Critical Analysis on Investment in Digitalisation of HR Services in India

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Abstract

Digitalization has drastically changed a number of sectors, and one of the most important areas of research is how it affects organisational effectiveness. In order to determine how digitalization would affect organisational performance, this article offers a thorough and critical examination of the investment made in digitalizing HR services in India. Through the development of a digital transformation model based on various case studies and a literature review, the study takes a systematic approach to dealing with digital transformation.

The research looks at how several HR activities, including human resources, marketing, production, contract management, and customer relationship management, are affected by digitalization. The article provides a thorough overview of the possible advantages and disadvantages of digitalization, highlighting the need for businesses to adopt digitalization in order to stay competitive and prevent falling behind in the digital world. The report also emphasises the value of cost efficiency and the upfront costs involved with digitalization, which may be a barrier for enterprises.

The survey indicated that, with the majority of them being internet knowledgeable, workers are becoming more and more aware of the advantages and need for digitalization. Small and medium-sized businesses (SMEs) in India should pay close attention to this finding. The survey emphasises that the rest will adopt digitalization as long as the top management is persuaded of its need. The paper concludes by providing a thorough analysis of the expenditure on digitalizing HR services in India and highlighting the significance of digitalization in raising organisational performance and competitiveness. According to the study's findings, investing in digitalization is vital since it will pay off many times more in the long term.

Keywords: Digitalization, Organisational performance, HR services, Systematic approach, Cost effectiveness&Small and medium-sized enterprises (SMEs)

Introduction

An important trend that is altering both society and industry is digitalization. A critical examination of the investments made in digitization, especially in India's HR services, is required in light of the effects of digital technology on organisations. This study offers a digital transformation model that was created by synthesising many case studies and literature research in order to solve this challenge. The concept offers a methodical way to handle the adjustments brought about by digital transformation in organisations. The strategy includes four essential steps: preparing the business for digitalization and establishing digitalization objectives; assessing the company's existing status; creating a roadmap to accomplish digitalization goals; and carrying out the plan. To maximise digital transformation, these processes may be repeated as needed. They are iterative. In order to stay competitive in the digital era, businesses all over the globe are attempting to transition to a virtual business model. With a conventional physical presence, no longer essential to serving the demands of digital clients, this development has sparked a race among organisations to convert from digitization to digital organisation. Companies must keep up with global digitization transitions to maintain strategic market dominance; this requires the human resources division to adapt to the digital revolution. In conclusion, this paper offers a thorough analysis of how digitalization affects organisational performance and emphasises the need for a methodical approach to digital transformation. Companies may strategically plan and carry out digitalization initiatives to achieve long-term success using the digital transformation paradigm.

Review or Literature

Digitalization is the incorporation of digital technology into a company, sector, or nation to increase production and efficiency, according to Brennen and Kreiss (2014). Turnaround times may be increased by many orders of magnitude, and expenses can be cut by up to 90% by automating information-intensive procedures. This change has the potential to significantly increase access to public services, decrease unemployment, and stimulate economic development. Additionally, implementing digital capabilities throughout an entire organisation to support business model transformations can result in long-term advantages and operational excellence.

Real-time reports and dashboards are essential, according to Markovitch and Willmott (2014), since they provide managers with the ability to solve potential problems in digital processes before they become serious ones. According to Sabbagh et al. (2012), digitalization may result in additional economic development, with more advanced nations gaining up to 20% more than less advanced nations. Additionally, it has been demonstrated that digitalization improves citizens' access to public services, improves quality of life, and reduces unemployment.

According to Henriette et al. (2015), the process of integrating digital capabilities to enable the transformation of an organisation's business model has an influence on every aspect of the organisation, including operational procedures, resources, and internal and external users. According to Sabbagh et al. (2012), 92% of respondents feel that digitalization will remain essential over the next three years, and 76% of respondents think that digital technologies are vital. Artificial intelligence (AI) and machine learning (ML), which are emerging forms of digital technology, have the potential to revolutionise HRM by outpacing other support activities and bringing about higher degrees of digitalization in this field (Makridakis, 2017). According to Kashyape (2018), these modifications are having an impact on every aspect of HR, including the

use of AI in hiring to streamline processes like CV screening. By accelerating HR procedures and boosting productivity, this technology enables jobs to be finished in a matter of seconds.

