

## Impact Of Digital Technology On Bsnl Employees' Behaviour

Aslesh S. S.<sup>1\*</sup>, Dr. C. Muralikumaran<sup>2</sup>

<sup>1\*</sup> Ph.D Research Scholar, Department of Business Administration, Annamalai University

<sup>2</sup> Assistant Professor, Department of Business Administration, Annamalai University Chidambaram

### Abstract

Employees working in a private company adopt new technology easily. Employees working in private companies are implementing and learning digital technology for job security. But more or less employees working in the public sector face numerous problems in espousing and learning digital technology. This has positive or negative effects on the employee's performance, behavior and their interpersonal relationships. There are constraints and challenges but the employees need to strive to achieve whatever is possible through the resources available with the employees. Hence, the research tries to identify the impact of digital technology on BSNL employees' behaviour in Kerala. Data was collected from fifty BSNL employees in Kerala. Hence, it is concluded that digital technology in the workplace has a positive effect on employee behaviour. The research also identified that employee behaviour has a positive effect on employee performance. The research suggested that BSNL will create a culture that encourages employees to be innovative and creative and improve employee behavior by imparting knowledge of digital technology to reduce employee stress and improve employee performance.

**Keywords:** Digital Technology, Employees' Behaviour, Employee Performance and BSNL Employees.

### INTRODUCTION

Technology is an important component in manufacturing and service sectors. Service sectors and modern Manufacturing is an increasingly automated and technology – driven industry. It relies on the application of cutting-edge technologies and systems that are changing the face of manufacturing as well as service sectors in ways that were inconceivable just a few decades ago. In this modern age there is a risk of a company going down due to digital technology hitches. So it is necessary for any company to update themselves with digital technology. Several companies are undergoing Digital Transformation and leveraging the latest technology to improve their business. A company's accomplishment is measured by its employees and digital technology. So it is necessary for the employees to learn digital technologies along with them to make their work easier and clearer. Employees are focused on prioritizing training on digital technologies in the right way that will fuel future growth of the company.

The attitude of an employee in an organization can be branded by his behavior. There are many internal and external factors affecting employee behaviour. Factors affecting employee behavior include reporting bosses' w.r.t. work culture, work environment, relationship with coworkers, leadership styles, job satisfaction, and reward system. Similarly, when a company implements digital technology, employee performance and behavior are affected.

All telecom companies are using digital technology to provide service to users. Telecom companies can keep customers satisfied and retain them with the company by using updated digital technology. Employees working in a private company adopt digital technology easily. Employees working in private companies are adopting and learning digital technology for job security. But some employees working in the public sector face many problems in adopting and learning digital technology.

When digital technology is introduced in the organization it makes abundant metamorphosis. Digital technology has gained momentum in the recent decade, with its relationships with digital entrepreneurship, digital economies, digital social interaction, green economies, etc. Also, digital technology has an excessive impact on the employee's work environment. This has positive or negative effects on the employee's performance, behavior and their interpersonal relationships. Hence, the research tries to identify the impact of digital technology on BSNL employees' behaviour in Kerala.

### REVIEW OF LITERATURE

Pham Thanh Huu (2022) can see the relationship between employees' innovative work behavior and digital autonomy as the influence of employees. Moreover, this research result will be necessary for company managers and future researchers to find the correct clarification for their desires.

Indrihastuti Sulistianingtiyas and Indi Djastuti (2022) identified that employee engagement is mediation relationship between digitization in the workplace and employee performance. Digitization in the workplace improves employee performance and increases productivity, digitalization helps to improve employee self-efficacy, develop employee morale, motivate employees, improve skills, active participation, creative solutions, new challenges, constant thinking to work with dedication, integrated employee engagement in doing job sincerely.

Digitization is an upward experience used by organizations to improve business strategies, processes and structures. It has potential benefits to enhance employee and organizational performance. Furthermore, many companies have experienced positive performance effects and benefits through digitization (Truant & Broccardo, 2021).

