The Impact of e-HRM on Organisational Citizenship Behaviour – A Study Outlined in the IT Sector

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THE IMPACT OF E-HRM ON ORGANISATIONAL CITIZENSHIP BEHAVIOUR – A STUDY OUTLINED IN THE IT SECTOR

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Abstract
Technology acts as a gateway and has a significant role in shaping an organisation. It helps the workforce in organisations become more effective in their day-to-day work, which in turn helps the organisation achieve its productivity. In this research, the role of technology is linked to Electronic Human Resources Management (E-HRM). Along the similar lines, the concept of Organisational Citizenship Behaviour (OCB) relates to employees and their behaviour towards the organisation, which corresponds to the productivity of the employees from their job duties. The current research performed helps arrive at a conclusion about the relationship between E-HRM and OCB. The primary data collected was through a structured questionnaire, and we used a purposive sampling technique to analyse the results. 20 Information Technology (IT) organisations and 100 respondents participated in the research. A multiple regression test is used to predict the outcome of the research across all the dimensions of OCB and its relationship with E-HRM. The study revealed the behaviour patterns of employees while they are using technology at work. These findings are significant in nature as they help the top management of IT organisations evaluate the causes of employee behaviour towards technology.

Keywords: electronic human resources management, organisational citizenship behaviour, human resources, information technology, management

JEL classification: M5, M12, M15, M21

Introduction

The Human Resources Department (HRD) is known as the Central Processing Unit in an organisation. It is equally important to understand both the strengths and weaknesses of HRD in an organisation, and endeavour to improve the weaknesses. Only then will the organisation be able to achieve its goals. Technology in HRD has an important role, and its positive impact can upgrade HR processes and practices. When technology is combined with HR functions, it helps to create a positive work environment for the stakeholders. The term Organisational

Citizenship Behaviour has a vital role in connecting employee and employer for various HR-related matters (Organ, 1997).

The multi-national companies are spending large amounts of money in their line of business, and for them, it is important to achieve productivity and profitability from their investments. To achieve this goal, employees play a significant role. The behaviour and morale of employees are crucial to determining the performance of the business (Salanova & Schaufeli, 2008). By default, it is the wish of any organisation that their employees display organisational citizenship behaviour, but in practice, this is not completely possible to achieve (Wengrzyn, 2003).

In practice, every organisation tries to achieve so-called organisational behaviour which is required for developing a competitive advantage (Saifi & Shahzad, 2017). According to past studies, there is this tendency for employees to go the extra mile in their work, i.e. when it comes to performing a job. So on the one hand, the employees not only tend to do their regular work but they also try to contribute extra efforts to their job. This indicates the kind of trust the employee gets from the organisation and this type of behaviour developed by the employee reflects their hope that the organisation will take care of them as long as they work hard and contribute to the success of the organisation (Dirks & Ferrin, 2000).

On the other hand, the role of the manager is increasingly challenging due to business dynamics and employee behaviour and expectations. More often than not, the manager struggles to find a proper solution to behaviour related issues with employees (Michel, Newness, & Duniewicz, 2016). With the globalisation of businesses and employees working from various parts of the world, it is a challenge for the organisation to manage both business and its workforce, bring them together and achieve their goals. Organisations tend to look for different ways of operating their business for the best possible outcome. One of the key factors is organisational citizenship behaviour as a capable element to improve the performance of the organisation (Yang, Simon, Wang, & Zheng, 2016).

There is a lack of research to demonstrate the key relationship between E-HRM and OCB, and to be precise, this shortage is observed in the field of the IT sector in Bangalore, India. This study was conducted to address this gap. Social Exchange Theory and the Technology Acceptance Model were used to showcase the relationship between OCB and E-HRM. It is evident that the city of Bangalore has an ample number of IT companies and well-trained IT professionals working at various job levels. The success of these organisations comes from their business model as well as the effort of their employees. It is a known fact that employees in the IT sector are known to be technology savvy. However, what is unknown is to what extent an IT organisation is applying technology in the day-to-day operations and where all the technology is applied. Furthermore, when the technology is applied, what overall outcome is achieved, and how well we understand the overall behaviour of the employees towards the technology and its application. These are all the known and unknown key factors needed to conduct the research.