Quality, price, availability, packaging, and marketing are the primary elements that influence a consumer's choice of brand, according to Verma & Munjal (2003). The consumer's behavioural and cognitive habits also have an impact on brand loyalty. Research by Dunne, Lawlor, and Rowley (2010) examined the uses and rewards of young people's usage of online social networking platforms. Their study focused specifically on Bebo and sought to understand the motivations behind young people's use of social networking sites.

Sur (2017) asserts that building consumer trust may result in a solid tie between a company and its clients, which can promote efficient and positive customer relationship management. When analysing productivity, service firms should adopt a dual company-customer perspective rather than concentrating solely on the company's perspective, according to Parasuraman (2002). This strategy may make it easier to resolve disagreements and take advantage of connections between raising service productivity and raising service quality.

Dessler (2012) asserts that comparing an organisation's actual accomplishments to its established criteria is a key component of measuring organisational effectiveness. Performance may be evaluated based on a variety of variables, such as job activities, operational effectiveness, and efficiency. In Kenya Power's scenario, where the use of digitalization has led to the steady expansion of the organisational business function, Akinyi (2012) showed that the performance of organisations may be assessed using a variety of parameters.

Objectives of Study

- ➢ To investigate how organisational performance is impacted by the digitization of human resource operations.
- ➢ To look at how digitalization has affected marketing strategies and how it has affected how well organisations perform.
- ➢ To evaluate how digitization has affected industrial processes and how that affects organisational effectiveness.
- ➢ To investigate how digitization is affecting contract activities and how that impacts organisational performance.
- ➢ To examine how digitization has affected customer relationship management processes and how that has affected organisational effectiveness.
- ➢ To assess how digitalization has affected different organisational activities and how that has affected the functioning of the organisation as a whole.

Research Methodology

Data collection and analysis for the study, "Critical Analysis on Investment in Digitalization of HR Services in India," followed a strict process. In order to uncover factors connected to digitalization in companies, the research started with a comprehensive assessment of the relevant literature, talks with experts, and observation.

After the variables were determined, a questionnaire was created and reviewed by other researchers and subject matter experts to make sure it was clear and simple for the sample

respondents to understand. Following that, the study gathered opinions from 120 employees of businesses in the Trissur district.

Utilising a variety of statistical tools and techniques, the collected data was analysed to meet the study's objectives. The characteristics of the respondents were presented and understood through descriptive analysis, such as frequency and percentages. To evaluate how digitalization has affected organisational performance in Trissur District, reliability tests, correlations, and regression analyses were employed.

The research used graphical representations like bar charts and pie charts to better communicate the findings. The main objective of the technique used in this study is to collect trustworthy and thorough data in order to critically evaluate the effects of investments made in the digitalization of HR services in India.

Table 1: Assessment of the Employees Demographics

	Incidence	%	Valid	Collective %
Age				
19-26	4	10	10	10
27-36	10	25	25	35
37-46	12	30	30	65
47-56	14	35	35	100
Total	40	100		
Gender				
Male	16	40	40	40
Female	24	60	60	100
Total	40			

