

ROLE OF CUSTOMER TRUST AND PERCEIVED RISK ON CUSTOMER INTENTION TO USE DIGITIZED SERVICES IN THE SRI LANKAN TELECOMMUNICATION INDUSTRY

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Abstract

Digital transformation is developing as a key driver of changing customer services in many industries including the telecommunication industry of Sri Lanka. Over the past decade, most customer services have been increasingly digitalized by improving profitability and the overall efficiency of business in several industries, including telecommunication. Hence, the study was mainly motivated to explain the effect of customer trust and perceived risk on intention to use digitalized services in the telecommunication industry in Sri Lanka. The conceptual model was developed based on three main variables, namely customer trust, perceived risk and intention to use digitalized services. For analyzing purposes, data was collected from a representative sample of 250 customers who were using traditional offline telecommunication services in the Colombo district. A printed structured questionnaire was used for data collection. SPSS and SMART PLS based Structural Equation Modeling (SEM) techniques were used for data analysis. The findings of the survey showed that customer trust had a positive impact on intention to use digitalized customer services. However, it has proven that there is no significant moderating effect of perceived risk on the relationship between customer trust and intention to use digitalized services in the telecommunication industry in Sri Lanka. Therefore, increased customer trust in digitalized services can be used as a tool to enhance the intention to use digitalized customer services. The findings further describe management implications and opportunities for future research in the same field.

Keywords: Customer Trust, Digital Customer Services, Intention to Use, Perceived Risk, Telecommunication Industry

Introduction

Digital conversion is evolving as a major factor in changing customer service in many industries including telecommunications. While providing enterprises with new opportunities for value creation, there is a possibility of greatly improving consumer living and creating a wider social benefit (World Economic Forum, 2016). Improved computing capabilities have brought ubiquitous access to data for both organizations and customers (Pantano and Priporas, 2016). In the past decade, most customer services have been increasingly digitalized by improving profitability and the overall efficiency of business in several industries, including telecommunications (Mwesigwa, 2010). The main driving force for digitization of customer activities like this is access to the Internet (Graupner et al., 2015). The worldwide telecommunications market has transformed into a digitalized environment by technological innovation and other technical enhancements such as e-commerce, big data analysis, cloud computing, Internet of Things and etc? (Pantano and Priporas, 2016).

Many companies in the telecommunication industry in Sri Lanka have shifted their businesses from traditional physical form to digitalized context by introducing lots of digitalized customer services such as web applications and mobile applications to facilitate bill payments, package activation and deactivation, customer service details, online shopping carts and etc. For example, all customer contact methods and sales channels such as online, mobile, and physical should be linked digitally so that consumer activities can be maintained in a single database, making interactions with customers in all channels less costly in terms of expended time and resources and enhancing customer convenience and satisfaction. Due to the rapid growth of internet technology, telecommunications consumers in Sri Lanka are enabled to purchase products or services and search product information through the digitalized environment. According to the pilot study carried out for this research, the results have clearly shown that most of the customers in the telecommunication industry in Sri Lanka do not prefer to use the digitalized services provided by the service providers.

As a result of the pilot study, it shows that 67% of customers are not using digitalized services offered by telecommunication service providers. Due to the lack of consumer confidence, many customers hesitate to tackle the actions necessary to disseminate electronic channels, such as sharing personal data with telecommunications service providers and conducting trading via the Internet. That scenario is proven from the pilot study of this research stating that 80% of participants do not trust digitalized services compared to offline services. This implies that there is a lack of consumer trust and a high level of perceived risk of using telecommunication services in digital environment (McKnight et al., 2002).

According to Faqih (2013); Cho and Sagynov (2015), the perceived risk of the internet, web technologies and mobile technologies are rapidly expanding, but digitalized services are not widely used by telecommunications customers. This may be due to lack of trust and perception of risk to the service (Mwesigwa, 2010). Sri Lankan telecommunication sector is currently implementing digitalized services for its customers. However, there is some evidence that customers are slow in adopting digitalized services (Taherdoost et al., 2013). This stresses the importance of studying

as to what factors might affect the adoption decision of customers with regard to the services in the telecommunication sector in Sri Lanka. Thus, the objectives of this study were to identify the effect of customer trust on customer intention to use digitalized services, identify the effect of perceived risk on intention to use digitalized services and explain the moderating effect of perceived risk towards the relationship between customer trust and intention to use digitalized customer services in the context of telecommunication industry of Sri Lanka.

