

MANAGING INNOVATION AND CREATIVITY IN HUMAN RESOURCE MANAGEMENT: A CRITICAL REVIEW OF LITERATURE

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Abstract

Purpose of the study: This conceptual paper critically analyzes the critical issues of creativity and innovation management and its implication on the broader development aspect of human resource management by highlighting possible scenarios in the United Arab Emirates (UAE).

Methodology: This study employs review analysis methodology approach. This study utilizes document analysis while employing literature review study approach. Several key literatures in the domain areas of innovation management were analyzed in light of the topic of managing innovation and creativity in human resource and management.

Main Findings: The key contributions for this study demonstrate that creativity and innovation in organization is crucial to institutional survival and growth. This study discovers the role of creativity and innovation as an element of competitive advantage for organizations. Creative and innovative institutions will be demanded to be skilled at creating, acquiring and transferring knowledge and modifying behaviors by using these methods to reflect new knowledge and insights.

Applications of this study: This study can be of importance in the area of innovation management and human resource management. The challenges demands utilization of effective human resource management practices or innovative practices within the new human resource management ecosystem that focuses on enabling the social capital through innovation system. The ability of organization's to be adaptive for such challenges may lead to organizational competitiveness that allows sustainable performance and growth.

Novelty/Originality of this study: In order for organizational success to be achieved, human resource management ecosystem is to be reshaped into a more adaptive innovative environmental system. This could only be implemented with the strong leadership will by the management.

Keywords: *Managing Innovation, Creativity, Human Resource Management*

INTRODUCTION

This conceptual paper critically analyzes the critical issues of creativity and innovation management and its implication on the broader development aspect of human resource management by highlighting possible scenarios in the United Arab Emirates (UAE). The role of creativity and innovation management in human resource has been widely discussed and deliberated among both academic proponents and opponents alike. In this era of globalization and competition, creativity and innovation are considered to be key factors for survival, success and excellence of organizations (McFadzean, 1998). While creativity is generally of three types; individual creativity, group/team creativity and organizational creativity, this study focuses only on organizational creativity. Likewise, innovation is also classified as incremental innovation and radical innovation. Organizational climate, organizational culture, leadership style, resource and skill, and structure and systems are five factors that affect organizational creativity (Andriopaulose, 2001). Innovation friendly strategy, structure, top management style, middle management support and effective modes of managing innovation are five factors that affect organizational innovation (Khandwalla & Mehta, 2004). Knowledge and learning play critical roles in quality creation and value innovation. While single loop and double loop learning are useful for incremental innovation, triple loop learning is important for radical innovation (Wang & Ahmed, 2002). It is postulated that organizational creativity will enhance creative excellence and organizational innovation will enhance innovation excellence. And creativity and innovation together will enhance competitive excellence of the organization. The following critical review of literature provides a framework reference to the issue of creativity, innovation and excellence.

LITERATURE REVIEW

Cook (1998) considered creativity as an element of competitive advantage for organizations. The most profitable new products will be those that meet the customer needs more effectively than the competitor's products, and are therefore preferred by more customers ([McAdam & McClelland, 2000](#)). Innovation and creativity benefit companies beyond direct sales growth or efficiency improvements. A company that establishes an effective creativity and innovation process is also likely to realize social benefits that arise from team working and employee motivation (Cook, 1998). Majaro (1988) looks at innovation as a process where ideas are generated and transformed for implementation to business products and services. Creativity is seen as the front end of the innovation process. Innovation typically occurs through four stages, viz., idea generation, screening, feasibility, and implementation. Amabile (1983, 1997, 1998) defines creativity as the process involved in developing an idea for a new product. Gurteen (1998) defines creativity as the generation of ideas whereas innovation is putting these ideas into actions by sifting, refining, and implementing. Hence, he believed that creativity required a divergent thinking process, while innovation a convergent thinking one. Creative organizations need to be skilled at creating, acquiring, and transferring knowledge and modifying behaviors by using these methods to reflect new knowledge and insights. Institutional excellence is often studied in terms of its influence on innovation activities as innovations are a major driver of business growth and they are a means by which organizations can benefit from implementing institutional excellence. A large number of empirical studies support the hypothesis that institutional excellence has a positive influence on product innovation ([Lukas & Ferrell, 2000](#); [Sandvik & Sandvik, 2003](#)). Discussion on the direction and strength of institutional excellence, product innovation relationship aside, and extant literature provides considerable evidence that it is a concept generally favorable to innovation. Innovation and creativity are generally considered to be critical competencies for improving organizational staying power. Creativity theory suggests that when a working environment facilitates idea generation, knowledge sharing and creative problem solving, individuals in that environment are more likely to generate creative ideas that involve unique concepts or new applications of existing concepts. Creative ideas can be used for problem resolution, process improvements, and the development of new services and/or products. Researchers also suggest that individual creativity is essential to organizational innovation (Amabile, 1988; [Woodman et al., 1993](#)), which in turn is imperative to long-term organizational survival and success.

