

The Essential Role of Human Values and Technology Driven HRM Towards a Smart HRM Process

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Abstract

Purpose: This study aims to propose a new model - a smart HRM processing that integrates a blending between data-centric technology and an innovative role of human values. The recent rise of big data and artificial intelligent technologies have but thrust HRM practices to rapidly embrace fact-based and data-driven cultures. This study highlights the importance of innovating, not diminishing the role of human values in coping with the application of technology across HRM practices.

Design/methodology/approach: This paper uses a systematic literature review by exploring prior research works on smart HRM process, technology driven HRM and innovative human values.

Findings: This paper thereafter proposes an integrated role of innovative human values and technology-driven HRM in achieving smarter HRM processes within the HRM practices' context. To achieve a smart processing of HRM, organizations must first be able to optimally align the application of technology with the human values aspect, which is predominant in HRM.

Research limitations/implications: This paper provides a theoretical perspective in understanding smart HRM processing, which integrates data-driven technology of HRM and human values. For future research, this paper opens for empirical analyses to further quantify the potential benefits of smart HRM processes that blend both innovative behavior of human values and HRM-specific technology.

Practical implications: This paper contributes to the existing knowledge of the HRM as well as provides a blueprint to the business stakeholders and policymakers on ways to integrate both roles of technology and human values in improving the current HRM practices. By using the

application of technology and innovative behavior of human values in HR practices, HR managers and recruiters can achieve a prominent process of smart HRM.

Originality/value: The paper contributes to the HRM literature by conceptualizing the inclusion of innovative human values, technology driven HRM and smart HRM process in big data era.

Keywords: Smart HRM, HRM Process, Technology driven HRM, human values, innovation

Introduction

With the arrival of Industrial Revolution 4.0, smart processing in Human Resource Management (HRM) is becoming even more critical. The core dimension of management mostly relied in the HRM process with the influences of internal and external aspect (Christiani & Peiro, 2018). In the meantime, the usage of big data, internet of things and much more technology driven tools has become the main factor for the improvement of HRM practices. However, recently, there have been concerns on the high reliance of data analytic in the process of human resource management (HRM). Data analytic is a method that employs use of data, analysis, and systematic reasoning in relation to people in an organization to improve individual and organizational performance (Nicolaescue, Florea, Kifor, Fiore, Cocan, Receu & Zanetti, 2019). Adopting the data-centric culture, most of the organizations tend to respond by building agile workplace environment that focuses on digitalizing the process of HR (Verma, Bansal & Verma, 2020). With the inclusion of new technology in HRM, this has drawn a shift in HRM philosophy that required HRM to be responsive, agile and inclusive (Garg et al., 2021).

Data analytics is argued to be valuable towards achieving a smart processing of HRM, but organizations are far from perfecting its potential function in those processes. Prior studies have identified several issues related to unsatisfactory performances from using data-driven process in the HRM practices such as, lack of talents that are sufficiently skilled to deal with the analytics process, data security and breach issues, and low impact on the overall integrative process. As such, HR's function is still struggles to advance toward quantifying and analyzing the more complex aspects of their workforce (Dahlbom, Siikanen & Sajasalo, 2019) and at the same time try to retain valuable employees (Claus, 2019). Evidence from prior literature indicates that HR managers remain unclear in how to focus on the value of each employee as an individual and also focus on the implementation of new technology in completing the work task (Nicolascue et al, 2019). Nevertheless, the HRM practices must keep performing the role of supporting the entire process of office management.

While it is imperative for organizations to integrate the technology of analytics into achieving a Smart HRM processing, its role will only be useful if it first enhances employees' experiences that is, by correctly informing organization of the employees' needs and behaviors. In organizations' haste to embrace the current trend of analytics in HRM, the element of human values, which has been fundamental to HR practices tends to be diminished in the process. Verma et al., (2020) highlight that, it is important to collaborate both roles of human and machines when enhancing the productivity and growth in digitalizing the HR process. Subsequently, this paper aims to conceptualize the roles of innovative human values and technology-driven HRM as a comprehensive approach to leverage the smart process of HRM in organizations.