Truant & Broccardo (2021); Zhou, et al. (2021); Martínez-Caro, et al. (2020); Vuori, et al. (2020); Ricci, et al. (2020); Okkonen, et al. (2019); Ratna & Kaur (2016); Kuusisto, (2015); Tan, et al. (2010) have identified that digitalization in the workplace has a positive influence on employee performance.

Bejakovic & Mrnjavac (2020) have conducted a study on the importance of promoting digital literacy by examining the relationship between digital competence and employment. Participants in learning through digital literacy receive basic training to develop technical skills. Also, digital education improves learning ability and helps in their career development. Brijesh Kishore Goswami and Yogesh Upadhyay (2019) have identified that digital transformation such as operational efficiency, customer experience and business modeling have significant effect on employee's engagement in NCR region. Mayowa G Agboola, et al. (2019) can accelerate change in employee behavior through technology use. Also, it promotes individual learning through the use of technology to increase employee efficiency and effectiveness and improve organizational performance. The research suggested that companies should review their policies and purchase software and hardware to protect their information against fraudsters and hackers.

Yuvaraj and Nadheya (2018) stated that digital technology helps an organization to improve employee performance faster and better. But since all the work is done with the help of ICT it has reduced the human interaction and affected the personal relationship between the employees. Majority of employees are willing to learn about new technology. This makes the employees satisfied with the technology and also increases their efficiency.

Ulrike Stefanie Foerster-Metz, et al. (2018) stated that digitization helps organizations to acquire the skills they need and communicate and collaborate, improve employee performance, and communicate from the leadership side to the employee side within the organization.

Muhammad Imran, et al. (2014) discovered that employee performance was influenced by technological advancement. The research also identified that employee motivation and employee training was influenced by technological advancement. Furthermore, employee performance was influenced by employee motivation.

Attar and Rateb J. Sweis (2010) have identified that there is positive influence of IT adoption on job satisfaction in Jordanian contracting firms. The authors recommended that organizations should provide managerial support for the adoption of information technology in their work scope.

## RESEARCH GAP

There has been a lot of research done on the digital technology and employees' behaviour worldwide, but very few researches has been done in the Indian context. Similarly, the digital technology and employees' behaviour has not been addressed in public sector companies.

## FRAMEWORK

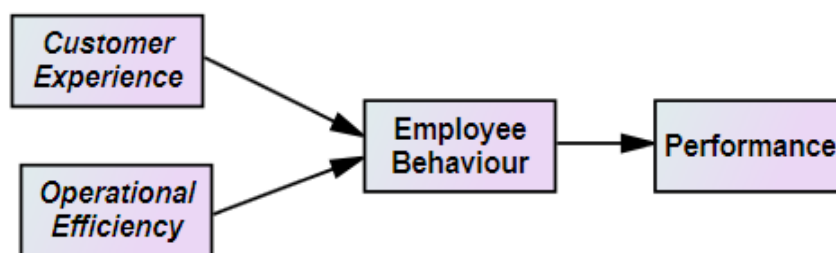


Figure 1: Conceptual framework

## NEED FOR THE STUDY

The findings of this study will help BSNL management and policy makers. This study will help identify the impact of digital technology on BSNL employees' behaviour. Findings from this study can help policy makers increase employees' behaviour, increase their job performance. Findings from this study will help BSNL Management to adopt policies and processes to enable transparent, quick and efficient decision making for providing a conducive work environment with strong focus on performance to enhance employees' behaviour by training and skill development.

## STATEMENT OF THE PROBLEM

Employees working in a private company espouse first-hand technology easily. Employees working in private companies are adopting and learning original technology for job security. But some employees working in the public sector face numerous problems in adopting and learning new technology. Also, this new and original technology has an excessive impact on the employee's work environment. This has positive or negative effects on the employee's performance, behavior and their interpersonal relationships. Hence, the BSNL is facing major problems in achieving the positive behaviour of employees by adopting new technology. Hence, the research tries to identify the impact of digital technology on BSNL employees' behaviour in Kerala.

