
PRELIMINARY REPORT

The Quest towards Obtaining a Competitive Advantage in Organizations through Managing the Human Capital

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ABSTRACT

The aim of this paper was to shed light on how managing human capital can contribute to obtaining a competitive advantage in organizations. This was done by conducting a literature review by examining and synthesizing the available literature from various research and scholars. Moreover, it included research into the different perspectives pertaining to the elements and approaches of human capital as it relates to competitive advantage in organizations. The literature reveals that Human capital plays a significant role as a contributor to obtaining a competitive advantage in organizations, which ensures high quality in the selection and recruitment of employees. Based on the literature, certain challenges may be encountered regarding human capital, and these challenges may inhibit the attainment of competitive advantages. Furthermore, the paper brings to light the approaches to utilizing human capital to achieve a competitive advantage. The Resource base view and the Human capital theory were the approaches discussed and considered relevant in navigating human capital towards a competitive stance. The distinctive character of the organization could be realized through the human capital concept; investing in employees bring about new ideas and solutions to the organization. While other resources are owned by the organization, such as technology and equipment, the human capital emanates from the employment relationship and could not be regarded as organizational-owned property but is also privy to its success. Human capital is viewed as an essential component of intellectual capital. Industry 4.0 was also seen as an important contributor to competitive advantage as the advanced technology seems to employ more modern ways of getting the job done. Even though advanced technology is necessary, among other factors, the quest towards the achievement of competitive advantage lies in the role of adequately managing human capital because human capital neutralizes threats, exploits opportunities, and enhances organizational efficiency that has the potential to lead to a competitive advantage

Keywords: *human capital, competitive advantage, intellectual capital, Industry 4.0, resource-based view, employees*

JEL Classification: L21, M12, M54, O34

INTRODUCTION

Various aspects of the global environment changes have pointed to the relevance of human capital in organizations. Preceding research has revealed that organizations have become more aware that holding a competitive stance based on technology is volatile and that managing the intangible resources in terms of their human capital is a better approach to a more sustainable

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advantage (Johanson, Mårtensson & Skoog, 2001). According to Bontis, Dragonetti, Jacobsen & Roos (1999), human capital is synonymous with the human aspect comprising the intelligence, the skillset, and the level of expertise found within the organization that gives it its unique trait. The term human capital often pertains to employees in general and considers what they collectively contribute to the organization in terms of the knowledge they possess, their overall job, their life experiences, and their skill sets. Davenport (1999) opined those employees within the workplace are the ones in possession of these elements. Therefore, managing such a resource within organizations is crucial to attaining a competitive advantage.

One cannot discuss human capital without mentioning intellectual capital, as they are intertwined. Numerous experts support the view that intellectual capital is vital in obtaining organizational performance (Sydler, Haefliger & Pruksa, 2014). Klein and Prusak (1994) defined intellectual capital as the intellectual information that has undergone a formalized process that has enabled the capturing and leveraging to yield more valuable assets. The organizations' innovative performance in compliance with vision 2020 requires both information and the management of intellectual capital as they are crucial areas for the majority of organizations, especially those that are knowledge-driven (Gogan, Artene, Sarca & Draghici, 2016). The term competitive advantage was coined by Porter; he emphasized that it is achieved by the organization when the value perceived by the customers exceeds that of production (Porter, 1985). Wang (2014) further elaborated that competitive advantage is achieved when organizations display exemplary performances in comparison to their competitors by executing certain actions and displaying particular attributes that put them in more favourable positions than others.

Technological innovations and the competitive business world have been contributory factors that oblige organizations to manage a certain amount of capital toward sustaining and attaining a competitive advantage. The survival, relevancy, and continuity of organizations depend on how they are composed to respond to and compete with competitive challenges. The probability of organizational success depends on the effectiveness and management of organizational capital and resources (Peteraf & Bergen, 2003). Similarly, Kraja & Osmani (2013) considered human capital as a main factor of competitiveness. Kuehn (2018) views human capital as a significant asset that complements the structure of a company. A multitude of studies shows that human capital is a resourceful sector for determining organizational level in a competition (Ndinguri, Prieto & Machtmes, 2012).

In order to obtain a competitive advantage, there must be proper utilization and management of the human aspect and navigating it in such a way that the objectives of the organizations can be realized. It is generally perceived that the operation of the organization is also based on the knowledge which is obtained through its human base. The employees are the source of such knowledge, and the successful management of those that possess the knowledge can aid in building a solid infrastructure that can assist in obtaining such advantage.

