through the inaugural phase of the current e-learning system within the organisation, as one of the Healthco employees explained:

"So, when they did the soft launch, they took us through all of that, so that when we did the hard launch across the organisation or group companies there was a champion, well at least two champions in every single department in the organisation. And those champions

could then come on board, should anyone have any questions. And that helped in the delivery, and the mobilisation I think, because then people weren't so nervous and that helped ease confusion. If anyone was struggling people knew who they could go to. Champions had to be quite vocal. Just to say, "I'm here if you have any questions".

-Respondent 6, General Employee, CS 1

This statement from respondent 6, a learning champion, represents a focal indication of how the organisation, through the development of champions and agents of e-learning, felt that they could enhance engagement and positive reception to learning environment activities. As the excerpt suggests, the learning champions, of their own volition, could engineer positive e-learning development by offering support to other employees within their units. This excerpt also shows how informal and formal communities of practice within a learning environment can foster e-learning engagement, which is vital to developing an expansive learning environment.

Healthco further sought to encourage engagement with e-learning by permitting employees to learn during working hours, even though e-learning was introduced as a means of accessing training materials without being confined in a learning space. The organisation ensured and supported the take-up of e-learning by allowing employees to learn during hours which are paid for by the organisation, as illustrated:

"When we first launched the system, the message was that everyone in the organisation would be given one hour with the system and spend time learning."

-Respondent 12, L&D Manager, CS1

Unlike Techco, Healthco did not have specified learning champions responsible for improving employee adaptation and engagement with e-learning platforms. However, the organisation provided certain opportunities and forums whereby employees could constantly get help

regarding their participation in learning activities and, by extension, engagement with e-learning.

"The learning and development team, you can phone them, you can contact them by email, and they did send us all a guide when the platform was first created, so we have all been given instruction as to how to use the platform. As I say, if you have any problems, and you're not sure how to enrol onto a course, you can contact the learning development team and they'll help you."

-Respondent 1, Line Manager, CS2

From the excerpt, one can infer that the learning and development team within the organisation offers support to staff regarding their engagement with e-learning and other activities within the learning environment. This study accepts that supporting staff learning is one of the primary functions of the learning and development team. However, the statement above shows the reduction of formal boundaries, which opens a constant channel for employees to seek support as much as they want. A respondent further corroborated this by stating that the learning and development team helps:

"But if you're not very good with computers, they do little basic courses that can help."

-Respondent 14, General Employee, CS2

The excerpts above suggest organisational levels and actions representing a form of formal community of practice support vital for developing an expansive learning environment. Therefore, it is clear that communities of practice and social relations are essential in the development of e-learning as an enabler of this environment.

The introduction of learning champions in Techco helped improve the experiences and engagement with e-learning whilst reducing boundaries and employee colleagues' reliance on

each other for assistance with e-learning, which supported the learning environment, particularly on e-learning.

As the excerpts below from junior employees will reinforce, reliance on formal support channels such as learning champions and informal channels within Healthco formed an integral drive of employee experience of e-learning, which resulted in increased engagement with e-learning platforms:

"We just end up asking each other the question and hope we get it right."

-Respondent 6, General Employee, CS2

"There's other people there that when it's going wrong, I can actually just grab hold of somebody to support me with, actually I still can't find where this thing is and connectivity as well."

-Respondent 19, General Employee, CS2

The next section highlights how line managers, by their responsibility, rank, and level of influence, can contribute to the organisational learning environment by being formal actors and providing leadership within a communal learning support perspective.

5.2.3 Organisational Leadership: The Strategic Role of Line Managers in the Learning Environment

Organisational leadership is an important element in identifying and understanding the nature and outlook of the learning environment. That leadership is not only undertaken by those at the most senior level. As this study and data will suggest, line management or supervision represents an important organisational actor whose responsibility and orientation can influence organisational learning cultures.

As discussed in Chapter 2, line managers are facilitators and enablers regarding the design, implementation, and sustainability of learning and development activities. They also conceptualise and develop policy on issues and debates surrounding e-learning platforms in their organisations' learning environments. Unsurprisingly, in both case studies, organisations' learning and development activities were credited as one of the responsibilities of line managers.

This perception of their role ran through multiple line manager narratives of their encouraging e-learning in both organisations. Line manager accounts of this are worth quoting at length:

"*I do encourage guys to go on it, my whole team that I regularly interact… I think I saw something about that on the e-learning platform, maybe you want to go and have a look at it, you know, just give them a gentle prod towards it."*

-Respondent 20, Line Manager, CS 1

"I make sure that everybody in my team spends at least an hour a week on [e-learning]."

-Respondent 18, Line Manager, CS 1

"Again, that's part of my role where I'm teaching other clinical staff how to use electronic systems, I mentioned to you earlier, that I use something called an E-rostering system, E-rostering software. I do have to work with staff and help to deliver training to them as well, where relevant."

-Respondent 1, Line Manager, CS 2

Learning and Development managers reiterated the importance of the line manager role in ensuring continued e-learning take-up:

"It's the individual's responsibility to meet the requirements in their mandatory training, et cetera, but their line manager has responsibility to ensure that they are meeting those

requirements, so attending training, et cetera. There's a process in place if someone doesn't attend training. If they're not completing their training once a month, they get reports about compliance and each line manager will get that. It's their responsibility to go through it and see who's out of date, and then to enable that person to attend training."

-Respondent 15, Senior Learning & Development Senior Partner, CS 2

The excerpts above, particularly the testimony of respondent 15 from Healthco amplify the fact that line managers are crucial in employee competence development and as will be argued later in this chapter, this research has thematically analysed there is a need for increased recognition of the role of line managers and supervisors in the development and everyday practice of learning environment and related activities.

Line managers in Techco are further expected within the organisation to encourage the learning and competence development of their subordinates in terms of engagement with e-learning platforms in a meaningful way. Again, this quotation from a Learning and Development manager is insightful in conveying the importance of this, alongside concern that it was not happening:

"I suppose getting people to see it as a development tool, and not just a mandatory tick box exercise. We need line managers to be having these meaningful conversations and actually checking in with their subordinates… these conversations aren't happening much at the moment, and we are looking to train our managers on how to have these types of conversations."

-Respondent 12, L&D Manager, CS1

Independently, a line manager from Techco agrees that line managers are important towards the development of employee and organisational learning philosophies and should see it as a personal interest to ensure such:

"*I think it is down to the line manager to try and draw right behaviours, and philosophies in helping e-learning grow within the organisation.*

-Respondent 14, Line Manager, CS 1

This practice is similar in Healthco, though being a more compliant-driven sector and organisation, line managers faced pressure from senior managers to ensure mandatory training. There were concerns here, too, that junior staff were not fully engaging with their e-learning. As the following line manager indicated, they experienced a degree of accountability for the extent of employee engagement with e-learning systems:

"If they don't do their courses, it comes down on me. As a manager, I get in trouble from the bosses because my staffs are behind in their courses."

-Respondent 15, Line Manager, CS2

Line managers appeared to go beyond partnering with their respective organisations and encouraging employees to engage and complete their e-learning training; they also seemed to serve as compliance agents, wherein they were responsible for enforcing compliance with learning and development platforms. In essence, line managers were empowered and could compel employees they manage to comply with dictates of the learning culture within the organisation, which in turn defines the attitude and perception of the general employees with regards to e-learning engagement:

"All of them complied but one, and then I had to give him a kicking, and now he has done it."

-Respondent 14, Line Manager, CS 1

These excerpts showed that line managers could encourage employees to get on learning and development practices whilst also buying into the learning objective and culture of the organisation, which, by extension, reflects the learning environment in place. In Healthco, a compliance and government-regulated organisation, line managers do not have the type of

powers their counterparts in Techco had wherein they can excuse or defend the inability of their subordinates to engage and complete e-learning modules on time. However, the data further suggests line managers, upon request and in agreement with their subordinates, can seek to take on additional courses:

"Equally, if there were any courses outside of the mandatory courses that I'd like to attend, I could speak to my senior manager and ask her to enquire."

-Respondent 1, Line Manager, CS 2

Organisational structures represent constraints and amplifiers of line management's role, powers, and influence within the learning environment, especially using e-learning platforms. The research findings suggest that line managers' perceptions and attitudes are important as they reflect the essence and seriousness of e-learning and thus influence the perspective and level of junior employee engagement.

The following excerpts reveal how line managers' personal beliefs, priorities, and orientation influenced how they used their influence regarding employee engagement and activities within the scope of learning and development. Some line managers seemed more positive than others, and the following quotations from respondents 11 and 2 illustrate different priorities:

"*I think being frank with you, because we are going through a lot of company reorganisation at the moment and as division head, it's very hard for me to find the time I'd like to put into it purely because I am busy*."

-Respondent 11, Line Manager, CS 1

"We have a regular weekly meeting, team meetings and as part of the agenda, I want at least a member of the team to update the others on any interesting courses they have taken. So, I normally open with a weekly report on who has done what, and they also share what they have learned, so we can recommend the courses they can spend time on or avoid."

-Respondent 2, Line Manager, CS 1

Overall, the data presented thus far suggest that line managers remain crucial in developing e-learning within the learning environment. Therefore, this study will seek to analyse the connection between organisational actors' learning and development attitudes and the mandatory/non-mandatory aspects of the learning environment. This relates to the intended contribution of this study, which seeks to draw more emphasis on how line managers can help foster expansive elements of the learning environments and the development of e-learning engagement in general.

5.2.4 Transitioning from Restrictive to Expansive E-learning Practices

This study accepts the place of discretion and the organisation of work as it is vital to unravelling perceptions and attitudes within the learning environment. In establishing and transitioning from a restrictive to an expansive learning environment, the level and degree of autonomy and responsibility accorded to organisational actors and structures matter because they define the learning boundaries of employees. Hence, the data within this section will unravel the extent of discretion within both cases and its implications. The participants' accounts in this study provide insights into the level of trust and limitations between organisational actors, especially between senior management and junior employees, with a focus on organisational initiatives and learning philosophies.

In both cases, discretion in engagement with e-learning was observed, particularly in the Techco case, where junior-level employees were involved in developing and introducing the current e-learning platform. A senior staff explained that before the current system was adopted, the organisation informed employees of new developments through several means. This included the use of several communication channels, as illustrated by the quotations below:

"So, there were presentations, open presentations done to staff. There were emails, there were flyers."

-Respondent 1, HR Director, CS 1

"I did take a number of the courses and so did a number of people from the different functions around the business had like a pilot group that we shared the content with because we had like a trial license for a month and different people reviewed the different courses. And the feedback was good. So that's why we also went with it."

-Respondent 12, L &D Manager, CS 1

This excerpt shows that the organisation perceived that it considered the input of every employee by ensuring that some employees within their levels had a chance to trial the proposed e-learning platform and thereby give their thoughts on the platform and how it can be developed. In Healthco, a junior employee corroborated this, explaining that the organisation had a trial phase to test run the e-learning system to be developed and gain preliminary insights about such systems from employees across selected departments. In their own words:

"I would say it started as a soft launch. So initially, they allocated certain champions from a range of departments, introduced to this group of people. It must have been 20 or 30 people to the platform, took them through variety of courses that are on there".

-Respondent 6, General Employee, CS 1

Further adding that

"... when they did the soft launch, they took us through all of that, so that when we did the hard launch across the organisation or group companies there was a champion, well at least two champions in every single department in the organisation. And those champions could then come on board, should anyone have any questions. And that helped in the delivery, and the mobilisation I think, because then people weren't so nervous and that helped ease

confusion. If anyone was struggling people knew who they could go to. Champions had to be quite vocal. Just to say, "I'm here if you have any questions".

-Respondent 6, General Employee, CS 1

The level of employee involvement in the design, introduction, and implementation of learning activities gives a picture of the extent to which discretion, autonomy, and trust run within the organisation.

The excerpt above further shows that there is a high degree of discretion in case 1, and the involvement of all cadres of employees at the initial e-learning phase helped ease employee acceptance and continued engagement with e-learning and general learning environment activities.

This is arguably an essential ingredient required for the advancement of an expansive learning environment, and it is expedient, therefore, for all levels within the productive system to be given equal consideration whilst introducing organisational programmes and initiatives. In Healthco, this appears to be the same picture, though being a heavily regulated sector, employees were only involved with regards to the introduction of new content on the e-learning platform, and not like they had a great say in the design and eventual rollout of the e-learning system as shown in the excerpt below:

"When I first started, I had induction and that's where they tell you to go on the e-learning."

-Respondent 14, General Employee, CS 2

The above excerpt showed employees were directed to go on the e-learning platform and complete the required courses whilst they can later engage with courses that interest them at their discretion. Another respondent noted that their exposure to the e-learning platform was

devoid of any trial or induction phase, and they had to get instructions on the phone, as illustrated:

"Didn't have any training in the e-learning, so it was basically phoning up headquarters."

-Respondent 11, General Employee, CS 2

This shows a low level of discretion and autonomy regarding employee engagement with the e-learning platform, which then results in low trust and employee buy-in regarding activities within the learning environment.