Theoretical framework

Electronic human resources management (E-HRM)

E-HRM is a technological concept that helps to implement HR strategies and practices in organisations by using web-based technologies (Ruel et al., 2004). The other definitions for E-

HRM were more inclined towards technology and organisational situations by categorising the phases into planning, implementation and applying the information technology while connecting at least two individuals in a shared services environment that involves HR activities (Strohmeier, 2007).

It was stated by Marler (2009) that the strategy of E-HRM contributed primarily to three parameters: saving cost, strategic alignment, and resource building. Whereas it was stated by Grant & Newell (2013), the concept of E-HRM revealed a platform of Human Resources Information System (HRIS) that helped the employees in an organisation use various employee-related data and administer these data by the HR professionals. Here, the employees could generate and access their own data in terms of personal information, skills, managing their time off, and attendance. In addition to this, the managers would have access to review the data of their team members.

Organisational citizenship behaviour (OCB)

The concept of Organisational Citizenship Behaviour (OCB) has been explored and researched by scholars over the past two decades. This area of research remains of special interest to the researchers. OCB corresponds to the known behaviour showcased by the employees while in the organisation (S Tambe, 2014). This paper is an effort to understand the meaning, nature, and scope of OCB, and it attempts to study the various dimensions of OCB. There is a detailed discussion of the five dimensions of OCB given by Organ (1988), and the paper makes reference to other dimensions of OCB given by various scholars from time to time.

The concept of Organisational Citizenship Behaviour has shown a tremendous increase in productivity, efficiency, and customer satisfaction, which in turn has shown motivation among employees at their workplaces in the form of reduced absenteeism and increased productivity (Podsakoff, Whiting, Podsakoff & Blume, 2009).

E-HRM and OCB relationship

The relationship between the application of E-HRM and, correspondingly, the way it affects the concepts of OCB has been defined by a few studies conducted across the globe. There seems to be a gradual development when it comes to adopting the practices of human resources management combined with OCB (Valeau & Paille, 2017). According to the Social Exchange Theory, the concept of Human Resources Management (HRM) practices can result in the ultimate satisfaction of the employees, and their contribution becomes more productive (H. He, 2014). The scope of social exchange theory is to evaluate the output of the HRM practices adopted by organisations by asking the employees about their inputs on the HRM practices adopted by their organisations (Ko & Hur, 2014).

Conceptual framework of the study

Employee needs in organisations can be beyond any limits, i.e. they can be categorised as unlimited needs and expectations from their employer. As stated by Homans (1961) with the amicable persistence of the transactional mindset, there is this tendency that if the employer can satisfy the employee's needs, then correspondingly, it is expected that the employee's

performance at the workplace gets better. Congruently, it was stated by J.A. Forson (2021) that the organisation can attain its goals by virtue of keeping employee motivated and their morale up. The concept of the Technological Acceptance Model (TAM) (Venkatesh & Bala, 2008) was used to develop the model of framework for the study that was conducted.

Problem statement

Based on the various inputs obtained from a theoretical perspective regarding the relationship between E-HRM and OCB and its assessment towards the employees in the organisations, it is becoming evident that the relationship between E-HRM and OCB is significant. The Information Technology sector is always booming, and as the advancement of technology persists, the number of challenges increases from an organisational standpoint. One of the core challenges is employee welfare. An unhappy employee will surely leave the job and the organisation for better prospects elsewhere. The employees who are leaving resemble the slowdown in the organisation growth. It takes an ample number of days, or at times months, to fulfil a particular skill of an employee who is expected to leave versus an employee expected to fill the leaver's position in an organisation. This is by no means a hurdle. It is important to analyse the mindset of the employees while implementing changes in the organisation.

