A Model of Electronic Customer Relationship Management System Adoption In Telecommunication Companies

Un modelo de adopción del sistema electrónico de gestión de relaciones con el cliente en empresas de telecomunicaciones

Written by:
Elham Abdulwahab Anaam[13]
https://orcid.org/0000-0002-1497-5509
Khairul Azmi Abu Bakar[13]
https://orcid.org/0000-0002-0575-2100
Nurhizam Safie Mohd Satar[13]
https://orcid.org/0000-0003-3389-3936

Abstract

Employee satisfaction is key to electronic–customer relationship management (E-CRM) systems in telecommunication companies. The purpose of this study is to investigate the direct and indirect effect of technological factors, individual factors, and organizational factors on employees' level of satisfaction. For this study, data was collected from 300 employees' workings in Malaysian telecommunication companies; and the data was analyzed using PLS-SEM. The findings revealed that technological, organizational, and individual factors are positively and significantly related to satisfaction and perceived usefulness. The results also supported the direct and positive relationship between perceived usefulness between employees' job satisfaction. The study has contributed to the body of literature by exploring the implications of various significant factors in terms of employee satisfaction. Besides, the management of the telecommunication companies may benefit from this study by adopting strategies that not only employee satisfaction but may also enhance the companies' performance. The limitations and the direction for future research are discussed in the end.

Keywords: E-CRM, telecommunication companies, success factors.

Resumen

La satisfacción de los empleados es clave para los sistemas electrónicos de gestión de relaciones con el cliente (E-CRM) en las empresas de telecomunicaciones. El propósito de este estudio es investigar el efecto directo e indirecto de factores tecnológicos, factores individuales y factores organizacionales sobre el nivel de satisfacción de los empleados. Para este estudio, se recopilaron datos de los trabajos de 300 empleados en empresas de telecomunicaciones de Malasia; y los datos se analizaron usando PLS-SEM. Los hallazgos revelaron que los factores tecnológicos, organizacionales e individuales están relacionados positiva y significativamente con la satisfacción y la utilidad percibida. Los resultados también apoyaron la relación directa y positiva entre la utilidad percibida entre la satisfacción laboral de los empleados. El estudio ha contribuido al cuerpo de la literatura al explorar las implicaciones de varios factores importantes en términos de satisfacción de los empleados. Además, la dirección de las empresas de telecomunicaciones puede beneficiarse de este estudio adoptando estrategias que no solo satisfagan a los empleados, sino que también mejoren el desempeño de las empresas. Las limitaciones y la dirección de la investigación futura se discuten al final.

Palabras Clave: E-CRM, empresas de telecomunicaciones, factores de éxito.

Introduction

Over the last two decades, with the rise of globalization and technological advancement, researchers' and practitioners' interest in the field of E-CRM, especially in the adoption of E-CRM in telecommunication companies, has increased. This is because telecommunication companies are considered the role model of a country's economic and technological development.

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[13] Faculty of Information Science & Technology, Universiti Kebangsaan Malaysia, Malaysia.

Besides, these companies also play a significant role in the productive capacity of a country (Hasan et al., 2015). Despite its significance, 65% of the companies have failed in the adoption of E-CRM, and this rate of failure may engulf 85% of the companies (Soltani et al., 2018; Bhanu & Magiswary, 2010). In the literature, several factors have been attributed to the low adoption of E-CRM. For instance, the increasing demand of the customer has adversely affected the selling, marketing, and customer service performance of the employees (Harrigan et.al., 2009). Besides, E-CRM has become complicated, with a vast amount of information about customers (Al-nassar 2015). Furthermore, high workload, multitasking, stress, unpleasant physical or interpersonal working condition, monotony, and inadequate supervision, and lack of employee training and experience are other factors that have contributed to the low adoption of E-CRM. Also, most of the companies are suffering from E-CRM complexities, massive demand for the customers' needs, and the cost of maintaining a large amount of data Ahmed (2016). Other factors that are consistently linked with low adoption of E-CRM are employees' level of satisfaction (Yang et al, 2011; Abdullateef et al. 2014) and perceived usefulness. (Al-Weshah, Al-Manasrah, and Al-Qatawneh 2018) reported that user satisfaction of E-CRM not only affects the telecommunication companies' performance but also enhances the adoption of E-CRM among employees. Besides, the improvement of E-CRM is associated with how the employees are satisfied with the use of the E-CRM. Thus, understating essential factors that improve employee satisfaction with the use of E-CRM may improve telecommunication companies' efforts to strengthen the adoption of E-CRM.

