RESPONSES TO DIGITAL HUMAN RESOURCE MANAGEMENT MODEL: SUGGESTIONS FROM DISRUPTIVE INNOVATION THEORY

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ABSTRACT
Purpose – Considering the popularity of digital technologies, the study aims to provide additional perspective of why managers have low commitment to digital human resource management (HRM) model and how they should interpret and respond to this model.
Body of knowledge – The study indicates that rushing to adopt digital HRM model is not encouraged, even though the model has potential benefits in terms of organizational efficiency and employee experience. However, the ignorance of its usage possibilities can make HR managers and professionals lose their control over HR activities to other business units.
Implications – Managers need to understand the driving factors of digital HRM model, do critical analysis of its relation to the current business model, and evaluate potential impacts of its adoption on the organization. Based on these analyses, managers can establish a suitable response plan to the disruption, which can range from ignorance at the first time to full integration in the long run.
Originality/Value – The emergence of digital technologies have disrupted the way organization operate their internal business processes. Compared to other functions, human resource management is likely to be overlooked in organization's digital transformation plan, even though human resource is considered to be an important resource for its competitive advantages in today's uncertain and fast changing world. The study contributes to drawing additional attention to the importance of digital HRM in organization's digital transformation plan and provides additional perspective to interpret and implement digital HRM.

Keywords: Digital HRM, Disruptive innovation, Managerial responses

INTRODUCTION
Digital technologies can be defined through three distinct but related elements—digital artifacts, digital platforms, and digital infrastructures (Nambisan, 2017). Digital artifacts are objects of which embedded functionalities are activated or edited by interaction with users and other digital objects, or by re-arrangement of their items and contents (Kallinikos et al., 2013). Applications, hardware or software are examples of how digital artifacts look like (Nambisan, 2017). Digital platforms are software-based systems that provide shared service or functionality for complementary software interoperating with them (Tiwana et al., 2010) such as Apple iOS or Google Android (Nambisan, 2017). Digital infrastructures refer to "digital technology tools and systems that provide communication, collaboration, and/or computing capabilities such as cloud computing, data analytics, online communities, social media, or 3D printing" (Nambisan, 2017: 1032).

Digital technologies have disrupted many industries and shifted the way organizations operate from traditional to more innovative models (Paul et al., 2023). They support organizations to improve customer experience process, leverage core competencies (Zhang and Chen, 2023), and

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create new possibilities (Paul et al., 2023). In terms of HR function, the application of digital technologies can make HR processes more distinctive, efficient and consistent (Bondarouk et al., 2017b), thereby creating value for targeted employees and organizations (Bondarouk & Ruel, 2009). However, compared to other functions, human resource management (HRM) still has been lagging behind in terms of digital adoption or transformation (Thite, 2022). Low managerial commitment to HR digital transformation can be attributed to the lack of robust and consistent empirical evidence on the benefits of digital technologies for HRM processes and organizations (Bondarouk et al., 2017b; Vrontis et al., 2022). It can also be resulted from managers' personal factors such as capability, experience or perception, which has attracted inadequate attention in HR literature. Moreover, despite different possibilities brought by different types of digital HRM technologies, the role of types and characteristics of digital HRM in explaining the inconsistent effects of digital HRM and the ways to integrate digital HRM into traditional HRM system have been discussed to a limited extent (Priyashantha, 2023; Zhou & Zou, 2023).

Considering this background, by drawing upon the disruptive innovation theory and integrating this theory with current literature on digital HRM, the study aims to provide additional insights about factors leading to managerial ignorance of digital HRM adoption and practical implications for managers on how to effectively respond to HRM digitalization pressure. To achieve this goal, the study is organized into three parts. The first part is an overview of different types and characteristics of disruptive innovation. The second part is a general discussion about different possible responses to disruptive business models and factors underlying managers' non-response to disruptive innovation. Finally, based on these two sections, digital HRM is critically evaluated whether it is a disruptive innovation and then managerial implications for better responses to these disruptive changes are given.

