THE CHANGING ROLE OF HUMAN RESOURCE MANAGEMENT IN AN ERA OF DIGITAL TRANSFORMATION

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ABSTRACT

The purpose of this study is to explore the changing role of human resource management in an era of digital transformation. The research question is: what do HR (human resource) professionals perceive to be the changing role of Human Resource Management in times of digital transformation. Digital transformation is the transformation of business processes, operations and structures in order to exploit the benefits of new technology. In the search for competitive advantage that may be brought about by digital transformation strategy researchers increasingly acknowledge human capital, intellectual capital and knowledge as critical components. A resource based view is adopted whereby a company's resources (technology and human capital) are perceived as assets and competencies owned or controlled by the firm that generate value for the business in achieving competitive advantage. The research methodology is a qualitative methodology using semi-structured interviews with five HR (human resources) professionals in the United Arab Emirates (UAE). The semi-structured interviews address the areas of HR planning, reward management, performance management, training and development, health and safety and employee relations, and their change in an era of digital transformation. Results are analysed using thematic analysis of the main themes and sub-themes. The main findings are that whilst digitalization impacts day-to-day HR practices and procedures particularly with the use of human resources information systems there is less emphasis on the role of HR in contributing to the strategy of digitalization.

Keywords: Strategic Human Resource Management, Digital Transformation, Qualitative research, Resource-based View.

INTRODUCTION

It is important to understand the importance of digital transformation in the context of the United Arab Emirates. The United Arab Emirates are leaders in using innovation to drive technology to new heights and companies in the UAE are claimed to be amongst the most prepared companies for the digital transformation era in the world. Between 2017 and 2021, digital transformation is expected to generate $16.9 billion in extra revenue annually for companies in the Middle East (Cabral, 2017).

Digital technologies play an increasingly influential role in both the working lives of employees and human resource management (HRM), which is to be affected in multiple ways (Parry & Strohmeier, 2014). The purpose of this study is to discover the changing role of human resource management as a result of digital transformation. The research question is: what do HR professionals perceive to be the changing role of Human Resource Management in times

of digital transformation? It is a study that is based in the UAE and taps into the perspectives of professionals in HR.

Digital transformation strategies can best be understood in a business centric perspective. These strategies have as their focus the transformation of products, processes and all organizational aspects as a result of new technology. Digital transformation strategies bring about changes to and have implications for business models as a whole (Matt et al., 2015). Similarly human resource management is also business centric and brings about change by adding value to organizations as a strategic partner, administrative expert and employee champion (Ulrich, 1997).

Bengtsson & Bloom (2017) claim that whilst it is clear that digitalization is effecting organizations and human capital there has been little research about how digitalization is experienced by HR managers in practice. This research tries to address this gap in literature by studying the perspectives of HR managers. Another contribution of this research study is that it addresses critical factors for making a successful digital transformation. This area of study is still underexplored (Liu et al., 2011).

Resource Based View

The theoretical framework of this study is the Resource Based View (RBV). The resource-based view (RBV) is a model that sees resources as key to superior company performance. The RBV suggests that the resources owned by a company such as human capital and technological resources are the main determinants of its value, performance, and sustained competitive advantage (Hoffer & Schendel, 1978; Wenerfelt, 1984). According to Barney (1991), resources are controlled by a company and enable the company to conceive of and implement strategies that improve its efficiency and effectiveness. Resources result in capabilities that then are a source of competitive advantage (Grant, 1991). Different sets of resources such as technology and human capital have a synergistic effect that results in sustained competitive advantage (Black & Boal, 1994; Broadbent, Weill & Neo, 1999). According to the RBV, the impact of technology resources on company performance and competitiveness should be understood in the light of other resources (Clemons, 1991) which for the purpose of this study are human capital.

Digital transformation and Human Resource Management

Digital transformation has revolutionized the way companies relate to their customers, how companies run their operations, how they conceive of their business model and how they organize themselves (Westerman & Bonnet, 2015).It is about integrating digital technologies, such as social, mobile, analytics and cloud, in the service of transforming how businesses work (Kane et al., 2015). The integration of digital technology into business processes has become very important for the survival and competitive advantage of contemporary organizations (Bharadwaj, 2000).