Any strategic move by the organisation needs to be dealt with cautiously. The introduction of technology and its application is a prime example of how it can make or break employees' attitudes and behaviours towards the organisation. This reflects a change in Organisational Citizenship Behaviour from an employee's perspective towards their organisation. To address the issue of employees and organisational behaviour, in this study, we were trying to evaluate E-HRM practices adopted in the IT companies in the city of Bangalore. This was followed by an evaluation of employee behaviour towards technology. After analysing the literature review and various factors in reference to this area of research and domain, the attitude of the employees towards technology, and to be specific, the use of E-HRM and the behaviour aspect of employees, was found to be a novel concept that was not researched neither in the information technology organisations nor in the city of Bangalore.

Research methodology

The objective of the study was to assess the OCB dimensions and combine them with the concepts of E-HRM to understand the behaviour of employees towards technology adoption and change management in information technology (IT) organisations.

The research was categorised as relational E-HRM wherein a hypothetical scenario between two modules was created and compared. The relationship was created and developed as per guidelines of previous research conducted in different environments using a similar topology. A purposeful sampling technique was used to collect the data. The reason for using purposive sampling is based on the user experience of the E-HRM tool in organisations. It is important to know the amount of hands-on experience a user has with reference to the application and adoption of E-HRM in organisations.

The structural constructs were measured by keeping in mind the past research conducted in this field and its attributes. A 5-point Likert scale was used to measure the OCB dimensions in the form of altruism, conscientiousness, courtesy, civic virtue and sportsmanship.

The E-HRM modules used for testing the sequences were in the lines of E-Recruitment, E-Performance and E-Separation. The dependent variable was OCB, and its concept was explained as stated by Podsakoff et al. (1990).

The concept of E-HRM relates to the modalities of technology. When it comes to the modality, it refers to the application of E-HRM tools in organisations. In this case, the study was performed in an IT business that is based outside the city of Bangalore. Inferring from the technology aspect and its presence, the study adopted the TAM 3 (Technological Acceptance Model) (Venkatesh & Bala, 2008).

The given theory explicitly talks about the various processes and procedures involved in adopting technology and innovation. It further explains that it is up to the organisation and its people to decide what is good and useful for employee and organisational needs.

The decision makers in the organisation should know how to effectively implement any new technology at the workplace by buttressing the challenges. The decision makers should know what all the areas are to expedite the adoption of technology in the organisation to become more agile and productive.

A centralised system with the application of technology and its advancement can bring the people and processes of the organisation together on a single platform. However, it is equally important to evaluate the pulse of the employees towards the introduction of technology at the workplace.

Employees are the biggest strength of the organisation (Peters & Waterman, 1982). It is the responsibility of the management and the organisation to ensure that the morale and motivation of the employees are not affected due to the introduction of E-HRM (Mohamad & Ramayah, 2011; Mohd, Ramayah, & Ibrahim, 2010).

Hence, the hypothesis can be defined as:
H01: *There is a significant impact on the attitude and the aspects among employees that construe OCB while using the E-HRM system at the workplace.*

Data collection and interpretation

The research was conducted in the information technology sector and targeted Bangalore as a location. The number of people selected for this survey was eighty IT professionals working in the capacities of Software Engineers, Senior Software Engineers, Managers and Directors. The distribution of the employees is as shown in Table 1. The questionnaire was developed using OCB measurement in various studies (Podsakoff, MacKenzie & Bommer, 1996; Van Dyne et al., 1994). The Cronbach alpha of the questionnaire was found to be 0.87.

Table 1 indicates the type of respondents required to conduct the survey and reach a conclusion about the various behaviour-related patterns among employees in organisations that are predominantly in the information technology sector.

It is significant to select more employees in the Engineer and Senior Engineer categories as they are the end-users of the E-HRM system (referred to as operational activities). Employees at the Director- and Managerial levels were using the E-HRM system to review and approve employee-related work functions (referred to as strategical activities). They were also classified as the end-users.