METHODOLOGY

The study adopts research design for conceptual papers suggested by Jaakkola (2020). First, the disruptive innovation theory is selected as domain theory because it enhances understanding of digital HRM adoption and implementation. It does not only explain managerial paradoxes (Sandström et al., 2014) but also provide useful guidelines to avoid managerial myopia (Kim & Mauborgne, 2019) in adopting innovations, which are not explicitly mentioned in other adoption models such as TAM (technology acceptance model), IDM (innovation diffusion model) or TOE (technology, organization, environment, and people). Disruptive innovations bring both opportunities and challenges for organizations (Cozzolino et al., 2018; Kim & Mauborgne, 2019) and so does digital HRM. Through automation, information and collaboration (Theres & Strohmeier, 2023), digital HRM can generate positive outcomes such as employee productivity (Iqbal et al., 2019), organization innovation (Jani et al., 2023); HRM efficiency and effectiveness (William & Singh, 2023). However, it also creates problems such as increasing work-related stress (Blom et al., 2019), reducing quality of communication and social relationship in organizations (Chugunova & Danilov, 2022), or enhancing social discrimination (Tambe et al., 2019). Second, the study searched the Web of Science, Scopus and citations for relevant literature. The study used keywords "disruptive innovation theory" to identify articles that define characteristics and types of disruptive innovations, and provide ways to respond to disruptive innovations. The study then used keywords ("Digital human resource*" OR "digital* HRM" OR "e-HRM" OR "electronic human resource*" OR "HRM digitalization" OR "smart HRM" OR "smart human resource management") to search articles related to types of applied technologies and consequences of digital HRM. Since literature review is not the study's ultimate goal, the study used topic modeling software (Mallet) to analyze abstracts of identified articles and select articles that are highly correlated to the study's selected concepts and arguments.

Disruptive innovation

Innovation can be defined in different ways, yet in general, it refers to the process of creating and implementing something new or novel (Anderson et al., 2014). It is considered to be the key to competitive advantage in today's world of uncertainty and continuous change (Assink, 2006). It creates significant value to new entrants, yet it also generates disruption or disastrous effects on the existing players in the market (Kim & Mauborgne, 2019). Specifically, although rapid advancements in digital technologies enable more innovative solutions for organizations, they also increasingly impose pressures on organizations to anticipate disruption in order to stay ahead of competitors and to retain customers (McCausland, 2023). This paradox may explain why disruption and innovation are often mistaken to be the same (Kim & Mauborgne, 2019) and Christensen et al. (2015) worried that disruptive innovation might have been wrongly labelled for "any situation in which an industry is shaken up and previously successful incumbents stumble". Managers and practitioners are even warned that disrupting industries or even their own companies is the only way to survive, succeed and grow (Kim & Mauborgne, 2019). This misperception about innovation, disruption and disruptive innovation make organizations overlook other types of innovations (Kim & Mauborgne, 2019) that ranges from incremental or sustainable innovation (remodeling functionality) to radical or disruptive innovation (breakthrough, paradigm shift) (Assink, 2006). More importantly, this misperception can make managers end up using the wrong tools for their context, thereby reducing their chances of success (Christensen et al., 2015:46).

To avoid misunderstanding and ineffective application, Christensen and other original authors reemphasized two basic characteristics of disruptive innovations. First, disruptive innovations arise in two overlooked markets by incumbents: low end market and new market. Low-end market refers to customers who are price sensitive and look for good enough products or services, and are not willing or unable to pay for additional product attributes (Droege & Johnson, 2010). New market refers to non-consumers who are turned into consumers of specific products and services (Christensen et al., 2015). Second, disruptive innovations are initially considered inferior by mainstream customers, but then successfully penetrate into mainstream markets when their performance improves over time (Christensen et al., 2015). These characteristics provide two important implications. First, the theory implies neither guaranteed success for unit of disruptive innovation adoption nor failure of incumbents. Second, the theory does not really classify disruptive innovations, even though it enlists different forms of disruptive innovations such as discount department stores, low price or cheap mass-market products (Markides, 2006). Failure to categorize disruptive innovations into subgroups is problematic because different types of disruptive innovations can occur in different time (Cozzolino et al., 2018), have different potential disruptiveness (Habtay, 2012), thereby providing different competitive effects and requiring different responses from affected actors (Markides, 2006). The following section provides an overview about the three most common types of disruptive innovations have been discussed in literature: technology, product and business model.