Numbers of factors have been associated with employees' level of satisfaction, especially with the adoption of E-CRM. For instance, technological factors (service quality, system quality, and information quality) are found to have a significant influence on employees' behavior attitudes. Researchers have also used IS theory to explain the impact of TF on employees' attitudes and behavior (Razak et al. 2016). Although prior research acknowledges the importance of TF in improving employees' attitudes and behavior, limited studies are available on the influence of TF on employee. satisfaction with the use of E-CRM. This study aims to bridge this gap in the literature by exploring the impact of TF on employees' satisfaction with the adoption of E-CRM and perceived usefulness in telecommunication

companies. Besides, scholars also acknowledge the significance of organizational factors (i.e., top management and training) in enhancing employee satisfaction with E-CRM and perceived usefulness. For example, Igbaria (1990) developed the EUCS model and found that (Etezadi & Farhoomand, 1996) Top management (Igbaria, 1990). Anaam et al. (2018) found that the organization's support and user training are essential for the satisfaction of the employees and perceived usefulness. Despite offering useful insight, research on the relationship between transitional factors and employee satisfaction with the adoption of E-CRM in telecommunication companies is limited. The second objective of this study is to explore this relationship and examine the influence of organizational factors on E-CRM's perceived usefulness. Also, there is evidence that certain factors related to individuals, such as how individuals perceive the E-CRM, individual skill, and knowledge about technology, self-efficacy, and experience, are found to have an important role in increasing employee satisfaction with technology. For instance, Other scholars have found similar results between individual factors and employee satisfaction (Jaber and Simkin 2016). However, studies on the relationship between individual factors and employee satisfaction with the adoption of E-CRM is limited. In this study, we explore this relationship. In doing so, the present study makes several significant contributions to the literature. First, this study examines the influence of technology factors (TF), organizational factors (OF), and individual factors (IF) on employees' level of satisfaction with the use of E-CRM, which, to the best of our understanding, has relatively explored. Second, this study examines the influence of TF, organizational factors, and individual factors on the perceived usefulness of the E-CRM. This study has a contextual contribution by exploring the implication of individual factors on employee satisfaction with the E-CRM in mobile telecommunication companies in Malaysia. The study also a methodological contribution by using PLS-SEM.

Literature Review and Hypothesis Development

The E-CRM refers to the guideline, method, and process given by the organization to the employees for the management of customer information (Abdulfattah 2012). These guidelines help the organization in assisting customers' needs (Ghahfarokhi and Zakaria 2009). CRM is a business vision to enhance the relationship between customers (Hendricks,

et.al., 2007) and the mobile company (Ahmed 2010). In E-CRM, employees' relationships with customers are managed with the use of information technologies and systems (McKenzie and Schweitzer, 2001). According (Damabi et al, 2018) mentioned that the E-CRM enhances the connection among staff in an organization. In the literature, different dimensions of E-CRM have been proposed. The main dimensions of the E-CRM are technological equipment, organization, and users of the systems (Al-Momani, et.al 2009). In the following sections, each dimension of the E-CRM is discussed and the hypotheses are proposed.

Relationship between TF, OF, IF, Employee Satisfaction with E-CRM, and Perceived Usefulness

Technology Factors

Technology factors consist of service quality, system quality, and information quality. These factors are related to the system and are found to have a profound influence on employees' attitudes and behaviors.