Literature Review

Smart Human Resource Management (HRM)

To achieve an efficient HRM, organizations must be able to allocate its employees' talents according to opportunities. HRM consists a set of activities assumed by a specialized manager in planning for, attract, develop and retain an effective workforce (Kinicki & Williams, 2019). In an organization, this task would usually be performed by HR professionals where they will identify the appropriate employees (talents), manage and monitor their performances and self-developments over time for the entire employment period. In this context, employees or talents are salient to organizations achieving a competitive advantage (Greening & Turban, 2001). In mean time, organization need a strong HR system to ensure the implementation of HR practices to be effective and and successful (Wright & Nishii, 2007). Evidently, HRM practices integrate various practices, policies and philosophies with HRM activities which in turn achieve organizational goals (Malik & Lenka, 2019). For this reason, HR management has an important role to explore and manage a wider range of human resource activities as one of the way to capture and retain the best employees in their company.

The evolving nature of HRM practices has led to its various definitions in prior literature works. Generally, HRM involves a system or set of practices that influences the attitude, behavior and performance of employees in an organization (Osman et al., 2011). In addition, HRM is also seen as a function in an organization that is responsible to set up and carry out policies and practices pertaining to the employees . The activities involved in HR are planned, prepared and applied by the HR department in order to achieve the organization goals and objectives. The application of HRM practices in the organization will provide support in term of decision-making, work team, trust, empowerment and upgrading the employee's skills set and knowledge (Alosani et al., 2020). Evidence from prior literature widely indicates that, HRM practice is critical in leading organizations towards a higher system of work performance (Carmeli & Schaubroeck, 2005; Huselid & Becker, 2010; Madera et al., 2016).

HRM involves multi-level process and actors with various roles to implement the system successfully in the organization (Renkema et al., 2019). A good HRM practices enabled the employees to perform well and consequently the organization achieve its strategic goals (Kitchot et al., 2021). HRM may in sequence affected the organizational outcome either directly or indirectly (Katou, 2016). With the recent development of HRM, the role of HRM has become crucial and thereafter need to align with digitalization aspect.

A smart HRM practices requires a deep understanding in managing employees' performances across their various career stages with the organization. The role of HRM is not limited to the earlier stage where new talents are hired into the organizations, but it is also required at the various later stages such as, managing and monitoring the performances of those talents. Though Bibi et al. (2017) identified that one of the key challenges for HRM is in the retention of their talents' supply and skillful employees. Walker (2001) further emphasized that the task of retaining good employees should be the focus of any organizations if they want to stay competitive in the market. It is viewed as crucial for the current HRM process to be able to match the right candidates with the right positions in order to retain them longer in an organization. Significantly, HRM practices varied across department whereby the HRM will impacted the employees performance differently (Clinton & Guest, 2012). As such, the success of an organization is dependent on the employees' contributions with the support from HR management and organization (Malik & Lenka, 2019).

The HRM practices have evolved through years with the adoption of various tools and strategy. As such, with the development and latest technology, make the HRM practices to be more efficient and consequently, meeting the current need of managing organizations. According to Claus (2019) “there is a need to rethink HR’s value proposition once again and redesign talent management to fill the half-full glass yet again, this time to capacity (or all the way to fullness) by focusing on the employee and looking for the sweet spot where talent management practices are good for both the worker and the employer”. Thus, HRM practices must be constantly aligned with the current trend in best attempt to serve the interests of the organization’s relevant stakeholders.

Technology Driven HRM

The early intervention of technology in HRM started with the adoption of the HR information system (HRIS) and automation (Taylor & Davis, 1989). The rapid intervention of technology in HRM continued to be practices with the appearance of electronic (e-HRM) that was used in various application of HRM (CedarCreston, 2006). Obeidat (2015) is among one of the scholars that has shown a significant influence of e-HRM on various perception of HRM process such as system responsiveness and service quality. With regard to the beneficial outcome of technology in HRM practices, the ongoing process of integrating the HRM practices was continued since then.