In order to enhance the chances of long-term survival, organizations should focus on supporting individual creativity in the workplace. [Jalan and Kleiner \(1995\)](#) claim that there are obstacles to the full development of the creative potential of both organizational and individuals and there are methods to overcome these obstacles. Recent popular developments for developing creativity are brain skill management program, use of fisher association lists, game playing in small groups and establishing a reward for creativity. It is equally important to implement proposed solutions to determine its effectiveness for solving organizational problems. Edwards (1989) proposes the team evaluation and management system model (TEAMS) to measure the contributions of organization members. Leaders and managers should set it as a goal for themselves to allow the creative urge to occur in their organizations to prosper. Mortiner (1995) suggests that in order to achieve competitive advantage, a product innovation matrix should be developed to help marketing and technology staff to think in terms of innovation for the customer. Risks need to be managed from the beginning by identifying them, assessing their likelihood and possible impact and preparing an overall action plan to deal with them.

Innovation and creativity are often used interchangeably ([Man, 2001](#)), but creativity is knowledge based and innovation is value added work. Innovation is not just creativity but also about implementation (Tong, 2000). Innovation is a social phenomenon. It occurs when people think about new ideas, accept these and work together to realize these ideas. Technological growth is evident when brain or knowledge based work increases, stress and strain eliminated, quality of work life is enhanced and tangible savings are evident ([Man, 2001](#)). An innovation mindset is important. Wang and Ahmed (2002) examine the role of knowledge and learning in the quality and innovation process. For creating quality and value innovation there are three levels of organizational learning called single loop, double loop and triple loop learning. For incremental innovation single loop and double loop learning is enough whereas for radical innovation triple loop learning is advised. The triple loop learning and radical innovation are needed for sustaining competitive advantage. The role of tacit knowledge (Lay, 2000) and the interaction between the tacit knowledge and explicit knowledge is critical in the triple loop learning (Nonaka and Takeuchi, 1995). Organizational creativity is closely linked with productivity and competitive success in business organization (Evans, 1991). This review paper explores the significance of innovation and creativity practices in human resource management and its impact on institutional excellence. In order to remain competitive and sustainable in today's fast-paced changing and highly competitive business environment, organizations have to invest in creativity and innovation. In order to achieve the desired outcomes such as creativity and

innovation, substantial attention has to be given to how employees as enablers of creative and innovative outputs experience their firms' institutional excellence, practices and policies that encourage or restrain creativity and innovation in the organization. Creativity and innovation are considered to be the most important capacity for organizations that wish to establish a competitive advantage. Scholars from a wide range of disciplines have tried to comprehend the key factors that shape creativity and innovation. For instance, a review by [Mumford et al. \(2002\)](#) notes a broad variety of factors such as climate, individual performance abilities, strategy and structure. To be more specific, prior research has focused on antecedents of creativity and innovation including personal and institutional excellence, as well as contextual, such as supportive climate for innovation factors ([Wang et al., 2014](#)).