The rest of the paper is organized as follows. First it discusses the key theoretical and conceptual literature related to the constructs of perceived trust, intention to use and perceived risk with their possible relationships in order to develop the conceptual model and the hypotheses. Second, it discusses the methodology with key assumptions and justifications. Third, it presents the data analysis with a discussion of the key findings. Finally, it provides conclusions and the implications of the study.

Literature Review

Digital technology enables innovation and creativity and stimulates significant changes in the domain of experts and knowledge (Yawalkar, 2019). All services offered via electronic network can be defined as digital services (Graupner et al., 2015). By considering all digital services as processes, Graupner et al. (2015) established the use of the intended digital process as a dependent variable when conducting their survey. Most service providers use the latest technology to digitize the customer services which they offer.

Graupner et al. (2015) argued that many researchers have used the concept of digital transformations relevant to many industries such as banking and finance, news, retailing, transportation, medicine, hotel including telecommunication because the move towards online channels is more attractive for both businesses and customers. Till date only a little research has described the meaning of the concept of digital transformation. One of the most popular definitions was “use technology to radically improve the performance of the organization” (Tolboom, 2016). Digitalized services relevant to the banking industry of the European countries have highly developed and the average internet banking usage is forty percent within the region. Due to that the number of regional physical branches has dropped by eight percent in 2013 (Graupner et al., 2015).

Trust has been called as the key to using digitalized customer service. In the literature on the trust of the organization, trust is a dependence or dependent behavioral intention to another party (belief or expectation for another (trusted) party, or vulnerability or risk in case of infringement of trust, or motivation (McKnight and Chervany, 1996). The failure to develop the significant level of consumer’s trust has been identified as a substantial impediment for maintaining long-term success in digital channels (Johnston and Warkentin, 2004). Each online transaction requires

trust, especially for the intangible services like activation of mobile service packages. The lack of physical interaction, the inability to check and examine products prior to purchase, and the asynchronous exchange of goods and money all contribute to the perceived risk of purchasing online and the resulting need for trust (Hong and Cha, 2013).

Mwesigwa (2010) investigated the customer trust research using a structured questionnaire by following the systematic and established procedures for 384 respondents. Kooli et al. (2014) has described that there are three aspects of customers' trust in an online environment such as personality based trust, cognitive based trust and institutional based trust. Further, researchers have explained that the personality based trust can be measured through benevolence, perceived credibility and integrity. Perceived credibility has defined as the extent to which one partner believes that the other partner has the required expertise to perform effectively and reliably (Hino, 2015).

Cho and Sagynov (2015) has studied the effect of trust on purchase intention in digitalized environment. According to past literature one of the most frequently cited reasons for consumers not shopping on the internet is the lack of trust about digital channels (Lee and Turban, 2001). These authors have found that their general attitude to trust people when in a novel situation. According to past researchers, the most remarkable source of trust in retail stores is sales people; Consumer confidence depends on sales personnel expertise and similarity with customers (Lee and Turban, 2001). However, in the digital environment, the role of the physical customer support agent is replaced with the help button and search function available on the website or mobile application. The main reason for the lack of consumer trust in digital environment is inability to check the quality and the features of a product physically or monitor the safety and security of sending sensitive personal and financial information which are required to complete the digital transaction over the digital channels (Lee and Turban, 2001). Further, Cho and Sagynov (2015) has identified that consumer trust in digital stores has a positive effect on purchase intention.

In addition, the risks perceived can be explained as consumers' uncertainty when purchasing goods in most cases: especially when cars, apartments, computer items are particularly expensive. The lack of perceived trust arises because economic transactions involve high risk (Mwesigwa, 2010).

Most researchers are studying the effects of perceptual risk on purchase intent. For instance, Ariff et al. (2014) confirmed that it had a negative impact of perceived risk towards online purchase intent. In the Malaysian online shopping context, it was confirmed that the adverse effects of perceived risks affect the attitudes of online shoppers (Ariff et al., 2014). Furthermore, the researcher also noted that not

all types of perceived risks are affected in the same way, such as convenience risk favorably affecting consumer attitudes. Researchers are considering the recognition of larger dimensional risks such as psychological risk, privacy risk, social risk, etc. in order to examine consumer attitudes and online shopping behavior. Theoretically, Ariff et al. (2014) discovered that the three important findings are related to the impact of perceived risk towards purchase intention in the digital environment. First, product risk, financial risk, and undeliverable risk negatively affect consumer attitudes in a digitalized environment. This finding is consistent with some authors who discovered that consumers' shopping behavior on the Internet, attitudes towards usage behavior and the intention to use e-commerce services are being influenced by perceived risk (Lin et al., 2019). Further it has been found that financial risk has a strong negative influence affecting consumer attitude. Secondly, according to the literature, it is shown that convenience risk has a positive effect on consumer attitudes. The assumption about convenience risk is that consumers may have a very strong trust in online service providers, so for problems other than convenience such as return handling and product quality considerations will not be concerned by the customers (Ariff et al., 2014).