Human capital is a substantial investment toward achieving a competitive advantage for organizations because it represents an employee's natural ability that generates economic value (Alnidawi, Alshemery & Abdulrahman, 2017). Many researchers have established the fact that knowledge and human capital could guarantee organizations a competitive advantage. It upholds that human capital is capable of ensuring a competitive advantage for organizations. Therefore, the concept is valuable for developing employees' skills and abilities that eventually produce innovations in the organization (Alnidawi et al., 2017). Managing human capital encompasses coordinating and arranging the job duties of the people within the organization and managing them in a specific way so that the organization's objectives can be accomplished. Hence, organizations need to value human capital management in the company's structure.

It is important to emphasize that organizational performance may also be linked to human capital since employees' knowledge and experiences are unavoidable components of competitive advantage (Hili, Gani, Hamzah & Rahman, 2017). Human capital, therefore, ensures

that the organization enjoys an extended period of competitive advantages (Liang & Gong, 2017). It should also be pointed out that human capital can be considered one of the most important integrals of organizational assets because employees contribute ideas, exploit opportunities and propose recommendations for overcoming organizational challenges. Without their relevant input, achieving a competitive outcome would be less likely to be attained. Organizations need to value people and link the management of the market, products, services, finances, information, and customer needs to human capital. Particularly, as human capital ensures that knowledge, skills and experiences are transformed into creative ideas, goods, and services for the organization (Boon, Eckardt, Lepak, & Boselie, 2018).

An organization that seeks to accommodate dynamic changes, including political, economic, cultural, social, and technological changes in organizations, needs human capital elements and competitive advantage components to succeed (Al-Omari, Alomari & Aljawarneh, 2020). An organization's ability to structure management methods toward creating policies and conditions that energize human minds to renew old ideas and innovate new approaches is essential in the process (Aljawarneh & Atan, 2018).

Furthermore, organizational resources may also be used to attain growth and ensure continuity (Alwagfi, Aljawarneh & Alomari, 2020). The changes and challenges faced by several organizations, therefore, call for a review of competitive strategies (Van Sluijs & Kluytmans, 1994). Hence, the purpose of the study is to explore how organizations can achieve a competitive advantage; it aims to highlight the Approaches and Challenges through its human capital. The approaches to managing human capital can be made in various ways. However, the ways of using human capital to achieve a competitive advantage will be analyzed from the resource base perspective and human capital theory. It will also take into consideration intellectual capital and industry 4.0 in addition to highlighting the crucial role of human capital in maintaining and obtaining a competitive advantage. From this, it was hypothesized that Managing Human capital plays a contributory role in obtaining a Competitive Advantage.

THE CONCEPT OF HUMAN CAPITAL, ELEMENTS AND APPROACHES FOR ACHIEVING COMPETITIVE ADVANTAGE IN ORGANIZATIONS

Youndt, Snell, Dean & Lepak (1996) described human capital as a concept that enables individuals to possess un-separated skills, knowledge, and competence to maximize organizational profits. Cabrita and Bontis (2008) emphasized that the human capital concept assists the organization in tapping and accumulating employees' ideas and experiences. It encourages employees to devote time, effort, skills, and capabilities to the growth of the organization (Seleim & Ashour, 2007). Widodo (2015) described human capital as employees' ability to introduce changes and produce modern and contemporary ideas to support the organization while responding to market and technological challenges.

Human capital establishes a stepwise link between solutions and employees' knowledge toward aspiring for organizational success (Burma, 2014). Memon, Mangi & Rohra (2009) opined that human capital could ensure productivity with the cooperation of employees. Human capital could be adequately evaluated with certain indicators such as employee capability, employee motivation, organizational climate and structure, teamwork, efficiency, and leadership (Chrysler-Fox, Pharny & Roodt, 2014).

The collection of employees' energy, knowledge, experiences, sacrifices, loyalty, commitment and creative ideas constitute human capital (Weatherly, 2003). Thus, the individual's skill, attitude and abilities establish the performance and productivity of the organization. Human capital diagnoses the employees that possess intellectual skills, abilities and experiences that could propose suitable suggestions to customers' wants through creative ideas. The worth of human capital is visible in organizational performance, productivity, relevancy and sustainability (Delery & Roumpi, 2017). Alomari (2020) asserted that human capital is an

inimitable rare resource that requires the organization's ultimate security and protection against other competitors from reduplicating it.

Furthermore, a study conducted on the management of human resources as a mediating mechanism on the influence on the outcomes of organizations by Jiang, Lepak, Hu & Baer (2012) revealed that, once adequate effort is placed on developing the abilities of the employees, it makes them more effective and more competent employees. Therefore, this can instill a feeling of comfort and belongingness in the mind of the employees. In turn, they might be more willing to share knowledge within the organization and be more productive, which can result in a better outcome. This can potentially improve the competitive stance of the organization.

Human capital elements for achieving competitive advantage in organizations

Human capital comprises various areas, and it is further discussed in the subsequent section as a contributor to competitive advantage in terms of employees' natural and personal skills, employees' commitment, employees' knowledge, and employees' innovative skills within the organization.