The concept of digitalization in HR management has not only become synonymous, but prerogative with the forces of I.R 4.0. It is becoming a norm for managers to use data analytics generated from internally-embedded technologies to solve business problems and provide support to the organizations (Heuvel & Bandarouk, 2017). Under the pressure to transform the data collected from its various processes into becoming more meaningful for the decision makings, HR managers now have to develop competencies in interpreting and analyzing HR data analytics (Garg et al., 2021). Even now, HR data has become important sources for managers in an organization. The adoption of HR data enables managers to develop better employee data management, and also, assess their performances (Pillai & Sivathanu, 2021).

To stay relevant, HRM function across organizations have to realign their HRM strategies and practices consistent with meeting the demands of IR 4.0 (Sivathanu & Pillai, 2019). Most of business organizations nowadays opted to adopting various technologies and tools in their HRM practices (Islam, 2016). The adoption of technologies in HRM is expected to facilitate a smoother and well organized management processes (Galanaki et al., 2019). Consequently, HR managers should prepare themselves and their teams to be skillful in digital aspect. This digital skill is crucial for the managers to solve problem related to their daily management tasks and also, creates digital outcome (Djumaieva & Sleeman, 2018). Bandarouk et al., (2014) urged the HR professionals to acquire knowledge in technology-assisted tools in HR and as well as understanding their possible benefits in creating best HR practices.

Research has shown that data analytics is useful in facilitating effective and efficient management decision-makings by providing insights to HR managers (Togt & Rasmussen, 2017). The new technological advancement, which brought forward by IR 4.0 is not only linked to an increased demand for data analytics, but gradually and unintentionally, replacing the role of traditional practices in HRM. The digitalization of HRM process and the upcoming smart industry has too, increase the pressure for HRM tasks to be more strategic by integrating the technological and issues over human aspects (Liboni et al., 2019).

The use of technology in management decision making is not new, but finding balance in its use or integrative function in area that historically dependent on human values such as HRM, can be a complicated process. In another study, Cheese (2008) argued that for organizations to strengthen their HRM processes, they need to first transform their traditional approaches in human resource practices. By embracing and making use of the arrival of artificial intelligent and big data technologies, they prevent HRM function from losing its relevance or becoming obsolete and instead, empower it. A finding from Vermal et al. (2020) suggest that big data is seen as one of strategic inputs for HR practices, as it creates a competitive advantage for the organizations. In a separate study by Garg et al. (2021), they find the application of machine learning and artificial intelligence have been evident in some of the HRM functions.

Findings from prior research indicate that technology alone is not sufficient in making HR data insightful for managers (Garg et al., 2021; Hecklau et al. 2016). According to Hecklau et al. (2016), technical, personal and social skills are necessary to drive the impact in HRM processes. Furthermore, it is expected that all these skills to be increasing in use over stages in HRM processes. In fact, intercultural and leadership skills are of high relevance to HR senior executive rank (Liboni, Cezarino, Jabbour, Olivera & Stefanelli, 2019). Hence, this further put emphasis the need to not diminish, but rather innovate the role of human values for organizations to achieve a smarter HRM processes. For a best practice of HRM, organizations need to strategically design that integrates both innovative behavior of human values and data analytics technology.

Innovative Human Values

Schwartz (2006) defines human values as “desirable goals, important and serve as a guiding principle in people’s lives”. Values are also known as abstract concepts and act as a desired goal that motivates a person to act accordingly (Sousa, Coelho & Saorin, 2012). Without values, a person’s life would be meaningless and the society will be in dull due to the people are lacking for life direction (Singh, Bhandarker, Rai & Jain, 2011). With this in mind, human values serve as a guiding principle for every task or work that needed to be accomplish. Kilicer, Coklar and Ozeke (2017) argued that values tend to be tied closely to human’s preferences, in which they have adopted and accepted as part of norms in guiding future decisions, action or preferences.

