



USER FRIENDLY MECHANISM OF ICT AMONG RAILWAY EMPLOYEES

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Abstract

Two megatrends that have an effect on businesses and workplaces all across the world are digitalization and demographic change. The ways in which work is done are fundamentally altering as a result of the rapid advancements in information and communication technology (ICT). In this study indicates that the opinion about the usage of ICT towards employees. Primary data was gathered by interviewing 385 Southern Railway employees using an interview schedule. The data were collected from Southern Railway employees in Tirunelveli, Tuticorin, and Madurai. The data were analysed by using the Statistical Package for the Social Science (SPSS) software package. The Reliability test, Factor analysis and Path analysis were used by the researcher to project the results. The results shows that the employees are expecting technological enhancement and guidance in the workplace.

Keywords: Employees, ICT, Organization, Southern Railway, Technology.

Introduction

One of the most well-established and developed subfields of information systems (IS) research is the study of how individuals accept and use information technology (IT) (Venkatesh, Davis, & Morris, 2007). There is also research on technology adoption by groups and organisations that holds the tenet that one must use a technology before one can achieve desired outcomes, like an increase in employee productivity and task/job performance in organisations (e.g., Sarker & Valacich, 2010; Sarker, Valacich, & Sarker, 2005; Sia, Lee, Teo, & Wei, 2001; Sia, Teo, Tan, & Wei, 2004). Computer and information technologies are now far more prevalent in today's organisations. **Cheng-Min Chao (2014)**, the study found that university students' attitudes about adopting m-learning are highly influenced by satisfaction, which is a major component. The findings also showed beneficial effects of PE, trust, and EE on BI. Perceived student enjoyment had a significant impact on PE, EE, and satisfaction. Perceived enjoyment significantly benefited from mobile self-efficacy. **Wihan de Wet et al.(2016)** their study examines that employees should make a conscious effort to manage their ICT to lessen the negative effects on their job and personal lives, even though ICT are often viewed as positive. **Zhou (Joe) Jiang (2014)**, According to this study the use of ICT and perceptions of its ease of use were positively correlated with both job satisfaction and work performance. The correlations between job satisfaction and ICT use and easiness, as well as the relationships between work effectiveness and these two characteristics, were strongly mediated by employees' knowledge sharing orientation.

Methodology of the study: Primary data was gathered by interviewing 385 Southern Railway employees using an interview schedule. The data were collected from Southern Railway employees in Tirunelveli, Tuticorin, and Madurai. The data were analysed by using the Statistical Package for the Social Science (SPSS) software package. The Reliability test, Factor analysis and Path analysis were used by the researcher to project the results. This study examines the opinion about the Usage of ICT towards employees

Table 1 Reliability & KMO and Bartlett's Test

| | | |
|--|--------------------|-------------|
| Cronbach's Alpha | | .934 |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .787 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 19995.400 |
| | df | 276 |
| | Sig. | <0.001 |
| No.of Items | | 24 |

The value of KMO is **0.787** which indicates that the sample is adequate and we may proceed with the Factor Analysis. Similarly, the Bartlett's Test rejects the null hypothesis, i.e, the variables are not related as the approximate chi-square value is 19995.400 at 276 degrees of freedom which is significant at one percent. The data reliability has been tested by using the statistic Cronbach alpha. The Cronbach's Alpha comes up to be .934. As per the standards, the value needs to be greater than 0.5. Hence it can be concluded that the data is adequate. Thus factor analysis may be considered as an appropriate technique.

Table 2 Rotated Component Matrix

| Variables | Components | | | |
|---|---------------|------------------|-----------------|------------------|
| | User friendly | Career Prospects | Lack of knowhow | Technology Panic |
| ICT is useful in my job | .942 | | | |
| Using ICT is a good idea | .929 | | | |
| ICT would be easy for me to become skillful at using the system | .926 | | | |
| ICT is easy to use | .921 | | | |
| ICT makes work more interesting | .920 | | | |
| Seniors are helpful in the use of ICT | .916 | | | |
| Learning to operate the system is easy for me | .901 | | | |
| Interaction with the ICT would be and understandable | .892 | | | |
| Liking work with ICT | .882 | | | |
| Using ICT increases the productivity | .858 | | | |
| Gives Confidence of using the system | .846 | | | |
| Working with ICT is fun | .844 | | | |
| The organization has supported the use of the system | .842 | | | |
| Planning of using the system in the near future | .837 | | | |
| ICT enables to accomplish tasks more quickly | .836 | | | |
| Have the intention of adapting the technology | .787 | | | |
| There was no advisors | | .872 | | |
| The ICT scares a little | | .795 | | |
| By using ICT, chances of career booster is possible | | .732 | | |
| Getting someone to help is possible | | | .838 | |
| Time saving is possible by the adoption of technology | | | .749 | |
| Fear of losing information by the misuse of technology | | | .701 | |
| Apprehensive about using ICT | | | | .854 |
| Hesitate to use ICT for fear of making mistakes | | | | .849 |
| Eigen value | 13.976 | 3.269 | 2.237 | 1.238 |
| Percentage of variation | 58.232 | 13.621 | 9.323 | 5.157 |

Source :Primary Data

The Eigen value of factor 1 is 13.976 with 58.232% of variance. Factor 1 has very high significant loading on the variable ICT is useful in my job (0.942) and it is the combination of sixteen factor, it can be termed as **User friendly**. Factor 2 is the combination of three variables and have the variance 13.621 and it can be termed as **Career Prospects**. Factor 3 is the combination of three variables and have the variance 9.323 and it can be termed as **Lack of know how**. Factor 4 is the combination of two variables and have the variance 5.157 and it can be termed as **Technology Panic**.