Employees' natural and personal skills

While natural skills are God-gifted abilities, personal skills encompass the experience attained from previous and existing job positions. The job skills are mostly acquired through training, workshop and work experiences (Al-Maghraby, 2004). Al-Tarawna & Al-Salihy (2004) argued that renewal skills, termination skills, evaluation skills, support skills, concentration skills, and coordination skills substantially complement human competence. These natural and personal skills that are honed by the employees serve as beneficial pivots in the pursuit of achieving competitiveness.

Human capital, in terms of employee skills, is used within the organization to obtain a competitive advantage. Employee skill is one of the inescapable components of human capital that can generate advantages for the organization through competitive advantage strategies. The employee, if allowed and motivated by the structure, has the power to devote natural and personal skills toward acquiring organizational goals. The skills can also be shared with other employees while collectively discharging organizational tasks and activities.

Employees' commitment

Zehir, Gurol, Karaboga & Kole (2016) contended that organizations could acquire uniqueness through employees' high performance, while commitment boosts employees' performance in the organization (Khalique & Pablos, 2015). Massingham & Tam (2015) conducted a study on the relationship between human capital, value creation and employee reward. The study was done on employees from the second largest public sector organization in Australia, based on three annual surveys between 2009 to 2011. The variables used were, first, employee capability; secondly, employee satisfaction; and thirdly, employee commitment. The findings from the study revealed that human capital is an important aspect of intellectual capital as there is an increased interest regarding how intellectual capital can be utilized to establish value in the organization. The main results revealed that employee capability and employee satisfaction had a positive relationship with the importance of work activity in a direct way. Also, it was revealed that an employee's capability only had a direct positive relation to the salary.

However, as it pertained to employees' commitment and the importance of job-related obligations, there was a direct negative relationship between them. Similarly, it was revealed that no relationship existed between pay and the aspects of employee satisfaction and employee commitment based on the results that were obtained from the survey. Furthermore, time commitment and management generate task fulfilment and effective performance for an

organization, thus strengthening organizational reputation among competitors. Commitment enables employees to engage themselves in change and combine experiences together towards developing organizational capacity (Massingham & Tam, 2015).

Employees' commitment helps organizations acquire a competitive advantage, retain survival and manage relevancy in the business vicinity (Abu Bakr, 2006). Time management and commitment result in generating modern and productive products for potential beneficiaries in a short period because employees strongly dedicate their time to the organization to provide for the customers' needs. Hence, employee commitment magnetizes a large number of customers to the organization, thereby ensuring a competitive advantage. Based on the literature, it is evident that employee commitment can be used to promote organizational work, competitive advantage strategies, growth, and outstanding performance. Once employees display a level of commitment to achieving the organization's objectives, it will be reinforced by the various outcomes.

Employees' knowledge

Employees' level of knowledge in operations, industry, profession, technology, dynamical and environmental changes adequately represents the significant role of knowledge in developing organizational competitive advantage (Lau, Chan & Man, 1998). The knowledge that the employees possess is paramount as it can be a deciding factor in the advantage the organization garners over others and the position it holds in the industry. Such a reservoir of knowledge serves as a catalyst for new service and product developments which can initially give the organization an edge over others. Organizational tasks could only be discharged and achieved with job knowledge and competency. To achieve a competitive advantage, an organization needs a regulatory environment that provides knowledge and motivation for employees (Alnidawi et al., 2017).

Employees' innovative skills

This is a process of transforming ideas into practice alongside producing innovative goods and creative services for customers' needs (Moorhead & Griffin, 2000). Innovation and creativity go hand in hand, ensuring sustainable competitive advantages. With the aid of creative and innovative tools, modern processes that generate value for customers, ideas that reduce production and delivery period so that the products can reach customers quicker, and initiatives that open opportunities and widen global professional networks could be achieved for organizations. It enables employees to modernize ways, approaches, and methods of running the affairs of the organization (Al-Sarn, 2000).

Innovation may appear in different forms, such as technical, product, managerial, and process innovation (Al-Saffar, 2008). Innovations may as well propel other competitors into competition-race. The level of an individual's innovative ideas is determined by an individual's curiosity (Sipa, 2018). According to Yaseen Dajani & Hasan (2016), intellectual capital is a determinant that is a catalyst for innovation in the organization. Furthermore, it can be viewed as an asset and a collection of knowledge that can be used for a given purpose in achieving a competitive advantage.

Galovska (2015) perceived innovation as a significant integral that defines organizational success. Therefore, innovative skill allows an employee to boost productivity and achieve a competitive advantage for organizations through inventive means. It may be used for extraordinarily presenting ideas that solve issues in the competitive market and support organizational objectives and help in sustaining an advantage.

