Chapter 1

Chapter 1: Introduction to Volume One: Future of Human Resource Development - Disruption through Digitalisation

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1.1 Abstract

This chapter aims to discuss the key elements of the book and highlight the main areas for investigation. It provides an assessment of the current and future trends of technology and how it coalesces with Human Resource Development (HRD) to impact organisations today and those in the future. The chapter also provides a review of the book's structure, objectives and context.

1.2 Introduction

1.2.1 Background to the Volume

The purpose of this section is to introduce the reader to the main themes of the book. It seeks to outline the key context and concepts explored across the chapters and enable the reader to examine the importance of understanding future trends in HRD across the globe. The idea of producing this volume arose from the 20th University Forum for Human Resource Development (UFHRD) conference in Nottingham. Participants across the globe travelled to the city to advance HRD thinking and practices and, together, celebrate the achievement of the HRD community. This was a great platform to debate how organisations prepare themselves to address future HRD in establishing effective organisations. It was the beginning of a journey to produce a set of chapters that offer the reader insightful knowledge on how to address future challenges and opportunities. It is simply not enough to highlight the important role of academic debate in organisational development, but resources that can have a meaningful impact upon organisations and individuals from a multi-level perspective. This entails considering the effect of context, both internally and externally, as well as employee perceptions and understanding of HRD and what this means for learning, creativity and growth. Covid-19 reinforces this point and the need for HRD to shape future practices including

innovation, performance, flexibility, well-being and management behaviour. The scale of the change is extraordinary as the pandemic has drastically changed, in just a few days, the way we work, communicate, socialise and learn. The range of the latter is not restricted to organisations or employment. Millions of children and higher education students across the world are studying at home, many in the case of the latter with support from academic staff now also facilitating learning from home. Home study is not, however, exclusively focused on formal learning contexts with many people taking advantage of tuition provided by professionals in, for example, cooking, baking, gardening and a wide range of crafts. Those learners and those providing tuition are doing so as a means of occupying some of the time that has become available to them because of the pandemic requirements to say at home and are using technology to facilitate learning. Therefore, this volume could not be more timely given the new realities that everyone is now facing. People need to rethink how they learn, how they implement learning activities, identify new methods of leaning resources and, most importantly, how technology can change the way HRD is understood and conceptualised by the academic and professional communities.

On a personal level, it was sometimes difficult to understand existing management perceptions in addressing organisational HRD needs. We believe that any attempt to fully utilise HRD principles requires sufficient knowledge (both at individual and organisational level), effective leadership skills and appropriate assessment of the wider business environment. It is now the time to take effective actions in changing old-fashioned perceptions on learning and development and offer the space where organisations can feel secure in making effective changes through evidence-based information. In an increasingly technology-driven business environment, significant changes are taking place which are challenging longstanding assumptions about the nature of work and the roles that humans will play in the workforce of the future (Schwab, 2016; Manyika, 2017). Digitalisation is a significant and influential factor in shaping the roles of humans in future workforces, hence the title and focus of this volume. The following section provides a further assessment of how HRD can respond to some of the challenges associated with digitalisation and related changes in the future.

1.2.2 Status and Future of Digitalisation and HRD

Loon (2017) lists fifteen learning technologies current at the time of writing his book. These include virtual learning environments; digital/learning repository and document sharing tools; blogs (and vlogs); media streaming systems and video learning; synchronous communication tools; digital/video games; simulation games and mobile learning (p.8). Some of these have come to the fore in response to Covid-19. For example, virtual learning environments have long been established but have probably been the saviour of being able to continue provision of higher education courses which have switched to online learning across the world. Synchronous communication tools such as MS Teams and Zoom have been the saviour of many business operations by facilitating staff meetings, client/customer interactions and other processes carried out from homes rather than from or in offices. The technologies in the list are also being utilised to deliver and facilitate learning required to prepare for a return to work during the crisis; for example, training employees on how requirements for continued social distancing will be met in workplaces.