Service Quality: Service quality is one of the essential elements of technology that play a significant role in employee satisfaction (Ahani et al. 2017). The technology context is indicated by the factors (service quality, system quality, and information quality) concerning the system and its influence on purposed behavior. IS theory included factors related to a condition that impacts the technology used because of those quality factors existing research used this theory. Besides, service quality also helps in the improvement of E-CRM that further leads to companies' competitiveness. Moreover, according to (Cook & Thompson, 2000), a business organization's success or failure depends on service quality. Other researchers have also found that service quality influences employee satisfaction and perceived usefulness (Erlirianto et al. 2015; Hosseinianzadeh, 2015, Chang, Park, and Chaiy 2010).

Information Quality: Information quality refers to the accuracy, timeliness, completeness, comprehension, and accessibility of the information (Ajoye, 2014; Malá and Černá 2012; Yusof and Yusuff 2013). According to previously published studies, information quality determines the goodness of managing data in E-CRM. Many researchers such as (Ajoye 2014; Akinnuwesi and Olabiyisi 2013; Hannachi, 2015; Wang, Wang, and Yang 2010) reported

that information quality has a positive effect on employee's satisfaction and perceived usefulness.

System Quality: System quality is another dimension of TF, and it refers to the ease of use and flexibility of the system. The important features of the system quality are the ease of use, system flexibility, and reliability of an information-system (Petter, Delone, and Mclean 2008). The typical measures of the systemic quality in the literature include response time, ease-of-use, flexibility, and stability (Yahaya, J H, 2016; Yahaya, Deraman and Hamdan 2008). Wang & Liao., (2007) mentioned that the ease of use and appearance are system qualities that allow organizations to present the right products and services to the customers. These qualities were found to have a positive effect on system use. Thus, organizations gain a competitive benefit by contributing more significance to consumers as well as improving consumer gratification. Enhancing the overall E-CRM system has a direct and positive influence on employee satisfaction (Kennedy 2006). According to Ayyash (2015), information quality is advantageous for the organization and is found to have a significant effect on perceived usefulness. In sum, the literature suggests that TF (system quality, information quality, and service quality) has an important role in increasing employees' satisfaction and the perceived usefulness of the system. Thus, based on the previous literature and IS theory, we propose that:

H1: There is a positive impact of the technology factors on perceived use.
H2: There is a positive impact of the technology factors on employee satisfaction.

Organization Factor

Organizational factors are those factors that are related to the organization. The most common organizational factor in E-CRM is top management (Igbaria, 1990) and training. Igbaria (1990) developed the EUCS model based on five variables to examining the success (Etezadi & Farhoomand, 1996).

Top management support has a significant influence on the success of E-CRM in an organization. (Kim et al, 2008) also found a significant and positive impact of top management support on the success of E-CRM. According to (Tarafdar & Gordon, 2007), when senior managers develop necessary standards in support of information technology, they strongly

advocate using information systems within that organization (Ahmad et al., 2011; Kamal et al, 2012). Besides, other researchers have also established the relationship between top management support and the success of IT. (Chinje, 2013) found that top management support, involvement, and understanding in E-CRM are the most potent factors behind E-CRM success. Moreover, E-CRM is deemed to become effective and achieves its objective when it has support from the top management.

Another component of the organizational factor is training. **Training** is the main component of E-CRM as it ensures that employees have all the required aptitudes to use the new E-CRM system (Suursalmi, 2016). (Mian, 2014) indicated that the main issue in telecommunication companies. Training is a major factor in positive employee performance (Olupot & Nouerag, 2014). Besides, training also plays a significant role in ensuring that users understand the system, use the system, and manage the exchange process effectively (Yusof, 2015; Gonalez-Benito et al., 2017). Researchers have also found the relationship of training with the success and implementation of a system (Hameed et al. 2012; Kakar et al., 2019, Hendricks et al. 2007). Although some confirmation of the importance of top management in encouraging E-CRM use and boosting employee satisfaction with E-CRM, studies on the influence of organizational factors (e.g., top management support and training) on the employees' satisfaction with E-CRM is limited. There is also a lack of studies on the influence of organizational factors on E-CRM's perceived usefulness. This study addresses this gap in the literature and proposes that:

H3: There is a positive impact on the organizational factors on perceived use.
H4: There is a positive impact on the organizational factors on employee satisfaction.