The response of a senior respondent, however, shows that at some points, the organisation considered feedback inputs from general employees as regards the use of e-learning platforms within the organisation, as illustrated:

"It's released at different times. A lot of our e-learning is hosted on the ESR, ... People struggle to find the e-learning, so we send out information to start with that it's available, what to look for. We try and allocate it to them, so they don't have to search for it and find the wrong thing. There is always communications that go out before the e-learning is released so that people theoretically understand what they're supposed to be doing, why, and how to do it."

-Respondent 15, L & D Senior Partner, CS 2

This excerpt proves that the organisation attempted to inform and communicate to employees about learning and development activities, especially e-learning, and the excerpt below also suggests a form of feedback loop that allowed the organisation to gain insights on employee experience with learning platforms, one of which is e-learning:

"Well, we have the feedback forms and people are often quite open on those. If they've not been happy with anything they'll say so and we also get frequent phone calls of people saying, I just can't do such and such learning."

-Respondent 7, General Employee, CS 2

These excerpts suggest that there were differences in levels of discretion between both case organisations. However, this does not eradicate the fact that each organisation had a level of discretion and involvement regarding learning environment-related platforms, which, in this case, is the e-learning platform. The degree of employee discretion and involvement within the learning environment is therefore strategic towards understanding trust and acceptance of learning and development initiatives, which is important in the development and nature of the expansive learning environment.

5.3 The Situated Context of E-Learning and Implications on Expansive or Restrictive Productive System Orientations of the Case Organisations

The findings to be presented in this section provide insights into the nature of the productive system in both case organisations whilst narrowing to the influences of the productive nature of both organisations on the situated context of e-learning and the overall aim of developing a more expansive learning environment. Both the literature review and findings in chapters 4 and 5 allude to the role of organisational actors within the learning environment. This chapter will argue that the organisation through its policies or nature of its productive system influences the actions, responsibility, and expectations of organisational actors and this, in turn, has effects on their engagement with e-learning and their role in advancing an expansive learning environment. To further explore the nature of the productive system within both cases, it is important to consider the vertical and horizontal framing (Felstead et al., 2009), which helps understand the principal levels of control and influence, the structural arrangement of each

productive system and the sequences through which employees and the organisation produces goods and services.

5.3.1 Principal Levels of Control and Influence: Regulatory Expectations

As explored in section 5.2.1, regulatory influences help shape the productive system within organisations, particularly regarding shaping the learning environment and the limitations (restrictive) or flexibility (expansive) of actors within such an environment. Patanakul and Pinto (2014) note that organisations are subjected to government regulatory controls, which can sometimes hinder or improve the innovative objectives of such organisations. The data show that both organisations were subjected to certain regulatory expectations, which are tied to the nature of the sector they operate in and reflect the productive system within which they operate. Regulatory demands account for one of the principal pressures of the productive system. A cursory look at the vertical dimension of Felstead et al. (2009) productive system illustrates the hierarchy of power and influence among levels.

These are within the production structure, and organisations are bound by external influences and control, some of which are from international bodies, governments across all levels and regulatory institutions within the sector in which the organisation is located. This study has already conveyed in Chapter 4 that the productive system, because of external regulatory and governance pressures, defines the approach to e-learning and learning environment activities in organisations. The excerpt below from the Techco case strengthens this argument as it appears the organisation was forced or expected to introduce compliance modules hosted on their e-learning platform, and this study infers that these courses might not have been included on the platform if the organisation was given a choice not to, as shown below:

"Well, we do have compliance-based learning, so if people are not doing it, then we would chase them and if they fail to do it, they place themselves in a disciplinary situation because it is an absolute legal requirement rather than a learning requirement."

-Respondent 1, HR Director, CS 1

From the Techco case, the above excerpt connotes organisations having no choice but to introduce and enforce staff engagement with e-learning modules to realise mandatory learning requirements because of pressures from the productive influences bounded by regulatory demands. Sweeney et al. (2012) note that though employees are constrained and bound to comply with voluntary and mandatory training demands, their perception of such training programmes is affected by how they see such learning platforms. This explains why employees in Techco perceive e-learning and other learning activities as a mandatory construct, as illustrated below:

"The organisation, I think has got a mixed bag… I think some employees see e-learning as a beating stick, because we do compliance training and they feel they just need to sit and do certain courses because it is a tick box exercise."

-Respondent 12, L&D Manager, CS1

The attitude and perception of e-learning as a tool for pushing mandatory training is the same in the Healthco case. However, the organisation is much more subjected to regulatory and external pressures, being a healthcare organisation in partnership with the National Health Service (NHS), which is the foremost public sector in the United Kingdom. Mythen and Janice (2013) agree that the healthcare sector emphasises compulsory completion and update of mandatory training, which is borne out of regulatory pressures and the severe consequences of non-compliance by organisations within this sector. In this case, regulatory expectations and

government policy pressures impacted the demands of the productive system on employees who were mandated to complete compulsory modules on the e-learning system.

The productive system within this case had more scrutiny and emphasis on satisfactory engagement with compulsory e-learning modules, reflecting employee attitude to orientations and activities associated with the learning environment. The data find this organisation is subjected to deeper regulatory pressures and expectations due to the sector in which it operates and the nature of its relationship or expected services to the public. The excerpts below show how the need to comply with the learning demands of health and social care organisations is defined and evidences the approach of the productive system in the learning environment. This is illustrated in the following excerpts:

"*As part of our appraisals and PDRs, we're expected to fulfil certain mandatory training requirements each year and that involves e- learning.*"

-Respondent 1, Line Manager, CS 2

A senior respondent further corroborated this assertion by noting that the NHS oversees the organisation's training and development policies and practices, and as a result, the organisation is bound to comply. This is illustrated thus:

"Some of the reason is to offer a standardised approach to training and being an NHS driven organisation and as part of our KPIs, we have to comply with a lot of regulations and training."

-Respondent 9, L &D Manager, CS 2

The excerpts above points to the fact that regulatory pressures define the approach and influence of the productive system, particularly on the nature of the learning environment. Tavistock and Portman's (2018) training and development procedure exemplify the strict training demands on NHS services and partners while stressing the consequences of non-

compliance with such expectations. Adams (2015) notes that NHS and allied healthcare service providers operate on organised corporate lines, and the consequence of this is an increased regulatory and target-driven culture that spirals into how the learning environment is designed and its increased premise on constant knowledge and skills development, which e-learning seeks to facilitate. Adams captures the regulatory influence of the productive system on health and social care organisations by noting that the demand to achieve clinical and corporate outcomes (production) impacts the learning approach (environment) within health and social care services.

Data from both case organisations reflect influences on and of the productive system occasioned by regulatory training demands, which are compulsory and set under a certain deadline completion period. However, this study notes that the nature of the organisation, especially the type of productive system it is subjected to in terms of ownership and control, indicates the approach given to compliance with regulatory training. A report by the Better Regulation Executive (2010) examines the impact of regulations on businesses within the UK and opines that there is a need for certain regulatory relaxations, arguing that some of these regulations inhibit the organisation from developing its policies.

This view was also supported by Broadberry and Leunig (2013), who agree that government and institutional regulations impact beyond public sectors. From a training and development perspective, Green and Hogarth (2016) advocate for increased employer control and engagement in skills and knowledge development with government and other regulatory bodies easing off. They also note that regulatory policymakers, especially regarding training and development, should focus more on specific employer contexts regarding training policies and demands, as not all organisations work in the same context. The cue from these assertions aligns with the different approaches to mandatory training in both case organisations, though the orientation of both learning environments was subjected to regulatory pressures.

5.3.2 Productive Expectations, Performance, and E-learning

The findings of this research also convey that the contours of organisational productive system influence e-learning engagement. The productive system includes the type of responsibility and level of control that each employee and staff cadre have within each organisation. This means that the orientation of such a productive system, particularly attitude to learning-related activities, can be influenced. The data from Techco suggests that beyond engaging their employees for mandatory e-learning modules, the organisation seeks to promote a learning environment and organisational culture whereby employees are interested in competency development activities, as illustrated:

> *"We are looking at the system benefitting both the organisation and employees, because it will benefit the organisation if your employees are constantly learning and developing themselves and you're getting smarter."*
>
> -Respondent 12, L&D Manager, CS 1

This excerpt shows that the productive system should foster work organisation and a learning environment that promotes engagement with learning and development activities.

The expectation in this regard is that support from the productive system enhances innovation and creates a culture where e-learning can thrive. Jha and Kumar (2016) find that organisations that engage with their employees are most likely to experience increased commitment to organisational initiatives, and this supports the adoption and continued use of e-learning platforms.

Aside from such learning platforms being allowed to thrive, the excerpt above also shows that an expansive learning-minded productive system is one whereby policies and cultures are developed to ensure that the intentions towards learning activities are seen as supported by the leaders within the productive structure, particularly leaders and top management employees.

This echoes the submission of Zheng et al. (2018) that organisational structure, leadership, and support are crucial in adopting and taking up learning technologies, which also influences positive organisational learning philosophy, which is a key element in developing an expansive learning environment.

The findings of this study contend that employees across all levels are usually encouraged by a productive system that allows for a hybrid engagement with the learning modules whereby training is not seen as one-sided or of a single benefit to the organisation but of benefit to both the organisation and employees. The perceived usefulness and benefit of e-learning modules, whether for personal development or job function, are indicated by the approach and disposition of employees within such organisations (Alsabawy et al., 2016). Albrecht et al. (2015) note that employee engagement and meaningfulness of organisational activities such as training platforms are vital to realising the firm's competitive advantage and increased staff performance. This notion gives credence to the requirements of an organisational-wide initiative to foster the development of an expansive e-learning environment.

Whilst performance in corporate businesses is hinged on meeting targets and making profits, the productive expectation in relation to the Healthco case is inhibited by the nature of the organisation. Healthco is a social enterprise business that is in partnership with the National Health Service (NHS) to deliver a diverse range of health and social care services. Though private health businesses are expected to make profits and increase their client base, the case in Healthco is different, as it is difficult to quantify the healing of patients and other health outcomes. The implication is that employees within Healthco can effectively carry out their roles with reduced engagement with e-learning modules, particularly the non-mandatory modules, provided they provide quality care to patients and service users. The quote below illustrates this point:

"Because we work in healthcare, patient care is number one. If it's a toss-up between patient care and doing e-learning, patient care wins every time. Which means something has to give and that's where e-learning allows people to learn at their own time outside of working hours. There is a certain push to do that because mandatory training is part of our KPIs that we have to make for our commissioners, and we have to be in the target requirement percentage."

-Respondent 15, L&D Senior Partner, CS 2

The excerpt above perfectly captures the challenges occasioned by the productive system and contexts within which Healthco employees operate. It shows the complexities of the healthcare sector where priority is given to healthcare delivery, and training takes a back seat. This reality calls for further exploration of the philosophies guiding non-mandatory and performance-related modules on healthcare e-learning systems and how insights gained can be deployed to enhance expansive e-learning. Kallstrom (2010) opines that measuring performance and quality of training can be challenging in healthcare. However, Kartal (2018) notes that increased engagement between the organisation and employees within healthcare results in increased staff productivity.

In this vein, Ruggeri et al. (2013) note that for e-learning in healthcare to be efficient and sustained, its usefulness and ease should benefit the organisation and employees.

This data then finds that though the organisation expects employees to prioritise service delivery for patients, it appears to give little consideration for employees being allowed to work and learn at the same time as the excerpt insinuates, that it is up to employees to make out time for learning and e-learning offers the opportunity to learn outside the workplace. As Ruggeri et al. suggest, an effective e-learning system, irrespective of the sector or context, should offer ease to employees, which leads to increased user engagement. The data from Healthco depicts

it as an organisation whereby the productive system rightly prioritises patient service delivery with less consideration for making learning flexible for its employees. This study conveys the need for greater sensitivity to the fact that the organisation of work has consequences for learning, and organisations with dispersed workforces are affected by this.

5.3.3 The Relationship Between Organisational Actors within an Expansive Productive System

The relationship and networks between organisational actors are crucial to developing an expansive learning environment that features e-learning (Naujokaitiene and Zydziunaite, 2015). Just as Purcell and Hutchinson (2007) admit a complex connection and interaction between different levels of the organisation hierarchy, the data within this section will detail the type of relationship between all levels within both case organisations. The levels within focus in this study and to draw from Felstead et al. (2009) are few senior managers, a considerable number of line managers and employees with supervisory responsibility, and junior employees.

This also includes employees from the learning and development unit responsible for successfully designing and implementing learning initiatives. The input of learning and development staff is also key as they set the tone for the learning environment in respective organisations. The key aim is to understand the interplay between various organisational actors and the context or conditions affecting their participation in the learning environment. Having established that the productive system influences the organisational structure and responsibility, the data will reveal the extent to which the productive system guides relationships across different organisational levels. Findings from Techco suggest that employees who supervise or lead team members were accorded the role of informing subordinates of organisational activities and policies:

"*Actually, it's my manager that told me about the platform. Yeah, and he gave us all the log in details and everything, telling us the compulsory ones to do, the time frame and additional ones we can do if we are interested*".