Human values evolve over time, which makes them durable and resistant to change (Nepomuceno & Porto, 2010). The earliest model of individual values was developed by Schwartz (1992) and it outlines ten individual values. The model by Schwartz was mapped from Rokeach’s (1973) study of values that was known as a guiding principle in one’s life (Hanel, Litzellachner & Maio, 2018). Using Rokeach’s (1973) findings, Schwartz further enhances its original concept and developing it into a human values model. According to Schwartz and Boehnke’s (2004) study, they proposed ten motivational values that are organized into four circular structures which are conservation, openness to change, self-transcendence and self-enhancement (Schwartz, 2006; Roazzi, Campello & Bilsky, 2013). These four types of innovative circular structure portray the opposite and compatible relationship between the ten values. The four main domain of human values was categorized into universalism and benevolence, achievement and power, hedonism, self-direction and stimulation, conformity, security and tradition (Schwartz, 2006). Gomez, Montes and Sanchez (2020) argued that human values are concerned with individual’s interest and potential, welfare of others, and inspiring movement and motivating individual to become resistance to change. Human values are not only related to social or cultural beliefs, but also include what one considers worthy in life (Chughtai, 2019).

Human values serve as stakeholders' compass for any organizations. Human values serve as a center for determining the fitness between individuals and organization (Cohen & Shamai, 2009). As for examples, employee would be happy, motivated, satisfied and committed in their works if they believe their values are in line with the organization's practices and objectives (Berings, Fruyt & Bouwen, 2004). This highlights the importance of role of human values in incentive employees' performance in organizations. Moreover, values laid inside the basic needs of human and demanded in society where it is differ from one person to another person importance (Prabhu, 2011). All these imply how the important of value that drive human being life and later on affecting their working life style.

Previous research has examined the role of individual human values in various organizational situations. For example, the study by Sousa and Coelho (2009) indicated that personal values affected employees' creativities in service sector. In addition, values are found to be an important predictor and a basic foundation in understanding employees' attitudes and motivations at the workplace (Singh, Bhandarker, Rai, & Jain, 2011). In another study, Kilicer et al. (2019) developed a measurement to determine cyber human values that focus on the behavior of people in cyberspace. This has showed that human values could be applied in any conditions or work life situations.

Chughtai (2019) argued that "human values suggest that each person's values have something insightful to offer, which is equal to any other argument and contributes to both digital solutions and engagement within the organization". Liboni et al. (2019) stated that "humans' relation with technology will be recursive: humans create new business and organizational models to manage the technology, and organizations provide infrastructure to adapt humans to the technology". This subsequently imply that humans' role is still prevalent in the peak of technology era and to certain extent superior to the technology. Thus, the role of human remains valuable in making HRM practices efficient.

From the previous discussion, it is indicative that the new phase of smart HRM practices is unavoidable for Malaysian organizations. In coping with the demands from IR 4.0, some Malaysian organizations specifically, the larger corporations may have been pressured into incorporating technology into their traditional practices of HRM. However, it is also unclear whether the current HRM practices or organizations for that matter, are fully ready in integrating the data-centric technology into human values, which have been traditionally mapping the HRM practices. Consequently, this study aims to fill in the gap through theoretical analysis in exploring the integrative function between the technology-driven HRM and human values in the smart process of HRM.

Methodology

This study employed a systematic literature review that was focusing on determining the related and current knowledge on the topic of interest. Systematic literature review allows the researcher to obtain data from previous research works and estimate analyses required to examine the issues and knowledge related to a specific subject. It was the focus of this paper to review literature related to the three main themes of smart HRM processes, which are smart HRM, technology-driven HRM and innovative human values. The aim of this study is to propose a conceptual framework to integrate innovative human values and technology for organizations to leverage the process of the HRM.

In conducting the systematic literature review, previous research works were first organized and scrutinized accordingly into the three main themes as discussed above. This include identifying the scope of the review, type of information and data needed for this study. This paper has extracted the key information from literature related to HRM, data-centric technology and human values. The analysis was then conducted to determine and verify the suitable literature for the topic discussed in this study. As such, all articles were analyzed to ensure they were categorized appropriately into sub-categories of selected themes. For those articles that not meeting criteria of the themes, they were removed and excluded from the discussion of the paper. Finally, the selected literature works were analyzed and discussed in entirety, according to the main context of this paper.