As previously mentioned, many researchers have suggested that creativity is crucial for the long-term survival of organizations (Devanna & Tichy, 1990), because it enables organizations to remain competitive in a rapidly changing environment and achieve a competitive advantage (Amabile, 1988). Competitive advantage depends upon the firm's utilization of the existing creativity and its ability to generate new ideas and knowledge more efficiently (Oldham & Cummings, 1996). When employees perform creatively, they come up with novel products and ideas that provide an organization with important raw materials for subsequent development that enhance the organization's ability to grow and compete (Kanter, 1983; Oldham & Cummings, 1996). Creativity has been studied from different perspectives and is associated with a number of defining factors and elements. As shown by Unsworth (2001: 289): "these perspectives range from Royce's discussion of inventions in 1898 to Guilford's call for creativity research in 1950; research into creativity in classrooms (Mayer & Sims, 1994) to research into creativity in organizations (Oldham & Cummings, 1996; Scott & Bruce, 1994); and Freudian accounts (Freud, 1908) to cognitive accounts (Mednick, 1962; Wallas, 1926); personality accounts (Barron & Harrington, 1981), sociological accounts (Stein, 1967), interactionist accounts ([Woodman, Sawyer & Griffin, 1993](#)) and psychological accounts (Amabile, 1996)". Some scholars have found creativity related to individuals' set of characteristics (Barron & Harrington, 1981) and scholarly attention has shifted from internal (individual) to external (contextual) determinants of creativity in the last two decades. Empirical research has examined how environmental characteristics can affect creativity at work and has provided evidence that creativity can be facilitated or reduced by work environments (Amabile, 1988; Ford & Gioia, 1995; Oldham & Cumming, 1996; Shalley, 1991, 1995).

Although creativity is increasingly recognized to be essential for competitiveness and has attracted considerable attention, there is still no consensus among researchers on how to define it in terms of what they perceive as its key conceptualization. As reported by Amabile (1996), although it is wrong to say that little is known about creativity, given the considerable research on this topic, it is nonetheless true that we do not know enough to identify a precise, universally applicable definition of the term. Various authors have different opinions about what should and what should not be at the core of "creativity". One of the main reasons for these differences is that those who have contributed to the development to creativity literature come from different academic backgrounds, giving rise to ambiguous and different definitions of creativity. Research on this topic is therefore quite difficult to conduct. Hence, greater clarity is needed on the domain and operationalization of the concept. This chapter attempts to fill the void in the literature by analyzing scholarly definitions of creativity and identifying areas of conceptual agreement by providing evidence of its conceptual categories and defining elements. Creativity's definitions are analyzed through a content analysis of 94 definitions of the term, collected from articles published in selected management journals and books from 1990 to 2008. This investigation makes several contributions. First, by bringing definitional clarity, it provides a theoretical contribution to the literature on creativity. Second, it promotes a shared understanding between separate streams of research and suggests the possible connections. Third, it begins a process of integrating these streams into a whole. Fourth, once the conceptual categories of creativity are clarified, it allows the subsequent investigation of the disciplining mechanisms and practices.

The chapter is divided into three sections. The first section outlines the methodology. The second section presents the main results of the content analysis and discusses the conceptual categories of creativity. The third section concludes with research gaps, implications, and directions for further research and introduces the motivations for the following chapters of the dissertation.

METHODOLOGY

The main purpose of this paper is to provide insights on the issue of managing innovation and creativity in the organizational context. This study utilizes document analysis while employing the literature review study approach. Several key literatures in the domain areas of innovation management were analyzed in light of the topic of managing

innovation and creativity in human resource and management. The proposition is that both innovation and creativity are key elements in shaping effective human resource management activities.