The final item on Loon's list is the ubiquitous 'other' and thus implies more than the fifteen discussed in detail. Two forms of technology that enabled learning but are not specifically mentioned in the list are Webinars and Massive Open Online Course (MOOCS). Webinars can utilise a range of software and be incorporated into learning platforms and virtual learning environments. They have been found to be welcomed by learners as a development tool (Gegenfurtner, Zitt & Ebner, 2020). However, Gegenfurtner, Zitt & Ebner (2020) make a number of points on possible drawbacks in the use of webinars. These include the length, timing and opportunities for interaction with those delivering the webinar. They also make the point that strong and reliable internet connections and bandwidth are essential requirements. That point could, of course, apply to most forms of digital learning. MOOCS is an acronym for Massive Open Online Courses. Then use of the word 'courses' may suggest learning associated with education and qualifications. This impression may be reinforced by the origins of MOOCS in open educational resources, and so early MOOCS being made available by universities. However, while many are still provided by universities, this is no longer the case and other providers are now active. Those still provided by universities are also not necessarily linked to qualifications and can be taken for whatever reason an individual has for engaging in them. There is also no reason why employing organisations cannot take advantage of MOOCS by recommending selected courses to their employees as a means of meeting their development needs or indeed by incorporating completion of such courses in their own in-house development programmes. MOOCS are by definition open access. They are also, according to Farrow (2017), an argued exemplar of disruptive innovation in learning. Farrow though does also question the potential of MOOCS and not least by challenging the claimed levels of disruption that they are argued to represent.

The authors of this chapter have chosen to highlight webinars and MOOCS because they are likely to have been among the most common responses to the 'stay at home' conditions introduced by national governments. The former will have been a fairly easily implemented way for employers to continue to deliver learning to employees. The latter, if not necessarily being a first-choice response by employers, may well have enjoyed increased use by individuals with unexpected time on their hands at home. So, those two forms of digitalisation of learning are probably among the most common current examples at the time of writing during the Covid-19 crisis. For that reason, they may well also quickly become more ubiquitous post-crisis and so two of the more common examples in our everyday experience. There is one further aspect of digitalisation that we are confident will also become more common, although in a less overt or obvious manner. This is the use of learning analytics.

Learning analytics can be an umbrella term to encompass data, metrics and analytics which can be used to enhance the effectiveness of learning experiences. However, it is also used in a specific sense to refer to collection and analysis of learner behaviour and interaction with digital learning (Stewart, 2017). For example, time spent on the learning programme or on individual components, such as reflective exercises or progress checks, can be monitored and compared across the learning populations. More sophisticated data such as time spent in discussion boards; number, nature and content of contributions to discussion boards; and learner preferences for different components of multi-media programmes as measured by usage of each can be monitored and analysed. Analysis can also include differences against variables such as age, gender and time variables such as day of week or time of day. Statistical techniques are often applied to produce such analyses. The primary purpose of learning analytics is to improve digital learning experiences, sometimes for current learners where adjustments are possible but always for future learners. There are nevertheless legal and ethical questions that need to be addressed in the use of learning analytics (Jisc, 2018). That said, it is believed that their use will continue to grow, especially in digital learning, and that the results of that growth are likely to lead to innovative and disruptive impacts on digital learning.

Artificial intelligence (AI) is the notion that machines can, one day, perform the same cognitive tasks as human beings. AI is a broad suite of technologies that also include machine learning and learning analytics. A fundamental characteristic of AI, such as Apple's Siri, is its ability to learn effectively, which places learning in the same frame as intelligence. The case AI in HRD, or learning and development (L&D) as it is perhaps more widely known in the workplace, provides some key insights as to the trajectories that are likely to further grow in the future.

Read and Think

AI can help to address the long-standing tension of being able to be efficient in the delivery of learning and development opportunities while at the same time being able to personalise the learning experience. In many organisations, mandatory training such as those involving occupational health and safety have to be retaken regularly to ensure that staff's knowledge and skills are to up-to-date. However, while there are fundamental foundations of such training that needs to be shared by everyone, the typical nature of such training tends to be undifferentiated in terms of the experience of the person, their professional needs and the degree in which the training needs to be delivered ondemand. At the person-level, AI enables the learning opportunity to be moulded to the needs of the person such as allowing learning to be shaped according to intrapersonal attributes and preferences of the individual such as their learning styles for those that prefer text-based, audio or audio and visual formats. In terms of professional needs, AI allows for sophisticated differentiation based on the person's role such as their organisational function e.g. outdoors or in the office, with heavy machinery or whether they are a manager. Different roles will have distinctive needs. Finally, AI can help track when a person last underwent training and remind them when they need refresher training, identify the learners' areas for improvement and provide more targeted training at the right time and pace.

