

The Impact of Digitalisation on Employee Performance in Banking Sector

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ABSTRACT

The purpose of this research study is to find the impact of digitalisation on employee performance in the banking sector. Primary understanding has been utilised to examine the impact of digital innovation and enhancement of technology on worker's performance and it absolutely worked out that the technologies like digital payment & assortment system, cloud computing, knowledge analytics, cyber system, etc. greatly increase the productivity of employees in conjunction with time saving. It rapidly affects the work pressure on employees and ensures management over frauds and mistakes. Simple use & fast access to data permits the bank workers in downside resolution, to deliver improved ability and quality service. Those banks that implement new technology also provide correct training to its employees and which will improve their skills and performance.

Keywords: Digitalisation; Employee performance; Banking sector.

1.0 Introduction

Digital transformation is understood as improved business processes through digital technology. Digitalisation can be called as the heart of modern world; banking sector is also not an exception to the digitalisation. World is nothing without digitalisation, it has become an integral part of everyone's life. In the current fast-moving world, digitalisation is playing an important role. Countries which are adapting to digitalisation, are performing far better than the countries which are lagging in adapting digitalisation.

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Banking sector is also called as the sector of development of all other sectors, because of the financial assistance it provides for other sectors and by encouraging capital formation. Being a fast developing nation, India is lagging in implementing digitalisation to banking sector. Digitalisation of banking will bring revolution in the whole economy, but there is a need to take important steps towards digitalisation.

Talking about the employee performance, in today's world every individual has day and night access to banking all because of online banking. Managing large amount of money has become easier. Digitalisation also plays a very important role to boost the employee morale within the banks and additionally the performance by minimising the error, fraud, mistakes, and also helps to extend productivity to perform the task effectively and efficiently.

2.0 Need for Study

Any kind of technological development, like digitalisation always comes with both positive as well as negative impact on banking business. Adopting new technologies like block chain, artificial intelligence, cyber security, cloud computing, digitalised payment, deposit system, etc., helps to manage the business process and facilitate business development. It also creates challenges in the areas like strategic, financial, operational, and workforce.

The most prominent problem faced by banks is the issue of technology and human interface. To leverage the benefit of technology, the banks need to find ways to balance the two. So, there is a need to identify different human related challenges along with digitalisation factors which impact the employee performance and therefore the design and need of training and motivation is very important.

Employee performance (EP), no doubt is one of the most important assessment tools for any organisation to evaluate the effectiveness and success of any technological implementation (digitalisation). Therefore, evaluation of employee performance is a most important step in an organisation.

3.0 Research Problem

With the rise of digitalisation in the banking sector there is a need of proper training for the employees who are working in the banking sector to boost employee performance. Not all employees are good at technology hence, it is very important to get them trained accordingly.

Employees get demotivated and their morale goes down if they find digitalisation difficult to understand, and it affects the employee performance also. Digitalisation in banking sector brings lot many risks and banking frauds as well, so proper understanding and awareness of technology and cyber security is must.

In rural areas, less people use smartphones and they lack financial literacy. So, employees of banking sector in the rural areas must come up with some new approach to satisfy their customers.

Digitalisation challenges like connectivity issues, difficulty in understanding the servers and banking software will discourage and demotivate employees, if not handled properly.

4.0 Review of Literature and Hypothesis Formulation

4.1 Research objective

- Primary Objective
 - To find the relationship of digitalisation on employee performance in the banking sector
- Secondary Objective
 - To find whether people above 50 years of age find it difficult to cope up with digitalisation.
 - To find the impact of digitalisation on different levels of management.

4.2 Review of literature

With the evolution of human resource management (HRM) the development of data and communication technology (ICT) has undeniably vied a key role. There are multiple ways in which ICT has affected the role of time unit (Jeyalakshmi & Rani, 2019). Besides, sanctioning financially simpler HR work, it primarily frees up time and resources required for participating in additional strategic work. Hence within the development of HRM, ICT systems have been therefore an important tool. With the result of growing involvement of managers and alternative departments such as IT and communication within delivery of HR work, the authors have stated that this development is now blurring the definition of HR role and therefore the boundaries for the time unit operate (Roehling *et al.*, 2005). Therefore, HR practices now-a-days are not solely conducted by ancient HR professionals. Employee squares measure the internal customers and a crucial resource for banks, it has been established that favorable worker perceptions of service square measure very important for up service performance (Kelley, 1992; Reyierse & Hasker, 1992).