However, the employees in Engineer and Senior Engineer roles were involved in performing day-to-day tasks that were classified as operational activities. To gauge the actual efficiency of the E-HRM system, the operational tasks were especially relevant, but both the operational and strategical were of equal importance. Operational E-HRM practices drove the efficiency of the organisation by streamlining HR activities (Lepak & Snell, 1998; Parry, 2011).

Table 1: Classification of respondents in reference to the job level

		Number of Software Professionals
Classification of Software Professionals	Engineers	40
	Senior Engineers	40
	Managers	10
	Directors	10

Source: authors' research.

Table 2 shows the years of work experience of the software professionals against the research respondents with different job roles. It was important to have some experience within or background in E-HRM from the respondent's point of view. This helped to add a maturity level to the recorded responses.

Table 2: Classification of the respondents in reference to the job role and years of experience

		Years of Experience
Job Role	Engineers	1 to 3 years
	Senior Engineers	3+ to 7 years
	Managers	7+ to 12 years
	Directors	12+ years

Source: authors' research.

Table 3 represents the research categorisation of respondents by gender and their level of education. From a gender perspective, more female respondents were actively participating in the survey compared to their male counterparts.

From the educational background of the respondents, the majority were people with engineering degrees, either holding bachelor's or relevant master's degrees. There were responses from people at the entry level of the career with the minimum qualification of a diploma in engineering. Some had the highest level of education in the field of engineering, which is the doctorate degree.

Table 3: Classification of respondents in reference to Gender and Education

Gender-wise summary and distribution

	Gender	Frequency	Percentage %
Demography	Male	33	41.25
	Female	47	58.75

Education-wise summary and distribution

	Qualification	Frequency	Percentage %
Demography	Diploma	8	10.00
	Bachelors	39	48.75
	Masters	27	33.75
	Doctorate	6	7.50

Source: authors' research.

Table 4 shows the correlation between the OCB dimensions in the form of Altruism, Conscientiousness, Curtesy, Civic Virtue and Sportsmanship.

A multiple linear regression test was used to predict the output of the hypothesis across all the five given dimensions of the OCB, which are mentioned in Table 5. The correlation was calculated by keeping all five dimensions in order. Here, the p-value is greater than 0.01 across all five dimensions of OCB, which are Altruism, Conscientiousness, Courtesy, Civic virtue, and Sportsmanship.

As a result of the above analysis, it can be interpreted that the presence of E-HRM in the workplace makes a major contribution to the mindset and related behaviour of the employees in an organisation.

Table 4: Correlation between the OCB dimensions

Dimensions	M	SD	AL	CS	CT	CV	SM
Altruism	4.54	1.22	.77				
Conscientiousness	5.89	0.89		.63			
Courtesy	5.23	1.11			.78		
Civic virtue	4.95	0.79				.75	
Sportsmanship	4.61	1.23					.86

AL = Altruism, CS = Conscientious, CT = Courtesy, CV = Civic Virtue, SM = Sportsmanship
Source: authors' research.

Table 5 shows the regression analysis performance to predict the hypothesis status. Here, the regression equation is insignificant, resulting in a p value greater than 0.01. It indicates that the null hypothesis (H0) is a workaround, and it is within acceptable limits.

Table 5: Regression analysis to predict the output of the hypothesis

Dependent Variable	Altruism	Conscientiousness	Courtesy	Civic Virtue	Sportsmanship
r2	0.21	0.79	0.8	0.12	0.7
F	3.39	2.55	1.39	2.33	2.56

Note: The regression equation is insignificant (F value = 3.39, adjusted r2 = 0.21; altruism, F value = 2.55, adjusted r2 = 0.79; conscientious, F value = 1.39, adjusted r2 = 0.8; courtesy, F value = 2.33, adjusted r2 = 0.12; civic virtue, F value = 2.56, adjusted r2 = 0.7; sportsmanship). The p value is greater than 0.01.
Source: authors' research.