## OBJECTIVES

- To discover the influence of digital technology on BSNL employees' behaviour.
- To find out the influence of BSNL employees' behaviour on their performance.

## HYPOTHESES

- There is no influence of digital technology on BSNL employees' behaviour.
- There is no influence of BSNL employees' behaviour on their performance.

## MATERIALS AND METHODS

In order to explore the impact of digital technology on BSNL employees' behaviour a descriptive research design is employed by the researcher. Data is collected from employees' of BSNL in Kerala through a standardized questionnaire. This descriptive research design is employed to explore the relationship between digital technology, BSNL employees' behaviour and employee performance.

## QUESTIONNAIRE DESIGN

Data is collected from BSNL employees in Kerala through a well-designed questionnaire. The questionnaire construction for this study is divided into four parts. The first part of the questionnaire is arranged in such a way to know the demographics profile of the BSNL employees', the second part is digital technology, the third part is employee behaviour and the fourth part is employee performance. Except first part, all the four sections are constructed with multiple choice questions. The first part is set up as a category and the other three as a measuring scaling technique.

**Table 1: Questionnaire Construction**

| S.No.      | Variable                  | Items     | Author   |
|------------|---------------------------|-----------|--|
| <b>I</b>   | <b>Digital Technology</b> | <b>8</b>  | Brijesh Kishore Goswami and Yogesh Upadhyay (2019) |
|            | Customer Experience       | 4         |  |
|            | Operational Efficiency    | 4         |  |
| <b>II</b>  | Employee Behaviour        | <b>11</b> | Yuvaraj and Nadheya (2018)                         |
| <b>III</b> | Employee Performance      | <b>8</b>  |  |

## RELIABILITY

Pilot study was done to confirm that the results of this study questionnaire are reliable. The questionnaires are verified by involving fifty BSNL employees in Kerala. Based on the BSNL employees' opinion, some changes are made in the questionnaire as suggested by the BSNL executives. Cronbach's alpha tool is employed to test the reliability of the research variables. All the variables of this questionnaire are above 0.70 which shows that it is reliable. This means that the set of questionnaire has a high reliability value. Based on this result, it is statistically recommended that the questionnaire set can be implemented for final analysis.

**Table 2:** Reliability of the research

| S.No.      | Variable                  | Items | Reliability |
|------------|---------------------------|-------|-------------|
| <b>I</b>   | <b>Digital Technology</b> | 8     | 0.85        |
|            | Customer Experience       | 4     | 0.86        |
|            | Operational Efficiency    | 4     | 0.88        |
| <b>II</b>  | Employee Behaviour        | 11    | 0.88        |
| <b>III</b> | Employee Performance      | 8     | 0.90        |

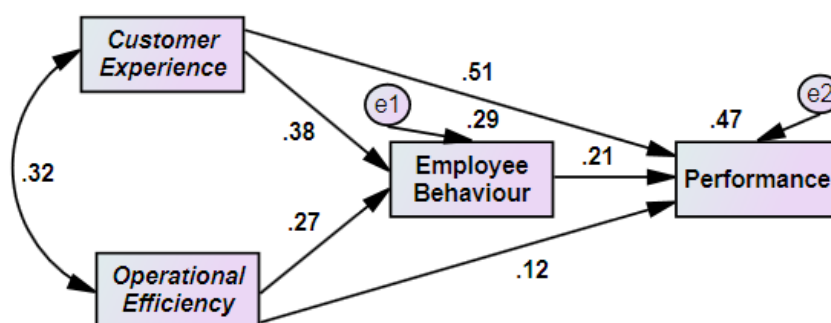
## SAMPLING TECHNIQUE

In this study, random sampling technique has been applied to collect the primary data from BSNL employees in Kerala. In this way 50 BSNL employees are approached to collect the primary data in Kerala.

## STATISTICAL TOOLS

Path analysis is used to estimate model by probing the relationship between digital technology, BSNL employees' behaviour and employee performance. The researcher has employed the path analysis for impact of digital technology on BSNL employees' behaviour.