1.3 Aims and Objectives

This volume has a primary focus on how what might be termed information and communications technologies (ICT) affect organisational and individual life through innovation, creativity and learning. Here, we use the term digitalisation to encompass emerging, as well as established, technologies. For example, learning analytics, virtual reality and artificial intelligence are currently limited in their impact but will be much more significant in their influence on HRD in the future. It is also debatable whether these concepts are accurately placed under the umbrella term of ICT. The term 'digital learning' has also gained currency with the UK Chartered Institute of Personnel and Development (CIPD, 2019). Hence, while the term ICT may have more familiarity, it is believed the idea of digitalisation is more appropriate to the content of this volume.

The scope of the volume is to capture the growing trends around digitalisation and how HRD can respond to these changes at micro and macro levels. The lessons of responding to Covid-19 to facilitate learning in a wide range of contexts will only add to the knowledge of how best to utilise technology in designing and delivering HRD. This volume provides a unique blend of chapters that offer critical assessment around HRD practices and outline how technology can be used as a learning tool to support individual and organisational goals. It aims to create a number of learning resources that will enable the reader to examine a range of wider implications on how to address learning needs in the future through utilising technological tools and innovations. Thus, it provides a sound platform for efficient and effective use of technology in HRD and for applying the lessons that will emerge from innovations arising from the work and non-work learning activities associated with the

circumstances caused by Covid-19. In turn, this will enable practitioners to harness the potential benefits of digitalisation, and to avoid the potential drawbacks and pitfalls of simply being either fascinated or inhibited by technology, rather than assessing and evaluating how best to put it to productive use.

1.4 Book Content

With the aims and objectives in mind, this volume contains nine chapters that cover distinct perspectives of the role of technology through the lens of HRD and its impact on organisations in a digitally connected world. The prominence of technology and organisations' dependency on it of course varies. It can facilitate, mediate, moderate, impede or create opportunities. However, while the impact of technology is relative, the two viewpoints that most people agree on is its high degree of ubiquity and that sooner or later technology will eventually become more disruptive and have a more significant impact, even in areas that initially seemed unlikely.

Chapter 1 provides an introductory assessment of the book's key dimensions and offers an insight into the key themes arising from the impact of technologies' disruption on HRD and organisations. The chapter allows the reader to get an overview of the context and access the key objectives of the book.

Chapter 2 offers insight to how new technologies, such as tools for digital communication or artificial intelligence, can have an impact on the quality of jobs by affecting work outcomes such as job satisfaction, performance, health or professional development. This chapter provides HRD with the empirical evidence it has been craving by demonstrating the degree of impact of technology in the field. This chapter contains an investigation that addresses the research questions; what are the effects of new technologies at work on individual work outcomes? and what are the implications thereof for the role of HRD to improve the quality of jobs? By reviewing and systematically analysing twenty-two studies, this chapter provides insight into the definition of technology and components of HRD

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from theories explaining relationships between the work context and different kind of work outcomes. Two sources were applied: studies from a concurrent review were reanalysed for the present purpose of identifying relationships between new technologies and work outcomes, and additional searches within domain specific databases were conducted in finance and healthcare.

Chapter 3 compare their "special way" regarding HRD education provision in the era of digitalisation to inform HRD professionals and policy makers on possible future actions. In particular the chapter undertakes a comparative assessment between the UK and Switzerland given that they are non-EU members and have autonomy in charting their own digital strategy. A nation's digital policy is ever increasingly important because technological advancements heavily impact the way people work while most recent socio-political and demographic changes (e.g. 'Brexit', economic instability, higher education reforms, generation attitude changes and a pandemic crisis) increase the need for critical insights on how digital competences of the workforce can improve and sustain business competitiveness and sustainability. The European Union (EU), and most national governments globally, have placed emphasis on digitally equipping graduates to satisfy governmental and organisational needs. While some organisations remain reluctant to foster their workforce's digital qualifications in the belief of having them poached by competitors, many view digitalisation as an opportunity to enhance employees' skillsets with company specific competences for competitive advantage.

Chapter 4 addresses the calls for research exploring the implications of HRD and its likely role in the gig economy. This chapter reflects on a case study of a 'new law' digital platform firm that sought to implement an HRD strategy for its highly diverse and gig-based workforce. At a time when HRD has seen its role move from specialist to distributed, demonstrating on-going relevance and contribution to global, real world issues become paramount. The amorphous, often hidden and fast changing nature of the gig economy presents renewed challenges for scholarship and practice in HRD. This chapter proposes how a critical HRD lens can reassert HRD as a key discipline in supporting a broader range of interests and needs in the gig economy. The critical HRD lens contributes to understanding the

nature of precarious work in the gig economy by exposing localities of power and disadvantage but also practical solutions for leveraging equality, capability development and knowledge transfer in the gig economy.