-Respondent 13, General Employee, CS 1

"I have been in the past reminded by my manager that I need to go in a particular course or do it online, to be up to date on my e-learning."

-Respondent 10, General Employee, CS 2

This suggests that managers and those within the responsibility cadre are entrusted as agents of the organisation, and they are vital to disseminating guidance and giving prompts as regards learning activities. Lehmann-Willenbrock et al. (2017) note that meetings between supervisors and junior employees are integral as this is the platform where information and guidance are passed on to the junior employee as regards any learning initiative or platform such as e-learning. This suggests that for low-level employees to be properly briefed on organisational plans and activities, it is expedient that their line manager have the correct guidance whilst also having the ability to pass such undiluted knowledge on to their subordinates.

This explains why line managers' perception of organisational activities reflects on the behaviour and attitudes of their subordinates regarding subscribing to organisational initiatives such as e-learning. Keegan et al. (2012) find that the responsibilities and demands placed on online managers have crossed the boundaries of day-to-day line management, and certain aspects of their function relate to HRM responsibilities, which include learning and development initiatives. This is reflected in this study as the data show line managers, by the design of the productive structuring of the organisation, are saddled with the responsibility of enabling and helping as regards the take-up of e-learning by their subordinates.

Brewster et al (2015) considering the implications of line managers in HRM related responsibilities note that they are partners in the development of initiatives that enhance organisational development. Hassan and Hatmaker (2015) re-instate this view by noting that direct managers or supervisors through their partnership with their subordinates can influence involvement and perception of staff with regards to activities within the organisational development scope. This study aligns with this view and agrees that line managers and employees with supervisory functions are key in the development of expansive learning environment, hence their relationship with other levels of organisational actors is important. The following excerpts shows how the relationship between line managers and the micro levels to which junior employees belong involves acting as motivation and agents of encouragement for their subordinates to engage with e-learning and other learning and development initiatives. This is illustrated from both cases:

"*I do encourage guys to go on it, my whole team that I regularly interact… I think I saw something about that on the e-learning platform, maybe you want to go and have a look at it, you know, just give them a gentle prod towards it."*

-Respondent 20, Line Manager, CS 1)

"I make sure that everybody in my team spends at least an hour a week on it."

-Respondent 18, Line Manager, CS 1

"*Our line managers tell us to log on and do it as soon as we can*."

-Respondent 6, General Employee, CS 2

Aside from acting as influencers within the learning environment, the data also finds that both the productive system and the organisation permit line managers to recommend and assist their subordinates with modules that interest them personally or are seen as instrumental to the

attainment of organisational objectives or job demands. This act by line managers reflects the position of Medina and Medina (2014) who posit that supervisors and line managers within organisations are partners in competence development and management and this is relatable to the urge or nudge given to subordinates to take up e-learning and other learning activities which are geared towards the development of employee skills and knowledge which in turn translates into improved competence for the organisation.

This is as Gilbert et al. (2011) suggest that line managers' interest in the development of their subordinates increases the affective commitment of general employees towards organisational activities. In essence, line managers need to have a good relationship or influential ability which is vital towards expansive development of the learning environment using e-learning. It is also important that line managers possess the right charisma and skills as Marreli (2011) notes that some managers are unable to affect or influence their subordinates as they lack the required influential skills to do that, and some would rely on organisational provisions that enable them to enforce or coerce employee engagement. This study opines that doing this shows the employee that the line manager considers their personal development and not just push training modules for organisational benefit only, and in balancing their interest, both levels need to be on a cordial note.

The excerpts below drawing from this view suggest the strength of partnership between the meso and micro levels which allow for the interests of each level to be actualised as illustrated below:

"*Also, our managers can allocate us courses, if my manager said, "Oh, I want you to do this course on presentations or something because it's specific to your role, then he could allocate that to me and then I would have to do that one."*

-Respondent 10, General Employee, CS 1

"The line manager and the person would, put forward complete a form which details why they need to do this particular course."

-Respondent 15, L & D Senior Partner, CS 2

"Equally, if there were any courses outside of the mandatory courses that I'd like to attend, I could speak to my senior manager and ask her to enquire."

-Respondent 1, Line Manager, CS 2

The excerpts above give credence to the nature of the relationship between actors within the learning environment as regards engagement and attitudes given to e-learning platforms. The excerpt also shows that those on the meso level are empowered to impose their views on the learning development and approach of their subordinates, though it is vital to ensure that such power does not contradict the interests of the micro-level employee, nor does the bias of such meso level manager influence the display of such power. Medina and Medina (2017) in this line agree to agree that line managers can act as learning enablers, but this study further suggests that junior employees or subordinates need to view them as learning partners and supporters, not as form organisational learning enforcers. To this end, this study amplifies the need for more collaboration between organisational actors across the meso and micro levels as the extent of such alliance defines the expansive development of the organisation's learning environment.

5.3.4 Tensions and Contradictions Between Organisational Actors Within a Restrictive Work and the Learning Environment

The above section discusses the nature of the relationship between both levels within the productive system. This section, building on the conclusive aspects of the previous section (5.3.3), will present findings that bring to the fore contradictory aspects of organisational relationships between both levels. The tense aspects of the findings relate to potential strains between actors on the meso and micro level as regards learning and development activities and

approaches. Mukhtar and Bahormoz (2021) note that organisational actors do have conflicts and different interests. However, there is a need to reduce these tensions by integrating the interests and perspectives of each group. One of the key tensions observed from the data relates to the purpose of learning and development activities within the organisation.

Bajaj (2013) adds that technology plays a vital role in contemporary human resource development in organisations, and as such, this study calls for the use of e-learning to be purpose-driven and complement efforts towards achieving expansive e-learning. Previous data, as conveyed in Chapter 4, suggest that the productive system by design influences the approach to learning and development, and this approach is shaped by meanings given to such learning and development activity.

Having a unified perception as regards the nature of e-learning within respective cases showed a distinct contradiction between both levels. The data finds that most respondents, especially along the lower cadre, viewed e-learning from the purview of what they get from it or the spectrum by which they feel the organisation implements e-learning. Those on the meso level who are managers or hold senior positions had a deeper understanding of the nature of e-learning within their organisations. Most managers, particularly key respondents of each case view e-learning beyond the mandatory lens and they see it as a platform that helps the organisation advance the skills and knowledge of its workforce:

"E-learning was introduced for product-based training and personal development."

-Respondent 1, HR Director, CS 1

"E-learning was introduced as a platform where people can learn product knowledge and other soft skills."

-Respondent 12, L&D Manager, CS 1

"Some of the reasons is a standardized approach, people doing the same training. It works very well for the information given which is why for some things we've chosen to use e-learning."

-Respondent 15, L & D Senior Partner, CS 2

This view is not shared by most low-level respondents whose perception and engagement of e-learning is mostly defined by the need to satisfy regulatory requirements and then some skills they find appealing. This is illustrated below:

"Yes, I have used to site to develop some skills and to become aware of latest policies and procedures."

-Respondent 16, General Respondent, CS 1

The data further finds contradictions in the orientation of senior respondents from that of lower-level employees. Findings, as will be evidenced below, show that certain managers might find it difficult to use their power as designed by the productive system to compel or influence their subordinates to engage with learning and development systems such as e-learning. The excerpts below show how line managers act as agents of compliance and engagement with e-learning:

"All of them complied but one, and then I had to give him a kicking and now he has done it."

-Respondent 14, Line Manager, CS 1

"I think our managers get like a notification of when we're about to run out and we get an email notification. We get a warning."

-Respondent 6, General Employee, CS 2

The organisation, by influence and design of the productive system, expects the line managers and team leaders to enforce and partner with their subordinates as illustrated:

"We need line managers to be having these meaningful conversations and actually checking in with their subordinates… these conversations aren't happening much at the moment and we are looking to train our managers on how to have these type of conversations."

-Respondent 12, L&D Manager, CS1

The excerpt below shows how it becomes tedious and challenging for these senior employees to engage their subordinates in e-learning and other learning activities as it may not be in the personal interest of the employee, whilst it is also worthy to note that such employees might have a restrictive notion of e-learning either by lack of interest or certain organisational constraints as evidenced below where a respondent noted that low engagement with the e-learning system is because:

"There is no career progression for me, I am a band three and there's no band four in this organisation for the job I am doing."

-Respondent 14, General Employee, CS2

Further adding that low interest in e-learning is basically due to the limited opportunities for career development, hence the motivation to engage is of no use as it has no potential benefit in the long run:

"Possibly, yes because there's no progression with it."

The point above reflects the thoughts of Marreli (2011), who notes that for senior employees to influence and compel junior subordinates to take up learning activities, there need to be organisational practices and policies that support the development of such activity. This is not the case here, as limited career progression means managers would find it difficult to encourage employees to take up further engagement of the e-learning platform when they are constrained and limited in career progression within such an organisation. Ideally, independent engagement with e-learning systems would be low or restricted to mandatory demands since there is no connection between what the module offers and career progression.

Managers in both case organisations are responsible and accountable for their subordinates' performance and professional development. O'Leary and Pulakos (2011) suggest that for them to function in this role fully, there is a need for improved employee relationship measures within which line managers can thrive. Being the most important 'chain' connecting organisational policy and organisational resources or foot soldiers, this study arising from the data notes the need for enhanced organisational practices and culture that, in turn, helps managers to promote and encourage continued take-up of e-learning amongst their subordinates and, this is vital towards the development of expansive learning environment. Saks and Gruman (2011) support this view by opining that there must be supportive conditions that enhance line managers' capacity to drive employee engagement with organisational initiatives. They further add that line managers are crucial in amplifying continued employee engagement.

To reconnect the interest of two different levels of organisational actors in developing an expansive e-learning environment, data from this study calls for a stronger relationship between levels within the organisations. Rahman and Taniya (2017) believed that efficient relationship management helps organisations foster relationships and reinforce employee commitment to organisational activities. The authors note that effective relationship management requires leaders supported by organisational structures and units such as Human Resources to build stronger relationships. Improving factors that enhance the relationship between organisational actors is important, as Bajaj et al. (2013) note that managing relationships between employees across all organisational levels reduces conflicts between these actors.

This increases trust between them and further contributes to the realisation of organisational objectives. Gunn (2010) adds to this view by suggesting that for expansive learning to thrive, organisational actors' conflicting perspectives and interests must be accommodated.

This view applies to the drive to enhance the expansive learning environment and engagement with e-learning, as the alignment of organisational actor interest and perception helps limit the barriers affecting the growth of e-learning and expansive learning in organisations.

Overall, the interview excerpts within this sub-section have shown how different interests and the allocation of responsibilities can lead to tensions and contradicting views and perceptions regarding e-learning and other learning activities from employees within the meso and micro levels. The discussion section, considering insights from this section, would discuss how collaboration between organisational actors within the productive system can be improved to develop an expansive learning environment so e-learning can thrive.

5.4 Prospects and Limitations of Expansive E-learning Environment in Organisations: Considering Push and Pull Factors

This section draws to close findings from both cases, as discussed in Chapter 4 and this chapter. The findings of this study would be incomplete without drawing insights from respondents so far from both cases about issues enabling and restricting the engagement of e-learning within a framework that allows it to develop expansive learning credentials. This section would, therefore, quickly discuss issues that have enabled the practice of e-learning and potential limitations towards the utilisation of e-learning and the development of an expansive learning environment.

5.4.1 User Experience Design for Improved E-learning Platform Engagement

Towards the development of expansive learning in organisations, this study finds that aside from the purpose and mandate behind the introduction of e-learning and the nature of the learning environment, attention needs to be given to the design of e-learning platforms. User engagement matters in the development of an expansive learning environment, and this study agrees that the lived experiences of end users with e-learning platforms are indicated by their ability to navigate the e-learning platform and how easy it is to access the platform and other

design considerations (Brown and Charlier, 2013). As Davis and Fletcher (2010) connote, employees' constant use of the e-learning platform develops their mastery and intention to engage with the modules and the e-learning platform itself independently. Respondents from Techco stated that their engagement with the e-learning platform was dependent on the type of courses it offered and the design and outlook of the e-learning platform. This is illustrated when respondents ascribed the use of the e-learning platform to the contents on the platform:

"Yes, I am happy with the content on the e-learning platform. I like the design of it, because you tend to get the content first and then you get questions based on what you've just had a look at. So, it kind of works in that way, because obviously, you get all the information you need to and then the questions come afterward. So, you can take your notes down while you're viewing the information or reading the information, and eventually you just do the test to make sure that you've retained some of the information."

-Respondent 4, Junior Employee, CS 1

"Yeah, the topics are interesting, I get to learn new stuffs and the design is colourful, so it doesn't make me bored."