## RESULTS AND DISCUSSION



**Figure 2:** Impact of digital technology on BSNL employees

**Table 3:** Model Fit Indication

| S.No. | Model Fit Indicators | Calculated Values in the Analysis | Recommended Values (Premapriya, et al. 2016) |
|-------|----------------------|-----------------------------------|--|
| 1     | Chi-Square           | 4.107                             | ---  |
| 2     | p                    | 0.072                             | > 0.050                                      |
| 3     | GFI                  | 0.988                             | > 0.90                                       |
| 4     | AGFI                 | 0.939                             |  |
| 5     | CFI                  | 0.988                             |  |
| 6     | NFI                  | 0.985                             |  |
| 7     | RMS                  | 0.044                             | < 0.080                                      |
| 8     | RMSEA                | 0.036                             |  |

Source: Primary data

The table 3 presents the mode summary of impact of digital technology on BSNL employees' behaviour. The path model presented, along with mode summary to verify the model fitness. The Chi-square statistic is 4.107 with  $p > 0.05$ . The table illustrates the model fit statistics such as RMSEA, RMR, NFI, CFI, AGFI and GFI. RMR and RMSEA are within than the recommended limit i.e., RMR and RMSEA is less than 0.08 (Indra, Balaji and Velaudham, 2020; Velaudham and Baskar, 2016). NFI, CFI, AGFI and GFI are within than the recommended limit i.e., NFI, CFI, AGFI and GFI is greater than 0.90 (Kantiah Alias Deepak and Velaudham, 2019; Velaudham and Baskar, 2015). All the model fit statistics imply a better model fit (Premapriya, et al. 2016; Victor and Velaudham, 2020).

**Table 4:** Regression Weights

| DV                   |      | IV                     | Estimate | S.E.  | C.R.   | Beta  | p     |
|----------------------|------|------------------------|----------|-------|--------|-------|-------|
| Employee Behaviour   | <--- | Customer Experience    | 0.493    | 0.065 | 7.609  | 0.381 | 0.001 |
| Employee Behaviour   | <--- | Operational Efficiency | 0.452    | 0.083 | 5.448  | 0.273 | 0.001 |
| Employee Performance | <--- | Employee Behaviour     | 0.115    | 0.027 | 4.303  | 0.208 | 0.001 |
| Employee Performance | <--- | Customer Experience    | 0.365    | 0.034 | 10.824 | 0.508 | 0.001 |
| Employee Performance | <--- | Operational Efficiency | 0.106    | 0.042 | 2.559  | 0.115 | 0.001 |

Source: primary data

**H<sub>1</sub>:** Customer experience significantly influences employee behaviour.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 7.609;  $\beta$  value is 0.381 and p value is significant. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the customer experience significantly influences employee behaviour. The result of the research is similar to the findings of Bigne, et al. (2001) which is also identified that digital transformation such as operational efficiency, customer experience and business modeling have significant effect on employee's engagement in NCR region.

**H<sub>2</sub>:** Operational efficiency significantly influences employee behaviour.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 5.448;  $\beta$  value is 0.273 and p value is significant. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the operational efficiency significantly influences employee behaviour. The result of the research is similar to the findings of Bigne, et al. (2001) which is also discovered that digital transformation such as operational efficiency, customer experience and business modeling have significant effect on employee's engagement in NCR region.

**H<sub>3</sub>:** Customer experience significantly influences employee performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 10.824;  $\beta$  value is 0.508 and p value is significant. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the customer experience significantly influences employee performance. Truant & Broccardo (2021); Zhou, et al. (2021); Martínez-Caro, et al. (2020); Vuori, et al. (2020); Ricci, et al. (2020); Okkonen, et al. (2019); Ratna & Kaur (2016); Kuusisto, (2015); Tan, et al. (2010) have found that digitalization in the workplace has a positive effect on employee performance.