Most researchers have studied about the moderating effect of perceived risk on the relationship between customer trust and intention to use online services. For instance, Kim et al. (2003) studied the moderating effect of perceived risk on user acceptance of technologies. Further, it has explained that perceived risk changes the effects of trust on technology acceptance in an online environment (Kim et al., 2003). In most documents, purchase intention is defined as "the probability that customers will aim or be disposed to buy any product and service later" (Ajzen, 1991). Customer's online purchase intention in digital environments determines the consumer's willingness to perform specific purchasing actions via digital channels such as web applications and mobile applications (Salisbury et al., 2001). In addition, the Theory of Reasoned Action suggests that consumer behavior can be predicted from the intention which corresponds directly in terms of action, target and context to that consumer behavior (Ling et al., 2010). Based on the review of literature, the authors have synthesized and integrated the three constructs to develop the conceptual model depicted in the Figure.1 based on the following two main hypotheses.

H1: Customer's trust has a positive impact on intention to use digitalized customer services provided by the telecommunication service providers in Sri Lanka.

H2: Customer's perceived risk has a negative impact on intention to use digitalized customer services provided by the telecommunication service providers in Sri Lanka.

H3: Customer's perceived risk moderates the relationship between customer trust and intention to use digitalized customer services provided by the telecommunication service providers in Sri Lanka.

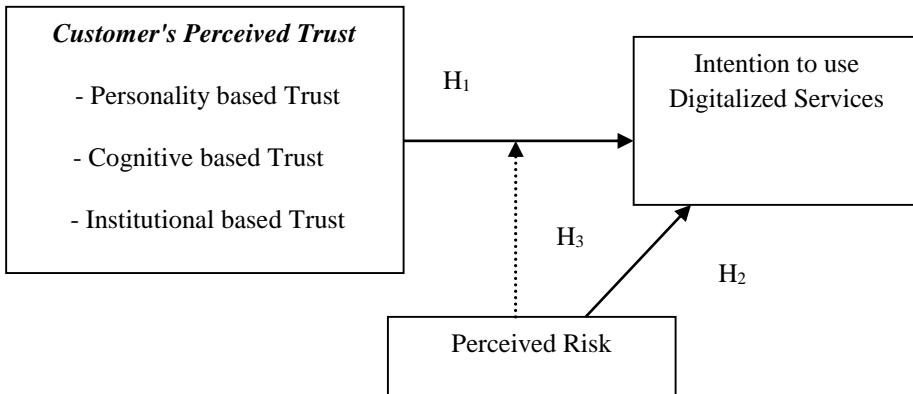


Figure 1. Conceptual Framework
Source: developed based on literature review

Research Methodology

This research is based on positivist research philosophy. This approach was used for the study where the researcher observed phenomena to investigate the impact of customer trust and perceived risk on intention to use digitalized customer services in the telecommunication industry. Guided by the positivistic paradigm, the researchers can gain objective knowledge by conducting a quantitative study (Dewasiri et al., 2018; Dewasiri et al., 2019; Baker et al., 2019). Most of the similar researchers have selected the quantitative methodology with survey research strategy to investigate how perceived trust and risk will influence purchase intention in an online context (Cho and Sagynov, 2015).

Measurement scales were available to operationalize the constructs of customer trust, perceived risk and intention to use the digital and services and hypotheses were developed based on priori literature. Therefore, the deductive approach has been selected to conduct the research. Perceived trust was measured by using 10 priori based indicators which covered the three dimensions namely, personality based trust, cognitive based trust and institutional based trust (Kooli et al, 2014; Mwesigwa, 2010) whilst perceived risk was measured using 18 priori based indicators representing four dimensions namely, functional risk, product risk, information security risk and financial risk (Mwesigwa, 2010; Ariff et al., 2014; Ling et al., 2010). Intention to use digitalized services was also measured from three indicators (Ling et al., 2010). All the items were measured on a five point Likert scales ranging from 1 for Strongly Disagree to 5 for Strongly Agree.