-Respondent 15, Junior Employee, CS 1

Another respondent supporting the excerpt above observed that their engagement and preference with the current e-learning system was borne out of its advantages, as equipped:

"*The current system is better than the previous, because it's little a bit more interactive."*

-Respondent 19, Junior Employee, CS 1

Respondents within Healthco had the same perception on the influence of design and platform content as regards their use of the e-learning platform. One equipped that their likeness of it is based on the way the courses are presented, and the excerpt below amplifies this point:

"Why do I like it? When you've got something visual, it gives you a lot more detail like different pictures and icons and that kind of thing. I must admit, I enjoy doing both the

information governance and the fire safety, and I don't think you'd get the same feeling if you were doing it on paper. Paper is quite antiquated anyway."

-Respondent 3, Junior Employee, CS 2

Another respondent offered a different opinion, which further conveyed the role of having a proper e-learning platform that improves ease of access and engagement. The response below shows why the respondent does not enjoy going on the platform as shown:

"Not really. You see, it's a bit boring. I'm a practical person. I'm practical better than just reading a load of information and statistics and yes, that's the whole side of it. Because the courses that I do, I'll read them, pass them and the next day I couldn't tell you half the things that it goes on about. It doesn't stay in."

-Respondent 14, Junior Employee, CS 2

The excerpt below from the Learning and Development Manager in Techco conveys the thinking of the organisation as regards ensuring that the current e-learning platform is suitable for user engagement, and stimulates ease of access and engagement beyond enforced training and development demands:

"*So, we've had the previous system, which is very basic, very old, very dated technology. The courses are generally just PowerPoint, animated and then they have a voice over which generally is native English. So, the translation isn't very good. So, it's very unfriendly and it was rarely ever used for mandatory training and not for product knowledge or other soft skills."*

-Respondent 12, L & D Manager, CS 1

This excerpt reflects the thoughts of Cruickshank (2013), who posits that faults with e-learning platforms affect user engagement as it limits their visit to the platform whilst also restricting them from showing much interest in non-mandatory modules. Callahan (2010) adds to this view by noting that internet connectivity can restrict ease of access and employee interest in e-

learning platforms. This data accepts that user perception and experience with e-learning platforms cannot be the same as humans have different preferences. However, organisations owe it to e-learning end users or employees to provide a decent platform where access is easy, the design and outlook of the platform match their personal capability, and the courses on the platforms are of interest to end users both from a working need and a personal skills interest. This resonates with the position of Becker et al. (2012), who finds a strong link between interest in e-learning platforms and their design considerations.

5.4.2 Developing Organisational E-Learning with Expansive Learning Policies

Policies are important in any sector as they can drive the commitment towards actualising organisational goals and objectives. Policies set the tone for organisational activities and culture. Pettersson (2018) notes that the conditions in which digitalisation occurs and thrives depend on the organisational factors and conditions supporting it.

The drive to enhance expansive learning backed by e-learning in organisations would require the right organisational structures and process-backed policies. This study finds that both organisations had learning policies that reflected the nature of their productive system and the type of learning culture allowed by such productive systems. For instance, in Techco, the learning culture was driven by a policy that seeks for employees to develop their skills, as illustrated below constantly:

"*We are working on something called defined for success, where you'd have your yearly appraisal and that does capture knowledge, skills and development*."

-Respondent 12, L & D Manager, CS 1

This excerpt from Techco reflects the organisation's interest in ensuring that employees develop a learning orientation and interest in training modules that improve their skills and competencies. The productive system in Techco is one that seeks to advance staff development, and the policy on learning is further reflected as the organisation has a mandate to ensure that

employees get to engage with the e-learning platform in their own time and space and for their personal development purposes. In this view, Tam and Gray (2015) suggest that organisations should model their structure to support the personal development of their employee and not just for organisational purposes only. This explains why a senior L & D respondent opined that the policy guiding the use of e-learning sought to ensure that employees see the potential of the e-learning system for their personal development. As illustrated:

"*For we are looking at the system benefitting both the organisation and employees…it will benefit the organisation if its employees are constantly learning and developing themselves*."

-Respondent 12, L & D Manager CS 1

The potential of e-learning beyond organisational uses and benefits strongly attracts employees' engagement in e-learning platforms whilst it helps develop a positive attitude and perception of learning and development initiatives in such organisations. Dajani and Mohamad (2016) call for a stronger culture and level of support within the organisation, which forms a crucial element that helps influence the learning orientation of employees and the overall competence levels within the organisation. Engaging in acts like this shows the level of discretion, trust and autonomy given to employees within Techco as regards their learning activity and the organisation's support for expansive learning is further reflected in its introduction of learning champions who help foster communities of practice and the development of a learning environment where learners are independent and always have the right support.

The strength and essence of independent organisational policies supporting the learning environment and use of e-learning were quite limited in Healthco. It appeared the major policy guiding the learning environment and engagement with e-learning in Healthco was regulatory-based, with greater emphasis on employees regularly completing their mandatory training on e-learning, which was required of every staff member and organisation in the health sector.

The excerpt below illustrates the role of e-learning for mandatory training regulatory demands in the health and social care sector:

> *"Some of the reason is to offer a standardised approach to training and being an NHS driven organisation and as part of our Key Performance Indicators,' we have to comply with a lot of regulations and training."*
>
> -Respondent 9, L &D Manager, CS 2

The organisation, due to the productive system it finds itself in and by nature, is expected to be accountable to the public and service users to whom it provides healthcare services. More policies are required for the organisation to promote learning activities and orientations independently.

These learning orientations complement the mandatory use of e-learning combined with the personal urge to visit the platform and independently complete certain modules. As Zhu (2015) notes the features of organisational culture and its influences are essential as they define the perception and level of responsiveness of employees, particularly to innovative and technologically driven introductions. Healthco's expansive learning policy would also present improved learning discretion and autonomy for employees, reflecting the organisation's trust in their employees to be interested in learning and taking the initiative to engage in e-learning platforms without being prompted or forced to.

Though informal communities of practice exist within Healthco by employees relying on each other for guidance and assistance on using the e-learning platform, the organisation needs to develop initiatives that enhance this practice by ensuring that not only the learning and development unit is responsible for resolving issues on e-learning but by promoting learning champions within all levels who will inspire and assist their colleagues as at when required for e-learning purposes. Lancaster and Milia (2015) supported the development of a learning culture that promotes openness, learner independence, formal and informal communities of

practice, and the empowerment of managers to influence learning and development activities. They believed that such a learning environment, as supported by existing organisational structure, policy, and factors, helps develop the relationship between organisational actors, which in turn positively increases the embracement of new initiatives such as learning technologies. This explains why Akrofi (2016) asserts that an effective organisational culture defines employees' learning approach and attitude within such an organisation. Drawing from these insights, the essence of having a supportive policy that embraces productive pressures and internal demand to expand learning orientation represents a push for developing an expansive e-learning environment in organisations.

5.4.3 Implementing Expansive E-learning in a Digital Inclusive Environment

The digital divide and exclusion issues are key aspects affecting the enhancement of e-learning to help generate an expansive learning environment (Helbig et al, 2009). These social and demographic issues are important, as beyond the pressures of the productive system, work organisation and the nature of the workplace, employees cannot detach from societal constraints that influence their independent engagement with e-learning. In this study and from several testimonies of the respondents, it is gathered that for expansive learning to be developed and for e-learning to thrive in such an environment, there are underlying issues relating to the digital divide and exclusion which need to be considered. The digital divide is evident in issues of access to the e-learning platform, literacy, ambition, and time pressures due to domestic commitments and responsibilities. The respondent's testimony below indicates a lack of time and issues of equal access at home and the workplace. The respondent first equipped that engagement beyond the workplace is limited:

"Because obviously, sometimes you just don't have time."

-Respondent 10, Junior Employee, CS 1

The respondent (10, CS 1) further asserted that difficulty with access outside of work represents a challenge for engaging with the e-learning platform. Keeping in mind one of the key benefits of e-learning is the benefit it offers users to connect from anywhere. Hence the statement below shows how important it is for access to be smooth on and off the workplace for the expansive use of e-learning to thrive:

"No. Um, I don't know if I can access at home. Because I don't have, um, a work laptop or anything. So, I don't know if I can actually access it."

Low morale to engage with e-learning platforms, as shown by the excerpt below, reflects the potency of digital exclusion issues on the drive to expand e-learning within an expansive learning environment. The testimony below strongly shows how lack of ambition and loss of interest in career and personal growth inhibits the desire of individuals regarding increased and independent use of e-learning, which helps promote expansive features of the learning environment.

"Because I don't need to. Because it's not going to benefit me doing anything extra. The skills that I've done is all the mandatory stuff. I won't go any further unless I go off and do a degree and stuff, university. Which I'd happily won't do. I don't want to do.

I'm not going any further in my career, so I haven't got any future career prospects. I'm on the top of my level and I don't have plans to do any future training or anything.

No, not really. Don't get wrong, there is opportunity. I have been given opportunities to go and do further training, but I don't want to do it at the moment."

-Respondent 22, Junior Employee, CS 2

Issues related to the above include the literacy levels of employees within the organisation and their ability to navigate and successfully complete courses on the e-learning platform.

Comparing both case organisations, Techco had a more knowledgeable workforce, and most were educated, whilst Healthco had a workforce that included skilled workers, knowledgeable

workers and those who required little or no literacy to work within the organisation. This then brings to the fore how the e-learning platform can cater to its workforce's diverse literacy levels to engineer all round levels of employee e-learning engagement and participation in learning and development activities. A respondent equipped that the e-learning platform ideally appears easy to engage and workers with little or no literacy skills should be able to use the platform as illustrated below:

"Yes. That is because the design of our e-learning contents is very simple, not complicated at all". (Respondent 8, Junior Employee, CS 2).

Having a dispersed workforce whereby employees work in and out of the office should also be considered in this discourse; for Healthco most especially, a huge number of employees work remotely and, in the community, and this impacts the learning space, that is where they learn and to also consider if the design of such e-learning platform allows for an engagement at work, home or even in the field. The excerpt below illustrates how the learning space is defined by remote-based work learning attempts:

"Normally, if I can, I do it while I'm here, if not, because of the type of job we have, this is on face-to-face and we do have a lot remote-based, so it is a bit of a mixture of home and here."

-Respondent 21, Junior Employee, CS 2

Engaging with e-learning beyond the workplace is further affected by time pressures, which this study finds connected to domestic responsibilities. Several respondents indicated that they do not have the space to further engage with e-learning modules off work because they are busy with other things. Most excuses given has to do with lack of time as the militating issue affecting their non-mandatory engagement with the e-learning platform, as illustrated below:

"*Time is an issue; I don't really have the time."*

-Respondent 19, Junior Employee, CS 1

Before bringing in gender, this study notes that most respondents preferred to engage with e-learning from a workplace setting, and most really do not wish to get on the system whilst at home. This is as Wajcman (2015) posit that women and men experience time differently, and this tells on their participation in learning and development activities, one of which e-learning falls. The complex situation here is that both e-learning platforms were designed for employees to be able to access and learn in their space and pace, and this is usually from home as only Techco at inception offered paid time for their staff to get on e-learning during working hours. Most of the respondents from Healthco were not afforded this luxury, and that explains why most use their little free time at work to do it rather than take it home. This is akin to how the organisation of work and processes generate inequality (Acker, 2006). Domestic responsibilities and their pressures on e-learning engagement are reflected in the testimony below, where a respondent noted that demands at home meant she would not be able to get on the e-learning platform, as illustrated:

"I don't because, like I said I'm a mother. I want to spend my time with my child then."

-Respondent 15, Junior Employee, CS 1

The excerpt above reinforces the point of Morante et al. (2017), who agree that socio-related issues shape individual learning experiences, and this study, based on its respondent demographics, asserts that women are the most impacted. Though most respondents were not asked explicitly "what prevents them from engaging with the e-learning platform at home", most observed they have other things to do and are busy. Still, the testimony of the respondent above helps narrow it down to pressures on the home front which women mostly experience.

It is worth to note that women form most of the respondents across both cases, though about 90% of the respondents from Healthco were women, and this was where they work in remote areas. This is the sector that demands full hands-on concentration on patient care and one whereby the level of literacy does not need to be basic before getting a job. Occupational

segregation of the workplace is evident from Healthco as most of the workers especially those in lower cadre, joined the organisation and health sector due to the flexibility and reduced pressures for job productivity (World Bank, 2019) as reflected in the testimony of respondent 22 as cited in section 6.4.3 where she refused to take-up more interest in e-learning.

Srinvan and Bohlin (2011) were of the view that the workplace is characterised by the gendered division of roles and the digital divide and exclusion challenges is related to societal hinderances confronting the employees, mostly women, who are under-represented in management and over-represented in lower paid roles. Though gender was not explicitly probed during the interview phase of this research, issues surrounding the division of domestic responsibilities in the home and related pressures came to the fore whilst analysing respondent's narratives. For instance, most respondents that experienced challenges of mastering and being able to navigate the e-learning platforms were women and the thoughts of Vandenbroeck et al (2008) come to the fore, where they observed that for women to get used to technological innovation, they require more time than men. Other studies (Egbo et al, 2011, Bruestle et al, 2009, Suri and Sharma, 2013) all focused on e-learning platforms being flexible and accommodative of potential gender challenges and inhibitions, which are meant to help balance the experiences of gender as regards ease of access and engagement with e-learning systems.