Digitalisation is the process of transforming information into a digital format, in which the information is organised into bits. Information technology was implemented by banks initially with the introduction of standalone PC's and voyaged to local area network (LAN) connectivity. Further, core banking platform was adopted by banks and then branch banking changed to bank banking. (Harchekar, 2018)

Digitalisation is considered to provide great efficiency when habits and work processes are changed to accommodate the possible efficiency improvements (Kuusisto, 2017). On the other hand, digitalisation policies will surely cause changes in the normal work patterns and procedures (Bastari *et al.*, 2020).

Information and communication technology enable employees to focus more and more on complex tasks which needs human knowledge, because secondary, repetitive tasks can be done automatically using computer. Studies have also suggested that digitalisation enables greater efficiency and productivity (Cijan *et al.*, 2019).

The banking sector which is also known as development of all other sectors, because of the financial assistance it provides for other sectors and thereby encouraging the capital formation. (Nayak, 2018)

4.2.1 Role of digitisation in banking

Banks are a section of our life as well as have a major role in our daily lives. For many people, day would not finish while not a minimum of one money dealings. Hence, banks perpetually try and adopt latest technologies to reinforce client expertise. Digitisation is not associate choice for banking system, rather it is inevitable because of each business being digitised and the banking sector is also not an exception. Over online banking, mobile banking is increasing at a faster rate. Because of digitalisation, paper-based payment system has been converted to paper-less payment system.

4.2.2 Advantages of digitisation in banking

The biggest advantage of digitisation is improved client expertise. Also, there is a reduction of prices for banks and customers in addition by mistreatment ATMs, cashless transactions, etc. With the help of good knowledge of digitisation with banks, they will take data-driven dynamic selections by mistreatment digital analytics. This will give advantage to all the banks and customers. Technology is non-discriminatory and everyone is going to be treated equally at banks. With the help of technology, variety of consumers is going to be more for banks. Digitalisation reduces the error which human does. Want of handling giant amount of money is going to be reduced. Gap and maintaining the bank account will be easier with the help of digitalisation. Automation eliminates the repetitive tasks and in this way rural & concrete gap is also going to be

eliminated. With the increase of cashless transactions, faux currency threats are going to be reduced. Productivity will get high and this will really bring satisfaction to the employee.

There are various technological trends in banking sector which are shown with the help of Figure 1.

Fig.1: The Banking Industry and its Digital Transformation



Source: <https://images.app.goo.gl/exvxStmUcGvXn1Z56>

4.2.3 Impact of digitalisation on employee performance

To figure out additional transparency and higher use of social networks, digital workplaces might support changes in operating designs enabling staff. Digitalisation unifies the offline and online communications by keeping the staff connected through their mobile to produce anytime, anyplace access to company data and tools. By providing workers with user expertise which they need outside the firewall, digitalisation concentrates on worker expertise. They supply flexibility, alternative, and personalisation. Also, digitalisation supports the virtual work environments which allows staff to remain connected in the distributed and virtualised work locations with equalisation client privacy and operational risk. By providing the staff with the proper tools and right data at the proper time, digitalisation minimises disbursement and enhances productivity.

Performance is the accomplishment of a given task measured against planned glorious standards of accuracy, cost, speed, and completeness. The use of technology at intervals and the moral limits undoubtedly edges the organisation, alongside improvisation in individual and cluster performance. On one side, the work done by workers reduces through the technological advancement; and on the opposite range of staff to perform a task is additionally reduced, so reducing the job opportunities. Using the human resource management department, firms use advanced technologies to examine and measure the staff performance. Unit of time department leverages rising technology to stay up with the market to drive productivity and manage human capital. The current technology trends impact unit of time area unit outsourcing and concentrate on worth that unit of time brings to the organisation. The higher service performance demand has driven a technological trend towards additional powerful, ascendible, and integrated system elements.

4.3 Summary of literature review

Digitalisation in banking sector has made the banking transactions easier because now we can do the payment by sitting at our home. It also increases the productivity and it brings satisfaction to the employees. Also, digitalisation reduces the human error and handling large amount of money also become easier. With the increase of cashless transactions, faux currency threats are going to be reduced. Mobile banking is increasing at a faster rate over online banking. Digitalisation has also improved client expertise. Digitalisation supports the virtual work environments which allows staff to remain connected in the distributed and virtualised work locations with equalisation client privacy and operational risk. Automation eliminates the repetitive tasks and this way rural & concrete gap is also going to be eliminated. Even in the current pandemic also, digitalisation has helped banks and its employees to increase the productivity and performance because everything can be done easily by sitting at home.