Disruptive technologies

Technology generally refers to devices, systems or tools that are used to transform inputs such as labor, capital or information into outputs. Disruptive technologies are technologies that disrupt or redefine the established trajectory of performance improvement. They are initially unappealing to mainstream customers, yet valued in remote or emerging market (Christensen & Bower, 1996). Disruptive technologies are often a result of intensive research and development activities. They are not necessarily related to new products or new market development (Boer & During, 2001). They themselves do not paralyze incumbents, but rather bring opportunities that require the subsequent development of disruptive business model to capture and commercialize (Cozzolino et al., 2018). In other words, the disruptiveness of new technologies can be only achieved when they are integrated within a business model (Osiyevskyy & Dewald, 2015).

Disruptive business model

Business models can be defined as business logic or system of interconnected and interdependent activities (Amit & Zott, 2012) that determines how firms create, deliver, and capture value (Teece, 2010). A new business model is considered to be disruptive when it disrupts or redefines the way or the meaning of value creation and capture (Cozzolino et al., 2018); or when it increases economic benefits for organizations either by attracting new customers or encouraging current customers to purchase more (Markides, 2006).

Disruptive business models do not always require the emergence of disruptive technologies (Cozzolino et al., 2018) or involve new products or services (Markides, 2006). It can be driven by market demand that refers to the redefinition of the established value propositions or the role of firms in existing value chain or market (Habtay, 2012). For example, a company can disrupt the existing market by introducing a low-cost model of which effectiveness is reinforced further by the emergence of internet and digital technology. Media business industry is disrupted by the entry of technology companies such as Google or Facebook when these technology companies redefine how the news is created and revenue is generated (Cozzolino et al., 2018). However, disruptive business model may require time to emerge (Cozzolino et al., 2018) and may not be always superior to the established or traditional one (Christensen et al., 2015).

Disruptive products

Disruptive products are new-to-the-world products. These new products disrupt consumers because they disturb prevailing consumer habits and behaviors in a major way, and disrupt producers because their production requires different competences and complementary assets (Markides, 2006). Disruptive products are simpler, more convenient and less expensive, but inferior to the standards or value proposition of the mainstream customers (King & Baatartogtokh, 2015). They are driven by supply-push processes or those who are responsible for new technologies rather than by demand side (Markides, 2006).

These three types of disruptive innovations are closely related to each other and sometimes hard to separate clearly. Disruptive technologies and disruptive products need to be commercialized through a business model for benefits. This explains why disrupters tend to focus more on getting business models rather than only products (Christensen et al., 2015). Because of its importance and dominance, the following section provides different ways in which managers can response to the emergence of disruptive business models.

DIFFERENT RESPONSES TO DISRUPTIVE BUSINESS MODEL

Although a disruptive business model differs from an established one, it does not mean the former is always superior to the latter. Therefore, assumptions that disruption is the only way to survive, grow and succeed, and rushing to embrace new business models can be detrimental to established companies (Charitou & Markides, 2003). By considering the nature of disruptive innovation and organization's internal and external factors, there are a number of ways in which managers can react to the disruption caused by business model innovation as follow:

Ignore the innovation. It normally takes a long time for a new business model to emerge and function well (Cozzolino et al., 2018). The new model may not be financially attractive to pursue because it requires significantly different skills, competences and assets (Charitou & Markides, 2003). Moreover, the improvement rate of disruptive technologies that drive business model is not as fast as that of sustaining technologies (King & Baatartogtokh, 2015). Therefore, established organizations can ignore disruptive innovation and focus on making their core traditional business more attractive and competitive (Charitou & Markides, 2003). Literature shows that many incumbents with high technology can still be profitable by focusing on satisfying the most demanding but least price sensitive customers and ignoring disruptive innovation. For example, despite the arrival of digital cameras featured with light weight, small size, multiple functions and affordable price, analog cameras business with extremely high-resolution technology still remains profitable by focusing on serving professional photographers better (Yu & Hang, 2009). However, the theory of disruptive innovation suggests that disruptive innovations continue to improve and move upstream to find the next group of customers who provide higher margins and are less price sensitive (Droege & Johnson, 2010). Therefore, it is necessary for organizations to take actions to respond to the disruption in the long run.