**H<sub>3</sub>:** Operational efficiency significantly influences employee performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 2.559;  $\beta$  value is 0.115 and p value is significant. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the operational efficiency significantly influences employee performance. Truant & Broccardo (2021); Zhou, et al. (2021); Martínez-Caro, et al. (2020); Vuori, et al. (2020); Ricci, et al. (2020); Okkonen, et al. (2019); Ratna & Kaur (2016); Kuusisto, (2015); Tan, et al. (2010) have found that digitalization in the workplace has a positive effect on employee performance.

**H<sub>5</sub>:** Employee behaviour significantly influences employee performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 4.303;  $\beta$  value is 0.208 and p value is significant. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the employee behaviour significantly influences employee performance.

## FINDINGS

The analysis discovered that digitalization in the workplace has a positive effect on employee performance. The similar result found by Truant & Broccardo (2021); Zhou, et al. (2021); Martínez-Caro, et al. (2020); Vuori, et al. (2020); Ricci, et al. (2020); Okkonen, et al. (2019); Ratna & Kaur (2016); Kuusisto, (2015); Tan, et al. (2010). The result of the research is similar to the findings of Bigne, et al. (2001) which is also identified that digital transformation such as operational efficiency, and customer experience and business modeling have significant effect on employee's engagement in NCR region.

## RECOMMENDATION

- It is suggested that the management of BSNL should provide continuous training in the use of technology to the employees to create better performance. Also, BSNL management should provide more sensible sessions in training programs to improve the performance of employees in their respective fields.

- BSNL Management shall provide strategic sessions on Micro learning, experiential learning for the employees to build healthier performance by them.
- However, employee behavior can be improved by providing better training programs and a better technology-based work environment.
- It is suggested that BSNL will create a culture that encourages employees to be innovative and creative and develop employee behavior by imparting knowledge of technology to reduce employee stress and improve employee performance.

## CONCLUSION

The research tries to identify the impact of digital technology on BSNL employees' behaviour in Kerala. Data was collected from fifty BSNL employees in Kerala. Hence, it is concluded that digital technology in the workplace has a positive effect on employee behaviour. The research also identified that employee behaviour has a positive effect on employee performance. Thus, the top management leadership, middle management involvement in implementing more digital technologies to the workplace will creatively identify the factors which have a positive effect on employee's behaviour in turn will affect the performance. The research suggested that BSNL will create a culture that encourages employees to be innovative and creative and improve employee behavior by imparting knowledge of technology to reduce employee stress and improve employee performance.