5.0 Research Gap Identified

No study was done earlier to find whether people above 50 years of age find it difficult to cope up with digitalisation. Also, no study was done earlier to find the impact of digitalisation on different levels of management. By using digital analytics banks can take data-driven vibrant decisions with more digital data available. This will benefit customers, bank employees, and banks also. Big data is used in banking industry for credit management to detect the fraud signals and same can also be analysed in real time using artificial intelligence. Mobile banking has made it easier for the employees of

banking sector to reach out to the customers easily and frequently. Digitalisation has reduced the rural urban gap as well, helping employees of rural areas to improve their performance by satisfying the customer needs quickly.

6.0 Hypothesis

Hypothesis 1

Null Hypothesis:

H_0 = There is no relationship of digitalisation on employee performance in the banking sector.

Alternate Hypothesis:

H_1 = There is a strong positive correlation of digitalisation on employee performance in the banking sector.

Hypothesis 2

Null Hypothesis:

H_0 = The people above 50 years of age do not find it difficult to cope up with digitalisation.

Alternate Hypothesis:

H_1 = The people above 50 years of age find it difficult to cope up with digitalisation.

Hypothesis 3

Null Hypothesis:

H_0 = There is no difference of digitalisation on different levels of management.

Alternate Hypothesis:

H_1 = There is a difference of digitalisation on different levels of management.

7.0 Research Methodology

- Sample size: 121
- Research type: Quantitative research
- Research instrument used: Questionnaire / Interview format & logic:

I have collected the data from the employees of 9 banks including SBI, Union Bank of India, ICICI Bank, HDFC Bank, Axis Bank, Kotak Mahindra Bank, Indian Overseas Bank, Bank of Baroda, and Allahabad Bank. I have used Likert scale for asking the questions. I asked the employees about their age and their job position. Based on the response which they gave, I completed the data analysis.

- Sampling method: - Random sampling
- Type of scale: - Likert Scale
 - (Strongly Agree - 1, Moderately Agree - 2, Mildly Agree - 3, Neither Agree nor Disagree - 4, Mildly Disagree - 5, Moderately Disagree - 6, Strongly Disagree - 7)
- Data collection method: - Primary
- Area of research: - Banking sector
- Statistical tool: - SPSS Version 21

8.0 Data Analysis, Interpretation and Hypothesis Testing

8.1 Reliability of scales used

8.1.1 Scale: digitalisation scale

Table 1: Case Processing Summary

		N	%
Cases	Valid	121	100.0
	Excluded	0	.0
	Total	121	100.0
a. Listwise deletion based on all variables in the procedure.			

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
.844	8

Conclusion: Here, value of Cronbach's Alpha is 0.844 which is greater than 0.7, therefore digitalisation scale is reliable (Table 1 and 2).

8.1.2 Scale: Employee performance scale

Table 3: Case Processing Summary

		N	%
Cases	Valid	121	100.0
	Excluded	0	.0
	Total	121	100.0
a. Listwise deletion based on all variables in the procedure.			

Table 4: Reliability Statistics

Cronbach's Alpha	N of Items
.826	7

Conclusion: Here, value of Cronbach's Alpha is 0.826 which is greater than 0.7, therefore employee performance scale is reliable (Table 3 and 4).

8.2 Normality

8.2.1 Scale: Digitalisation scale

Table 5: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Digitalisation	121	100.0%	0	0.0%	121	100.0%

Table 6: Descriptive Statistics

Digitalisation	Mean		Statistic	Std. Error
	95% Confidence Interval for Mean		14.4876	.45168
		Lower Bound	13.5933	
		Upper Bound	15.3819	
	5% Trimmed Mean		14.2920	
	Median		14.0000	
	Variance		24.685	
	Std. Deviation		4.96843	
	Minimum		8.00	
	Maximum		25.00	
	Range		17.00	
	Interquartile Range		6.50	
	Skewness		.568	.220
	Kurtosis		-.681	.437

Table 7: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Digitalisation	.120	121	.000	.926	121	.000

a. Lilliefors Significance Correction

Conclusion: Here, value of skewness is 0.568 and value of kurtosis is -0.681 which is less than 3, therefore it can be concluded that digitalisation scale follows a normal distribution (Table 5 to 7).