Individual Factors

Ease of Use: Individual factors are those factors that under the control of the individual, and it includes individual skills, ease of use, personal self-efficacy, and experience in the computer. Akter & Ray, (2013) defined information security based on ease of use and Privacy through using the E-CRM platform. There are three system items: efficiency, reliability, and Privacy, which constitute user perception toward E-CRM system quality. Reliability determines the level of (Akter et al., 2013) E-CRM platform, which is available anytime and anywhere. Efficiency: define the level of ease of use and meet needs

from the E-CRM platform. Privacy indicates to the degree that the E-CRM platform provides security in store the information submitted to users. Some studies mentioned the ease of use affects user satisfaction (Arvidsson., et.al., 2014; Maillet et al, 2015; McGill & Klobas, 2009). On the other hand, Wang & Liao, (2007) claimed that the main success factors contributing to the successful adoption are employee satisfaction, system use, and perceived usefulness. **Skills** are the strength of accomplishing something (Rahmat et al., 2012) and are the key features of the success of any user system (Ayyash, 2015).

(Charoensukmongkol and Sasatanun 2017) mentioned that skills are part of human factors that have a significant impact on employee satisfaction. Besides, when employees become more skilled, they eventually become efficient and have a strong customer relationship (Hsiao et al, 2013). Recognition of employees' skills motivates employees and gives them the responsibility to treat the customers at high-quality levels (Lumpur & View, 2015; Eliseeva et.al 2019). Another important individual factor that plays a role in the adoption of E-CRM is computer self-efficacy. **Self- efficacy** reflects the people's belief that they can do whatever they want to do with their skills and abilities. Computer self-efficacy is an essential factor for using computers and enhances employees' abilities to use a computer (Taylor et al., 2008). (Speier & Venkatesh, 2012) propose a positive connection between self- efficacy and user convictions (Hu et al., 2003). Research also shows that users who have self-efficacy would value and understand the system better. Besides, self-efficacy plays an essential in identifying the level of complicated tasks. On the other hand, lack of computer self-efficacy leads to more negative individual understanding toward a technology (Speier & Venkatesh, 2012). Employees with high computer self-efficacy will have a better view of the E-CRM system and better perceptions of its success. Another individual factor that plays a role in the E-CRM is an **individual experience** in E-CRM. Research shows that when an employee has experience in something, they become more productive in those activities, and their performance also increases with individual experience in technology. For instance, (Karimi et al, 2015; Rahmat, 2015) found a positive and significant relationship between computer experience and employee satisfaction. Individual experience also affects the success of the E-CRM system. There is little evidence examining how employees learn from their experiences in developing, adopting, and managing E-CRM.

Reports showed there is a significant relationship between employee and experience that contributes to the success of the E-CRM system. Though much of the studies suggest a link between individual factors and user satisfaction with the use of technology, however, studies on the influence of individual factors on employee satisfaction with the E-CRM and perceived usefulness of E-CRM are limited. To address this research gap, this study proposes the following hypotheses:

H3: There is a positive impact on individual factors on perceived use.
H4: There is a positive impact on individual factors on employee satisfaction.

Perceived Usefulness: This refers to employee's perception that the use of new technology will improve their satisfaction. (Hart et al, 2004) reported that perceived usefulness is affected by several factors. E-CRM system value measuring with meet employee satisfaction need (Jafari & Soltani, 2016). Similarly, perceived usefulness influences ease of use and user satisfaction (Chang et al., 2015). Perceived usefulness has also been found to have a strong correlation with employee satisfaction, and employee satisfaction, in turn, is found to influence system success) Davis, 1989). Thus, based on the literature, we predict that perceived usefulness can be affected by various factors such as system use, skills, computer self-efficiency, and experience of using the E-CRM system. According to (Scherer et al, 2015; Ayyash, 2015), perceived usefulness is positively affected by individual self-efficacy and skills.