Intellectual capital and competitive advantage

Numerous studies have been conducted, displaying the relationship that exists between intellectual capital and competitive advantage. For instance, a study conducted by Chahal and Bakshi, (2015) on the relationship between intellectual capital and competitive advantage focused on the role that innovation plays in learning in organizations. The study was conducted on 144 banks in India. The findings revealed that intellectual capital had a positive and direct relationship with a competitive advantage. It pointed out that innovation had a mediating role between intellectual capital and competitive advantage. Also, innovation and organizational learning played a part in competitiveness.

Furthermore, in another study conducted in Jordan on telecommunications companies by Yaseen et al. (2016) on the impact of intellectual capital on competitive advantage, it was revealed that relational capital and structural capital account for 48.4% of the competitive advantage, and both positively influence competitive advantage. Based on this finding, it is safe to say that human capital has an indirect influence on competitive advantage since it is a part of relational capital. In response to globalization and competition among different organizations, a committed organization's focus should perhaps be emphasized on creating a competitive advantage that transcends services provided by other competitors in the marketplace. The infrastructure of competitive advantage is needed to overcome functional, efficacious and high-standard market competition. The competitive strategies promote the status and relevancy of the organization over other competitors in the global marketplace (Porter, 1985).

Similarly, a study was conducted by Janošević, Dženopoljac & Bontis (2013) on 100 Serbian companies on the influence that intellectual capital has on their financial performance. The intellectual capital efficiency was measured based on the value-added intellectual coefficient (VAIC). Findings revealed that the operating revenue, profit and net profit were not a consequence of the efficient utilization of intellectual capital in the companies. However, it was revealed that structural and human capital affect Return on Equity and Return on Asset, while physical capital affected the Return on Equity. The survey also revealed that intellectual capital had a minor impact on financial performance. The level of intellectual capital is a limiting factor in competitiveness growth. However, it should be noted that during that time, the Serbian economy was going through a crisis. Also, just as corporate performance cannot be assessed by using one measure, intellectual capital should not be analyzed from solely one perspective (Janošević et al., 2013).

The two common types of competitive advantage

According to Porter (1985), in general, Competitive advantage can be viewed in terms of Comparative advantage and Differential Advantage. The comparative advantage is an organization's capacity to produce at a reduced cost compared to others providing the same service or products. Typically, this advantage is obtained by allowing the products or services to be sold at a cost that is lower than its rivals. While the differential advantage is achieved when the product or service produced can be differentiated from others and can be viewed as superior by the users. If the organization pays attention to its human capital along with the proper management of the employees, this can clearly put the organization in a better position than its competitors, which may be lagging behind in this area.

The resource base perspective to achieve competitive advantage

Many researchers have been seeking to comprehend the components that act as deciding factors in the profit level of organizations. According to Peteraf and Bergen (2003), the main underlying presumption of the resource base approach is that organizations compete based on their capabilities and the resources that they have. The resource base view originated in 1984 by

Wernerfelt, as a contributor to competitive advantage theory (Fahy, 2000). Wernerfelt (1984) alluded that a resource can be those tangible assets that contribute to the organization in terms of added strengths or weaknesses. Nevertheless, those resources can either be of tangible or intangible nature, tangible in the form of skilled personnel, plant and machinery, and intangibles such as reputation, know-how, and expertise in marketing and the production processes (Wernerfelt, 1995).

Similarly, Barney (1991) reiterated that resources could be categorized into two main areas. First is the human capital aspect, such as intellect, training, and experience. Second, the physical capital, such as the technology, equipment, and plant, and organizational capital, such as the structure. The dominant claim of this perspective is the argument that competitive advantage is derived from certain resources within the organization, and these resources are considered rare in other organizations or they are lacking in the competitors' organizations. Therefore, they are viewed as superior resources by the competition. According to Bridoux (2004), this perspective implies that the resources in the organization provide the basis for a strategy, a strategy that can enable the organization to better exploit the resources within its own organization relative to that of the competition.

Similarly, Donnellan & Rutledge (2019) stated, as per the resource base model, it's the unique resources and capabilities that account for the differences in the performance of the firm rather than the structural characteristics of the industry. It is further argued that the resources that are rare, not easily substituted, and hard to duplicate/imitate form the key set of the resources that give the firm a strategic advantage over others. Therefore, by focusing on these components of the model, it might be easier to recognize the resources that could possibly provide a sustainable competitive advantage for the organization.

The resource-based view is one of the common theories used to explain the organization's sustained competitive advantage. The underlying premise of this view is that organizations can obtain a strategic competitive advantage when they are in possession and control of assets that are scarce and non-substitutable and in an organization that is capable of handling them (Kraaijenbrink, 2011). Similarly, according to Foss (1996), the resource base view is geared more towards the long term and provides a more detailed analysis of the competitor. This may be useful to ascertain any threat of imitation in the future by the competitor by analyzing the competitor's capabilities and resources.