Figure 2: Boxplot for Digitalisation Scale



Conclusion: The boxplot shows that there were no outliers for digitalisation (Figure 2).

8.2.2 Scale: Employee performance scale

Table 8: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Employee Performance	121	100.0%	0	0.0%	121	100.0%

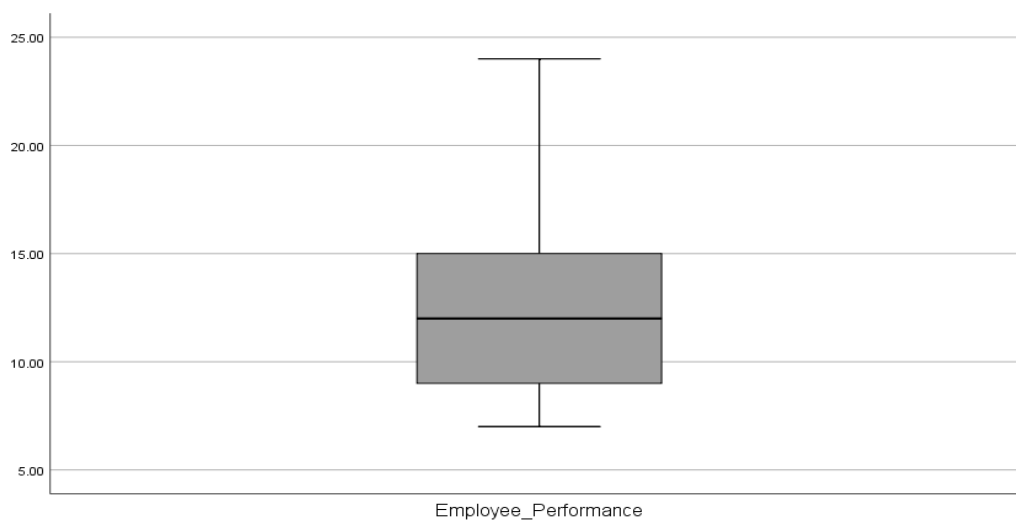
Table 9: Descriptive

			Statistic	Std. Error
Employee Performance	Mean		12.7355	.43658
	95% Confidence Interval for Mean	Lower Bound	11.8711	
		Upper Bound	13.5999	
	5% Trimmed Mean		12.4288	
	Median		12.0000	
	Variance		23.063	
	Std. Deviation		4.80238	
	Minimum		7.00	
	Maximum		24.00	
	Range		17.00	
	Interquartile Range		6.00	
	Skewness		.751	.220
	Kurtosis		-.155	.437

Table 10: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Employee Performance	.116	121	.000	.916	121	.000
a. Lilliefors Significance Correction						

Conclusion: Here, value of skewness is 0.751 and value of kurtosis is -0.155 which is less than 3, therefore it can be concluded that employee performance scale follows a normal distribution (Table 8 to 10).

Figure 3: Boxplot for Employee Performance Scale

Conclusion: The boxplot shows that there were no outliers for employee performance (Figure 3).