The signs of a lack of motivation and ambition from female respondents in Techco and Healthco can be further tied to the thoughts of Garcia et al (2010) and Wallace and Panteli (2018) who both argue that motivations to e-learning can be low for women as the gendered division of domestic responsibilities represent a key constraint for learning and this in turn affects personal and professional development. This study therefore agrees that for e-learning to thrive, considerations need to be given to organising processes that balances the experiences and engagement of e-learning platforms for all gender.

5.5 Summary and Conclusion

The case study findings presented thus far provide an overview of e-learning and the wider learning environment in which it takes place. The chapter offered a discussion of key features of the context within which e-learning is being practised and, in both cases, reiterated the key features. Analysis of the narratives suggests that the situated context of e-learning, especially from a practice and policy perspective, is indicated by organisational actors' view of e-learning and the subjective meaning they ascribe to its implementation. This subjective perception is derived from their experiences of engaging with e-learning platforms and, by extension, learning environment-related activities. Overall, the data finds that the situated context of e-learning in organisations features in forms of e-learning being used as a learning platform, a compliance and regulatory device and finally, due to other extensive benefits to the organisation and employees.

The findings considerably convey the extent to which the situated context of e-learning in respective organisations was defined by the nature of the organisation and the extent of regulatory controls it is subjected to. Furthermore, the data revealed the contradictions in respondents' perceptions across the meso and micro levels regarding their views on the nature of e-learning and how beneficial it is to them. This chapter also discusses findings that reveal the nature of the learning environment intending to explore the restrictive and expansive elements of each organisation’s learning environment. The key features used to explore how expansive the learning environment is related to the key attributes drawn from Fuller and Unwin’s (2004) conceptualisation of the learning environment. The data finds that the learning environment had mandatory and compliance-related contexts, which helped understand the drive behind learning and development activities such as e-learning.

The findings further suggest that organisational leadership and the structure guiding it matter in understanding the expansive nature of the learning environment. The data finds that line

managers were enablers and symbols of compliance in driving learning activities within the learning environment. Line managers appear to be essential to aligning and finding a balance between tensions and contradictions within the organisational space and actors involved in the learning environment. The level of involvement, information, discretion, and trust also reflects how expansive or restrictive each organisation's learning environment is. The data found a considerable level of discretion and trust in the Techco case whilst it is lower in the Healthco case. This is attributed to the nature of the organisations whilst also noting the type of external pressures and ownership each organisation is subjected to. External pressures and the performance-related demands of the case organisations as influenced by the productive system also revealed the link between the learning environment and the performance design of learning modules.

Closing with the prospects and limitations of e-learning within such a productive influenced learning environment, this study explored the factors that represent the push and pull elements of e-learning and concludes that there is a need to have the right policies in place as the organisation retains power and their interest takes priority. However, there is a need to consider end users in the design of policies relating to learning and development activities. Beyond the place of policy, this study finds that the practice and user engagement of e-learning from a platform design perspective need to be improved.

Chapter 6: Drawing From Techco and Healthco Learning Environment: Implication for E-Learning Practice

6.1 Introduction

Building on the insights from Chapters 4 and 5, which thoroughly examined the learning environments and employee experiences within the context of e-learning deployment, this chapter delves deeper into the combined organisational experiences at both the meso and micro levels. The focus is to explore the implications for e-learning in practice as defined by distinct organisational learning environment and the effects for organisational actors operating within organisational structured systems (Aberdour, 2016). This exploration aims to discern how these factors shape the e-learning landscape, influencing its development towards expansive or restrictive learning environments. As the chapter progresses, it critically assesses how e-learning is integrated and received across different strata of the organisation, from executive management to frontline employees (Garavan, 2007). It examines the alignment of e-learning strategies with organisational goals, the adaptability of learning platforms to meet diverse user needs, and the effectiveness of managerial support in fostering a conducive learning culture.

The chapter concludes by synthesising the overall findings from the case studies, articulating how various elements of e-learning contribute to shaping learning environments that are enabling or limiting. This discussion highlights the key drivers and barriers to learning environments and opportunities. It provides strategic insights into how organisations can better leverage e-learning to enhance individual and organisational growth and increased e-learning engagement. Through this analysis, the chapter offers valuable recommendations for optimising e-learning practices to achieve more dynamic and inclusive learning outcomes within organisational, corporate, and productive settings.

6.2 Work Organisation and the Learning Environment in Techco and Healthco

The findings within this study affirm that several factors influenced by the organisation and the productive system within which it operates are essential to the understanding the nature of the learning environment (Felstead et al., 2009). The comprehensive framework on the productive system, which incorporates the horizontal (stages of production) and the vertical (structure of production), is quite essential to this study as it provides a platform with which to consider both formal and informal aspects affecting e-learning and the incentives to understand how e-learning thrives within expansive and restrictive organisational learning environment (Felstead et al., 2011). This explains why this study considers organisational actors across the meso and micro levels, intending to understand how their perceptions and attitudes within the learning environment operate vis-à-vis the development of e-learning in their respective organisations.

The first stage of production in Techco outlines the business's aims and strategy, which is to secure and retain partnerships with its client, whilst the second recognises the essence of recruiting and retaining employees who are crucial to realising its business outcomes. The third stage is concerned with ensuring that employees within the business are provided the means and support to develop their capacity in a way that helps the business thrive and meet its targets. This explains why the last stage concerns the yearly realisation of company targets and objectives. The stages involved in the organisation achieving its objectives provide the basis for the business's emphasis on developing its workforce capabilities and compliance with government regulations.

Government regulations demand that businesses within the UK offer certain compulsory training to their workforce, such as data protection (GDPR), Health and Safety, Information Governance, Equality and Diversity, etc., which mostly form the core of compulsory government training (Geels, 2014). These stages also explain why most employees engage with

e-learning from a personal and professional perspective as they work in a sector whereby personal skills and knowledge development can earn them promotion or career growth (Randel et al., 2018).

In terms of the vertical production structure in Techco, though an independent business, the structure shows a degree of government-regulated influence on its training programme and use of e-learning. However, the business retains high control and influence over its activities. It hardly needs to explain some of its activities or approaches except through corporate social responsibility, which is common among organisations. Figure 4 presents simple, less complicated levels involved in the production structure at Techco. As shown in Figure 4, the organisation is guided by the laws and regulations of the country it operates, the United Kingdom. Through its regulatory arms or ministries, the UK government has the power and influence to dictate and instruct organisations, whether private or public, on issues such as employee relations, compliance demands, under which training usually falls and several other demands.

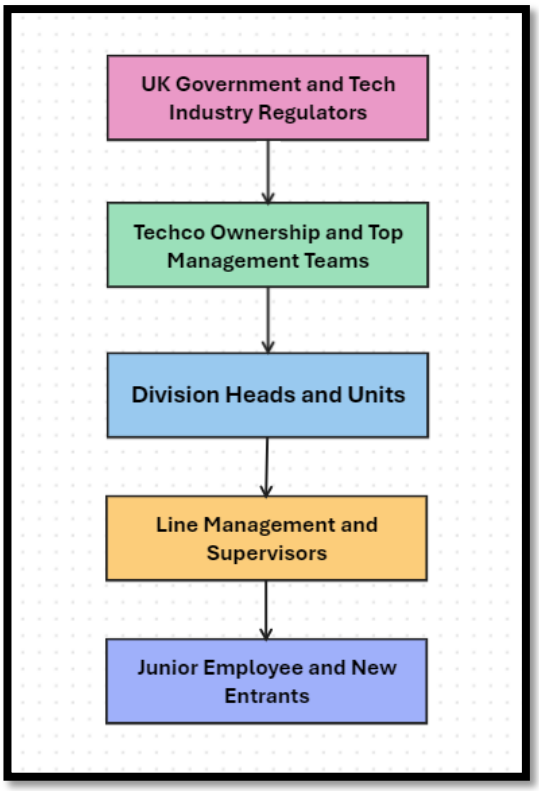

Figure 4: Vertical structure of production in Techco

These demands are for the business to be allowed to operate without experiencing certain government fines or punishment. The next powerful and influential level is that of the owners and directors of the business as represented by the board or even the management of the company itself. These individuals define the organisation's direction, how they wish to arrive at such objective and what they expect from the entire workforce. These levels set the tone for the culture and approach to attaining business objectives at Techco.

From the management level, we have respective divisional heads of units who agree, make inputs, or pass on the feelings of those beneath them to the management board. We thereafter have the line managers seen as foot soldiers, saddled with supporting and enforcing employee participation in organisational activities and initiatives such as e-learning and other related

learning environment programmes. This level is expected to drive organisational policies and inform their subordinates of the direction of the company whilst monitoring the day-to-day behaviour of their staff towards the goal of the company, which is to remain in business and make profits. As findings from chapters 4 and 5 suggest, those with line management and supervisory roles are integral to the engagement of junior employees in organisational initiatives such as e-learning and activities within the learning environment. Ahmad et al. (2014) note that coaching and mentoring are important elements of developing employee learning initiatives, and this reflected the findings of this study that reveal that the form of leadership, particularly from line managers, has consequences on employee engagement with e-learning and other activities within the learning environment (Fletcher, 2019).

General and junior employees within Techco are at the lower level of the production structure and, as a result, are influenced and led by the dictates and policy directions of those above them. Though they are on the lower rung, as Felstead et al. (2009) put it, employees with less influence and power also have a form of exercise or resistance to certain organisational policies and designs which they feel are not in their best interest. Guerci and Vinante (2011) stress the importance of each stakeholder group or organisational actors in developing and evaluating learning programmes and initiatives. This study, noting from the narratives of junior employees, agrees that junior employees need to be given greater consideration in matters that concern their training and development, not just from a practice point of view but also on policy necessitating such organisational objective or orientation.

The vertical structure of production in Healthco is government regulatory-led and influenced, as the diagram below will suggest. This gives credence to the impact of levels within the structures, and it shows how organisations within different sectors and industries comply with government regulations. This diagram offers an interesting difference to the Techco analysis

that shows minimal government regulations or interference, unlike Healthco, which, despite being a corporate social enterprise, is still being influenced to such an extent.

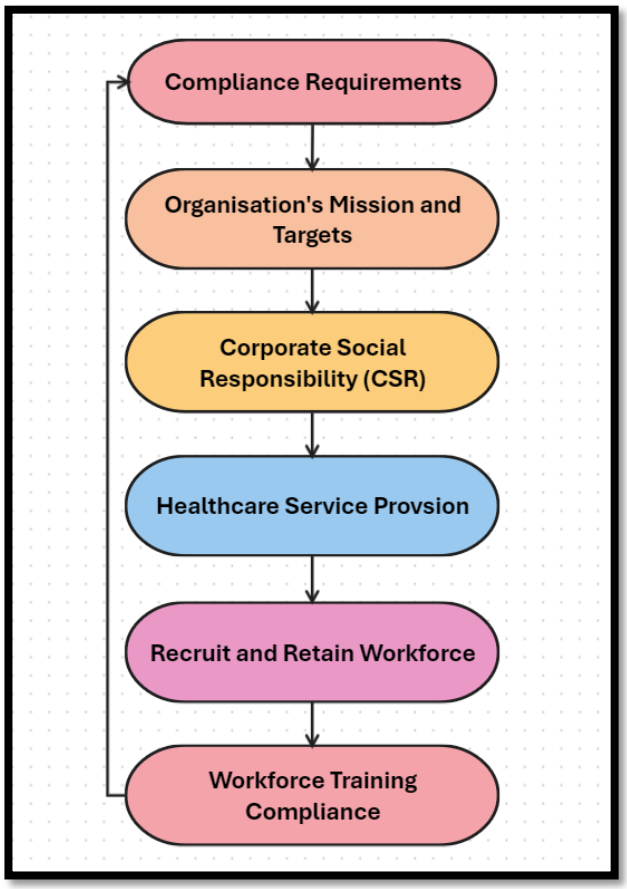

Figure 5: Vertical structure of Healthco Productive System

The outstanding element of the Healthco production structure is the central role and influence of government-affiliated institutions and bodies on the organisation. The UK health sector is massively regulated, and through its institutions and ministries, the government constantly regulates the conduct of organisations and employees within the sector. James (2005) notes that this sector is constantly regulated regardless of ownership. It is, therefore, noteworthy to assert that Healthco, through its nature and multiple partnerships, is bound to subscribe to several compliance demands, most of which would require certain mandatory training, as seen in the testimony of respondents from the organisation.

Haggerty (2017) explains that a lot of funds are being spent on the digital transformation of the UK health and social care industry, especially ensuring stakeholders and healthcare organisations are training compliant. This explains the continuous growth and acceptance of e-learning in UK healthcare and the influence of government bodies in this regard. Manville et al. (2013), aligning with Haggerty, note that governance and regulatory culture are rife in UK healthcare. Still, there is a need to ensure that these regulatory demands are effective for all actors in the industry and that the interest of all levels of stakeholders is represented in each regulatory training policy. Other aspects of the diagram reflect the usual organisational chart that shows power and social relations amongst levels within the organisation. As shown in Techco, junior and general employees at the lower end are left to comply with the dictates of those above them, and this study opines that their resistance or acceptance of these power relations is best understood through an exploration of their perception and experiences, as discussed in chapter 5.