Additionally, the resource base perspective explores the collective groundwork based on an economic infrastructure by delving into the concept of human capital in establishing a competitive advantage for the organization. Furthermore, due to this resource perspective, other academicians have used this application in prioritizing the human aspect as a means to explore how it assists the organization in obtaining a competitive advantage, as demonstrated by Wright, McMahan & McWilliams (1994). Similarly, Youndt et al. (1996); Jackson & Schuler (1995) are proponents of this view as they sought to incorporate learning within organizations. Furthermore, Barney (1991) pointed out that there are several components that can create a competitive advantage and emphasized human capital as one of such components. He elaborated further that this type of competitive advantage occurs when the organization device a plan of action that differs from prospective competing organizations. In essence, from the perspective of the resource base view, competitive advantage is linked to any resource in the firm that differentiates it from its competitors.

Rose, Abdullah & Ismad (2010) conducted a study pertaining to an organization's resources and competitive advantage as it relates to performance within the organization. It was concluded that looking at the competitive advantage from a resource point of view is important mainly as it may be applied as a framework or guide for organizations to improve their level of competitive advantage and overall performance through applying and manipulating the resources within the organization.

A study conducted by Donnellan & Rutledge (2019) on JP Morgan Chase revealed how the resource base view was employed to synchronize the resources found in the company with its strategy to achieve its target of being the highest-ranked bank in the United States. This entailed the implementation of changes to their environment both internally and externally and fully exploiting the competencies and resources that were at their disposal. This case study indicates how the firm looks internally to find out the resource gaps that appeared within their organization. It revealed that they made the necessary adjustments to ensure they had the resources and abilities to yield much better returns. These changes led to an increase in their revenue. Even though organizations cannot afford to prioritize only their internal resources and exclude others, what this case study revealed is that analysis using the resource-based view is crucial, and organizations should not neglect internal operations if they want to maintain a competitive advantage.

The resource base view strategizes the resources that may be useful for the growth of organizations (Gerrard, 2005). It exposes the rapport between a firm's performance and internal features (Barney, 2001). The internal characteristics represent organizational resources, which may appear as physical, technological, or financial (Mahoney, 1995). According to Amit & Schoemaker (1993), an organization's capacity is largely seen in the organization and combination of resources alongside tacit elements such as expertise and knowledge.

Resources and capabilities constitute the core strategic sources of competitive advantage. In the presence of rare, valuable, non-substitutable, and imperfectly imitable resources, resources can ensure and guarantee a competitive advantage (Gerrard, 2005). In this regard, the more organizations invest in capabilities, the higher they acquire a competitive advantage (Eisenhardt & Martin, 2000).

Approaches based on the theory of human capital

According to Armstrong and Taylor (2014, p.70), managing people can be approached based on the human capital theory. This entails receiving certain answers by asking specific questions that are stated below:

What are the main driving forces behind creating value in the organization?

Which skillsets do these individuals hold?

What are the required skillsets necessary to achieve the organization's essential objectives?

What measures can be implemented regarding attracting, developing, and retaining these skills that they possess?

What can be done regarding cultivating an atmosphere and culture that enables the promotion of learning that is beneficial in meeting the requirements of the employees and the organization?

Which measures can be implemented to incorporate and utilize the explicit component and tacit component of knowledge that is being generated?

This theory assists in determining the impact that the employees have on the company and the overall worth they add to those that have a stake in the organization. In addition, it portrays that human resource practice is useful and worthwhile. It is valuable because it adds to the assets of the organization in terms of the return on investments. Furthermore, it points in the direction and navigation of the prospective organization strategy that will communicate the relevant strategy and practice designed to boost the effectiveness of managing employees (Armstrong & Taylor, 2014).

The underlying principle surrounding the Human Capital theory is that an individual's learning abilities can be compared in terms of value to other resources that are a part of producing the services and products (Lucas, 1990). The ability of the organization to obtain advantages from human capital does not rest solely on the specific skills of the employees. It also

depends on the ability of the organization to create and leverage the supply and demand side movement constraint to retain the human capital at reduced costs against that of rival firms. However, it is the assumption that employees might seek employment elsewhere if they are willing to accept a salary reduction (Campbell, 2012).

According to Davenport (1999 p.10), human capital comprises knowledge such as IQ, intelligence, general and work-specific knowledge; behaviour such as work expression, abilities, norms, and beliefs; skills that are needed to carry out the task such as physical body mobility of the job; personal talent that is innate to the individuals; and effort which is the use of their innate talents and abilities in addition to time. Similarly, Wuttaphan (2017) opined that the theory of human capital illustrates the importance of maximizing labour in addition to how employees' knowledge, skills, and abilities can be accumulated within the organization that can contribute to improvements in the employees' abilities. He elaborated further that the value of this theory is generally accepted as a way to improve the performance of the organization, so it relies on the above-mentioned attributes as a value creation concept in organizations. The general presumption of the human capital theory is that educated and well-trained employees lead to greater productivity. It maintains that investing in human capital can potentially result in a competitive advantage in the organization.