The population of the study was defined as the customers who were using traditional offline telecommunication services in the Colombo district and covered both male and female customers who were aged between 18 to 60 and executives in

both private and state sectors as well as a few self-employed. The population was also limited to the customers of the main telecommunication services providers in Sri Lanka. It included only the customers who were residing in the Colombo metropolitan and suburbs and used to attend physical outlets without using online services. When referring to past literature, Islam (2010) used the convenient sampling technique to study the customer loyalty in telecommunication industry in Bangladesh by using 150 sample size. In 2008, Roy and Ganguli conducted a study on service quality and customer satisfaction in telecommunication industry in India with 255 sample size. Therefore, by analyzing past empirical literature on studies which were conducted in similar contexts, the researchers identified that 250 sample size was sufficient and employed the non-random and judgmental but representative sampling technique for data collection in the current study. The respondents were intervened and provided with the printed questionnaire on their consent at the payment and services points and outlets where they used to attend to pay their phone bills and for other service requirements.

A structured questionnaire was developed to collect the primary data from the participants. Measurement scales were adapted from prior research to ensure the content validity of the scales. Correlational design was used to measure the relationships between Customer's Trust, Perceived Risk and purchasing Intention on digitalized services (Sekaran, 2010). The study employed both descriptive and inferential statistics using both SPSS 22 (R) and SMART PLS 3.2 software. SMART PLS (partial least square) based Structural Equation Modelling (SEM) was used to first to estimate the measurement model and then to estimate the structural model for testing the hypotheses. SMART PLS is appropriate for estimating complex structural models with small sample sizes, non-normal data, and multicollinearity issues exist (Westland, 2015).

Data Analysis and Discussion

Out of the 250 respondents, 240 completed the questionnaires. Therefore, the response rate was 96% and satisfactory. The questionnaires were checked for the accuracy and completeness and then were entered into the SPSS 22(R) software packages for the preliminary analysis. The majority of the respondents (27% from the total population) were in the 25-35 year age category while, those are above 55 years of age (5% from the total population) represented the minimum portion of the sample. Majority of the population is represented by the private sector which was 47% from the total population but, there was no significant difference between the number of participants who are working in public sector and private sector. The minimum represented by the "self-employed" category was 8% from the total sample. Majority of the population (46% from the sample) has achieved the highest education category of Diploma Level and postgraduate category (11% from the sample) represents the minimum number from the sample. It implies that customers who were having highest educational level of diploma were highly involved in off-line telecommunication

services. The majority of the respondents were female which was 54% from the total respondents whilst majority of the population (51 % from the total sample) represented the income level of “50000 - 100000”. The minimum (4% from the total sample) representing the category of income level was “below than 25 000”.

The researchers evaluated the convergence validity using Average Variance Extracted (AVE), composite reliability, and Cronbach's alpha score values. A benchmark of 0.70 was used as the minimum acceptable Cronbach's alpha value (Nunally, 1978) and 0.5 was used as the minimum allowable AVE value (Hair et al, 2014). A few items with poor factor loadings and cross loading were deleted to refine the final scales. The three main constructs fulfilled the requirements for construct validity and reliability. Table.1 shows the construct reliability and validity of the study.

Table 1. Construct reliability and validity

Variable	Variable Description	Number of Items	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
CT	Trust	10	0.876	0.923	0.732
PR	Risk	16	0.878	0.916	0.818
IN	Intention	06	0.889	0.931	0.906

Further, Discriminant validity was analyzed by using AVE technique. In AVE analysis, it is recommended that the square root of each construct's AVE should be higher than the correlation of the construct with any other construct in the model (Fornell and Larcker 1981). As depicted in Table. 2, off-diagonal values are lower than those on diagonal values (the AVE's square root), suggesting a satisfactory level of discriminating validity for Customer's Trust (CT), Perceived Risk (PR), and Intention to use (IN). Further, Table 2, depicts that customer's trust has a significant and weak but positive association with intention to use digital services whilst Customer's Trust also has a significant and somewhat weak but negative association with Perceived Risk. It is also evident that Perceived Risk seems to have a significant and weak but negative association with Intention to use digital services.