Disrupt the disrupter. Because customer values or preferences may not be fully anticipated in advance (cf. Habtay, 2012), it is possible for established organizations to take actions to attack back the disrupters by launching another innovation so as to attract and retain customers. For example, both Apple and Sony responded to the introduction of cheap products in their business by launching and emphasizing style and design as attributes of their products (Charitou &

Markides, 2003). Or in credit card camera industry, the established disrupt the entrants by providing superior offerings (King & Baatartogtokh, 2015).

Adopt new business model. Although a disruptive business model is different from the existing one, the coexistence between these models are possible. In some cases, a new model can even benefit incumbents by allowing them to reach untapped customers (King & Baatartogtokh, 2015). Therefore, the established organizations can exploit opportunities arising from the disruption by either creating a new division (Christensen et al., 2015) or establishing an alliance and acquisition with disruptors and other incumbents (Cozzolino et al., 2018). To reduce potential negative impacts of disruptive models on organizations, some scholars such as Christensen et al. (2015), or Charitou and Markides (2003) suggest that organizations need to separate the new business division from core business and provide the new division with decision making autonomy on its own culture, values, budgetary and investment policies. In contrast, Cozzolino et al. (2018) indicated that integrating the new business model into the current one through enhancing similarity between them can facilitate positive transfer and then synergy between them. The authors also emphasized that alliance and acquisition may provide a faster and more secure way to compete when disruptive business is less likely to be related to traditional core business; and threats from disruption is in its early stage.

Transform into a new business model. It is also feasible for incumbents to abandon their existing ways of doing business and completely embrace the disruptive business model. First, with first-mover advantage or market leader status, it is not too difficult for the established firms to scale up the new model by using their strong financial and marketing resources (Kim & Marborgne, 2019). Moreover, their strong reputation and creditability in the market can make it easier for them to obtain acceptance from existing customers and potential customers for their changes in value propositions (Charitou & Markides, 2003). As a result, their profitability when transforming business model is less likely to be affected.

The way in which organizations respond to disruptive business model depends on their ability and motivation to respond, which are determined largely by the nature and size of conflict between traditional and new business model as well as the improvement rate of innovation (Charitou & Markides, 2003). Details about what kind of responses are suitable for what condition is beyond the scope of this study. However, in general, adopting a disruptive business model should be considered a priority when organizations enter a new market without first mover advantages, when the existing way of doing business is clearly inappropriate, and when organizations aim to scale up its disruptive products to the mass market (Markies, 2006).

MANAGERIAL FACTORS LEADS TO FAILURE OF DISRUPTIVE INNOVATION ADOPTATION

Despite the disruptiveness of disruptive innovations and the availability of different ways to respond, many managers still decide to ignore or fail to take action on this kind of innovation. This kind of managerial decision or reaction can be explained by the effects of uncontrollable external factors such as demographic changes, or institutional and social regimes (King & Baatartogtokh, 2015); the unavailability of enabling and complementary technologies (Petzold et al., 2019); organizational culture, organizational structure (Yu & Hang, 2009), or organizational politics (Henderson, 2006). However, according to the theory of disruptive innovations and related literature, this kind of managerial reaction can also be resulted from managers' own cognitive failures (Henderson, 2006) as below:

Misperception of disruptive innovation. When managers do not perceive disruptive innovations or new offerings as either opportunities or threats, they tend to remain inactive (Petzold et al., 2019) with or without improving their current ways of doing business (Charitou & Markides, 2003). For example, managers of Gillette decided to ignore the threats by disposable razors and focused on improving their competitive positions in the market (Charitou & Markides, 2003). Manager's misperception can be due to the fact that they are too captured or trapped with their current most profitable and demanding customers (Henderson, 2006). It can also be affected by their intuitive sense of the nature of disruptive innovation. Because disruptive innovations normally starts at small size, managers consider them as inferior (Yu & Hang, 2009) and believe that disrupters cannot compete effectively against them (Henderson, 2006).