Tan (2014) summarized the criticism surrounding Human Capital Theory (HCT) on moral, empirical, practical, and methodological grounds. HCT is harmful to HR because of its heavy reliance on educational measures while evaluating workforce competence. According to Barro (1991), previous studies used registrations or literacy levels to determine national human capital. Formal qualifications are a limitation of HCT toward human capital. Formal qualifications do not cover traditional accredited competencies acquired experientially or informally by an individual (Colardyn & Bjornavold, 2004). Furthermore, the absence of defending one's educational attainment prevents HCT from complementing HR (Green and McIntosh, 2007). Another limitation in HCT is the workforce crisis and the 'war for talent'. The role of HCT in the HR field is to ensure positive performance through the configuration of competencies (Cafferkey, 2018). Winterton (2009) argued that the organization actively needs an individual's intelligence and learning ability to demonstrate work performance.

COMPETITIVE ADVANTAGE AND MANAGING HUMAN CAPITAL

The probability of achieving organizational goals may be perceived through organizational commitment and the ability to influence its performance with human capital. Human capital, including employees' ability, skills and knowledge, is considered a tangible resource that contributes tremendously to organizational growth than any other organizational asset (Garavan, Morley, Gunnigle & Collins, 2001). Human capital may also appear to enhance the performance of employees through training and organizational development programs (Mahdi, Nassar, & Almsafir, 2019). Providing an organizational environment that gives freedom to employees while aiming to utilize employees' intellectual skills for organizational growth may also be a contributing factor.

The environment should provide training and workshops that develop problem-solving and all interrelated skills for employees. As it pertains to the management context, the ways adopted by management to ensure competitive advantages for the organization are important. The organizational structure constructed and provided by management can add value to organizational goals. Management should ensure that the structure provides for employees' needs and specify conditions that promote interactions between processes and individuals. Numerous motivational factors need to be adequately included in the organizational structure.

In addition, organizations can nurture employees' skills and competence to secure competitive advantages (Gannon, Roper & Doherty, 2015). Tacit knowledge is instrumental to competitive advantage and could largely be developed within the organization (Chaudhry &

Roomi, 2010). The effectiveness of tacit knowledge development plays an important part in employees' commitment to the organization (Alnidawi, et al. 2017). Barney (1991) researched the correlation between Strategic Competitive Advantage and the organization's assets. The indicators used to represent the potential of the organization's resources to bring about sustained competitive advantage were rareness, substitutability, value and imitability. The findings revealed that competitive advantage is based on the assets that the organization possesses, and the resources that are considered valuable, rare, inimitable, and non-substitutable possess the potential to bring forth a sustainable competitive advantage within the organization. Therefore, managing human capital is crucial to achieving a competitive advantage within organizations.

According to Hitt & Duane (2002), it is imperative that the management team properly manage such a resource within the organization, which involves the evaluation of the present talent repository and initiating the necessary adjustments to develop or acquire the relevant expertise from external sources and removing by means of layoff those human resources or those relationships that are external to the organization that is no longer beneficial. This also entails paying attention to the policies as they could be used to achieve organizational goals successfully. It is expected that management establishes policies that honour rewards, compensations, promotions, and career advancement since these are the factors that boost employees' motivational spirit. The policies are anticipated to limit or eliminate pressures on employees so that employees can get inspired.

The absence of effective management of human capital may downgrade the organizational level of performance in the marketplace. Alnidawi et al. (2017) perceived the unavoidable role of human capital in creating a competitive advantage in companies. Human capital management ensures the management of talent, individuals, and employees through retention, engagements, training, workshops, and development programs (Human Capital Management, n. d.). Hence, the concept could be used to develop, retain and attract customers to create value for the organization.

Industry 4.0 and human capital in achieving competitive advantage

Across the globe, the fourth industrial revolution is revered as the driving force behind technology, and technology propels formal or informal disruption while molding individuals. The impact of technology is two-fold; it can be predicted at times while unpredictable at other times, and it can be negative in one instance while positive in another. In the years ahead, artificial intelligence and automation will be more prevalent and will be transforming the work environment as employees begin to be more connected and engaged with smart machines. This type of human-to-machine interaction is expected to bring about a lot of benefits, including better productivity, work quality improvement in production and business performance (Balalle & Balalle, 2018).

The study by Kazancoglu & Ozkan-Ozen (2018) highlighted the transformation from conventional and old-fashion production processes to more digital, technologically equipped smart factories. The study revealed that demanding a high level of intelligence from the workers will contribute to an environment that will emphasize the importance of having the ability to handle complex matters, interact with modern interfaces, have knowledge of information technology, and solve problems, multi-tasking, and overall flexibility. In this regard, it is important that the organization's management team pay keen attention to the human capital as they have the capabilities. Industry 4.0 can help to create more knowledgeable workers that can influence worker productivity, improve quality, efficiency and determine the success level of the organization.