Table 2. Correlation Matrix for Assessment of Discriminant validity

	CT	PR	IN	Mean	Standard Deviation
CT	0.856			3.76	0.56
PR	-0.279*	0.904		4.01	0.87
IN	0.184*	-0.358*	0.952	3.16	0.45

Note: * p<0.01

Further, assessment of the model fit was made by examining Standardized Root Mean Square Residual (SRMR), and Normed Fit Index (NFI) as well (Hair et al., 2014). SRMR value was less than 0.08 and NFI was more than 0.90, which were acceptable in social science research (Anderson and Gerbing 1988). Based on the above all quality criteria related to validity, reliability and model fit, the measurement

model was ready to move to the next step of assessing the structural model for testing the hypotheses through path analysis.

As shown in the Figure 2., R2 of the path model showed that 73.2% of the total variance of the dependent variable was explained by Customer Trust (CT), Perceived Risk (PR) and moderator effect (interaction effect, i.e. CT x PR) path coefficients. The R2 value of 73.2% can be considered as an indicator of the predictive validity of the overall model and represents a sufficient level to justify the goodness of fit of the present model.

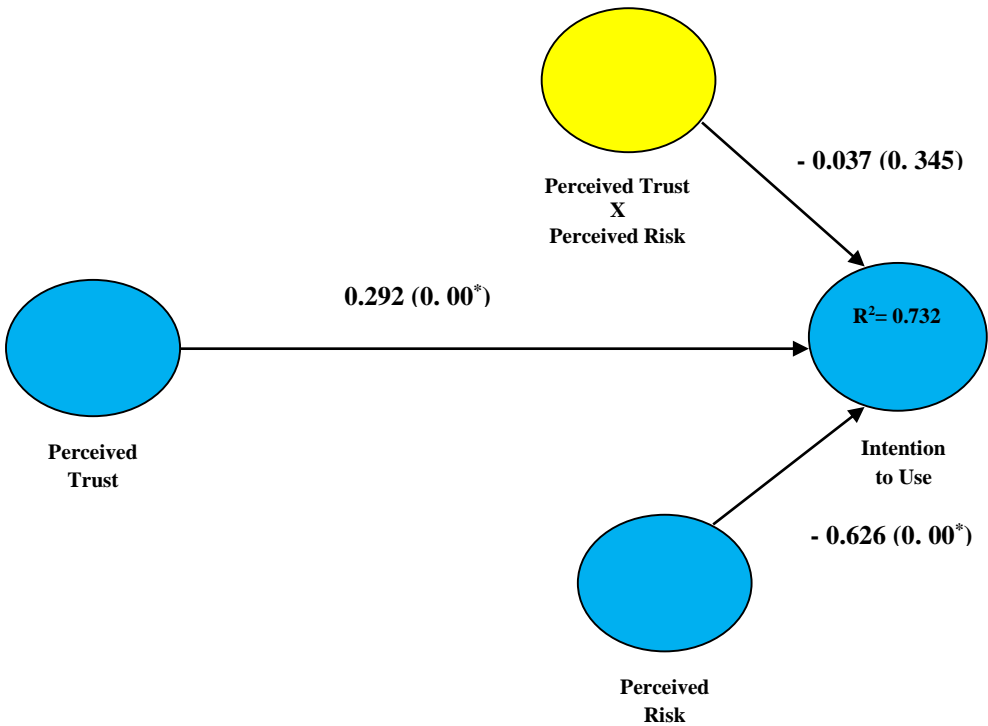


Figure 2. Final Structural Model with Path Coefficients

Note: * $p < 0.01$

Each structural path in the model represents a potential relationship between the three variables and is tested for significance. SEM bootstrapping technique has been used to measure the significance level of the relationship. The null hypothesis is rejected whilst the alternative hypothesis is accepted if the p value is less than 0.05. The Figure 2 shows the PLS path diagram where path coefficients represent the direction and the strength of the relationships whilst p values indicate the level of significance at 0.05.

According to path diagram, there is a significant and positive relationship between customer trust and intention to use digitalized customer services (Path coefficient= 0.292 and $p=0.00$). However, the path coefficient has a moderate predictive power. The first hypothesis was to identify the effect of trust on customer intention to use online based services provided by the telecommunication service providers in Sri Lanka. Thus, as per the evidence of the path diagram, the first alternative hypothesis (Hypothesis 1) was accepted claiming that each online service requires trust, especially for the intangible services like activation of mobile service packages. Improvements in customer trust on digitalized telecommunication services can increase the usage of those digitalized services. Telecommunication Service providers of Sri Lanka should focus on the improvements of cognitive based trust, personality based trust and institutional based trust to improve the overall customer trust towards the digitalized customer services provided by them (Kooli et al., 2014). There is no face-to-face conversation, not being able to inspect goods and services before purchase, and asynchronously exchanging goods and money all lead to the recognition of the risks purchased online and the resulting need for trust (Segal et al., 2002).