This study interprets this as a call to consider junior-level employees in the policy and practical design of learning environment initiatives such as e-learning. The diagram above further explains why employees within the organisation are 'bombarded' with constant regulatory training modules and the expectation for them to keep updating it occasionally. Being regulatory influenced also explains the use of the ESR (electronic staff record) system, which is the platform that hosts e-learning training modules in Healthco. The availability of this platform constrained Healthco from developing its e-learning platform though they have the space to add modules to the ESR for their employees to engage with.

This study finds that the productive system structure and framework guiding organisations have the potential to limit or support the development of e-learning for expansive or restrictive learning purposes. The context from Healthco shows that mandatory regulatory pressures appear to limit employee engagement with e-learning from an independent perspective. This

negates the principles of expansive learning, which seeks to promote independent and personalised learning, this aligns more with the restrictive divide. Holbery et al. (2019) note that organisational structures are important as they can serve as barriers or enhancers of organisational learning initiatives.

The data finds that both organisations are affected by the nature of the productive system within which they operate (Halloun, 2023). The data also suggest that the productive system defines the approach and reception given to learning and development activities, whilst Techco appears to have found a solution whereby employees are productive and learning at the same time; for Healthco, it is more of emphasising meeting the needs of patients and later devising their own learning time, especially as regards modules hosted on the e-learning platform. The nature of the autonomy between both cases is reflected in the structure above, as Techco employees have a greater sense of control, discretion, and trust to engage further in learning activities than their Healthco counterparts, who are constrained to fully concentrate on their mandatory training requirements.

6.3 Productive System Shapes the Expansive and Restrictive Extent of Organisational Learning Environment

The productive system is a principal factor and is important in guiding the nature of learning environments in organisations (Redeker et al., 2012). The productive system is of key essence in this regard, as organisational values embedded in existing learning environments are drawn from and directed by the nature of the productive system practised in organisations. Towards understanding the nature of the learning environment, whilst employing improved use of e-learning, the data revealed the domineering influence of the productive system (Haddad et al., 2022). A critical discovery is that both case organisations are influenced by the degree of influence and controls they are subjected to from organisational structures and practices drawn from the productive system.

Organisational learning environments and approaches provide the basis for employee engagement and orientation with learning and development practices, one of which is e-learning (Huang, 2014). As hinted in this section, the data suggests that every aspect of the learning culture from an organisational or individual perspective is reflective of or influenced by certain elements within the productive system. Techco's employees' orientation and attitude to learning and development activities hinged on the organisation's productive nature.

Being a corporate organisation with reduced regulatory influences, the organisation could develop or attempt a culture where every staff member encouraged and embraced independent engagement with the e-learning platform regardless of their status or context (Sutha, 2016). The organisation ensured that its current e-learning system incorporated modules that were useful for the professional and personal development of its workforce whilst also supporting staff take-up of e-learning by introducing policies that enhanced learner curiosity and embracement of e-learning. In Healthco, the pressures of the productive system adopted an external outlook whereby government regulatory training demands and requirements shaped its learning culture. As presented in Chapter 6, the productive system in Healthco heavily relies on government guidance and influences, which explains the organisation's direction and attitude on other attributes of the learning environment. This further explains why the organisation had limited policies that supported employee engagement with e-learning as they were in a sector where mandatory training is binding, and as such, every employee knew the consequences of failing to complete these modules (Billett, 2014).

For the learning environment to be expansive or restrictive, the organisation of work and the productive system plays a critical role in the need, support and design of learning applications used to support and deliver organisational learning and development objectives. This was evidenced in Healthco which tilted towards the restrictive divide as focus was given to satisfying government demands and maintaining its reputation as a public-friendly health

provider. The productive system, through its performance demands and expectations, is also a vital aspect in this regard, as both cases reveal how pressures to deliver or meet organisational targets indicated the extent to which employees trained and engaged with the e-learning platform. In Techco, employees saw the connection between their performance or job function with modules on the e-learning platform, which positively encouraged active use of the e-learning platform. This contrasts with the Healthco case, where this study could not positively connect the use of e-learning to the productivity of employees.

6.4 E-learning for Mandatory Training Purposes in Contemporary Organisations

Towards answering and providing context on the situated context of e-learning in contemporary terms and practice, this study notes that the introduction and adoption of e-learning appeared to be regulatory-led. As such, this defined the approach and perception of meso and micro levels within the organisation. From both cases, this study finds that engagement with e-learning across all levels was hinged on mandatory or regulatory training demands. This explained the approach taken by these levels towards e-learning. An expansive learning environment arguably requires employee engagement to go beyond the mandatory scope and should promote advanced engagement with the e-learning platform by employees. Drawing from the both cases, the outlook was restrictive in nature as respondents across all levels recognised the strong element of compulsory training as the reason for e-learning and the benefit it offers organisations in meeting regulatory demands, which comes with consequences capable of threatening the existence of the organisation.

Though section (6.3) presents Techco as an organisation that seeks to promote engagement with the e-learning platform, this study finds that a key underlying factor behind its introduction and continued use was the benefit it afforded the organisation, especially as a platform that unifies all its compulsory modules and the ability to track employee compliance and act as a control system. Junior employees, probably from the way the e-learning system

was introduced, felt it was all about completing mandatory courses on it, and the supportive culture instituted by the organisation and the nature of its workforce was then responsible for increased engagement of the e-learning platform beyond mandatory demands.

This explains why junior employees first perceived the e-learning platform as a mandatory learning device to support their completion of certain regulatory courses (Felstead and Jewson, 2014). Viewing e-learning as a compulsory training tool is much clearer in Healthco, where almost all respondents indicated that their perception of the e-learning platform guides their initial and current engagement with e-learning as an innovation designed for meeting health and social care sector compliance demands. The Healthco case presented low engagement with e-learning beyond mandatory demands. This study asserts that this is because the organisation premises its implementation and design on e-learning on employees being compliant with their regulatory training demands. Engagement with e-learning beyond regulatory needs is further compounded by the limited drive by Healthco to enhance further engagement of the e-learning system, and this contrasts with Techco, where an attempt was made to ensure that staff see e-learning beyond mandatory training. This section, having presented mandatory demands as a key factor behind the situated context of e-learning, pushes for a mixed approach from organisations where the e-learning platform is designed to embed mandatory and relevant non-mandatory contents and the culture within organisations as expanded in the next sub-section, should indicate this approach to employees.

6.5 Employee Values, Organisational Goals and E-learning within Expansive and Restrictive Learning Environment

Organisational values or culture, which are used interchangeably, are important to understanding how expansive or restrictive the use of e-learning is in organisations. Organisations' Values and culture are drivers of behaviours within which employees derive meanings and approach organisational activities and programmes. This study finds from both cases that more needs to be done to present an explicit organisational orientation and learning

culture that gives employees positive readings and meanings to activities within learning and development.

The data also reveals a crucial lack of organisational policies from which employees drew inspiration to engage in e-learning, and most derived this from instructions from the learning and development team, the demands of their manager or out of a personal desire to engage with the e-learning platform. None of the respondents across both cases appeared to understand the orientations guiding the learning environment from which they would have been guided and inspired to understand and get on further with e-learning courses. Findings revealed that most respondents did not fully understand the values that would have indicated the nature of training and development activities in the organisation, and most relied on information passed down, which mostly focused on the implementation or practice aspects of e-learning with little reference to the connection of such implementation to the learning ethos of the organisation.

The development of expansive learning is arguably impossible in a culture where relevant stakeholders are only communicated with or brought on board at implementation stages, not from the very beginning, which includes policy considerations. This has limited the avenues of micro-level employee input, consultation, and potential voice in organisational learning and development design. Therefore, this study posits that limited communication and involvement at certain stages of e-learning within organisations is a recipe for restrictive learning environment.

Therefore, there is a need for organisational values and culture to be seen as instrumental in deciding how expansive or restrictive the learning environment would be. Expansive learning is driven by giving greater involvement to employees across all levels and providing a platform that brings employees up to date on organisational initiatives and the policies guiding them. Whilst restrictive learning environment is characterised by selective or reduced involvement during the design and implementation of organisational learning initiatives.

Practices within the organisation are backed and enforced by organisational structures and values. Keeping this in mind, and in advocating for expansive learning, this study calls for improved policy on the part of the learning and development team or senior management to ensure that all activities or processes connected to the development of expansive learning are promoted across the board.

Providing and drawing on these frameworks potentially empowers other organisation components to get on board and help facilitate the nature of organisational learning attributes. For instance, and keeping expansive learning in mind, if empowered by relevant organisational policies, line managers and other learning networks are much more likely to encourage and sustain employee commitment to learning and development initiatives, whilst employees are also afforded a chance to get guidance and clarity from a policy perspective. This move might also enhance the efforts of current formal and informal communities of practice geared towards offering support to employee learning behaviours and interests, which is key in promoting or limiting expansive learning.

6.6 Line Managers as Facilitators of Expansive and Restrictive Learning Environments

Line managers are important in developing and restricting learning attributes in the organisation (Alfes et al., 2013). This study opines that all organisational actors have contradictory interests, and line managers could act as bridge builders in resolving the conflict and tensions between all levels of the productive system. Felstead et al. (2009) came up with a structural picture of the stages of production, which range from government at the top down to individual employees. Still, this study adds to this framework by carving out a niche for supervisors and line management, which this study suggests should not be mixed with senior management levels and should be visible in this framework. Before revisiting the responsibilities and influences of the line manager, it is instructive to present a pictorial

analysis that reflects the diverse roles that line managers, in both cases, have played towards adopting and embracing organisational learning activities, particularly e-learning.

The illustration in Figure 6 below also helps convey junior employees' perceptions of who or what their line manager represents and the role they play or do not play in their take-up and engagement with e-learning platforms.

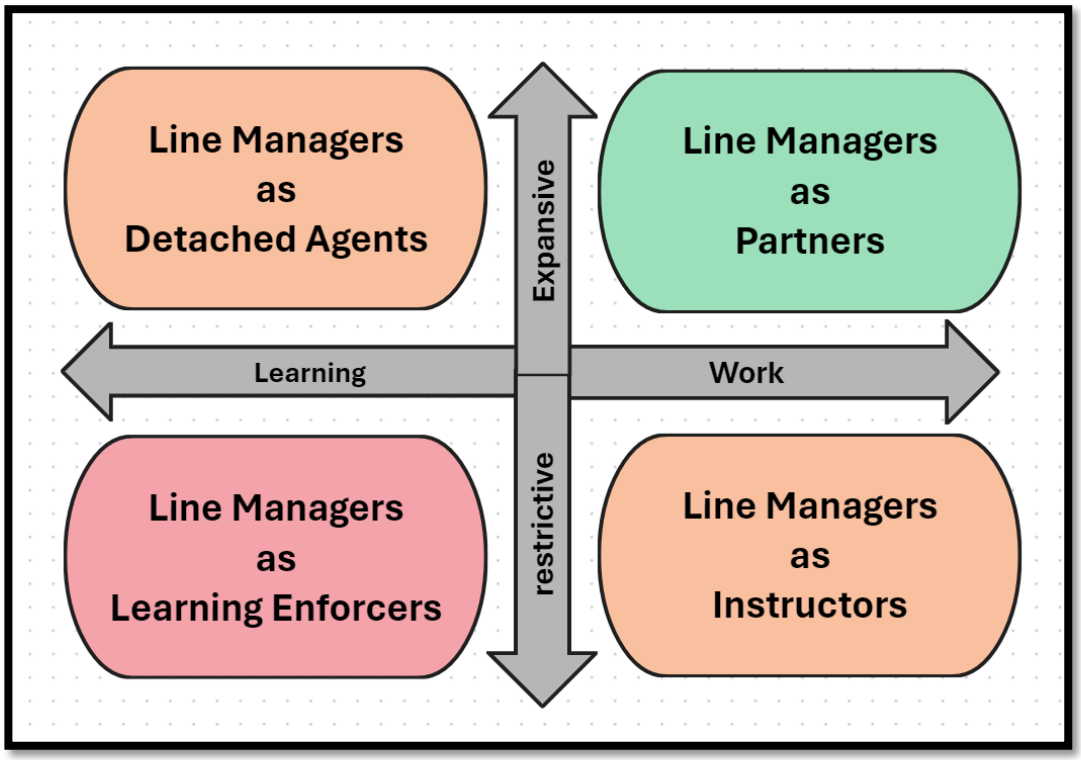

Figure 6: Role and Perception Given to Line Managers

The illustration above clearly shows the role and perception given to line managers from all sides of the organisation. This means that the views of those on the meso, micro and macro levels are represented in the diagram above. It shows how line managers are seen and provides evidence of their roles in the current e-learning context. This study accepts that line managers are subject to influence from the productive system, which defines the extent of their powers, influence, and involvement in their subordinates' learning approach. Accounts of participants

in this study showed that line managers are there to carry out organisational directives; these narratives also further pointed out that some line managers within their organisations have the power to engineer staff take-up or detachment of e-learning as they can excuse their junior colleagues from completing e-learning courses as required.