Path Analysis Model for User friendly mechanism of ICT among Railway Employees

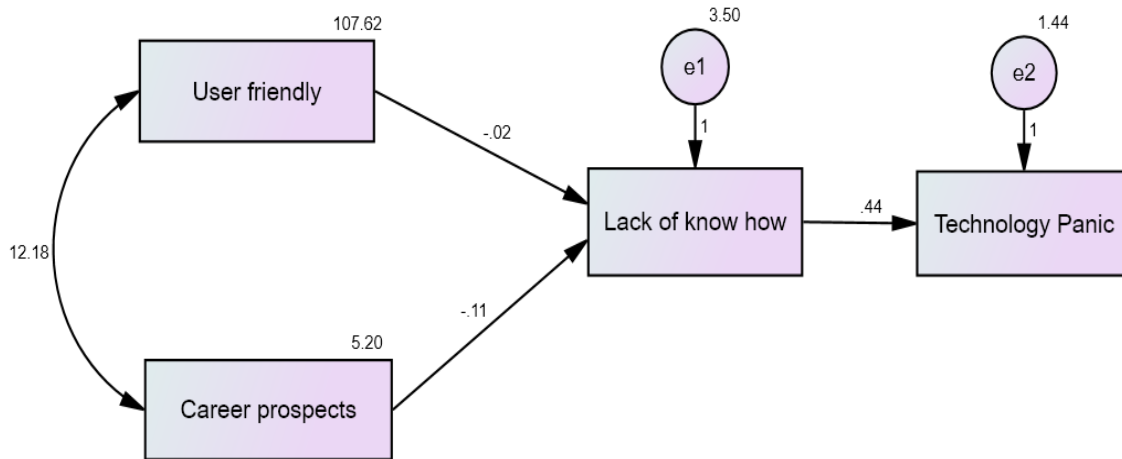


Table 3 Variables in the Structural Equation Model Analysis

| Variables | | Unstandardised co-efficient (B) | S.E of B | Standardised co-efficient (Beta). | t value | P value |
|------------------|-----------------------|---------------------------------|----------|-----------------------------------|---------|--------------|
| Lack of know how | <--- User friendly | -0.024 | 0.011 | -0.130 | -2.24 | 0.025 |
| Lack of know how | <--- Career prospects | -0.108 | 0.049 | -0.128 | -2.21 | 0.027 |
| Technology Panic | <--- Lack of know how | 0.435 | 0.032 | 0.571 | 13.63 | *** |

Source: Derived

From the above table, Unstandardised coefficient User friendly -0.024 represents the partial effect of User friendly on Lack of know how, holding the other path variables as constant. The estimated negative sign implies that such effect is negative that Lack of know how would decrease by 0.024 for every unit decrease in User friendly and this coefficient value is significant at 5% level. Unstandardised coefficient of Career prospects on Lack of know how is -0.108 represents the partial effect of Perception on Career prospects, holding the other path variables as constant. The estimated negative sign implies that such effect is negative that Lack of know how would decrease by 0.108 for every unit decrease in Career prospects and this coefficient value is significant at 5% level. Unstandardised coefficient of Lack of know how on Technology panic is 0.435 represents the partial effect of Technology panic, holding the other path variables as constant. The estimated positive sign implies that such effect is positive that

Technology panic would increase by 0.435 for every unit increase in Lack of know how and this coefficient value is significant at 1% level. Based on Standardised coefficient Lack of know on Technology Panic (0.571) is the most influencing path in this SEM model, followed by User friendly on Lack of know how (-0.130), Career prospects on Lack of know how (-0.128). Therefore the model has a good fit.

Table 4 Model fit summary of Structural Equation Model

| Indices | Value | Suggested value with reference |
|--------------------|-------|--------------------------------|
| Chi-squarevalue | 5.586 | - |
| DF | 2 | - |
| P value | 0.061 | > 0.05 (Hairt al.,1998) |
| Chi-squarevalue/DF | 2.793 | < 5.00 (Hairt al.,1998) |
| GFI | 0.993 | >0.90(HuandBentler,1999) |
| AGFI | 0.964 | >0.90 (Hairt al.2006) |
| NFI | 0.981 | >0.90(HuandBentler,1999) |
| CFI | 0.988 | >0.90 (Dairetal.,2008) |
| RMSEA | 0.068 | <0.08 (Hairt al.2006) |

Source: Derived

From the above table it is found that the calculated Chi-square value/DF is 2.793 which is less than 5 which indicates perfectly fit. Here Goodness of Fit Index (GFI) value (0.993) and Adjusted Goodness of Fit Index (AGFI) value (0.964) is greater than 0.9 which represent it is a good fit. The calculated Normed Fit Index (NFI) value (0.981) and Comparative Fit Index (CFI) value (0.988) indicates that it is a perfectly fit and also it is found that Root Mean Square Error of Approximation (RMSEA) value is 0.068 which is less than 0.08 which indicated it is perfectly fit.

Conclusion

Information and communication technology (ICT) is increasingly used in today's organizational environment. The present study explored opinion about usage of ICT towards employees. From the above analysis 24 variables are classified under four factors such as User friendly, Career Prospects, Lack of knowhow and Technology Panic. By using Path analysis the results indicates that lack of knowhow of ICT leads to Technology panic for employees and the employees are opinioned that the usage of ICT is very beneficial, yet employees indicate that they have some difficulties using it. Utilising ICT is resisted by certain employees. Using ICT and training personnel properly can promote national growth.

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