Chapter 5 presents and assesses key areas of HRD and how they can be used to enhance an organisation's creativity and innovation capability. Particular focus is paid to recruitment and selection (e.g. the personality traits that organisations should prioritise for developing innovation capability, such as extraversion and openness, and the gamification of their measurement), training (providing content-specific knowledge and building confidence in equal measure, facilitated by coaching) and reward (ideally non-financial rewards focused at team level) and where technology may play a role. These topics are reviewed within a multilevel context, that is, one that considers both individual and team levels. This approach is particularly important given that much of the innovation process is team-led and organisations seek a holistic understanding of the complex phenomenon of innovation. Also considered is the role of innovation climate, the development of which can be facilitated by HRD practices such as training and reward as they signal that the organisation values innovation which, in turn, solidifies a climate of innovation.

Chapter 6 responds to challenges facing the HRD community in how far it should proactively take responsibility and get involved in shaping future skill development and human interactions with technology? Or will HRD, as in the past, retain a passive observer position? There is much talk of the displacement of humans by technologies with some analyst reporting that employment in 44% of occupations in the UK is creating uncertainty about which jobs will continue. The disruption to current approaches to skill development and identification of what new skills are needed requires attention. For people to retain relevance, more attention is needed on those skills that resist automation and technology replacement by the Fourth Industrial Revolution.

Chapter 7 offers an overview of e-learning and the value it offered during lockdowns imposed by many governments. The sudden lockdown of many businesses and educational institutions

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necessitated the need of e-learning more than ever before. E-learning is a well-known training and learning approach and is well-practiced by many businesses globally to support and enhance their employees' learning experience. E-learning represents the safest way to train in times of global crisis events as it allows the trainers and the trainees to virtually interact through an online platform which serves as the e-classroom, free of the dangers entailed by physical interaction. Yet, the extent to which this sudden shift to online learning represents the future of workplace training and learning or whether it is just a temporary alteration for human resource development is debatable. The Covid-19 outbreak is expected to accelerate learning and work reinvention, resulting in multiple implications for businesses in relation to institutional resilience.

Chapter 8 explores the benefits of such innovations involving increased productivity and efficiencies, and minimising pressures on human workers, freeing up their time to provide more complex forms of care. However, technology is costly, subject to failure and can also impede care provision and cause issues such as being more time consuming, changing working relationships, roles and responsibilities. As a result, the chapter considers the human resource development implications in operationalising technological innovations in care, comprising careful and well-communicated implementation; systematic integration into work practices, taking account of revised roles and responsibilities; addressing user anxieties; and ensuring provision of training and development activities which reflect changing skills and competencies.

Chapter 9 unpacks how small and medium enterprises (SMEs) in the creative enterprise industry play a critical role in a nation's economic growth, its development of jobs and subsequent wealth creation. It explores the constraints facing creative enterprises have been seldom explored or critiqued extensively. This chapter investigates the external factors hindering the growth and development of SMEs in creative enterprises in Gulf Co-operation Council (GCC) countries (Saudi Arabia, Kuwait, Bahrain, Qatar, Oman and the United Arab Emirates) and suggests implications for research and practice. By doing so the chapter demonstrates how HRD plays a vital role in overcoming issues facing SMEs in creative enterprises at a national level. Challenges in realising a truly genuine SME

industry based on creative enterprise initiative and implementation are many and often profound. This study highlights how economic and labour market factors – compounded by a faltering education system – have negatively impacted the development of creative enterprise in GCC.

Chapter 10 is an interview with Dr Wilson Wong is Head of Insight and Futures at the Chartered Institute for Personnel and Development (CIPD) and Chair of the Human Capital Standards Committee at the British Standards Institution (BSI). Wilson shares with us his insights as to what the future holds for HRD and organisations in a post-pandemic world. In the interview Wilson argues that technology has not lived up to its promise in our fight against Covid-19. He intimates that there are underlying the problem is multi-faceted, and therefore the solution(s) need to be holistic from taking care of the environment to preclude these events from occurring again, government policies in preparing nations for these highly unlikely but impactful events to organisational business models that mediate technology to enhance cost efficiencies.

1.5 References

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