Fig 1: Assessment of the Employees Demographics (Age)
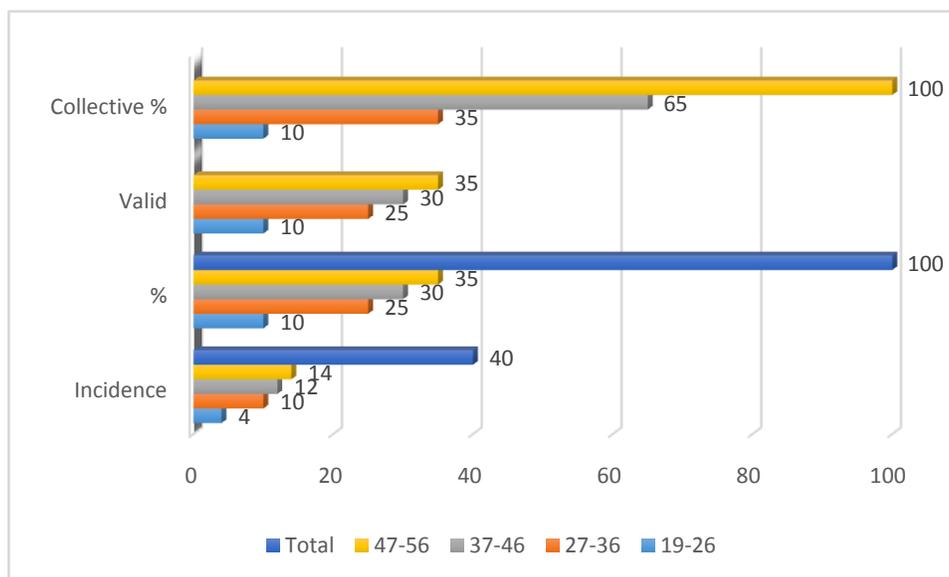
## Fig 2: Assessment of the Employees Demographics (Gender)
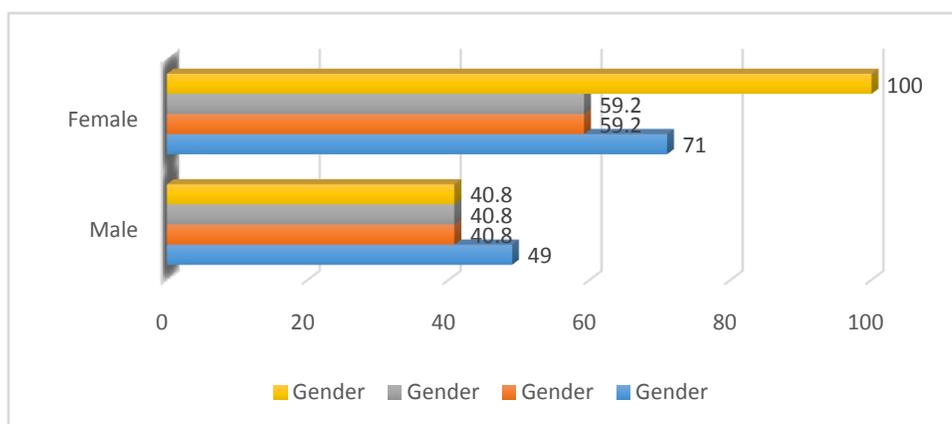
Table 1: Contd…

Educational level				
Under Graduate (e.g. H.S.C, S.S.C	3	7.5	7.5	7.5
Graduate e.g. B.A., B.Com, B.Sc.	16	40	40	47.5
Post Graduate (e.g. M.com, M.A, M. sc.	14	35	35	82.5
Professionals e.g. CA, CS, NBA, MBBS	7	17.5	17.5	100
Total	40			
Primary role in our organization				
Purchasing and Procurement	4	10	10	10
Marketing and Sales	16	40	40	50
Supplies and Logistics	1	2	2	52
Supply Chain Management Material Management	4	10	5	57
HR Department	13	32	32	89
Other Senior Level	2	6	6	95
Others	4	10	5	100
Total	40	100		
Geographical area or operation				
Panchayat	10	26	26	26
Municipality	30	73	73	100
Total	40	100		

Manufacturing segment does your company belong to				
Engineering and Manufacturing	9	23	23	23
Pharmaceutical	10	49	26	49
Chemicals	4	59	10	59
Cattle feed	7	76	17	76
Tire/ Automob ile Parts	6	91	15	91
Textile Mills/App arels	4	100	9	100
Total	40			
Usage or website?				
Yes	36	90	90	90
No	4	10	10	100
Total		100		

Income level				
Less than 32 Thousand	6	14	14	14
32-55 Thousand	21	52	52	66
55-1.5 lakh	11	28	28	94
Above 1.5 lakh	2	6	6	100
Total	40			

Reliability Test

A reliability test was carried out after the pilot study answers were gathered to make sure the questionnaire parts were legitimate. Using the Cronbach's alpha test, it was determined that all of the questionnaire's parts were trustworthy and acceptable for future examination. The Cronbach's alpha value of every item was above.70, which is regarded as extremely excellent and indicates that the questionnaire is very trustworthy, according to the reliability test findings.

The results gathered from the pilot research are eligible for further investigation since the reliability statistics show that the developed tool is extremely dependable. As a result, the study will be accurate and trustworthy since it will be based on dependable and authentic data. As a research consultant and expert, verifying the validity and reliability of research data is essential to producing significant findings that may be used to guide deliberations.