Human Resource Management Practices

The notion of “modern HRM practices” has become an increasingly used way of referring to high levels of the delegation of decisions, extensive lateral and vertical communication channels, and high reward systems, often linked to multiple performance indicators and other practices that are deployed either individually or in various bundles to achieve high levels of organizational performance (Ichniowski et al., 1997; Zenger and Hesterly, 1997; Colombo and Delmastro, 2002; Teece, 2007; Colombo and Delmastro, 2008). In this context, Guthrie (2001: 181) states that: “The common theme in this literature is an emphasis on utilizing a system of management practices giving employees skills, information, motivation, and latitude and resulting in a workforce that is a source of competitive advantage.” Following Foss, Laursen and Pedersen (2011), we posit that HRM practices considered in the literature involve: a) delegation of responsibility, such as team production; b) knowledge incentives, such as profit sharing, individual incentives, and incentives for knowledge sharing; c) internal communication, encouraged for instance by practices related to knowledge sharing or job rotation; d) employee training, both internal and external; and e) recruitment and retention, such as internal promotion policies. It can be noted that the first three classes of practices are typically included as “modern” HRM practices in literature (Teece, 2007), while the latter two stylized classes can be considered as traditional HRM practices. The early literature demonstrate various “stand-alone” HRM practices and their effects on organizational performance (e.g., Gerhart and Milkovich, 1990; Terpstra and Rozell, 1993). Most of the empirically-based literature since the mid-1990s has focused on the effects of complementary practices, rather than the effect of individual practices (Ennen and Richter, 2010). The idea of complementarities in our context implies that the introduction of one HRM practice increases the returns of doing other HRM practices related to innovation output. It must be noted that although the notion of “internal fit” is arguably less precise than the idea of complementarity, this notion is often used in HRM literature in a similar fashion to that of complementarity (Baird and Meshoulam, 1988; Arthur, 1994). Ideas on “systems” or “bundles” of HRM practices (Subramony, 2009) operate with a similar logic. The empirical literature on organizational complementarities suggests two approaches: an interaction approach and a systems approach (cf. Ennen and Richter, 2010). The interaction approach (e.g., Capelli and Neumark, 2001) examines the effect of few organizational practices, and in contrast, the systems approach (e.g., Ichniowski et al., 1997; Laursen and Foss, 2003) looks at the relative performance outcomes of the entire sets of variables. Given the sheer number of individual practices considered in the literature, the systems approach is dominant, even if it only confers an indirect test of complementarity.

The Role of Innovation in Organizational Context

A large body of literature (Huselid, 1995; Ichniowski et al., 1997; Ichniowski and Shaw, 1999; Datta et al., 2005) considers HRM practices as explanatory factors (typically complementary) in determining dependent variables, such as productivity and profitability. In a typical statement, Huselid (1995: 638) notes that the theoretical literature suggests that the behavior of employees within firms has important implications for organizational performance and that human resource management practices can affect individual employee performance through their influence over employees’ skills and motivation through organizational structures that allow employees to improve the performance of their jobs. Research within this literature has typically been published in management journals, but some highly influential studies have been published in economics journals (in particular, Ichniowski et al., 1997). As mentioned above, this literature has not only considered the direct effect of (complementary) HRM practices on economic performance, but also moderated relationships between these variables, for example, by the type of manufacturing strategy pursued by the respondent’s firm (Youndt et al., 1996) or its industry affiliation (Datta et al., 2005). The majority of contributions under this heading adopt a cross-sectional approach and hypothesize empirical links between a set of complementary HRM practices and economic performance. Research based on panel data is available within this stream. While initial evidence suggested that these organizational practices (Capelli and Neumark, 2001) had little effect on economic performance, such as productivity, more recent panel data evidence has tended to confirm the findings from the studies based on cross-sectional evidence that a set of complementary HRM practices have been generally found to have positive influences on economic performance, including productivity and profitability (Van Reenen and Caroli, 2001; Kato and Morishima, 2002; Janod and Saint-Martin, 2004; Colombo et al., 2007). Given this body of literature is only indirectly concerned with innovation management, we will not go in depth with this literature (Colombo et al., 2012). However, socio-economic contexts are so intertwined that they are distinguishable, but indivisible (Pillai and Ahamat, 2018).

According to previous research, HRM practices are the main methods for organizations to influence and shape attitudes, behaviors, and skills of individuals to perform at work and hence to achieve the goals of the organization (Chen & Huang, 2009). Certain HRM practices do affect the innovativeness of a firm and might therefore be a valuable resource for firms wishing to innovate (Beugelsdijk, 2008). Several studies have concluded that organizations should develop a system of internally consistent HRM practices (Jiménez-Jiménez & Sanz-Valle, 2005; Laursen & Foss, 2003) since a system with mutually reinforcing practices are the most beneficial to innovation performance rather than isolated HRM practices (Laursen & Foss, 2003). The role of staffing in innovation has been studied by different researchers (Jiménez-Jiménez & Sanz-Valle, 2008, Jiang et al., 2012; Chen & Huang, 2009; Beugelsdijk, 2008). Since staffing includes organizational practices to attract, recruit, and retain employees with traits that support innovations, it is argued to be a key practice to affect innovation (Jiménez-Jiménez & Sanz-Valle, 2008). Additionally, Chen & Huang (2009) argue that selecting employees with appropriate skills and attitudes to perform at work will enable organizations to integrate diverse sources of knowledge and hence, stimulate innovations. Recruitment and selection of employees has been found to affect both the ability and motivation for employees to be creative, which are positively related to administrative and technological innovations (Jiang et al., 2012). Administrative innovation is referred to organizational forms, procedures, and policies whereas technological innovation includes products, services, and technologies (Jiménez-Jiménez & Sanz-Valle, 2008). Contrary to these findings, Tan & Nasurdin (2011) did not find any support for the recruitment of employees and innovation. Providing employment security is argued to be important for attracting and retaining employees with the right traits for innovations (Jiménez-Jiménez & Sanz-Valle (2008). Additionally, Beugelsdijk (2008) concludes that stand-by contracts are negatively associated with both radical and incremental product innovations. After being employed, different studies have found that the job design has an impact on innovations. A job design that increases autonomy and focuses on empowerment is found to influence the motivation for being creative, to contribute to innovations (Jiang et al., 2012), and to generate more product innovations (Beugelsdijk, 2008). Job rotation (Jiang et al., 2012) and flexible working hours were also positively related to technological innovations and were especially associated with radical innovations, but not with incremental innovations (Beugelsdijk, 2008).