Employee Satisfaction: Employees are the critical assets of organizations and play a significant role in their success (Dauwed et al. 2018; Jafari & Soltani, 2016). At the same time,

others defined it as the gap between the expected gain and the actual gain (Jaber and Simkin 2017). Measuring employee satisfaction through some individual factors such as skills, experience, computer efficiency, and system use, also is indicated to E-CRM successful. For example, (Nor, Mukhtar, and Yahya 2011, Pandit and Vilches-montero 2016) stated that services' effectiveness is a tool for measuring user satisfaction.

Therefore, this study identified the factors that direct the impact of skills, experience, system use, and computer self-efficiency on employee satisfaction.

Individual Performance: Jafari & Soltani, (2016) define performance is the difference between responsibility and innovative results. They are considered in determining business targets and objectives. Some researchers identified individual performance in E-CRM critical success factors (Kuegler et al., 2015). The individual impact is tested through the performance of job efficacy and quality of service at work (Seddon, 1997). Individual performance is measured by individual productivity and efficiency awareness (Fuller et al., 2018). There are different ways to measure individual performance impact, and they vary between researchers. This study measured three items (effectiveness, productivity, and performance) for individual performance impact on the E-CRM system. To understand the effect of the major elements of individual performance. The first is a structural problem related to the support of the company; Number of employees, age, and goal. The second element is used to analyze the employees, performance measurement, quality (Kim et al. 2015), and Development of Information Technology.

Table 1.
Direct Hypotheses Suggest Framework.

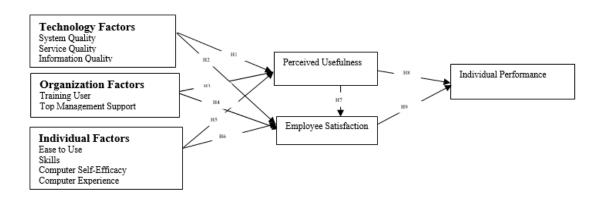| NO	Hypothesis	Hypothesis Description
H1	(TF) → (PU)	There is a positive impact of the technology factors on perceived Usefulness
H2	(TF) → (ES)	There is a positive impact of the technology factors on employee satisfaction
H3	(OF) → (PU)	There is a positive impact of the organization factors on perceived Usefulness
H4	(OF) → (ES)	There is a positive impact on the organization factors on employee satisfaction
H5	(IF) → (PU)	There is a positive impact of the individual factors on perceived Usefulness
H6	(IF) → (ES)	There is a positive impact on the individual factors on employee satisfaction
H7	(PU) → (ES)	There is a positive relationship between perceives usefulness factors and employee satisfaction
H8	(PU) → (IP)	There is a positive impact of the perceived usefulness factors on individual Performance
H9	(ES) → (IP)	There is a positive impact on employee satisfaction factors on individual performance

Figure 1. Proposed model.

Methodology

The research mainly included a questionnaire design. According to (Tabachnick & Fidell, 2001) as a general rule of thumb, at least 300 cases are deemed comfortable, 500 as very good, and 1000 as excellent. Consequently, the sample size is 300 respondents for this study. The simple selected according to different position categorize, namely Administration, Manager, Head of department, Executive. The data gathered by personal surveys. Respondents were asked to rate on a five-point Likert scale their agreement or disagreement on the E-CRM dimension. The questionnaires were created based on close and open questions that allow the respondent to answer each item's exact answers. The questionnaires were distributed to the employees of telecommunications companies in Malaysia called A, B, C. PLS-SEM was used in the current study to analyze data where the previous scholar has used PLS-SEM for analysis model (Kakar et al., 2019).

Developing a Measure

This study has developed measurement items that followed the process. Items from previous studies were adopted that included 61 questions. Second, the items of the questionnaire were presented to the review of three academic experts in the fields of information systems and information technology. The questionnaire was validated to check it is free of error and clear for respondents. Some measure items were rejected or reworded, and others were added. Third, the resultant questionnaire instrument is a pilot study with 30 employees in the telecommunication company (Anaam et al., 2020). They were requested to fill up questionnaires and stated any ambiguity or other difficulties they experienced in responding to the items. Their comments and suggestions were used to modify the questionnaire. This study uses SPSS for analysis pilot study. Also, the principal component transformation extraction technique was used to select components in terms of explained variance for all items.

