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A Study on Factors Influencing Employees on Adoption of Digital Transformation Initiation by Employers

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Abstract

India is one of the largest and fastest-growing economies and the organisations in India needs to compete with other developed countries to keep the momentum and achieve the higher growth rate than other countries. Competitive offerings by telecommunications firms have turbocharged internet subscriptions and data consumptions by the individuals and organisations. The competition among the firm is increasing, and it is a fact that the organisation which is capable of exploiting the technology in a better way will outsmart other in the competition. Though the union government and state government prioritise the information technology training, the employees are still not perceived the advantages of digitalisation. The digitalisation effort by few organisations is either not taken off or left at midway due to lack of support. Hence, this study is to evaluate the factor influencing the organisation digitalisation. It is found that all factors like employee satisfaction, perceived usefulness and easiness of technology are strongly correlated with employee readiness to accept the digital transformation. Employee insecurity and discomfort negatively correlated on digital transformation.

Keywords: Employee Satisfaction, Employee Readiness, Perceived Usefulness, Perceived Ease of Use, Digital Transformation

Introduction

Organisations are facing stiff competition from national and international firms and the firm which has the capability of using digital technology in the most efficient way will take advantage over others. According to Mckincey Digital India report 2019, the organisations which innovate and digitise more rapidly will be in a better position to take the benefit of India's huge, connected market. It is expected that by 2023, India will have 840 million internet users and 700 million smartphone users. Due to the fast-changing scenario in technology-enabled services and low-cost data availability, business models are becoming pervasive over the next decade. As technology is rapidly progressing, present-day organisations are confronted with massive changes (Colbert, Yee & George, 2016).

Changes brought by digital adoption will disrupt India's labour force as well as its industries. It is estimated that 65 million new jobs could be created from the indirect and direct impact of digital applications which will be helping the productivity enhancement. All the jobs which are done manually will move to technology-enabled process and impact the supporting services also. These jobs could be agriculture, trade and hotel, IT-BPM, media, telecom, manufacturing, logistics and transportation, etc.

To overcome this fast-changing technology, individuals will need to equip themselves constantly by learn and relearn new skills in their lifetime. To take up these challenges, the government needs to facilitate effective and affordable training programmes for fresher's and mid-career courses for existing employees. In addition to that, the organisations are facing problems due to employee's behavioural tendencies for acceptance of new. It is the fact that without the wholehearted support of

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each and every employee these transformation will not be fulfilled.

One way of achieving an edge over a competitor and sustaining the competitive advantage is by employing an Enterprise Resource Planning (ERP) system. An ERP system is a well-structured, mandatory, integrated, customised, packaged software-based system that handles most of the system requirements in all business operational functions such as finance, human resources, manufacturing, sales and marketing (Wua, Onga & Hsub, 2008). Though implementation of ERP systems was perceived with high expectations, very few organisations have achieved significant performance enhancement (Soh, Kien & Tay-Yap, 2000) and most ERP projects turn out to be expensive, not cost-effective and a failure (Abugabah & Sanzogni, 2010; Hong & Kim, 2002; Kumar).

There were many reasons for ERP failures in an organisation. Somers & Nelson (2004) found that ERP project failures were due to poor project communication whereas (Al-Mashari, Al-Mudimigh & Zairi, 2003) it is due to lack of senior management support. Presence of ethnic differences (Yusuf, Gunasekaran & Abthorpe, 2004), low user acceptance (Amoako-Gyampah & Salam, 2004; Shih & Huang, 2009), ineffective integration of systems (Al-Mashari et al., 2003), user dissatisfaction (Beyleveld & Schurink, 2005; Yu, Li & Gagnonc, 2009) and inadequate system training (Amoako-Gyampah & Salam, 2004) were considered as other reasons.

Understanding the growth potential of IT industry, the Government of Kerala too has implemented few policy directives to catch up with the requirements. The present study evaluates the effectiveness of initiatives at the ground level. The study also assesses the behavioural aspects of existing employees on acceptance of digitalisation by the organisation.

The goal of this paper, therefore, is to review, refresh and structure the literature on factors influencing the employees for acceptance of digital transformation in their organisations. To do so, we conducted an empirical survey at three IT hubs of Kerala namely Trivandrum, Kochi and Kozhikode as major information technology organisations are concentrated on this part of the state.

Objective of the Study

The objective of the study is to evaluate the factors influencing the acceptance of digital transformation in their organisations. The study focus on factors like employee satisfaction, the benefit of perceived use and benefit of perceived easiness due to digitalisation in framing the attitude in accepting the digital transformation initiative. The study also sheds the lights on building a model for the implementation of the organisational digitalisation process.