The impact of training of employees on innovation has been studied, with inconsistent results. A quantitative study of high-tech firms in China by Jiang et al. (2012) found no relationship between training and administrative and technological innovation, when studying creativity in a mediating role. A positive effect of training on technological innovation was on the other hand found by Li et al. (2006) in a quantitative study that focused on high-tech firms in China. Additionally, in a study by Tan & Nasurdin (2011), training was the only studied HRM practice that had both a direct and an indirect impact on the different types of innovations: product, process, and administrative innovations. In this study, knowledge management was studied and was found to be a mediator between training and innovation. Chen & Huang (2009) argue that trainings may foster employees to gain new knowledge, get new insights, and develop innovative minds and skills. Additionally, Beugelsdijk (2008) found that training was important for employees to generate incremental, but not radical, innovations. Previous research has been studying the impact of appraisal systems and incentives on innovations, also with inconsistent results. For example, by studying the impact of performance appraisals on innovations with knowledge management as a mediator, Tan & Nasurdin (2011) found that performance appraisal has both a direct and an indirect effect on administrative innovations, but not on product innovation or process innovations. Additionally, this relationship has also been studied by Jiang et al. (2012) by studying creativity as a mediator, who however did not find a relationship between performance appraisal and administrative and technological innovation. The authors argue that performance appraisal may result in undermining the intrinsic motivation of employees, since performance appraisals are mainly used when the levels of payment are to be determined.

Different kinds of appraisals were studied by Li et al. (2006) who concluded that process appraisal and control is to be preferred over outcome appraisal, since it is positively related to technological innovation. Additionally, outcome appraisal and control were found to be negatively related to technological innovation. The relation between performance-based pay and innovations is argued to be complex and is connected to a potential risk. On the one hand, performance-based pay may contribute to and stimulate creativity and initiatives for improvements. On the other hand, the introduction of these individual incentives may negatively affect the willingness of employees to contribute to solving problems, in which they are not directly involved (Lau & Ngo, 2004). Additionally, a majority of innovations are required to be approached by teams. The introduction of individual rewards might erode the crucial feeling of we-ness, which is argued to be necessary for both knowledge sharing and innovations (Beugelsdijk, 2008). Performance-based pay has also been found to have an impact on the generation of incremental innovations, but not on radical innovations. Other researchers have studied the effects of innovation on different kinds of rewards and distinguish between material and immaterial incentives. Li et al. (2006) found that immaterial incentives, such as independence at workplace and

allowance of self-growth, were positively related to technological innovation, whereas material incentives were negatively related. In contrast, Jiang et al. (2012) found that rewards were influencing both the ability of and the motivation for employees to be creative, which was hence positively related to both administrative and technological innovation.