The workforce will be significantly impacted by industry 4.0 since the transformation directly affect the employees. The traditional roles of the workforce decline as a result of the

introduction of high-tech equipment that is synchronized, which enable easy communication among these machines and equipment, which makes them more self-reliant. As such, the job descriptions are significantly transformed; one, in particular, is the interaction or interface between the employee and the machine (Romero, Bernus, Noran, Stahre, & Fast-Berglund, 2016).

According to a paper published in the European Patent Office, by the year 2025, it is projected that 26-30 billion of devices, found in both the household and organizations, will be embedded with software and processors in addition to being equipped with the necessary sensors and connected to (IoT) Internet of Things. They will be able to function independently, collecting or exchanging data among themselves. When they are merged with other technology, for instance, artificial intelligence and cloud computing, they will facilitate the automation of the business process such as the intellectual jobs that were previously performed by people. They have already been in use in various sectors ranging from areas in manufacturing, agriculture, the transportation industry and even health (Meniere, 2017).

Industry 4.0 possesses a contradictory impact on role and performance. It may aggravate available structural imperfections and reduce the progress of climate crisis resolution. Business organizations broadly need modern and updated rules for operations (Cooper & Kaplan, 1988). Industry 4.0 has led to the synthesis of the physical and cyber world and propelled the ongoing movement towards a combination of innovation streams. The impact of industry 4.0 is ambivalent; it can pose both advantages and possible issues. If it is not properly managed, it can worsen the existing past structural imbalances as organizations cannot continue to operate under the former rules of the past (Đuričin & Vuksanović Herceg, 2020). These types of changes will affect the management and prompt modern approaches to the business model, strategic vision and organizational structures.

Among all sectors, actionable information is considered the major requirement for achieving a competitive advantage. Dynamic approaches enable business organizations to overcome data flows, critical infrastructure and actionable information challenges. Several platforms, technologies and resources can generate room for competitive advantages (Ardito, Petruzzelli, Panniello & Garavelli, 2019). In general, since the onset of the 4th industrial revolution, it may be argued that the major difference observed is the technology used and how it is merging more and more in everyday human life and creating the demand for new skills. It's happening at a more rapid speed and has led to a lot of innovation.

CHALLENGES IN UTILIZING HUMAN CAPITAL TO ACQUIRE A COMPETITIVE ADVANTAGE

The challenges of human capital may differ based on the type of organization, its location, the industry in which it operates, the type of business activities it engages in, and also the pool of talent. One of the fundamental issues with human capital is that, as opposed to other capital that the organization owns, such as the database, patents, etc., the human capital can simply exit the organization without returning (Coff & Raffie 2015). Therefore, this proves why managing human capital should be seen as a priority and why it poses a long-term issue in firms as it relates to obtaining a competitive advantage.

There are several factors that may inhibit the realization of competitive advantages through human capital. According to a research report by the Society of Human Resource Management, it was revealed that achieving greater levels of engagement among employees is a major challenge, as cited by 38% of the human resource personnel; also, leadership training was noted by 31%, sustaining a compensation level that was deemed competitive was noted by 29%; also a challenge to retain the top performers 26% and retention in general 25%, a specialist with the specific skill-sets 24%, while sustaining benefits that are competitive such as retirement health coverage, etc. was 24% (SHRM, 2015). These are some of the challenges that were outlined according to human resource professionals.

According to a study conducted by Gonzalez (2008) on Facing Human Capital Challenges in the 21st century in selected Arab countries, it was revealed that the demand for qualified employees is outgrowing the actual number of skilled personnel. With regard to the gulf countries, it should be noted that foreigners dominate the workplace. An employee's skill, for instance, may need certain organizational inputs and support before implementation, of which the organization lacks the structure and policies to make it available and achievable. Goals setting between employees' promotion and organizational development may likewise delay the organization from achieving competitive advantages. High-number of feedback interventions may clash with organizational objectives, thus decreasing task fulfilment and performance. While positive feedback motivates employees to work more, negative feedback unfavourably affects employees' strengths and feelings toward organizational assignments.

A low level of knowledge, experience, training and information about organizational-task reduces employees' support and participation toward achieving competitive advantage. Mullins (2007) opined that education is a route for advancing their careers; if the organization intends to maintain high productivity levels, it is important that employees are given opportunities for education. The unavailability of motivational instruments may pave the way for employees' light-hearted commitment to organizational objectives. Excessive organizational objectives and customers' feedback may be an issue for employees' activeness in activities. It is the duty of employers to provide solutions to challenges faced by employees. However, it becomes a harmful situation when the employer's knowledge, experience, exposure, and intellectual skills are far below the employee's capabilities.