Further, the individual dimensions of perceived trust can be important in explaining this impact on intention to use digitalized customer services in the industry. Personality based trust can be impactful on intention to use digitalized customer services provided by the telecommunication service providers in Sri Lanka. Personality based trust has been measured through benevolence, perceived credibility and integrity. Therefore, telecommunication service providers need to take necessary actions to increase the individual customer personal trust about the expertise and capability of telecommunication companies (Kooli et al., 2014). The second dimension of customer trust is the cognitive based trust can also positively impact on intention to use digitalized customer services provided by the telecommunication service providers in Sri Lanka. As the third dimension of the customer trust, institutional based trust too can be important as the customer tends to believe that there is evidence of assurance, rules and policies to protect customers if anything bad happens to customers (Kooli et al., 2014). According to the results of data analysis, the telecommunication service providers need to develop rules and policies to protect customers and should always develop the transparency while digitalizing customer services.

As per figure.2, there is also evidence to accept the alternative hypothesis (hypothesis 2), claiming that perceived risk have a significant and moderate but negative (path coefficient = -0.626 and $p = 0.00$) impact on intention to use digitalized customer services in the Sri Lankan telecommunication industry. This implies that the customer may expect uncertainty in receiving digitalized customer services in the Sri Lankan context, leading to a reluctance to use such services. It can mean that the perceived risk can reflect functional risk, product risk, information security risk and financial risk in the eyes of customers, which might negatively influence customer decision making to use digitalized customer services as per the results of the present study. These findings are consistent with those of the empirical studies undertaken by Ariff et al. (2014) as well as Lin et al. (2019), which also found that perceived risk felt

by customers can lead to negative attitudes toward products and services especially in an e-commerce context.

It was interestingly found that as shown in the path diagram in Figure 2., there was no significant interaction effect of perceived risk (path coefficient = - 0.037 and $p = 0.345$) in moderating the relationship between customer perceived trust and intention to use digitalized customer services in the telecommunication sector in Sri Lanka. This provided evidence not to reject the null hypothesis 3 and claim that customer perceived risk does not moderate the relationship between customer trust and intention to use digitalized customer services. But there is a significant negative impact when considering the direct effect of perceived risk on purchase intention (hypothesis 2). However, there are empirical studies that provide support for existence of a (negative) moderating impact of perceived risk, which are contradictory with this finding of the current study. When analyzing the past literature, several authors have justified that perceived risk of customers can create a threat for enterprises in promoting digitalized services. (Lee and Turban., 2001). The concept of risk helps decision-making processes to evaluate customer's understanding and to select specific brands (Conchar et al., 2004). When recognizing risk, it is strong effect against favorable customer behavior. Customers are motivated by avoiding mistakes by maximizing purchasing utility (Mitchell, 1999). Risk-taking and risk awareness are part of the selection cost. It is an important part in making appropriate decisions (Conchar et al., 2004).

Advanced user interface designs and improved features are available in modern digital applications. Further network capabilities have improved with advanced digital devices such as 4G technology. Therefore, customers feel lower risks related to the functionalities of the application (Ariff et al., 2014). Most telecommunication service providers of Sri Lanka are evaluating the security aspect of their corporate digital channels by getting the consultancy from a third party auditing company such as Price Waterhouse Coopers (PWC) . Further, most companies have implemented two factor authentication security features for digital channels. Therefore, people feel low security risk related to the digital channels (Beneke et al., 2012). Another important reason for low perceived risk is familiarity for online activities (Arslan et al., 2013). Most customers are purchasing products from online shopping malls like e-bay and highly engaging with online social media activities. Therefore, customers are familiar with online products and analyzing the features, cost of products which are available in online shopping malls. People feel low perceived risk related to the products which are available in the digital environment (Beneke et al., 2012). Transaction success/failure notifications and online receipts are available in most digital channels of telecommunication service providers in Sri Lanka. Therefore, the financial risk is low in digital applications in the telecommunication industry of Sri Lanka. Because of the reduction in all risk factors, (a negative) moderating impact of overall perceived risk is negligible. This provides some support to justify the insignificant moderating impact of perceived risk in the current study.