Low capabilities. Manager's failure to react to the disruption can result from their low capabilities (King & Baatartogtokh, 2015; Boer and During, 2001) to capture the value of disruptive innovation. For example, Xerox seemed to misunderstand the value of Canon's dry-toner innovation in reducing service costs and customer inconvenience (King & Baatartogtokh (2015). Similarly, despite the availability of analytics tools, HR analytic programs are still mostly used for historical reporting (Angrave et al., 2016), and many managerial decisions are still intuitive rather than data driven (Jewell, 2017). Managers can also be incompetent to manage organizational resources to respond to the disruption or to figure out the connection between the development of disruptive technologies and changes in consumer's latent preference and market conditions (Yu & Hang, 2009). For example, traditional chocolate confectionery fails to detect changes in consumer's latent preferences because they fail to search in broader market peripheral to their current one (Henderson, 2006). Managers who work in relationship management software had overlooked the threat by salesforce.com (King & Baatartogtokh, 2015).

Expectation of failures. In some cases, managers decide to remain inactive because they anticipate difficulties in changing ingrained habits and behaviors of current employees in the organization (Henderson, 2006). Moreover, because the adoption of disruptive innovation often involves risk and may not be profitable (Henderson, 2006), managers ignore the disruption in order to protect their expected rewards and incentives (Yu & Hang, 2009).

Disruption is a process, not an outcome (Christensen et al., 2015). Therefore, although it may not be necessary to make immediate changes in organizations, it is essential for managers to develop a strategic plan and get organizations prepared when facing disruptive innovations.

PRACTICAL IMPLICATIONS FOR RESPONSES TO DIGITAL HUMAN RESOURCE MANAGEMENT

Before providing suggestions for managerial responses to disruption caused by the digital HRM model, the study evaluates digital HRM model against characteristics of a disruptive innovation.

Digital human resource management as disruptive innovation

An early adoption of information technology in HRM was the mechanized employee information system appearing in the 1940s (DeSanctis, 1986). During 1960s and 1970s, the advancement in computing technologies together with the affordability of computers urged organizations to adopt HRIS (human resource information system) – a more sophisticated system to effectively manage personnel data (Kim et al., 2020). Later on, the widespread use of internet and the development of communication technology (Marler & Fisher, 2013) allow organizations to perform their HR activities regardless of time and geographical locations. More recently, more disruptive technologies such as artificial intelligent, robotics, blockchain, the Internet of Things or other advanced SMAC (social, mobile, analytics and cloud) technologies allow organizations to standardize HRM practices and improve the speed and quality of HRM decision-making process by reducing involvement of people (Ulatowska et al., 2023). Different terms such as virtual HRM, web-based HRM or e-HRM have been developed to reflect the continuous applications of digital technologies in HRM field over time. However, digital HRM is considered to be the broadest term to represent all applications of digital technologies to perform HRM practices (Theres & Strohmeier, 2023).

The study considers digital HRM as a disruptive innovation for two main reasons. First, human resource management function is generally overlooked by managers in organization's digital transformation plan (Bondarouk et al., 2017a), despite its importance in building and ensuring organizational capabilities to compete in turbulent business environment. Automation provided by digital HRM allows employees to have more time focusing on high-value tasks (Cooke et al., 2022). Connection through digital platforms such as organization's internal social network or e-learning allows employees to access different training resources both internal and external and learn at their own pace (Hamidianpour et al., 2016; Lin, 2011). Digital connection also encourages and enables employees to adopt continuous learning as well as facilitates exchange of ideas, information and knowledge among employees (Nayak et al., 2022). As a result, organizations can improve their learning capabilities to adapt to changing business environment (Njoku and Ebie, 2015). Al-Hawary et al. (2020) found a positive relationship between e-HRM and organizational learning capabilities. The characteristic of being ignored of digital HRM somewhat satisfies low-end origin requirement of a disruptive innovation. The low-end status of HR areas in digital business strategy can be influenced by a long history of perceiving HR as supporting role (Belizón and Kieran, 2021), and by lack of tradition to measure and communicate HR results quantitatively (Mathis et al., 2017). Managers overlook the adoption of digital HRM simply because they perceive investment in digitally transforming HR processes and practices expensive and unprofitable (Bondarouk et al, 2017a). In some cases, they are tempted to ignore HRM digitalization because of its complexity (Wiblen & Marler, 2021). Unlike other organizational functions, outcomes of HR decisions such as recruitment or promotion generate serious consequences for individuals and society in terms of ethics and equity (Tambe et al., 2019), which may make automation of HR activities struggle to balance between economic value and social value.