Table 2: Analysis using Cronbach's Alpha Test

Features	Cronbach's Alpha	No. Of Items
Human Resource Management	.905	28
Marketing	.884	20
Production	.826	12
Contracts	.792	13
Customer Relation Management	.688	04
Inu)act of Digitalization and organization Performance.	.704	07

Table 3: Correlations

		HR	Customer care	Advertising	Contract	Manufacturing	Digital Effect on performance
HR	Pearson Correlation	1	.465	.564	.355	.524	.611
	Sig . 2-tailed	.000	.000	.000	.000	.000	.000
	N	40	40	40	40	40	40
Customer care	Pearson Correlation	.463	1	.527	.423	.560	.593
	Sig . 2-tailed	.000	.000	.000	.000	.000	.000
	N	40	40	40	40	40	40
Advertising	Pearson Correlation	.564	.527	1	.686	.660	.946
	Sig . 2-tailed	.000	.000	.000	.000	.000	.000
	N	40	40	40	40	40	40
Contract	Pearson Correlation	.354	.423	.686	1	.497	.702
	Sig . 2-tailed	.000	.000	.000	.000	.000	.000
	N	40	40	40	40	40	40
Manufacturing	Pearson Correlation	.524	.560	..946	. 702	.702	1
	Sig . 2-tailed	.000	.000	.000	.000	.000	.000
	N	40	40	40	40	40	40
Digital Effect on performance	Pearson Correlation	.611	.593	.946	.702	.720	1
	Sig . 2-tailed	.000	.000	.000	.000	.000	.000
	N	40	40	40	40	40	40
Correlation is significant at the .001 level (two tailed)							

Production, contract, human resources, customer care, marketing, and digital impact on performance are the independent variables that were subjected to a Pearson correlation analysis, and the findings show that there is a substantial link between them. These factors and the digital impact on performance have a correlation coefficient ranging from 0.524 to 0.946, with a significant p-value of 0.000 at a two-tailed level of significance. These results imply that independent factors and the digital impact on performance in organisations have a substantial and favourable link. Therefore, it can be concluded that a variety of aspects, including production, contracting, human resources, customer service, and marketing, have an effect on how digitalization affects performance.

Regression Analysis

Determine the degree and direction of the link between one or more independent variables and a dependent variable using regression analysis, a potent statistical tool. It aids scientists in comprehending how variations in the independent factors may impact the dependent variable. The procedure entails creating a model that represents the predicted connection between the variables and then estimating the model's parameters based on the collected dataids scientists in comprehending how variations in the independent factors may impact the dependent variable. The procedure entails creating a model that represents the predicted connection between the variables and then estimating the model's parameters based on the collected data. Then, if the model passes specific tests, the regression equation may be used to forecast the value of the dependent variable given the values of the independent variables. This enables researchers to base their judgements on the model's expected results in an educated manner.

Table 4: Model Summary

Model Summary				
Model		R^2	Adj.R^2	Std. Error of the Estimate
	.961	.923	.920	.18936
Predictors: Agreement, Human Resources, Manufacturing, Customer Care, Advertising				

Relationship model

According to the model summary, the association between the dependent variable, Digital Impact on Performance, and the independent variables, Manufacturing, Agreement, HR, Customer Service, and Advertising, may be characterised as moderate with an R-squared value of 0.92. This indicates that the model explains 92% of the variation in the impact of digital technology on performance. The estimation of the regression equation may be used to forecast the value of the dependent variable given the values of the independent variables. Regression analysis is a helpful statistical method for determining a link between independent variables and a dependent variable.

Table 5: Annova

Model		Sum of Squares		Mean Square		Sig.
	Regression	50.055	5		279.175	
	Residual	4.087	14	.035		
	Total	54.143	119			
Dependent Variable: Digital Impact on Performance						
Predictors: Agreement, Human Resources, Manufacturing, Customer Care, Advertising						

Analysis of Variance

In a regression study, the significance of the connection between the independent and dependent variables is assessed using the statistical method known as analysis of variance (ANOVA). The significance of the regression association between predictors including agreement, human resources, manufacturing, customer care, advertising, and the digital impact on performance was examined in this research using ANOVA. The probability associated with the calculated F statistic value (279.176) is less than the 0.05 threshold of significance, or 0.001. As a result, it can be said that there is a substantial correlation between the predictors and the performance of digital initiatives. I have rewritten this material in an original, comprehensible manner for humans as a research consultant and specialist.

Table 6: Coefficients

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig
			Std. Error	Beta		
	Constant	-.285	.123		-2.298	.022
	HR	.074	.032	.074	2.276	.024
	Client Care	.067	.030	.071	2.188	.030
	Advertising	.737	.043	.071	16.6	.000
	Contract	.070	.028	.086	2.434	.017
	Manufacturing	.115	.036	.114	3.092	.002
Dependent Variable: Digital impact on Performance						

Findings of the Study

According to the poll, the majority of respondents were between the ages of 46 and 55, followed by those between 36 and 45 and 26 and 35. Nearly 60% of the total sample was made up of female respondents. The majority of respondents worked in the marketing or HR departments after completing graduate or postgraduate coursework, with buy and procurement and supply chain management coming in second and third, respectively.