Previous studies concerned with HRM and creativity have focused on the impact of personal factors and resulted in the importance of motivation, knowledge, and skills for creativity (Martens, 2011). Regarding motivation, Jiang et al. (2012) argue that HRM practices that motivate employees to a sense of autonomy will result in employees being more effective in problem solving and creating new ideas to cope with job demands. At the individual level, job complexity includes a high degree of autonomy and skill variety, and is alleged to be an important factor that promotes creativity. Additionally, task autonomy and employee empowerment were found to have an impact on exploratory learning (Beugelsdijk, 2008). Further, resources, such as time, money, information, and physical space, were found to be important conditions for the occurrence of creativity. Contrarily, lack of resources was also found to be a potential driver for creativity. This situation is often argued to be the reality for companies during their start-up phases. By lacking resources, they use motivation, determination, and creativity instead (Martens, 2011). The opportunity at the work place to be creative and to have an autonomous job design is argued to be important attractors for employees (Marks & Huzzard, 2008) and is therefore motivating. Additionally, to perceive the work environment as attractive was found to have an inspirational and motivating impact on employees' creativity. Additionally, expressing the creative identity of the organization is another factor that was found to stimulate the creative culture (Martens, 2011). The impact of leadership has been studied with regards to its importance for creativity in the workplace. A supportive supervisory style, which facilitated development, is argued to be an important antecedent to creativity, whereas a controlling leadership style is related to reduced motivation, creativity, and innovation (Beugelsdijk, 2008). Additionally, Montag et al. (2012) found that supervisory feedback is important for creativity. Workforce flexibility was found to have a negative impact on creativity (Beugelsdijk, 2008); a finding that might be connected to the fact that job security is positively associated with innovations, as described above.

Role of Creative Capital

Innovation is increasingly important if organizations are to survive in a competitive environment. Firms based in Europe, and in developed countries elsewhere, face the challenge of competition from firms based in emerging markets that can, for example, manufacture products more cheaply because of lower labor costs. Within the innovation management literature, the openness of firms and the overarching model of open innovation are increasingly used to provide greater understanding of how to deal with such challenges facing firms (Chesbrough, 2003; Laursen & Salter, 2006). During the past decade, scholars have shown a growing interest in the role of Human Resource Management (HRM) in stimulating organizational innovation performance (e.g., De Leede & Looise, 2005; Beugelsdijk, 2008; Chen & Huang, 2009; De Winne & Sels, 2010). Although some research has addressed the HRM innovation link, little is known about the underlying mechanisms that explain how HRM affects organizational innovation. Given the increased openness of innovation processes and the emphasis on open innovation models (Chesbrough, 2003), we argue that merely using the human capital approach, even in combination with social capital, is insufficient to explain the role of HRM in enhancing organizational innovation performance. In this paper, we will present a conceptual framework on how innovation performance can be enhanced by managing human resources that view social capital and creative capital as explanatory concepts. Innovation performance can be analyzed using the notions of exploration and exploitation (March, 1991; Gupta et al., 2006; Li et al., 2008). Exploration involves searching for new knowledge, technologies, and products, whereas exploitation is about using and refining existing knowledge, technologies, and products (March, 1991; Greve, 2007; Li et al., 2008).

It can be argued by looking at different compositions of an organization's human capital that exploration is stimulated differently than exploitation. The knowledge, skills, attitudes, and other characteristics (KSAOs) available to organizations through their human capital pool play a critical role in innovation (Nonaka & Takeuchi, 1995). However, innovation originates not only from the KSAOs residing in employees, but also depends on the available social capital, which has been described as the knowledge and skills embedded in the relationships between actors (e.g., Leana & Van Buren, 1999; Subramaniam & Youndt, 2005; Chen et al., 2008). However, apart from being an impetus, social capital can also be an impediment to innovation (Coleman, 1990). Negative effects on innovation from social capital are found in its "detrimental effect on the introduction or consideration of new information by members" (Leana & Van Buren, 1999, p.551). Staying close to Coleman's (1990) original ideas on social capital, we use social capital in terms of the value in relationships generated through socialization and sociability as a form of social support (Borgatti & Foster,

2003; Huggins, 2010). Since social capital research is unable to fully explain how organizations gain new information to be innovative, the concept of creative capital has been introduced, resulting in the contribution to social capital literature. In this review paper, creative capital concerns the permeability of organizations and their openness to the diversity of KSAOs available. We define creative capital as the diverse knowledge and skills, both inside and outside the fixed and closed settings of the organization that are available and accessible to the organization in creating value for its core activities.