Human Resource Management has as its main focus the performance of the organisation emphasizing the role of human resource management as a solution to business problems (Becker & Huselid, 2006). Human resource management is a strategic asset to firms contributing to the competitive advantage of the company (Schroeder, 2013). Payne (2010) claims that unless human resource management changes to manage the HR function strategically top management may continue to regard human resources as a drain to the finances of the company.

On the human resource management in a digital age, Palmer et al. (2017) claim that human resource management is as a result more varied, more people-oriented with the responsibility of designing diverse, challenging jobs to keep the young employees more engaged in their work. Digital transformation puts into questions the traditional ways the HR functions are carried out in organisations.

Bell et al. (2006) state that the digital transformation has resulted in further implications for the role of HR, its capabilities and competencies. Furthermore, Larkin (2017) argues

the change to the HR department that digital technology will bring will be all pervasive and omni-directional throughout every company.

Consequently, digitalization affects HRM more than just through facilitating daily administrative work. The use of technology facilitates the actual HR functions (functions addressed in this study are: HR planning; recruitment and selection; performance management; reward management; health and safety; employee relations; work design) however has also added new demands on the HR function as the latter ensures that the human capital in the organization is one that is aligned with the strategic needs of a digital era.

Hays & Kearney (2001) write about how HRM is a field that is very sensitive to changes in the broad environment. They write how technological innovations push mainstream personnel techniques to their expiration date. HR Managers in an era of digitalization are loyal to traditional values however dedicate more time to managing information and mastering software (Human Resource Information Systems - HRIS). Technology is changing the way HR accesses, manipulates, transmits and store massive amounts of data.

Human Resource Information System (HRIS) is an important Management Information System which contributes to the human resource functions of an organization. HRIS is a computer system used to acquire, store, manipulate, analyse, retrieve and distribute information related to human resources. Modern HRIS can help organizations by automating most HR functions. HRIS becomes an important strategic tool since it collects, manages and reports information for decision-making (Nagendra & Deshpande, 2014).

HRIS has brought about changes to the role of human resource management in an organization. Kassim et al. (2012) found that the use of HRIS serves as an empowering function for HR professionals, providing a means for HR professionals to provide increased value in their work. IT is a tool that HR professionals can utilize to provide more value to the organization (Ulrich, 1998). Also on the impact of HRIS, Kassim et al. (2012) write that HRIS contributes to information accuracy and greater responsiveness. Since the use of HRIS systems decrease the time required to complete tasks HR professionals have more time to see to organization-wide issues, strategy development issues and organizational change efforts (Kassim et al., 2012).

Miles & Snow (1994) used the term strategic fit to emphasize that organizations need to find a match between their internal resources/capabilities and the demands of their external environments in order to enhance their competitive advantage. HR planning ensures that there is a strategic fit between the human resources of a company and the demands of digital transformation by forecasting the needs of a company in terms of resources and capabilities and setting the right goals to meet those needs. Action is taken by the HR department to recruit and select the required resources and capabilities to meet the demands of a digital era. Each business will have different transformational objectives so defining the digital transformation goals is an essential first step in determining the core business capabilities required to achieve the transformational objectives of a digital era.

METHODOLOGY

A qualitative methodology was selected for this study since an in-depth understanding of the perceptions of HR managers on their changing role in an era of digitalization is the aim of the research. Researchers decided that such in-depth understanding could best be achieved through semi-structured interviews. The face-to-face in-depth semi-structured interviews addressed the key areas of HR (namely HR Planning, work design, reward management, training and development, performance management, selection and recruitment and health and safety) and the influence of digital transformation. The semi-structured nature ensured that the key issues and areas of HR were addressed with a degree of consistency in all five interviews.

Five HR managers of large institutions in the UAE (specifically in the Emirates of Sharjah & Dubai) belonging to both the private and public sector received an e mail in which they were asked whether they were willing to be interviewed after the aim of the interview was explained to them. Anonymity was promised as no reference is made to the name of the HR manager interviewed as well as the company where s/he works. Interviewees consented by e mail and appointments were set at the place of work of the interviewees. Each face to face interview lasted 60 minutes and were recorded allowing for further transcription. Confidentiality is also secured as no information in the research report allows for recognition of the participating companies.

The method used to analyse results was thematic analysis with the aim of understand the main themes and sub-themes of the interviews also addressing the links between such themes.