Second, although it is empirically supported that digital HRM offers cost-saving solutions to perform transactional or administrative HR tasks (i.e Parry, 2011; Bondarouk & Ruel, 2009; Malik et al., 2022), it still underperforms traditional HRM model in the aspect of human reaction and quality of relationship at work (Thite, 2022). For example, using a chatbot in HR activities allows Ernst & Young to cut off the workload of HR staff by 10 000 hours within only six months in 2018 (Kokshagina & Schneider, 2023). IBM reduced its HR costs by 107 million USD by applying several AI applications in its subsidiaries around the world (Malik et al., 2022). Martínez-Morán et al. (2021) also found that digital tools help organizations to conduct their talent management process at lower costs, shorter time with higher objectivity and better person-job fit. Conversely, Palumbo (2022) found that digitalization constrained face-to-face organizational communication and negatively impacted interpersonal relationships at work. Gupta et al. (2022) also found that digital HRM technologies increased mistrust and conflict among employees. However, digital HRM technologies have been continuously improved. AI and other advanced digital technologies can offer numerous solutions that facilitate the individualization and personalization of HRM practices and social exchanges and thereby improving employee experience (Malik et al., 2022). The dark side and continuous development of digital HRM technologies satisfy the second requirement of disruptive innovation that is inferior to mainstream market but will penetrate into mainstream market over time.

Recommendations for managerial responses and interpretation

Three broad HRM goals consist of HRM efficiency, HRM effectiveness and strategic contribution to organizational performance. As digital technologies advance, traditional HRM approach also improves (Nankervis et al., 2021). Although it is not certain which one improves faster and full automation of HR practices may not be possible (Popkova & Sergi, 2020), it is impossible to delay digital transformation of HRM in the long run either. Chapano et al. (2023) found that despite challenges such as lack of organizational capabilities or other external factors, the adoption of digital HRM technologies are generally not slowed down in South Africa regardless of technology types. Disruptive innovation theory and related literature discussed above, therefore, can provide useful guidelines and warnings for managers when encountering new ways of defining and performing HRM practices as below:

Digital HRM is not the only way to achieve HRM goals. Despite its potential benefits, disruptive innovation does not guarantee success. Therefore, managers should not interpret that digitalization is the only key to make HR function more strategic and more efficient. Zavyalova et al. (2022) found no relationship between digitalization of HRM and organizational performance. The authors indicated that some companies could perform well, and even become leaders in key performance indicators without adopting information and communication technology to perform their HRM activities.

Distinguishing types and characteristics of digital HRM is an important prerequisite to any response plan. There are different types of digital HRM, ranging from very operational ones such as automation of cabinet filing and information sharing to sophisticated ones such as automation of decision making. Each type has different improvement rates, produces different consequences (Strohmeier, 2009) and requires different resources in case of adoption. For example, operational technologies such as HRIS need basic ICT skills and tend to provide time and cost savings; relational technologies such as employee self-service systems require HR skills and can improve communication and cooperation between HR and employees within organizations; and transformational technologies such as e-learning and knowledge management platforms or human capital management systems require HR skills, business acumen and analytic skills and can support organizational change and other strategic decisions (Martin & Reddington, 2010). Therefore, it is essential for managers to distinguish types and characteristics of digital HRM in order to have other meaningful analysis and avoid confusion and different interpretations among stakeholders about impacts of digital HRM on organizations before adoption.