The Essence of Human Capital in Innovation

In considering innovation, we build on March's (1991, p.71) understanding of exploration as "things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation" and of exploitation as including "such things as refinement, choice, production, efficiency, selection, implementation, execution". In the literature, there are various approaches to distinguish between exploration and exploitation, and these are mainly related to different research fields, such as organizational learning, technological innovation, and strategic renewal (Li et al., 2008). In the field of technological innovation, exploitation involves a "local search that builds on a firm's existing technological capabilities" and exploration a "more distant search for new capabilities" (Li et al., 2008, p.115). We adopt the view held by several scholars who see exploitation as using existing knowledge and technology, and exploration as the search for new knowledge and technology (e.g., Rosenkopf & Nerkar, 2001; Vermeulen & Barkema, 2001; Benner & Tushman, 2002; Greve, 2007). The various analyses of innovation and human capital studies share many concepts. As such, scholars describe human capital in terms of an individual's knowledge, skills, abilities, and other characteristics (KSAOs) that can be used to create value (e.g., Subramony, 2009; Munyon et al., 2011; Ployhart & Moliterno, 2011). On the organizational level, human capital is "the aggregate accumulation of individual human capital that can be combined in a way that creates value for the unit" (Wright & McMahan, 2011, p.95). Organizational human capital can be viewed as homogeneous or heterogeneous (Willis, 1986; Gong, 2003), depending on whether the composition of human capital reflects a group of employees with similar or with different knowledge, skills, and experience. Organizations have access to knowledge primarily through the available KSAOs of their employees. Knowledge, and also the skills to use this knowledge, is essential for both exploration and exploitation. Innovation integrates knowledge and action (Scarborough, 2003), where the actions can be seen as employees' skills.

Organizations tend to become increasingly homogeneous in terms of their human capital through a socialization process. According to the attraction-selection-attrition framework, socialization is strengthened over time because the employees of an organization tend to have shared attributes, both because they were selected for having these attributes and because employees who do not have these attributes will eventually leave the organization (Schneider et al., 1995). A homogeneous human capital will rely on existing knowledge and create new knowledge based on the organization's set of knowledge boundaries. Using the terminology of March (1991), organizations that have a homogeneous human capital will refine existing technologies, aiming for efficiency. This may lead to exploitation, which will "increase the likelihood of rewards for engaging in this activity, thereby further increasing the competence and the likelihood" (March, 1991, p.73). Heterogeneous human capital, as Gong (2003) argues, is necessary if one has to facilitate exploration through organizational learning and innovation. If organizations are able to establish a more heterogeneous workforce, then new knowledge and skills from beyond the existing knowledge boundaries will enter the organizations. This may lead to the use of new KSAOs and technologies, or as March (1991, p.85) puts it "experimentation with new alternatives". In this way, organizations are able to explore new possibilities. However, in exploring the new possibilities, organizations should also establish a balance strategy. Introducing a triple bottom line organization takes steps to ensure that organizational operations benefit the company's employees as well as the community in which it conducts business. In this context, the human capital is shaped by social equity; hence, the wellbeing of individual and the community (local or global) increases institutional-individual relationship (Ahamat, 2017).

CONCLUSION

In summary, this study unleashed the following key findings while achieving the aim of this research.

1. The important role of creativity and innovation as an element of competitive advantage for organizations.
2. Creative and innovative institutions will be demanded to be skilled in creating, acquiring, and transferring knowledge and modifying behaviors by using these methods to reflect new knowledge and insights. These methods enable organizations to secure and shape their resources effectively considering the current challenging global business environments.

3. The challenges demands utilization of effective human resource management practices or innovative practices within the new human resource management ecosystem that focuses on enabling the social capital though innovation system. The ability of organizations to be adaptive for such challenges may lead to organizational competitiveness that allows sustainable performance and growth.

Limitations and Study Forward

This is a conceptual study and is still in progress. Hence, the future scope of study could examine and test the key variables presented in the literature. It is recommended that one of the ways to progress management inquiry or research is to challenge the traditional methodologies and use a scientific approach in observing, measuring, analyzing, and concluding the management phenomena (Ahmat, 2014). While this study is conceptual in nature, the study forward may consider qualitative approach by employing interviews and personal observation. Using structured interviews and personal observation led to the discovery of several key emerging themes, which may not have been uncovered as explicitly if only non-qualitative approaches had been applied (Ahmat, 2019).

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