Conclusion and Implications to the Practice

The research was mainly carried out to identify the impact of customer's trust and perceived risk on the intention to use digitalized customer services in the telecommunication industry in Sri Lanka. The research brought together a number of domains and areas such as digitization, digital transformation, digital customer services, and customer trust on digital services and perceived risk on digital services etc. Perceived risk is identified as a moderator of the relationship between customer trust and intention to use digitalized services. The dependent variable was customer intention to use digitalized services in telecommunication services. The independent variable was customer trust in the digital environment.

The results have shown that there is a positive relationship between customer trust and intention to use digitalized customer services. That means greater customer trust improves usage of digitalized customer services in the telecommunication industry. Further, the results of data analysis have proven that there is no moderating effect of perceived risk for the relationship between customer trust and intention to use digitalized services. Telecommunication service providers are required to take necessary actions to improve the customer trust related to digital customer services. Furthermore, telecommunication service providers need to improve cognitive based trust, personality based trust and institutionally based trust to increase the overall intention to use digitalized customer services in the telecommunication industry.

Theoretical and Empirical Implications

The present study contributes to the customer trust and perceived risk on intention to use digitalized customer service literature by demonstrating the strategic importance of customer trust to enhance the intention to use digitalized customer services as a competitive weapon. Telecommunication service providers could perhaps adapt key dimensions which reflect the customer trust and intention to use digitalized customer services. It was further emphasized that telecommunication service providers require to increase the customer trust on new technical innovations related to digitalized customer services to enhance the market capabilities. This study indicated that improvements in institutional based trust as one dimension of trust that can increase the intention to use digitalized services in the telecommunication industry in Sri Lanka. It was evident that intention to use digitalized customer service in the telecommunication industry is at a very basic level and still telecommunication service providers can reach a competitive advantage with better human touch and improved customer orientation methods. Authors believe that it is compulsory to increase the customer trust towards the digital services in parallel to technical implementation of digital services. Trust building among the customers should be a major concern for the telecommunication service providers while improving the functionalities and technical capabilities of the system. In order to enhance trust in digitalized customer services, trust-creating activities must be continuously pursued. Further improvement in the level of digital technology with human touch would improve cognitive based trust and personality based trust to achieve the competitive advantage with high performance. Using hybrid interaction can increase the trust of customers on digital channels. As an example, the hybrid interaction can be used to support the customers when they have

faced problems when using the digitalized channels. Analyzing tools such as Google analytics can be used to identify the problem point and personalized calls and SMSs can be used to provide personalized solutions to customers related to digital services.

Telecommunication service providers can use data analysis technology to understand the customer behavior in the digital environment. By understanding the customer behavior, the application can display proactive warnings and information when the user is engaging with the digital channel such as push notifications, application alerts, SMSs, emails etc. This will increase the personalization of the system and customer trust will increase. One of the most important elements is to improve the transparency of digital transactions and to take measures to develop digital transactions with digital technology using human hands. Telecommunications service providers need to ensure system security and privacy. Telecommunication companies need to develop the user interface of digital applications in a way that users can easily navigate and easily understand. As a result, customers can easily remember the digital service features and understand how to operate them.

Limitations and Further Research

The first limitation of the study is the conceptual scope of the variables which are only limited to trust and risk. The population of the study was restricted to the telecommunication customers of the Colombo district of Sri Lanka. Hence, the results can be more optimized when data collection is conducted in all areas of the country. Another limitation of the study is that it focuses only on the telecommunication industry of Sri Lanka. There are many other industries such as retail, banking, hotel etc. which are using digitalized customer services and those industries are not considered in this study. The study has not considered any technical implementation theories within the study and only focused on the customers' perspective of digitalized customer services, trust and risk factors. By representing all regions of Sri Lanka, it will be possible to conduct future surveys targeting representative samples of telecommunications customers. In addition, future surveys can target other stakeholders' views, especially administrators, and can conduct appropriate analysis using qualitative in-depth interviews. Further researchers need to investigate other factors that have effects on intention to use digitalized customer service. The combination of customer trust, risk awareness and digitalized customer service provides many opportunities for researchers and the results of this survey open up many paths for further investigation. As an extension to the current study, it is possible to investigate the impact of risk and trust on hybrid customer service consisting of both digital and analog services.

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