Factional conflicts may also be a major concern among employees because certain members may detest teamwork and cooperation, thus impeding knowledge-sharing within the organization. Factional sentiments give room for selfish and sluggish attainment of objectives. Factional conflicts imply that some employees would lack updates about the ongoing activities in the organization. Investment priority between employees and the organization would have far-reaching practical effects on competitive advantage, especially when employers prefer to invest in the organization instead of human capital resources. The highlighted issues, if left unaddressed, would impede the realization of human capital in the organization.

The industry 4.0 revolution, with the digitalization of more and more aspects of the workplace and technology changing every day, might pose some challenges regarding keeping abreast of the latest developments. More organizations are embracing the latest technologies, which will create demand for new skills. This will place more demanding requirements on the low-skill employees since the task might require new skills that some employees do not have. Therefore, the employees must seek to acquire better knowledge. If the opportunities are not provided, this might lead to frustration and reduced motivation. If employees are faced with these dilemmas at the workplace, it might dampen their productive spirits and hence, affect the organization's competitive stance in a negative way.

CONCLUDING COMMENTS

The literature reveals that Human capital plays a significant role as a contributor to obtaining a competitive advantage in organizations, especially in today's age of global competition, producing value-worthy products and services is a major concern. A lot of effort has been placed into improving this. Even though competitive advantage can be viewed in terms of comparative and differential competitive advantage, in essence, it can only be achieved through placing emphasis on the effective management of human capital since they are the driving force behind it. In a competitive market, organizations strive to be in a position that gives them an edge over others. Human capital is the real resource; they possess the know-how, knowledge, and skills. If they deem their work environment satisfactory, this can lead to motivated employees; hence they'll express a willingness to exert more energy and attention, which will ultimately lead to

better outcomes. This translates into improved production, yielding better results and fostering an environment that can create a competitive advantage.

Managing human capital ensures high quality in the selection and recruitment of employees so that available talent can be evaluated and needed value can equally be supported with investment. Human capital management structures the performance expectations of the organization. The managers are the ones that assess organizational goals through employees' commitments, capabilities, and contributions. Therefore, managing human capital plays a role in enhancing employees' performance in organizational assignments, duties, and obligations.

Based on the literature, there are certain challenges that may be encountered regarding human capital, and these challenges may inhibit the attainment of competitive advantages in organizations. Human resource personnel and the availability of adequate training for the potential leaders in the organization secure the top-performing employees. Also, the integration of more technology in the workplace has posed a challenge since it requires employees to be retrained to obtain more advanced knowledge in this area. Some employees do not possess the necessary skills and may also oppose learning. In addition, retaining and acquiring specialists can be considered among the challenges that organizations face. Furthermore, employees' reluctance to be team players and the lack of cooperation thereby restrict the sharing of knowledge. If knowledge is not being circulated, it may dampen the spread of ideas, creativity, and the necessary knowledge that leads to innovation which can potentially affect competitiveness.

The afore-spotlighted human capital elements depict how they complement the organization to acquire a competitive advantage. Employees' natural, personal and innovative skills, in addition to their commitment, knowledge, and experience, are instrumental to quality ideas and valuable advantages that realize organizational objectives. Employees' knowledge, particularly the one that is constantly updated with training and workshops, can navigate an organization to the advantageous side in all plans, services, and activities. Besides, competitive advantage may be unachievable alongside an obsolete structure. A structure that lacks motivational factors would definitely discourage employees from using human capital to ensure competitive advantage.

Furthermore, the paper brings to light the approaches to utilizing human capital to achieve a competitive advantage for an organization. The Resource base view and the Human capital theory were the approaches discussed and considered relevant in navigating human capital towards a competitive stance. The distinctive character of the organization could be realized through the human capital concept; investing in employees brings new ideas and solutions to the organization. While there are other resources that the organization owns, such as technology and equipment, the human capital emanates from the employment relationship and could not be regarded as organizational-owned property but is also privy to its success.

Although training and experience additionally enhance human capital, it is essential to state that employees often come along with human capital to the organization. The effectiveness of human capital can be perceived in the employee's productive capacities. Employees' energy, attributes, enthusiasm, knowledge, inventiveness, and life experience constitute human capital, thus contributing to achieving an organization's competitive advantage.

Furthermore, there is an increased interest in how intellectual capital is being utilized to establish value in the organization. Human capital is viewed as an important component of intellectual capital. Industry 4.0 was also seen as an important contributor to competitive advantage as the advanced technology seems to employ more modern ways of getting the job done. Even though advanced technology is necessary, among other factors, the quest towards the achievement of competitive advantage lies in the role of properly managing human capital because human capital neutralizes threats, exploits opportunities, and enhances organizational efficiency that has the potential to lead to a competitive advantage.

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