RESULTS

The result of the thematic analysis shows two main approaches to thinking about digital transformation by HR managers. These are subdivided into main themes and sub-themes. The first approach is thinking about the role of HR in supporting the digital transformation era and the second approach is how such digital transformation has revolutionized HR day-to-day practices. The latter is the main approach taken by the five HR Managers participating in this study.

On the role of HR in supporting digital transformation in organizations although all participating five HR Managers in the five organizations mention the digital transformation they have experienced and are still currently experiencing, only one of these HR Managers mentioned the important role of HR in bringing about digital transformation
"We in HR have a great role in bringing about that change".

On the contrary all five HR Managers in the five organizations addressed how digital transformation has revolutionized HR practices. The main themes are: HR Planning; Recruitment and Selection; Reward Management; Performance Management; Employee Relations; Culture; Health and Safety; Training and Development; advantages and disadvantages of digital transformations.

On HR Planning one of the five HR Managers addressed the use of technology in the forecasting and goal setting stages of HR planning and another two HR Managers mentioned the use of HRIS to facilitate the process of planning. However on Recruitment and Selection all HR Managers mentioned the use of HRIS, two HR Managers addressed the use of technology with regards to selection techniques such as simulation and psychometric testing

"*Psychometric assessment is an online assessment. We also have other customized assessment one is called E skills. This is simulation exercise for financial, accounting, computing skills. This is all implemented thanks to new technology*"

whilst one participant also spoke about how technology has facilitated talent management and succession planning, in particular the identification of talent in the organization "*Our system helps us not only identify the right candidates for the right jobs, it also identifies high potential candidates that might be suitable for future jobs*".

Differently, only one participant mentioned the use of HRIS in Performance Management. However in reward management three HR Managers addressed the use of technology specifically the digitalization of certificates

"*We are working on digitalizing most of the certificates, for example the monthly excellence certificate. The employee will get a digital certificate and there are other types of certificates or messages which can be received by an employee for outstanding performance*"

and the use of HRIS.

On the main theme of training and development all five participants spoke about the use of E Learning as a widespread training method within their organization

"*We have introduced E-Learning as part of our digital transformation. Employees can attend training anywhere, even whilst sitting at home they can attend training thanks to technology*".

Software is also used in the identification of training needs (one participant) and to ease signing up for training (one participant). Another participant also mentioned how digitalization is shaping training objectives as more and more employees need to be trained in information technology skills

"*We have to forecast, as I said earlier, what type of future training we need, to prepare our workforce to fit in the technological world or digital world*".

On health and safety two participants mentioned the use of technology in digital signage, another participant spoke about wearable technology

"*We have wearable technology that measures leaks, heat and toxic gasses that help us to identify risky environments*"

whilst another two participants addressed the use of technology in improving security

"*All our doors are mostly locked with a key code or with a card. All doors are unlocked as soon as something happens so it will be easy for people to leave the building. These are some of the health and safety measures*".

Addressing the main theme of employee relations all participants agree that in the era of digitalization communication has improved

"*As a company we are adopting a lot of the social media either in announcing new products, new serves and in communicating internally and externally*". Linked to this aspect a participant also addressed the increased collaboration as a value within the company culture ("*I believe that with the use of digital methods of communication even the value of collaboration has been given greater weight within the company*"). Table 1 shows the main themes and sub-themes as addressed by the five HR managers in the five organizations.

Table 1 MAIN THESES AND SUB-THEMES						
Theme	Sub-Themes	Participant A	Participant B	Participant C	Participant D	Participant E
Digital transformation	The Role of HR in implementing a	1				

strategy	Digital transformation strategy					
	Digital transformation as key to the company's competitive advantage		1			1
	Experienced and experiencing Digital Transformation	1	1	1	1	1
HR Planning	Digital transformation influences HR Planning specifically the forecasting of competencies needed such as the IT skills required for employees	1				
	Use of HRIS		1			1
Recruitment and selection	HRIS system such as Oracle	1	1	1	1	1
	Use of software in recruitment and selection that is integrated with the company website	1		1		1
	Digital technology facilitates talent management		1			
	Technology used in Psychometric testing and other selection techniques				1	1
Performance Management	Use of HRIS				1	
Reward Management	Digitalizing recognition certification	1		1		1
	Use of HRIS		1	1		1
	Software facilitates the recognition of high performers		1			
Advantages of technology	• Ease of documentation • Speed • Ease in communication across Emirates; • Use of tele	1	1	1	1	1