8.3 Hypothesis Testing

8.3.1 Hypothesis 1.

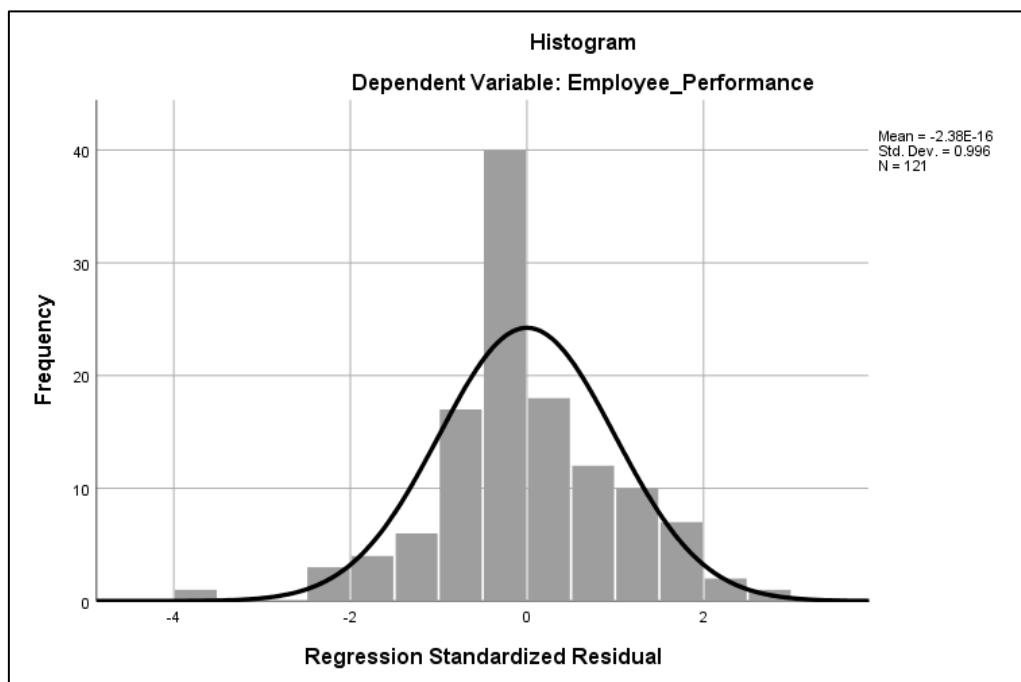
H_0 = There is no relationship of digitalisation on employee performance in the banking sector.

Table 14: Coefficients

Model		Unstandardized Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.616	.825		1.960	.052
	Digitalisation	.768	.054	.794	14.251	.000
a. Dependent Variable: Employee Performance						

Conclusion: The p value is 0.000 which is less than 0.05. Based on the p value, employee performance variable is explained by digitalisation variable (Table 13 and 14). As a result, the equation of the model is:

$$\text{Employee Performance} = 1.616 + 0.768 * \text{Digitalisation}$$

Figure 4: Regression Chart (Histogram)

8.3.3 Hypothesis 2

H_0 = The people above 50 years of age do not find it difficult to cope up with digitalisation.

Table 15: Descriptive

Digitalisation								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
20-29	90	14.6000	5.13591	.54137	13.5243	15.6757	8.00	25.00
30-39	17	14.3529	5.26713	1.27747	11.6448	17.0610	8.00	24.00
40-49	7	14.0000	2.94392	1.11270	11.2773	16.7227	10.00	17.00
50-59	7	13.8571	4.33699	1.63923	9.8461	17.8682	9.00	19.00
Total	121	14.4876	4.96843	.45168	13.5933	15.3819	8.00	25.00

Table 16: ANOVA

Digitalisation					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.892	3	1.964	.078	.972
Within Groups	2956.339	117	25.268		
Total	2962.231	120			

Conclusion: Here, p-value (level of significance) is 0.972 which is more than 0.05, therefore it can be concluded that the people above 50 years of age do not find it difficult to cope up with digitalisation (Table 15 and 16).

8.3.4 Hypothesis 3

H_0 = There is no difference of digitalisation on different levels of management.

Table 17: Descriptive

Digitalisation								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Top Level Management	14	14.2857	5.04485	1.34829	11.3729	17.1985	8.00	24.00
Middle Level Management	58	14.3966	4.59573	.60345	13.1882	15.6049	8.00	25.00
Lower Level Management	24	14.2917	4.97366	1.01524	12.1915	16.3919	8.00	24.00
Staff	25	15.0000	5.95119	1.19024	12.5435	17.4565	8.00	24.00
Total	121	14.4876	4.96843	.45168	13.5933	15.3819	8.00	25.00

Table 18: ANOVA

Digitalisation					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.537	3	2.846	.113	.953
Within Groups	2953.695	117	25.245		
Total	2962.231	120			

Conclusion: Here, p-value (level of significance) is 0.953 which is more than 0.05, therefore it can be concluded that there is no significant difference of digitalisation on different levels of management (Table 17 to 18).

9.0 Results and Discussions

9.1 Findings

The findings of my research are that most of the respondents believe that digitalisation has impacted equally to the employees of different age groups. Also, there is no difference of digitalisation on different levels of management. Respondents also agreed that digitalisation eliminates the repetitive tasks, and it helps employees in the banking sector to deliver the work on-time. Digitalisation has also made it easy for bank employees to maintain and track the record of their customers. Bank employees are now more flexible at work and their workload has been reduced to some extent because of digitalisation. Respondents also agreed that bank ID & different digital applications save time and energy of both customer as well as employees.