## REFERENCE

1. Attar and Rateb J. Sweis (2010). The Relationship between Information Technology Adoption and Job Satisfaction in Contracting Companies in Jordan. *Journal of Information Technology in Construction*, 15, 44 – 61.
2. Bejakovic, P and Mrnjavac, Z. (2020). The importance of digital literacy on the labour market. *Employee Relations, The International Journal*.
3. Brijesh Kishore Goswami and Yogesh Upadhyay (2019). An Empirical Study on Digital Transformation and Its impact on Employee Engagement. SSRN-Elsevier, 1022-1033.
4. Indra, Balaji and Velaudham (2020). Impact of Social Influence and Safety on Purchase Decision of Green Cosmetic. *International Journal of Future Generation Communication and Networking*, Vol. 13, No. 3, 3036–3042.
5. Indrihastuti Sulistianingtiyas and Indi Djastuti (2022). The Effect of Digitalization in the Workplace on Employee Performance Mediated By Employee Attachment (Study on Employees of the Center for Product Processing Research and Marine and Fisheries Biotechnology, Central Jakarta). *Budapest International Research and Critics Institute-Journal*, 5 (2), 15121-15136.
6. Kantiah Alias Deepak and Velaudham (2019). Marital differences towards consumer buying behaviour. *AJANTA*, Volume – VIII, issue – II, 36-45.
7. Kuusisto, M. (2015). Effects of Digitalization on Organizations. *International Journal of Management*, 12(1), 1665–1689.
8. Martínez-Caro, E., Cegarra-Navarro, J. G., & Alfonso-Ruiz, F. J. (2020). Digital technologies and firm performance: The role of digital organisational culture. *Technological Forecasting and Social Change*, 154, 119962.
9. Mayowa G Agboola, Mosunmola Akinbode, Chidi Segun-Adeniran Peter Ifeanyichukwu Dibia, Anuoluwapo Oloruntoba, Tamarapreye Dinyain, Tolulope Johnson Fabunmi, Temitope Funsho, Oluwaseun Abayomi Akinde and Chelsea M Betek (2019). Technology usage and employee behaviour: controversies, complications, and implications in the Nigerian business environment. *International Conference on Energy and Sustainable Environment*, 1-14.
10. Muhammad Imran and Nadeem Maqbool and Huzaifah Shafique (2014). Impact of Technological Advancement on Employee Performance in Banking Sector. *International Journal of Human Resource Studies*, 4(1).
11. Okkonen, J., Vuori, V., & Palvalin, M. (2019). Digitalization Changing Work: Employees' View on the Benefits and Hindrances. In *Advances in Intelligent Systems and Computing*, 918.
12. Pham Thanh Huu (2022). Impact of Employee Digital Competence on the Relationship between Digital Autonomy and Innovative Work Behavior: A Systematic Review. *Research Square*, 1-30.
13. Premapriya, Velaudham and Baskar (2016). Nature of Family Influenced by Consumer Buying Behavior: Multiple Group Analysis Approach. *Asian Journal of Research in Social Sciences and Humanities*, Vol. 6, No.9, pp. 908-915.
14. Ratna, R., & Kaur, T. (2016). The impact of Information Technology on Job Related Factors like Health and Safety, Job Satisfaction, Performance, Productivity and Work Life Balance. *Journal of Business & Financial Affairs*, 05(01).

15. Ricci, F., Scafarto, V., Ferri, S., & Tron, A. (2020). Value relevance of digitalization: The moderating role of corporate sustainability. An empirical study of Italian listed companies. *Journal of Cleaner Production*, 276, 123282.
16. Tan, B. C. C., Pan, S. L., & Hackney, R. (2010). The strategic implications of web technologies: A process model of how web technologies enhance organizational performance. *IEEE Transactions on Engineering Management*, 57(2), 181–197.
17. Truant, E., & Broccardo, L. (2021). Technological Forecasting & Social Change Digitalisation boosts company performance : an overview of Italian listed companies. 173.
18. Ulrike Stefanie Foerster-Metz ,Katrin Marquardt, Nina Golowko, Andreas Kompalla and Christian Hell (2018). Digital Transformation and its Implications on Organizational Behavior. *Journal of EU Research in Business*, 1-14.
19. Velaudham and Baskar (2015). Multiple Group Structural Equation Model Showing Influence of Age in Consumer Buying Behavior towards Air Conditioner in Chennai City. *Annamalai journal of management*, 89-96.
20. Velaudham and Baskar (2016). Number of earning members influence over air conditioner buying behavior: multiple group analysis approach. *Annamalai Business Review*, Vol. 10, Issue 2, 59-68.
21. Victor Charles and Velaudham (2020). The Impact Of Consumer's Perception Towards E-Tailing In Madurai. *High Technology Letters*, Volume 26, Issue 10, 583-593.
22. Vuori, V., Helander, N., & Okkonen, J. (2020). Correction to: Digitalization in knowledge work: the dream of enhanced performance. *Cognition, Technology and Work*, 22(2), 427–433.
23. Yuvaraj, S and Nadheya, R. (2018). A Study on the Role of Technology on Employee Behaviour and Their Performance. *International Journal of Mechanical Engineering and Technology*, 9 (7), 244–251.
24. Zhou, Y., Liu, G., Chang, X., & Wang, L. (2021). The impact of HRM digitalization on firm performance: investigating three-way interactions. *Asia Pacific Journal of Human Resources*, 59(1), 20–43.