Drawing from Figure 6 above, this study concludes that line managers are vital for thriving e-learning and to engineer positive employee engagement. Line managers must be accorded the respect, influence, power, and place to carry out this responsibility without hindrance. Line managers bridge the gap between the demands of higher levels of organisational actors who draw up the policies guiding learning culture and activities and the implementation or practice aspects of e-learning wherein they are expected to act as partners or enforcers on behalf of the organisation. Being the closest to the general workforce also conveys the importance of line managers being co-opted into all activities within the learning environment. The attitude or information they pass on to their junior employees defines the initial perception and attitude of such employees towards training programmes. Figure 7 shows various levels of the vertical productive system and how they can be adapted to explore expansive and restrictive learning. Figure 7 contrasts a restrictive environment with an expansive environment in the context of organisational learning.

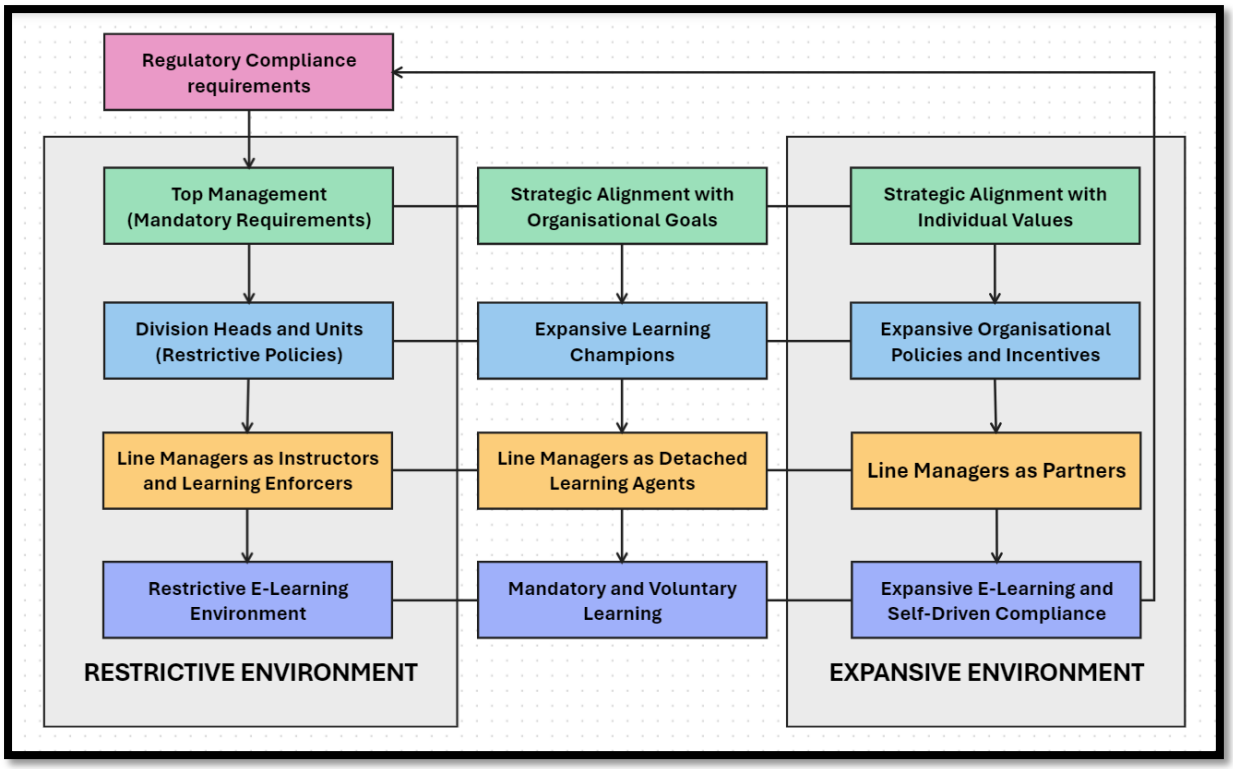

Figure 7: Facilitating Expansive and Restrictive Learning through the Productive System

On the left side, the structure shows a top-down approach where mandatory requirements and restrictive policies inform the role of line managers and ultimately contribute to a restrictive e-learning environment. On the right side, the vertical production structure shows a more holistic and integrated approach, where the organisation's strategic alignment with both organisational and individual values lead to an environment that encourages both mandatory and voluntary learning, facilitated by line managers who act as partners in the learning process, fostering an expansive e-learning environment or helping to maintain compliance led training which is inhibitive of learner development. The contrasting columns suggest that the organisational mindset and structural approach towards e-learning significantly impact whether its members perceive the environment as restrictive or expansive. The diagram above presents a vivid

imagination of the findings of this study that emphasises the role, influence, and characteristics of line managers towards the attitudes and behaviour formed by their subordinates as regards the expansive engagement with e-learning and other learning activities. The diagram conveys the strategic place of line managers, though this study accepts that all levels represented above directly impact junior employees' learning environment. However, the argument here relies on online managers being, in practice, the most consistent and reliable organisational actor in facilitating the development of expansive learning, which is shaped by employee perceptions and attitudes to training programmes such as e-learning.

6.5 Summary and Conclusion

This chapter explores the productive system in both case organisations to provide an understanding of how they are productively shaped and influenced. Relying on Felstead et al.'s (2009) analogy of the structures and stages of production, this section presented an individual case analysis that showed the different systems in which both organisations operated and how they defined the nature of the organisations and their approach to expansive and restrictive learning, which is defined by the extent of their engagement with e-learning and the assumptions guiding it.

The learning environment due to productive influences is also different as seen in this chapter as Techco is more of a learning organisation where there are knowledge workers, whilst in Healthco, the learning environment is much more concerned with meeting mandatory regulatory training demands and most employees or respondents were not that so interested in taking up e-learning for non-work-related personal trainings. The chapter further looks at the networks and organisational actors within both cases to understand the interest of all levels of stakeholders and to examine the nature of their relationship and its impact on the desire to achieve expansive learning using e-learning. This data jointly notes the conflicting interest of organisational actors in meso and micro levels within both organisations and drawing from

these realities attempt to advocate for a balancing of organisational actors, interest and for communities of practice within both organisations whether formal or informal, to be much more supported by organisational structures that reduce conflicts and tensions as regards engagement with organisational initiatives.

Closing with the prospects and limitations of e-learning within such productive influenced learning environment, this study explored the factors that represents the expansive and restrictive elements of e-learning and concludes that there is a need to have the right policies in place as the organisation retains power and their interest takes priority, though there is need to consider end users in the design of policies relating to learning and development activities. Beyond the place of policy, this study finds that the practice and user engagement of e-learning from a platform design perspective needs to be improved on.

Chapter 7: Conclusions

7.1 Introduction

In concluding this thesis, it is imperative to reflect on how the research has systematically addressed the core questions posed at its inception. The exploration into the domain of e-learning within contemporary UK organisations has revealed a multifaceted construct that intertwines with organisational culture, policy, and practice. E-learning has been identified not merely as a digital platform for knowledge dissemination but as a strategic organisational tool that embodies the shift towards continuous, adaptive, and flexible learning paradigms. Organisational policies and practices reflect this understanding by increasingly integrating e-learning into their core developmental strategies, promoting a culture that values ongoing employee development and adaptability to change.

Organisations have been shown to be actively developing and infusing e-learning within their learning environments in diverse and innovative ways. This infusion is marked by efforts to align e-learning strategies with broader organisational goals and individual professional development needs. Through the integration of user-friendly technologies, flexible learning modules, and supportive learning ecosystems, organisations are moving beyond traditional, one-size-fits-all training models. Instead, they are adopting a more personalised and engaging approach that encourages employees to take an active role in their learning journeys.

The situated context of e-learning in organisations critically influences whether learning environments are perceived as expansive or restrictive. In expansive environments, e-learning is leveraged as a gateway to broader learning opportunities, where the emphasis is placed on self-driven learning, professional growth, and the application of learning to real-world

challenges. Conversely, in restrictive environments, e-learning is often limited to mandatory compliance training, with less emphasis on personal development and adaptability. This thesis has demonstrated that the key to fostering an expansive learning environment lies in the strategic alignment of e-learning with organisational objectives, the empowerment of line managers as learning partners, and the active engagement of employees in shaping their learning experiences. On the restrictive divide, the learning environment is characterised by limited involvement of every stakeholder level, reduced communication, mandatory training level of engagement and line managers solely as learning enforcers.

The implications of these findings are significant, suggesting that for e-learning to be truly effective, it must be carefully designed to support both the organisational mission and the personal growth of each learner. This necessitates a commitment from organisations to not only invest in e-learning technologies but also to cultivate an organisational culture that prioritises learning as a core value. The conclusion drawn from this research thus provides valuable insights for both practitioners and scholars interested in the ongoing evolution of e-learning and its role in shaping the future of work and learning in contemporary organisations. The introduction of e-learning in organisations and its place in learning and development has been recognised for a long time. The study at inception sought to explore the practice of e-learning in organisations with view a to examining its capability to enhance smart learning in organisations. Deeper engagement with existing literature revealed that most of the attributes of smart learning environment were broadly captured in the learning environment framework and for this, this study focused on the expansive and restrictive attributes of the learning environment. Towards exploring the limits and potentials of e-learning in an expansive and restrictive learning culture, this study relied on Felstead et al (2009) analysis of the productive system to understand influences shaping the nature of learning environments in organisations

and to provide insights on the prospects of e-learning within both learning environments arising from current practice and lived experiences of end users.

7.2 Addressing the Research Questions

This research was based on an exploratory case study approach that employed the use of two different case organisations to investigate e-learning and how productive system bounded by the organisation of work, hierarchies and structures factors in the development of expansive and restrictive learning environment. This also required scrutiny of work organisation alongside learning environments. The research addressed the research questions, providing substantial insights into e-learning's integration within contemporary UK organisations. Firstly, the research sought to understand the meaning of e-learning and its reflection in organisational policy and practice. The meaning of e-learning, as uncovered through the study, transcends a mere digital platform for training; it is increasingly recognised as a strategic component aligned with the broader objectives of organisations. The data indicated a notable divergence between junior and senior respondents' understanding of e-learning—while senior management views were aligned with policy and strategic implementation, junior employees often saw e-learning in terms of its practical benefits, without a deep understanding of the underpinning theoretical or policy frameworks. This reflects in organisational policies that are often top-driven, focusing on compliance and mandatory training, potentially overlooking the end-users' needs for more expansive and engaging learning experiences.

Secondly, the research examined the extent to which organisations are developing and infusing of e-learning within their learning environments. Organisations are actively shaping their e-learning platforms to foster both mandatory and voluntary learning. This is achieved by crafting content that aligns with organisational goals and caters to professional development needs, suggesting a move towards more expansive learning environments. The study highlights that while e-learning is adopted widely, its effective infusion into the learning environment depends

on organisational leadership, the roles of line managers, and the extent to which learning aligns with the employees' work and personal growth objectives. Lastly, the research sought understand the implications of e-learning's situated context on learning environments. The situated context of e-learning has considerable implications for whether an organisation's environment is perceived as expansive or restrictive. The findings delineate that expansive environment, characterised by the presence of learning champions and policies encouraging self-driven compliance, lead to a more positive engagement with e-learning. In contrast, restrictive environments are primarily compliance-driven, focusing on mandatory training and lacking in personal development opportunities. This study concludes that a balance must be struck between organisational power and user-centric design to foster the most appropriate environment in which e-learning thrives. The study identifies a crucial intersection between e-learning design and user engagement, calling for policies and practices that consider the end user's experience. This focus on the user's experience is imperative to transition from restrictive to expansive learning environments, which are more conducive to engaging and effective e-learning.

7.3 Research Findings

The findings of this study reveal that the meaning of e-learning within organisations is complex and varied. By employing the socio-technical productive systems theory adapted from systems theory, the study dissected the multifaceted nature of e-learning into four primary dimensions: organisational social structure, technology, work relations, and the learning environment. These dimensions provide a comprehensive framework for understanding the diverse perceptions and implementations of e-learning across different organisational contexts. Respondents from the case organisations reflected these dimensions in their perceptions of e-learning, highlighting various factors influencing their engagement with e-learning platforms. Technologically, perceptions were centred around platform design, user experience, and ease

of use. Socially, e-learning was viewed in terms of policy refreshment and mandatory requirements, and it was considered as a tool for enhancing competencies. Regarding work relations, e-learning was often integrated into induction processes, linked with specific work tasks and deadlines, and seen as part of the existing work systems. Furthermore, preferences for learning methods varied significantly among respondents, with factors such as convenience, engagement levels, and the ability to interact with others playing crucial roles. These preferences underscore the importance of considering individual and group learning styles and the need for e-learning environments that are both technologically sound and socially and operationally integrated within the organisational framework.