Respondents agreed that organisations should highly encourage employees to use the digitalised tools. Digitalisation helps the employees in fulfilling their responsibilities. Respondents also believe that want of handling giant amount of money is going to be reduced due to digitalisation and it will reduce the workload of employees.

Respondents have also given positive response towards improved employee performance due to digitalisation. They believe that digitalisation reduces human error which leads to improved performance. Also, digitalisation has brought high competition in the banking sector which encourages employees to improve their performance and work efficiency. Respondents agreed to the fact that communicating effectively with the colleagues, habit of quick learning, and ready for change in the current digital world helps to improve the performance. Respondents have also supported the fact that planning and organising the work is very important in this digitalised world and it helps in delivering the work on time and improved employee performance. Also, when

employees are committed to their work even in the changing situations and challenges, their performance automatically increases, and this leads to customer satisfaction. Respondents also agreed that employees in the banking sector have to be more careful while doing any transaction in this digital world, otherwise there may happen any cyber-attack which will be a loss for the bank, and it will affect the employee's performance also.

9.2 Suggestions/Recommendations

Arising from the findings of the study and conclusion thereof, it is recommended that banks should give proper training to their employees related to digital technology. Banks must be compelled to create progressive changes in everyday practice to encourage full scale conversion and supply training, facilities, and motivation to machine up the staff to face digitalisation challenges like connectivity issues, difficulty in understanding the servers, and banking software. Motivation is required to encourage and create worker a competent person to figure and productive. It will help banks to face the digitalisation challenges in industry, effectively, and expeditiously.

It is also recommended that banks should highly encourage its employees to use the digitalised tools in the service delivery process to assist them in the best possible way. Since everything is getting digitalised now, so it is recommended to have proper understanding of cyber security and its policies to be secure from banking frauds. In rural areas, less people use smartphones and they have lack of financial literacy. So, employees of banking sector in the rural areas must come up with some new approach to satisfy their customers.

9.3 Limitations

This study is confined to the impact of digitalisation on employee performance in the banking sector only but no other sector. The scope of this study is limited to 9 banks including SBI, Union Bank of India, ICICI Bank, HDFC Bank, Axis Bank, Kotak Mahindra Bank, Indian Overseas Bank, Bank of Baroda, and Allahabad Bank only.

Also, the sample size of data collected by me is limited to 121 only (i.e., $n=121$). This study only talks about employee performance because of digitalisation, but no other HR aspects like organisational development, employee engagement, etc. Also, this study is mainly focused on banking employees not banking customers.

9.4 Further research directions

The same study which is prepared by me can also be done for other banks as well along with or excluding these 9 banks (i.e., SBI, Union Bank of India, ICICI Bank,

HDFC Bank, Axis Bank, Kotak Mahindra Bank, Indian Overseas Bank, Bank of Baroda, and Allahabad Bank). Also, this study of impact of digitalisation on employee performance can also be done for any other sector as well other than banking sector like IT sector, automobile sector, healthcare, etc.

The same research can also be done with data which has larger sample size. The same research can also be done for other HR aspects like organisational development, employee engagement, etc. This research can also be done from banking customer's point of view rather than just banking employee's point of view.

9.5 Conclusions

Digital work strategy is very important and need to be understood because like every other work strategy, digital work strategy supports the organisations to meet business objectives like increasing business performance, reducing prices, and reducing the repetitive task and workload.

This study examined the impact of digitalisation on the performance of employees in the banking industry. The analysis has proven that the digitalisation contains an important impact on employee performance. The performance has been measured in various ways like it eliminates the repetitive task, reduces the workload of employees, reduces the human error, increases the satisfaction, improves the employee's skills, delivers the work on time, and improves the motivation. The study also suggested that employees in the banking sector must be more careful while doing any transaction in this digital world, it will help in doing safe and secure transaction by eliminating the banking frauds.

The study concludes that there is a strong positive correlation between digitalisation and employee performance. This study also suggested that digitalisation has treated employees of all age groups equally and people above 50 years of age do not find it difficult to cope up with digitalisation. Also, digitalisation has equal impact over different levels of management and there is no significant difference of digitalisation on different levels of management.

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Website Links

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