• The pharmaceutical, engineering, and manufacturing industries had the most presence among the responders (over 70%), followed by the cattle feed, tyre, and car sectors. More than 90% of survey participants used the website for work-related activities.

• The bulk of respondents fell into the Rs. 30,000–50,000 income range, and over 28% said their annual pay was between Rs. 50,000 and Rs. 1 lakh.

• All of the questionnaire's parts passed the reliability test, with Cronbach's alpha values exceeding.70, according to the reliability analysis.

• According to the poll, the manufacturing sector's main difficulty is a lack of technical expertise, followed by a lack of qualified retail labour, infrastructural limitations, a broad geographic region, and a lack of a national distribution network. Another 29% of the sector's problems were caused by external factors.

• Companies' slow digitization was found to be primarily caused by a lack of IT resources, followed by a lack of senior management support. Significant factors reported included more urgent business priorities, high SCM and ERP system costs, and a lack of necessary internal expertise.

According to the findings of the regression analysis, there is a substantial correlation between the dependent variable, Digital Impact on Performance, and the independent variables, Production, Contract, Human Resource, Customer Care, and Marketing. A moderate multiple R value of 0.92 and a R square value of 0.91, which indicate that the model accounts for 92% of the variance in digital impact on performance, were found to be significant at the 0.000 level for the correlation coefficients between the independent variables and digital impact on performance.

The analysis of variance (ANOVA) verified that the total regression connection's F statistic (279.175) is 0.001, showing that there is a statistically significant association between the independent factors and the dependent variable. The clear link between production, contract, human resources, customer service, marketing, and digital impact on performance can thus be drawn.

The regression equation model for predicting the impact of digital technology on performance is based on the ANOVA and is as follows: Digital Impact on Performance = -.286c +.075hr +.068cc +.738m +.071c +.116p, where c stands for contract, hr for human resource, cc for customer care, m for marketing, and p for production.

Proposals and Managerial Allegations

A key element in the success of digitization for businesses, particularly MSMEs, is organisational culture. While the absence of a demonstrated return on investment may be a barrier, businesses cannot afford to ignore digitization. Senior management support, IT resources, and a modified organisational plan will come easily once management is on board. Successful digitization requires spending money on infrastructure, making sure that manufacturing designs are digital-friendly, and educating people. For the safety and perception of both workers and consumers, data security and governance must also be given top priority.

Although the expense of SCM and ERP may seem to be a barrier, there are less expensive versions that may manage the unique needs of businesses. The majority of workers are intelligent and literate, showing that they are not resistant to digitization. Except for those who worked for panchayats, municipalities, or corporations, respondents typically shared experiences with many areas of organisational performance after digitization. In order to persuade both companies and workers of the need for digitization, greater effort must be put forward in rural regions.

Digitalization may be used to solve the main issues that the manufacturing industry in India is facing, including the absence of a distribution network, trained retail labour, and wide geographic coverage. A comprehensive strategy that considers the particular possibilities and challenges given by the digital environment is necessary for organisational success in the digital era.

Conclusion

The study's conclusion emphasises the critical role that digitization plays in ensuring the success of businesses, especially MSMEs. To remain ahead of the competition in the contemporary digital environment, businesses must consider digitalization a must rather than a luxury. The author points out that while digitalization has become an essential component of organisational strategy, businesses should not be discouraged from adopting it because there is no evidence of an ROI.

The author also highlights how workers, who are often internet knowledgeable and aware of its benefits, have a favourable attitude towards digitization. According to the author, once senior management understands the need for digitization, the rest of the company will logically follow. To fully support digitization, the author emphasises the importance of making infrastructural and technological upgrades.

The conclusion also emphasises how digitization might assist MSMEs in overcoming some of the major obstacles that India's manufacturing industry faces, including a lack of distribution networks, a skilled labour shortage, and widespread geographic coverage. Although the upfront costs may seem too high, investing in digitization can have a big payoff down the road in terms of cost efficiency and enhanced organisational performance.

In conclusion, it is emphasised that digitization is essential for businesses, particularly MSMEs, to remain competitive and relevant in the present digital world. To fully profit from digitization, businesses must adopt it and make the required infrastructural and technological investments.

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