A significant distinction emerged between the perceptions of junior-level and senior-level employees regarding e-learning. Junior-level employees' perceptions primarily influenced their motivation and engagement with e-learning platforms, directly impacting the effectiveness of these educational tools. Conversely, senior-level employees' perceptions shaped organisational policies and practices, determining whether the learning environment would be expansive or restrictive. Despite these differences, a common understanding across all levels was the influence of regulatory requirements on the need to complete e-learning modules. However, beyond mere compliance, the study highlighted that both individual values and the organisation's productive expectations and performance metrics depend heavily on the effective implementation of e-learning. This underscores the necessity for e-learning strategies that meet regulatory demands, align with broader organisational goals, and cater to the professional development needs of employees across various levels.

A pivotal finding from this study underscores the essential role of line managers in navigating the complex interplay between organisational compliance demands and individual development needs. Line managers are instrumental in enhancing the user experience by effectively integrating training into work schedules and allocating time for course completion.

Their efforts are critical in fostering expansive learning policies and facilitating diverse learning methods, significantly enhancing e-learning initiatives' effectiveness. The research further identified the necessity to empower line managers, enabling them to act as partners in the learning process. By aligning mandatory requirements with strategic organisational goals and individual values, line managers can help create policies that promote expansive learning environments. This alignment encourages a re-evaluation of the roles of line managers, supporting them in their capacity to champion employee-driven development that addresses both voluntary and mandatory learning needs. The findings advocate for organisational support that equips line managers with the tools and authority needed to transform e-learning from a compliance exercise into a dynamic platform for comprehensive professional growth.

7.4 Research Contribution

7.4.1 Contribution to Theory

This research posits that the socio-technical productive system fundamentally shapes the design and implementation of organisational programs, including e-learning and associated learning practices. Building on the insights of Felstead et al. (2009), the study undertakes a comparative analysis across two different sectors to ascertain how socio-technical productive systems operate under diverse conditions of ownership, regulatory pressures, workforce composition, and performance expectations. The study responds to Felstead et al.'s call for more detailed engagement with various levels of the productive system, focusing particularly on the meso and micro levels to understand the interrelationships among organisational actors within these tiers. Emphasising the meso and micro levels, this thesis uncovers the pivotal role of line managers in mediating the adoption of e-learning and fostering expansive learning attributes among their subordinates. The productive system's nature, coupled with other influencing factors such as digital exclusion, profoundly dictates the learning environment's capacity for promoting or restricting learning.

One importance of this approach was that this study, focusing on these two levels identified line managers who were classified on the meso level and suggested that they play and can take a critical role towards the engineering of their subordinates to take-up e-learning and to reflect attributes of appropriate learning environment in their learning approach. Overall, the outlook of every learning environment and its potentials to advance or restrict learning is significantly guided by the nature of the productive system it is subjected to and the recognition of other forces such as digital exclusion at play. In addition to enhancing relationships and networks required for the development of expansive learning environment, this study suggests a reclassification of line managers along the four constructs illustrated in Figure 6. This study notes that the perception and responsibilities of line managers has evolved overtime and their influence in employee buy-in and attitude towards organisational initiatives cannot be understated. This explains why this study notes that line managers have adopted several identities and depending on the scope of their functions in organisations, they can be classified as communicators, enforcers, partners and lastly as agents of detachment from e-learning engagement. This last classification stems from the results of this study that showed that line managers by virtue of their learning orientation, powers and job context can implicitly or erroneously influence negative attitudes amongst their subordinates particularly on their perception and attitude to activities related to learning and development.

The analysis presented in this study adds to the ongoing debate concerning the ability of line managers to define employee engagement with organisational programmes.

The socio-technical productive system theory acknowledges the role of management within the production structure, but it does not recognise the distinctive role of line managers. This study adapted to the production structure by advocating for an increased emphasis on the essence of middle managers, line managers and supervisors on perceptions and behaviours of organisational actors within the learning environment.

Especially this study argued that positive engagement with activities in the learning environment is dependent on formal and informal communities of practice, which relates to learning networks. Conclusively, this study, from the theoretical perspective and by building on the systems theory, develops an understanding of key mechanisms that drive expansive e-learning potentials in organisations.

7.4.2 Contribution to Practice

This study has important implications for organisations' drive to develop and adopt appropriate learning environments whilst seeking to employ e-learning as a useful platform for achieving this objective. It provides pragmatic implications for organisations to better understand their productive systems and ensure they have the required attributes to enhance or restrict their learning environment. This study unearths the productive environment's restrictive and expansive capability, which is useful in the design of e-learning programmes that will enhance deeper understanding of both learning environment.

Practice-wise, the findings suggest that corporate organisations are at an advantage over publicly scrutinised companies, such as Healthco, that do not have the total independence to define their learning priorities and terms of e-learning engagement. This study, therefore, serves as a guide for organisations with immense productive or regulatory pressures to consider the extent of such pressures on their performance/productivity and learning and development approaches before developing e-learning programmes designed for expansive or restrictive learning purposes.

In addition, the research calls for greater roles and emphasis regarding the extent of line managerial powers, influence, and involvement in embracing learning programmes designed to improve or restrict learning amongst the workforce. This means that organisations need to scrutinise the roles their line managers play in organisational development initiatives and use it to guide their terms of engagement in building a workforce that learns without restriction.

The perception and lived experiences of employees are of relevance to the development of expansive learning, and in this vein, this study makes a case for organisational training programmes that reflect junior employee input and involves line managers more.

Having covered the line manager and junior employee status and interest, this study on the practical side reflects and emphasises on the roles played by organisational actors in learning networks. This study therefore calls for the consideration of learning networks in organisations that seek to develop expansive learning features as learning networks represent a strong level of support for organisational actors and they are the means through which objectives of specific learning environments are reinforced. Conversely on the restrictive end, limited interaction and place of learning networks strengthens restrictive learning environment credentials. These learning networks and organisational actors if given a platform to voice their concerns and interests can also use this channel to call into focus, their perception on engagement issues affecting respective e-learning platforms.

7.5 Limitations of Study

The main limitation of this study is the inability to get qualitative data from respondents who qualified at the macro level and are regarded as influential to the policy directions of organisations and the sector they belong to. Undertaking key informant interviews with policymakers, for example, would have afforded the research a chance to compare the implications of policies on the contours of the productive system and to attempt a full-on level-by-level analysis of actors within all levels, as stated by Felstead et al. (2009). This research was also limited in terms of time and opportunity to further probe issues around digital exclusion and previous experience in a different productive system that emerged from completed data analysis of both organisations. Though the phased nature of the interview sessions offered a chance to probe new respondents on initial themes generated from previous respondents, the researcher would have preferred to represent these questions to previous

respondents again. The advent of Covid-19 made it further difficult to re-engage case organisations, for instance Healthco, who were in the battlefront confronting the virus hence the organisation would not prioritise getting face to face interviews as the researcher preferred this approach over online interview that is much harder to analyse and transcribe.

7.6 Suggestions for Future Research

This research represents an initial exploration and investigation into the potentials of e-learning within the productive system and its role in enhancing the prospects for achieving appropriate organisational learning environment. There are grounds for extensive future research into several components. As already implied, future studies of e-learning need to consider all levels of the productive system with a view to having a comprehensive view of how the levels, structures and stages of production potentially co-exist and contradict each other towards the realisation of expansive and restrictive learning objectives.

This study adds to the debate on organisational structures and how it empowers organisational actors towards advancing e-learning in expansive settings. In relation to this, this study finds it appropriate for other studies to focus on organisation with less complex structures such as small-medium enterprises with a view to investigating if the roles of organisational actors within the learning network have the same characteristics or potentials as observed in this study.

Having compared a corporate organisation against one that has public and government influences, future researchers are encouraged to focus on examining organisations within the same sector and productive system to further analyse the outlook of its learning environment and investigate the potentials of e-learning in developing expansive and restrictive learning. This research notes issues around digital exclusion and the key impact of the gendered nature of organisations on equal access and engagement with e-learning systems.

Other studies are welcome to delve deeper into these issues, engaging with productive systems and wider workplace learning framework.

7.7 Conclusion

This research concludes that the implementation of expansive and restrictive learning environment and improved engagement of e-learning is impacted by the productive system, structure, and networks within organisations. The study argues that the productive system through its expectations and nature defines the situated context within which e-learning is practiced, thus having implications on the expansive or restrictive nature of the specific learning environment. The study further emphasises the importance of organisational actors within the learning networks and the demand for supportive organisational structures. The limitations to this research in terms of interview challenges and limited scope of research instruments points to grounds for further research. Regardless of these limitations, this research has made theoretical and empirical contributions as regards building expansive learning environment and the role of e-learning in achieving such objective.

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Appendix A

Case Study Interview Guide

Meso Level Respondents (Senior managers, Line managers, HR, and L&D)

Introduction

- Introduce myself
- Explain/ reiterate purpose of research.
- Place emphasis that it is perception and experiences of respondent that counts, and not their response been right or wrong.
- State that interview has ethical approval and ethical codes will be adhered to i.e., confidentiality, voluntary participation and right to withdraw data at anytime.
- Explain purpose of recording and seek permission.
- Confirm if respondent is happy to go ahead with interview under the conditions stated.

Part A: Background Information

1. Ask about current role in the organisation.

   Probe

   - Previous and current role
   - Scope of responsibility

Part B: Engagement with E-learning

1. Previous and current overview of e-learning

   Probe

   - Ask if respondent engages with e-learning
   - Motivations for engaging/disengaging with e-learning modules
   - Probe level of technological expertise
   - Any change in perception of e-learning
   - Probe personal learning orientations/bias and if it affects expansive learning drive

2. E-learning and Current role/function

Probe

- Reasons for e-learning in the organisation (note regulatory influences)
- Conditions for directing staff to comply/engage with e-learning
- Connection/usefulness of e-learning to work role/department/unit
- Support systems/initiatives to enhance e-learning in the organisation

3. Linking e-learning, organisational learning environment with expansive learning

Probe as appropriate:

- Seek to understand current and previous learning attitude within the organisation.
- Any learning boundary or what are the impeding factors affecting learning and development activities.
- Seek to understand if practice of e-learning is affected by learning orientations and organisational attitudes.
- Constraints since introducing e-learning

4. Leading/Enforcing Engagement with E-learning and Related Programs

Probe as appropriate.

- how are subordinates encouraged to engage with e-learning (communities of practice, Work pattern etc)
- Successes or noticed/perceived improvement amongst subordinates since adoption of e-learning
- is this made mandatory with role or personal responsibility to improve e-learning
- Challenges and issues with current practices
- Improvements or suggestions

Micro Level Respondents (Junior employees)

Introduction

- Introduce myself
- Explain/ reiterate purpose of research.
- Place emphasis that it is perception and experiences of respondent that counts, and not their response been right or wrong
- State that interview has ethical approval and ethical codes will be adhered to i.e., confidentiality, voluntary participation and right to withdraw data at anytime
- Explain purpose of recording and seek permission
- Confirm if respondent is happy to go ahead with interview under the conditions stated

Part A: Background Information

1. Ask about current role in the organisation

   Probe as appropriate:

   - Previous experience and current roles
   - Level of technological capability

Part B: Engaging with E-learning

1. Ask overview of respondent engagement and history with e-learning

   Probe as appropriate:

   - If respondent has previous e-learning experience
   - If yes, ask if it is linked to need or personal development, learning convenience, personal interest or mandatory introduction by previous employer
   - If no, probe reasons such as lack of interest, low IT level, suitable alternative or non-existent e-learning programs in previous organisation
   - Level of technological expertise before joining current organisation
   - Previous Perception of e-learning

2. Ask about e-learning within current organisation and role

   Probe as appropriate:

   • Is e-learning practiced in the organisation

   • How it was introduced to respondents i.e. optional or mandatory

   • How staffs were made to comply with e-learning program i.e. timeframe or deadline given

   • If level of technological expertise was considered during this phase

   • How it is in practice i.e. mobile app, learning hub, training centre or online etc

   • Learning orientations, personal bias and preferences

   • Organisational support systems for engagement with e-learning programs

3. Link e-learning with dimensions of Productive System

   Probe as appropriate:

   • Seek to understand current and previous learning attitude within the organisation

   • Any learning boundary or what are the impeding factors affecting learning and development activities

   • Seek to understand if practice of e-learning is affected by learning orientations and organisational attitudes

   ● Constraints since introducing e-learning

4. Perception and experience with e-learning

   Probe as appropriate:

   • What benefits or ease does engagement with e-learning offer?

   • Compare level of technological development before joining organisation or current role

   • Does current role or career path require knowledge or basic skills

   • Does e-learning or need to learn improve output at work/ personal competencies

   • Relevance of current e-learning modules with career/personal goals

5. Wrap up questions

   Probe as appropriate:

- General Perception of e-learning
- External factors affecting learning behaviour and engagement with e-learning
- Further thoughts on e-learning.