Significance of the Study

The rationale of this study was to find out and recommend the factors influencing the implementation of digitalisation in the organisations. The study evaluates the employee's perception of technology acceptance while considering the facts on employee satisfaction, advantages of using technology on task easiness and usefulness. The study is of utmost significance to employees as very few organisations only successfully implement the digitalisation process as most of them failed due to the reasons one or other. Kerala with its educated manpower wants to compete with national and international organisations, the organisations need to assimilate the technology to get an advantage over others.

Proposed Model

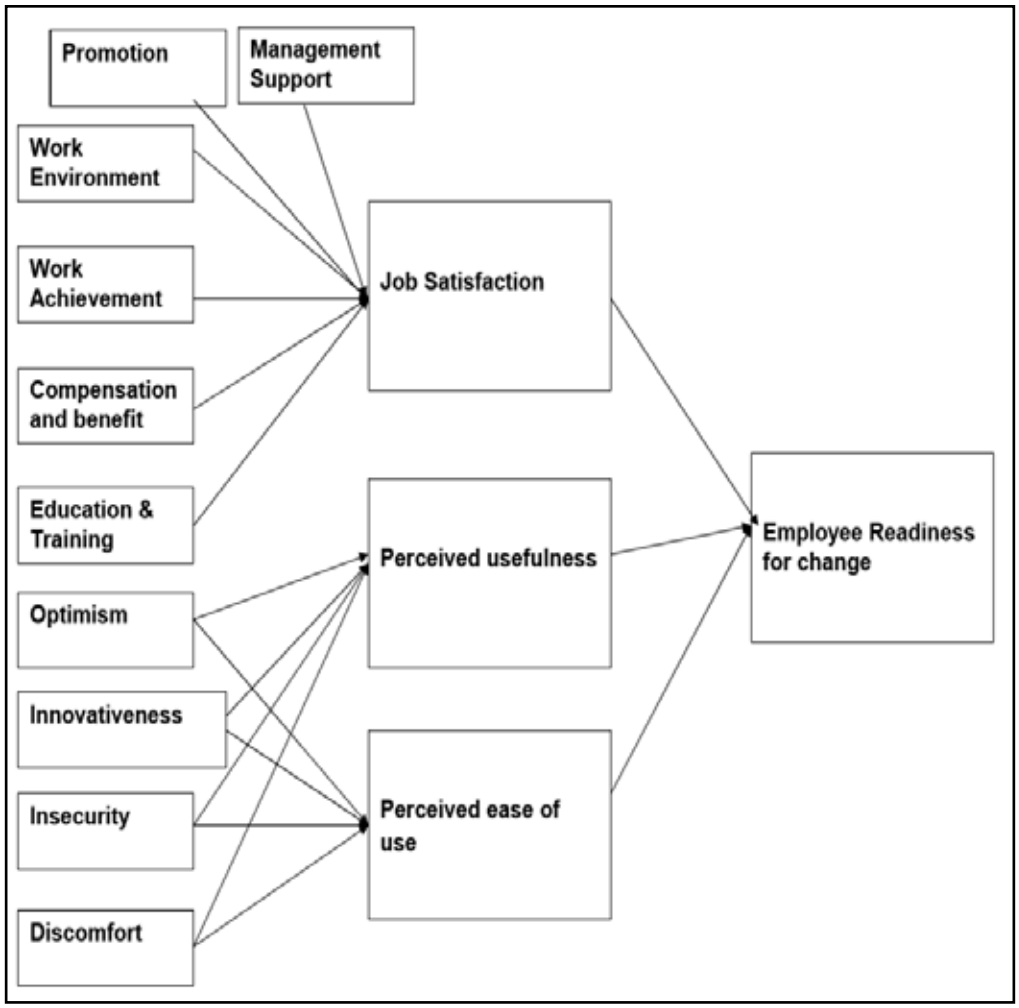

Fig. 1

Literature Review

The aim of the study is to find out the factor which can influence the employees on adaption of digital transformation by the organisation. Schultz & Schultz (2014) suggests the studies conducted by researchers in the area of digital transformation have given thrust to ergonomic and technology design factors in pre-implementation phases of ERP systems. Meade & Islam (2006) and Venkatesh et al. (2003) found that information technology (IT) acceptance research has explored many competing models for explaining the relation between user attitude, perception and belief towards system usage. People's propensity to embrace new technology is the combination of positive and negative technology-related belief. These beliefs are varied among individuals, and it will effect an individual's pre-deposition to the technology (Parasuraman & Colby, 2001). Furthermore, findings show that these beliefs can be categorised into four dimensions: optimism, innovativeness, discomfort and insecurity (Parasuraman, 2000).