Data Analysis

Table 2 shows the name of companies that collected data. As shown in Table 3, most respondents have experience working effectively with E-CRM. Table 4 presented Cronbach's alpha reliability coefficients for variables. The Cronbach's Alpha values could make between 0-1 as the acceptance range. A more significant level of range means a higher value of reliability. Values that are 0.9 and above are excellent; values of 0.8 and above are ethical; values of 0.7 and above are acceptable; values of 0.6 and above are questionable; and values less than 0.6 are poor (Pallant, 2013).

Table 2.
Questionnaire distribution companies.

Companyies name	Selected questionnairs
A	83
B	97
C	120
Total	300

Table 3.
Questionnaire distribution amongcampanies.

Variables	Cronbach`s Alpha >0.70
Computer Self-Efficacy_(CSE)	0.794
Easy to Use (EOU)	0.874
Employee Satisfaction_(ES)	0.878
Information Quality_(IQ)	0.893
Perceived Usefulness_(PU)	0.777
Skill (SK)	0.845
Computer Experience_(CE)	0.894
Individual Factors (IF)	0.745
Individual Performance_(IP)	0.839
Organization Factors_(OF)	0.800
Service Quality_(SERQ)	0.842
System Quality (SQ)	0.841
Technology_Factors (TF)	0.869
Top Management Support_(TMS)	0.873
Training_(T)	0.793

Descriptive Analysis of the Study Variables

Standard deviation, degree of agreement, and rank were calculated for each item to show a descriptive analysis of respondents' answers to each statement item. Concerning Age Category, a large percentage of the sample was within the Age category 25-29 (46.3%-139) followed by Age category 30-34 (38.0%-114). The Age category 35-40 was less than the form groups (14.7%-44) followed by Age category (Above 40 (1.0%-3) as the smallest category. While concerning Education Level Category, a large percentage of the employees had a Bachelor's degree (37.7%-113) followed by Diploma (28.3%-85) and high school (17.0%-51). Of the remaining, 12.3%-37 had a Master's Degree, and only (4.7%-14) had a Ph.D. degree. Regarding position, a large percentage of the sample is an executive manager (69.7%-209) followed by Head of Department (8.7%-26). The Administrators' sample is less than the former groups (13.7%-41), followed by the Manager (8.0%-24) as the smallest. Concerning years of sample experiences, most of the sample was between 3-4 years (48.3%-145) followed by less than two years' category (23.7%-71). The category of above six years was less than the former (19.3%-58), followed by the 5-6 years' category (8.7%-26) as the smallest category.

Table 4.
Charts for Gender, Age, Education level, Position and Experience.

Variables	Frequency	Percent	Cumulative Percent
Gender			
Male	231	77.0	77.0
Female	69	23.0	100.0
Total	300	100.0	
Age Category			
25-29	139	46.3	46.3
30-34	114	38.0	84.3
35-40	44	14.7	99.0
Above 40	3	1.0	100.0
Total	300	100.0	
Education Level			
High School	51	17.0	17.0
Diploma	85	28.3	45.3
Bachelor	113	37.7	83.0
Master	37	12.3	95.3
PhD	14	4.7	100.0
Total	300	100.0	

Position			
Administration	26	8.7	8.7
Manager	24	8.0	16.7
Head of Department	41	13.7	30.3
Executive	209	69.7	100.0
Total	300	100.0	
Experiences			
Less tan 2 years	71	23.7	23.7
3-4 years	145	48.3	72.0
5-6 years	26	8.7	80.7
Above tan 6 years	58	19.3	100.0
Total	300	100.0	

Research Findings and Practical Implications

The data is gathered from the employees of telecommunication companies in Malaysia, namely, A, B, C companies. The questionnaire reliability was done through Cronbach's alpha. Using a specific sampling of 300 employees used using the E-CRM system has chosen population using Structural Equation Modelling (SEM) to test the proposed model and analyze the hypotheses. Test of hypothesis model to ensure reliability in the current study. The Average Variance Extracted (AVE) for convergent validity evaluation. The evaluation results have shown the Cronbach's alpha for the framework's whole structure is an agreeable level. It is defined as the grand mean value of the squared loading of the construct indicator items with a construct. Therefore, AVE is equivalent to the commonality of the construct. AVE Value of 0.50 and above is desirable.