	conferencing; • Simplicity; • Greater organization; • Less paper work; • Increase in accessibility; • Ease in collecting comparative data • Improved planning • Improved performance • Improved motivation					
Disadvantages	• Cost of software and their updates; • Software lacks the human touch; • Greater security of data is required		1			
Training and development	Use of e learning	1	1	1	1	1
	Digital transformation is shaping training objectives as people need to become more skilled in the use of technology	1				
	Use of software in the Training Needs assessment		1			
	Use of software to apply for training			1		
Health and Safety	Digital signage	1				1
	Wearable Technology that indicates a risk in the environment		1			
	Security Systems				1	1
Employee relations	Use of online chat rooms		1			
	Improved communication	1	1	1	1	1
Culture	Digital transformation improved the value of collaboration	1				

As shown in Table 1 all five participants believe that in the era of digitalization there are many advantages such as the reduction in paper work, speed, ease in communication and greater simplicity. One out of the five participants also noted disadvantages experienced in the era of digitalization namely the cost of software; machines do not have the human touch and issues related to security of information.

DISCUSSION AND CONCLUSION

Matt et al. (2015) write how digital transformation has transformed the business processes, operations and structures in order to exploit the benefits of new technology. The findings in this study show how digital transformation has transformed human resource business processes and operations as all participating HR managers write about the use of human resources information systems and other technology that have greatly impacted their work as HR Managers. All participating HR Managers speak positively of the transformations in HR processes mentioning the following advantages: ease of documentation; speed; ease in communication across Emirates; use of tele conferencing; simplicity; greater organization; less paper work; increase in accessibility; ease in collecting comparative data; improved planning; improved performance; improved motivation.

Human capital (Hitt et al., 2001), intellectual capital (Edvinsson & Malone, 1997) and knowledge (Grant, 1996; Leibeskind, 1996; Matusik & Hill, 1998) are critical components in bringing about digital transformation. However in this study we conclude that digital transformation is being seen by the participating HR Managers more as serving HR and there is less emphasis on the role of HR in bringing about the digital transformation strategy. Human Resource Management with its involvement in training and development, performance management, talent management and reward management pays an important role in achieving the strategy of digitalization. However in this study the focus of participants tends to be on how technology has made HR practices and procedures more efficient and effective.

In conjunction, companies seem to be using technology more to ease, speed up and improve their current human resource practices and procedures and less to analyse data and plan around such analysis. Whilst HRIS in the companies participating in this study is used to contribute to information accuracy and greater responsiveness (Kassim et al., 2012) it is used to a much lesser degree to address organization-wide issues, strategy development issues and organizational change efforts (Kassim et al., 2012).

The widespread use of E-learning is a finding in this study that spans across all five organizations that have and are experiencing digital transformation. According to Cheng, Wang, Mørch et al. (2014), E-learning, is increasingly used by organizations as a result of its efficiency and just-in-time delivery benefits. Improved communication is another finding that spans all organizations. The link between digitalization and communication is found in literature (Attaran, 2003) and further confirmed in this study.

The main recommendation for HR Professionals is that technology and human capital in organizations are seen more as working together in a synergistic effect resulting in sustained competitive advantage (Black & Boal, 1994; Broadbent et al., 1999). Based on the research finding, HR is to take a more active role in contributing to the era of digitalization in ensuring that the human capital are skilled and knowledgeable to meet the digitalization needs of the

present and future. All the HR functions may be aligned to ensure that the digitalization strategy of the organization is achieved.

The use of HRIS in the organizations participating in the study is widespread. A further recommendation for HR professionals is to make use of the data stored in their HRIS to contribute to strategy formulation, design and implementation. The use of HRIS to speed up processes making them more efficient and effective should also be extended to the analysis of such data. The analysis of this data can serve to influence strategy formulation.

A limitation of this research study is the limited sample size adopted therefore preventing the extrapolation of research findings. With this in mind a recommendation for further research is to study the changing role of HR in an era of digitalization using larger samples and research both approaches to the role of HR, namely the role of HR in supporting the digital transformation era as well as how such digital transformation has revolutionized HR practices.

Another recommendation is to research business analytics within organizations and the use of information from HRIS to guide strategy. Finally research may also be conducted on the outcomes of e Learning since this is widely spread in the organizations participating in this research study.

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