Employee Satisfaction

Job satisfaction is defined as the extent to which an employee feels self-motivated, content & satisfied with his/her job. Job satisfaction happens when an employee feels he or she is having job stability, career growth and a comfortable work-life balance. According to Buitendach & de Witte (2005), job satisfaction of an individual is his/her job perception and in turn, it is influenced by the values and expectations. Individuals, therefore, evaluate their jobs on the basis of factors which they regard as being important to them (Sempane et al., 2002). Visser

et al. (1997) define job satisfaction as "…the attitude of workers toward the company, their jobs, their fellow workers and other psychological objects in the work environment."

Camp (1994) defines job satisfaction as the extent to which these needs and values are satisfied in the workplace. In conjunction with this, Robbins (1998) surmises that job satisfaction is based on "the difference between the amount of rewards workers receive and the amount they believe they should receive." Because job satisfaction may be an indicator of whether individuals (a) will be effectively connected to an institution, (b) will merely comply with directives, or (c) will quit (Ma & Macmillan, 1999), principals ought to have some understanding of the factors that influence teachers' satisfaction with their work lives and the impact this satisfaction has on teachers' involvement in their schools, primarily when changes are implemented.

According to Nicolaidis & Katsaros (2011) and Brooks (2000), managerial and organisational performance has a significant effect on job satisfaction. Also, Locke (1976) and Spector (1997) suggest that a positive emotional state resulting from the pleasure an employee derives from the job effects affective, cognitive and emotional attitude held by an employee about various aspects of their work. Vroom defines job satisfaction as "the positive orientation of an individual towards all aspects of the work situation."

Perceived Ease of Use

Nunkoo et al. (2013) defines the perceived ease of use (PEOU) as the degree in which a person believes that using a particular system would be free from effort. Chau (1996) found that perceived ease of use influences usefulness, attitude, intention and actual use. Davis et al. (1989) found that perceived ease of use is an important factor for employee intentions to use computers. Feelings of fear and insecurity related to technology are associated with ambiguity and low usage by employees (Parasuraman & Colby, 2001; Tsikriktsis, 2004). Davis (1989) suggests that perceived ease of use also can improve employee performance due to the fact that he or she can deploy less effort to accomplish the task.

Perceived Usefulness

Perceived value is defined as the degree to which an individual believes that using a particular system would enhance his or her performance. Davis et al. (1989) found that perceived usefulness and usage have a stronger and more consistent relationship. Also, Chau (1996) found that individuals evaluated the consequences of their behaviour in terms of perceived usefulness and based their choice of behaviour on the desirability of the usefulness.

Methodology of the Study

The objective of the study has been to find out the factors influencing on employees on adaption of digital transformation initiative by the organisation. On the basis of this, the methodology of the study has been designed.

Research Design

The study is descriptive in nature because it has been designed to measure the employee's perception of digitalisation initiatives by the organisation. The data collection has been done by the use of the questionnaire method, which consisted of constructs related to employee satisfaction, perceived ease of use, perceived usefulness and employee readiness to accept the digitalisation. The constructs for employee satisfaction, perceived ease of use, perceived usefulness and employee readiness to accept the digitalisation have been taken from the study of Godeo & Johansen (2012).

Sampling Design and Data Collection

Data required for the study have been collected from both the primary and secondary sources. A structured questionnaire has been prepared and used as an aid to collect the data from the respondents. The research has been carried out in three information technology dominated industries in the state of Kerala, i.e., Ernakulam, Trivandrum and Kozhikode. These districts have the highest IT-enabled industries with various industries. The target population for this study has been primarily the employees of organisations at all level. The study was conducted between Nov. 2017 and Jan. 2018. A total of 600 questionnaires were distributed, and only 354 were returned. Out of these, 323 survey forms from all three places were subjected to statistical analysis. The information collected from secondary sources such as websites, articles, journals, books, magazines, etc., was also used for the study.

Analysis and Result

Data collected have been analysed using SPSS version 21 in order to find the reliability and the relationship between the dependent and independent variables. The test of reliability using Cronbach's alpha has been 0.89, which is satisfactory. Correlation and regression analysis have been carried out in order to find out the influencing factors of employee acceptance of digital transformation.

Demographic Profile of Respondents

The characteristic of the study population is detailed in Table 1. 57.2 percent respondents were below 40 years. 46.7 percent respondents were graduates and the gender of the sample were equally distributed. Sample size from Trivandrum, Kochi and Kozhikode were equal representative of the sample.