Response to digital HRM is inevitable. As disruptive innovation, digital HRM redefines how HRM practices create and capture value. At functional level, as its performance improves over time, digital HRM probably diminishes the role of HR professionals in performing HR activities. Rapid advancements in digital technologies such as algorithm, artificial intelligent or virtual and social community are allowing digital HRM to not only to augment the speed and quality of managerial decisions (Tambe et al., 2019) but also provide employees with experience of social or human interaction and communication similar to traditional HRM (Suen & Chang, 2017). Therefore, if HRM managers do not capture possibilities of these technological advancements, they may see HRM function being controlled by other business functions (Tambe et al., 2019). At organizational level, failure to adopt digital HRM may reduce organizational attractiveness to job seekers and organizational commitment from employees because both job seekers and employees attribute technology usage with the modernity and growth of organizations (cf. Bondarouk et al., 2017a). Therefore, response to or the adoption of digital HRM should not be delayed in the long run.

Digital HRM can start at low value HR areas and in collaboration with other departments. Like other digitalization, HRM digitalization often requires time and large capital investment (Parry, 2011). The question is how managers can overcome these challenges. Drawing on the theory of disruptive innovation, managers can initiate digitalization process at low end areas of HRM to overcome large initial capital requirement. In the language of HRM field, low-end areas can be interpreted as administrative activities, while high-end or mainstream areas would be strategic activities because ultimate goals of HRM are to become strategic partners and contribute to organizational performance. Literature review supports this assumption. Many studies found that digital HRM has mostly happened in routine administrative HR tasks such as payroll or filing cabinet (i.e Chapano et al., 2023; Bondarouk & Ruel, 2009; Bondarouk et al., 2017b). To shorten learning curves for HRM digitalization, HRM managers also can cooperate with other organizational functions that are more familiar with digitalization such as marketing or operations to learn more from their experiences and expertise.

Conducting a critical cost and benefit analysis is an essential part of any effective adoption decision. Because of inherent conflicts between digital and traditional HRM, managers should conduct critical analysis of the nature and size of conflict, the impacts of digitalization as well as technological improvement rate when deciding what HR activities to digitalize and to what extent. Generally, if the traditional way to conduct an HRM activity proves clearly inappropriate especially when an organization aims to attract different segment of workforce, that activity can be a great candidate for digitalization.

CONCLUSION

Disruptive innovations can exist in different forms: technological changes, new products or redefinition of how organizations create and capture values. Each type of disruption generates different effects and requires different responses from organizations. The theory of disruptive innovation generally explains why organizations fail to respond to the disruption and suggests a central role of managers' cognitive capabilities and perception in this failure. Although predictive power of theory is still under debate, it provides useful warning and suggestions for managers (King & Baatartogtokh, 2015). Drawing upon this theory, the study expands insights of how managers and HR professionals can interpret and react to disruption caused by digital HRM model. Human resources are considered an important source of competitive advantages in today's fast changing and competitive world (Jewell, 2017). While changes in people's preferences and values are not always predictable to managers, rapid advancements of digital technologies provide them with a lot of potential possibilities to adapt to changes including individualization and personalization of HRM activities that imitate the same employee experience provided by traditional HRM. Therefore, at organizational level, if managers continue to ignore the importance of digitalizing HRM practices compared to other functions, they can put their companies at the disadvantages. At functional level, if HR managers make intuitive judgements about digital HRM based on its initial inferior performance and do not take proper reactions towards it, they may see HRM activities and function be controlled by other business units such as finance and engineering.

However, managers should not consider digital HRM as the only solution to enhance the strategic position of HRM in organizations or rush to embrace it. Digital HRM not only exists in different types that have different characteristics and take time and cost to emerge, but also structurally differs from traditional HRM. Therefore, managers need to identify what HR activities to digitalize and to what extent based on a critical analysis of the nature and impacts of digital technologies on different HR functions in relation to organizational strategies. Managers can start digital transformation of HRM at low-end HR areas to overcome large initial capital requirement, and then gradually integrate it with the existing model and minimize structural tensions by enhancing the similarity between two models. HRM managers can also cooperate with other organizational functions to capitalize on their digitalization expertise and experience to shorten their learning curve.

CONFLICTS OF INTEREST

The author declares that there are no conflicts of interest found in this research

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