Forner Lackert Scale

The path coefficients and R-square (R) result from bootstrapping in SmartPLS software. To attain the power of mediocrity, the author applied the variance accounted for (VAF) (Sarstedt et all, 2014; Suki & Azman, 2016). The result is examining the indirect impact was part of the total effect. In general, the outcomes of this study are as the following: Hypothesis 1 suggested a significant relationship between technology factors and perceived usefulness. This study results shown that a positive relationship among two elements ($\beta = 0.216$, t-value = 3.927). Next, Hypothesis 1 was supported. In Hypothesis 2, we suggested that a significant relationship between technology factors and employee satisfaction. Results of the study present that a positive relationship among two factors ($\beta = 0.202$, t-value = 4.216). Next, Hypothesis 2 was suggested.

In Hypothesis 3, we suggested that a significant relationship between organizational factors and perceived usefulness. Current study outcomes indicate that a positive relationship between two factors ($\beta = 0.214$, t-value = 3.202). Next, Hypothesis 3 was supported.

Hypothesis 4 suggested that a significant relationship between organizational factors and employee satisfaction. Current study results show that there is significant relationship between two factors ($\beta = 0.228$, t-value = 3.403). Next, Hypothesis 4 was suggested.

In Hypothesis 5, we suggested that a significant relationship between individual factors and perceived usefulness. Study outcomes present positive relationship among two factors ($\beta = 0.447$, t-value = 5.390). Next, Hypothesis 5 was suggested.

In Hypothesis 6, we suggested that a significant relationship between individual factors and employee satisfaction. Study outcomes present positive relationship among two factors ($\beta = 0.264$, t-value = 3.695). Next, Hypothesis 6 was suggested.

In Hypothesis 7, we suggested that a significant relationship between perceived usefulness and employee satisfaction. Study outcomes present a positive relationship between two factors ($\beta = 0.262$, t-value = 5.232). Next, Hypothesis 7 was suggested.

In Hypothesis 8, we suggested that a significant relationship between perceived usefulness and individual performance. Study outcomes present a positive relationship between two factors ($\beta = 0.230$, t-value = 3.800). Next, Hypothesis 8 was suggested.

In Hypothesis 9, we suggested that a significant relationship between employee satisfaction and individual performance. Study outcomes present a positive relationship between two factors ($\beta = 0.596$, t-value = 10.235). Next, Hypothesis 9 was suggested.

Table 5.
Results of hypothesis.

NO	Hypotheses	β≥0.20	T Values ≥1.946	Decision
H1	(TF) → (PU)	0.216	3.927	Supported
H2	(TF) → (ES)	0.202	4.216	Supported
H3	(OF) → (PU)	0.214	3.202	Supported
H4	(OF) → (ES)	0.228	3.403	Supported
H5	(IF) → (PU)	0.447	5.390	Supported
H6	(IF) → (ES)	0.264	3.695	Supported
H7	(PU) → (ES)	0.262	5.232	Supported
H8	(PU) → (IP)	0.230	3.800	Supported
H9	(ES) → (IP)	0.596	10.235	Supported

Conclusion

This study proposed a model to examine the impact of technology, organization, and individual factors on employee satisfaction and individual performance. The suggested framework was prepared dependent on the next factors: service quality, system quality, information quality, top management, training, ease of use, skills, computer efficacy, experience, perceived usefulness, employee satisfaction. Also, it examined the mediating influence of perceived usefulness and employee satisfaction on individual performance. The data was gathered from 300 employees in telecommunication companies of three companies, namely A, B, C, in Malaysia. The model was estimated to apply the PLS-SEM approach. The results of all hypotheses estimated showed that positive relationship. The results detected that technology, organization, and the individual positively influence employee satisfaction performance. Perceived usefulness and employee satisfaction affect individual performance.

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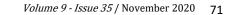
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