Table 1

Age of the Respondents	*Frequency*	*Percent*	*Valid Percent*	*Cumulative Percent*
less than 30 yrs	118	36.5	36.5	36.5
31-40 yrs	67	20.7	20.7	57.3
41-50 yrs	47	14.6	14.6	71.8
51-60	41	12.7	12.7	84.5
Above 60	50	15.5	15.5	100.0
Total	**323**	**100.0**	**100.0**	
Qualification				
Degree	151	46.7	46.7	46.7
PG	105	32.5	32.5	79.3
Technical	67	20.7	20.7	100.0
Total	**323**	**100.0**	**100.0**	
Gender				
Male	170	52.6	52.6	52.6
Female	153	47.4	47.4	100.0
Total	**323**	**100.0**	**100.0**	
Place of Survey				
Kochi	101	31.3	31.3	31.3
Trivandrum	108	33.4	33.4	64.7
Calicut	114	35.3	35.3	100.0
Total	**323**	**100.0**	**100.0**	
Professional Level				
Management Staff	178	55.1	55.1	55.1
Office Staff	69	21.4	21.4	76.5
Field Staff	76	23.5	23.5	100.0
Total	**323**	**100.0**	**100.0**	
Years of Service				
Less than 5 yrs	30	9.3	9.3	9.3
5-10	89	27.6	27.6	36.8
10-15	204	63.2	63.2	100.0
Total	**323**	**100.0**	**100.0**	
Educational	27	8.4	8.4	8.4
Engineering	3	.9	.9	9.3
Information Technology	103	31.9	31.9	41.2
Admin/HR	55	17.0	17.0	58.2
Financial	100	31.0	31.0	89.2
Marketing	35	10.8	10.8	100.0
Total	**323**	**100.0**	**100.0**	

Test of Reliability

A reliability coefficient of (Cronbach's Alpha) 70% or higher is considered acceptable in most social science research. The result of this test in the current study is 0.890 hence accepted.

Table 2: Reliability Coefficient

Reliability Statistics	
Cronbach's Alpha	*No. of Items*
.890	59

Correlation

Table 2 shows that the correlation coefficients between independent variables are greater than 0.36. All the variables except discomfort and insecurity of employee perceptions have shown high positive correlation with employee readiness. All the values are significant at the 0.01 level.

Regression Analysis

Regression analysis has been used to identify the relationship between independent variables and dependent variable. A model of the relationship has been hypothesised and estimated parameter values are used to develop an estimated regression equation. The estimated regression equation confirmed to predict the value of the dependent variable from the given values of the independent variables.

Relationship Model

Table 3 provides with the R and R^2 values. The R-value is 0.827, which represents that there is a fairly good correlation between dependent variable employee attitude and independent variables (perceived usefulness, perceived ease of use and employee satisfaction). Similarly, nearly 69% of the variance is explained (R^2 = 0.684) in the regression model.

Table 3

Model Summary				
Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	.827[a]	.684	.681	3.44361

a. Predictors: (Constant), Employee satisfaction, Perceived use fullness, Perceived ease of use

Parametric Estimates

Table 4 allows us to specify multiple models in a single regression model. The constant represents that the strength of affiliation (5,668) is positive, thereby indicating a positive relationship. The coefficient of perceived usefulness is 0.381. Perceived ease of use is 0.954. Employee satisfaction is 0.438.

Table 4

Coefficients						
Model		*Unstandardised Coefficients*		*Standardised Coefficients*	*t*	*Sig.*
		B	*Std. Error*	*Beta*		
1	(Constant)	5.668	.611		9.279	.000
	Perceived use fullness	-.381	.131	-.269	-2.911	.004
	Perceived ease of use	.954	.154	.668	6.180	.000
	Employee satisfaction	.438	.049	.448	8.876	.000

a. Dependent Variable: Employee Readiness

Discussion

The objective of the study was to find the factors influencing the employee perception on adaption of digital transformation initiatives in organisations. For this purpose, a study model was developed, which included several factors. These factors were divided into four dimensions namely Perceived usefulness (PU), Perceived ease of use (PE), Employee satisfaction (ES) and Employee readiness (ER) .

The result of the study showed that perceived usefulness (PU), Perceived ease of use (PE) and Employee satisfaction (ES) have significant positive relationship with Employee readiness (ER) and their values of correlation coefficient are found to be (0.649^{**}), (0.759^{**}) and (0.783^{**}), respectively. Also, the relationships between Employee satisfaction (ES), perceived usefulness (PU) and Perceived ease of use (PE) are found to be highly positive with (0.654^{**}) and (0.763^{**}).

Recommendations

From the results, it is found that employee discomfort and insecurity are the factors that employee are hesitant to adopt the digital transformation initiated by the employers. By way of training, awareness camps, etc., these feeling can be removed. The importance of digitalisation in this competitive world should be conveyed to employees for a more straightforward implementation of digital transformation.

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