Findings

From the review of previous literature, this study proposes for an integrative role of innovative human values and technology-driven HRM in enhancing the smart process of HRM. Since, HRM processes evolve over time with the applications of data-driven technology and analytics, the traditional process of HRM has not captured much attention among scholars and practitioner nowadays. In mean time, the smart process of HRM has become a new and integrated process with the domination of technology application in the overall process of HRM. The implementation of current and smart technologies have simplified these processes and procedures involving HR practices (Bondarouk, et al., 2017). Therefore, the use or integration of technology into HRM processes is only expected to continue and probably, widely applied in future. Though, it is also premature to remove the traditional elements such as, the element of human values and compassionate, which have pertinent to the traditional HRM practices.

The integration of innovative behavior of human values is seen as fundamental to enhance the smart processing of HRM. The important aspect of smart HRM process persist in the entire process of planning and implementation of task with the integration of technology and the empowerment of human capital. Renkema et al. (2019) argued that the empowerment of employees in the organization is a part of HRM innovation. This has showed that the role of human value could not be left out without given a room for it to integrate with the new technology driven HRM. Thus, the aspect of human values will be much important and needed for the HRM development and innovation.. For examples, the management always solved all the problem related to HR performance by solely relied on data and technology tools. Unfortunately, these data and technology sometime incurred error in it. Consequently, the wrong decision will affect the performance of employees in the organization.

The performance of the employees sometime could not be measure by numbers and data. Thus, employees who are being evaluated to have lower performance due to the result generated by data system might feel the HR system was rigid. Katou (2016) did mentioned that employees are difficult to only attach to one kind of meaning with regard to understand the HRM system because they may interpret it uniquely. Therefore, the intervention of human discretion is needed to solve this problem. This is due to the subjective aspect of human being which makes every employees to be unique which cannot be assume and categorized same as to each other. Hence, the integration of human values to support the current digital process of smart HRM is required.

The extant of literature has highlighted the important role of technology applications in HRM and apart from it the literature suggest the role of human values as predictor for employee work engagement. Overall, this paper provide a better understanding on the role of technology driven

HRM and human values which is relevant and lead to the improvement of HRM process. This suggested to the HR management to include the element of human values apart from solely reliance on technology and data to drive the current process of HRM.

Implications and Recommendation

This paper provides insights in understanding the theoretical positioning in the integrating HRM-data technology and human values in building much smarter HRM processes. This paper also provides implications in the field of HRM as to improve and enhance the current HRM process with the integration of technology and data analytics. However, the core value of human must not be leave behind by the management in the organization. From the evaluation on prior research works, this paper finds the underlying problem lies with the current HRM processes is that the organizational failed to determine an optimal balance between the application of technology and human values. Thus, the management especially, the HR managers must first equip themselves with the in-depth knowledge on the HRM data technology, its usefulness and ways to optimally blend them into human values component in HR practices. With better understanding and readiness, HRM practices can be transformed to an efficient function that facilitates higher performance for organizations.

For future research, this paper suggests for the identified variables, which discussed extensively in this study to be investigated empirically. With empirical evidence, it is expected for researchers and practitioners to gain better insights and therefore, lead to better understanding on the issues. With the combination of theoretical and empirical-based literature, the process of adopting and transition of data-driven technology into current HRM processes can be smoothly facilitated, and subsequently, lead to a smarter, comprehensive and an optimal HRM model for the organizations.

Conclusion

With the rise of IR 4.0, businesses are expected to adjust to the rise of technology applications, and HRM function is without exception. This study aims to propose a model that integrates a blending between data-driven technology and an innovative role of human values. This paper provides insightful perspective in understanding the current smart HRM process with the inclusion of technology and human values. The finding of this paper shows that the adoption of data analytics and technologies into HRM work processes are inevitable to ensure HR function stays relevant in any organizations. This proposes for organizations to develop an optimal integration design between technology-driven HRM and innovative human values. HR management would have to re-evaluate their traditional HRM processes and begin to aligning those practices with the applications of various technologies made available by IR 4.0 to create a smarter process of HRM. This paper also shows that the role of human values in HRM remains significance, but HR managers must be ready to transform its current role to meeting the changes of work flows induced by technology applications in HRM. This would allow for organizations to make use the best of both worlds as well as creating a smarter solutions to ever evolving HRM practices.

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