Discussion

Comparing the various levels of inferences obtained during and after the study, it is of utmost importance to mention that it is the top management in the organisation that helps to make or break a decision (M. Aboramadan, 2020). The decisions taken by the top management can influence the organisation and its people in both a constructive and destructive manner. It is important for people holding key positions in organisations to behave as mature citizens of the organisation, especially when it comes to decision making (Nielsen, 2010).

In a similar way, it is the duty of the organisation to evaluate the capability of the people in decision-making roles and present them with frequent challenges in order to review their activity. According to the Upper Echelon Theory (Hambrick and Mason, 1984), the different characteristics shown by people in the job role can be one way to influence the management to make decisions.

These decisions can be linked to the education, experience and age of the employees, which in turn affect the organisational performance and metrics. On the one hand, the organisation must know that its employees are always going to be its key strength. It is equally important that the morale and motivation of the employees are boosted during any ups and downs in the business. The organisation should assess its key stakeholders in the decision-making role to ensure that any wrongdoing does not affect its employees and business functions.

On the other hand, the employees are the soft targets of any change that the management introduces. The employees should know how to address the issues they face at the workplace. However, it is equally important for employees to remain mature and possess the required patience while handling the issues faced at the workplace through a proper channel of communication. The retaliation from employees can interrupt the workplace operation, with the possibility of even closing the organisation. This could lead to further job losses and potentially cause physical and mental stress.

The role of technology has made a major contribution. The presence of technology can bring about the changes desired by management and the organisation. It is important to apply the technology in the organisation for better cause and reasoning. The introduction of technology in the work processes can bring discord among the employees and the organisation, as it can potentially create more job losses due to employees' workload being taken over by the application of technology.

The present research elaborates on the type of relationship between E-HRM and OCB, and the ways in which the presence of technology can influence the behaviour patterns of employees in the organisation at various levels. The outcome of the research shows a positive correlation between the various HR functions that are linked to the technological platform E-HRM. The statistical tools used have shown adequate relevance and contribution to the research. The result of the study has supported the findings and relationship between OCB and E-HRM. The results obtained shed light on innovation in analysis of the behaviour of employees and their perceptions of technology as well as its application in organisations.

Conclusion

The study focused explicitly on the employee behaviour towards the technology and all the internal and external factors responsible for such behaviour. The results obtained from the analysis of the research provide an overall impact on organisational behaviour with reference to the technology, which in this case is E-HRM. It is evident from various past studies on electronic human resources management and organisational development that employees are the key strength of the organisation. Without proper nurturing and growth plan for the employees, the success of the organisation is in vain. Along the similar lines, it is important for an organisation's point of view to sustain their line of business. This is only possible when they have a well-defined system or process to drive their business (Dubey & Ali, 2011). In general, the organisation should be more process-driven than people-driven. One of the organisation-wide process initiatives is E-HRM, which helps to drive people-related matters in the organisation and analyse the behaviour patterns of the organisation and its employees.

Implication and limitations of the study

The study is expected to help the top management in organisations evaluate the root cause of employee attitude and behaviour towards technology, which in this case is E-HRM. It will also help them plan the future scope of their business as well as strategise the overall organisational behaviour towards E-HRM. From a theory point of view, this study encompassed the various points covered under the umbrella of E-HRM and OCB through a review of the literature. Further inputs received from the research performed in the IT sector outside the city of Bangalore have the required potential to supplement the literature contents.

The area of the study is limited to the city of Bangalore and inclined towards the information technology sector. This may simplify the results obtained and restrict them to a specific geography and industry. A detailed and diversified approach can quantify the obtained results towards a better understanding of the application of E-HRM tools and how they affect the overall culture and behaviour of the organisation.

Future research directions

The research was conducted within the information technology sector and the city of Bangalore in India. However, in order to attain similar viewpoints and conclusive evidence, future research can be conducted and executed in other parts of the cities in India as well as in any other

locations. Considering the enhancement of the global job market and the widespread use of information technology, which is not just the expansion of global business but also a hub for creating jobs for people, the research can be further explored in the information technology sectors and based in various countries. The exploration of research in other business sectors is another possibility that can be explored and executed.

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