Roles of Technical and Functional Service Quality, and Cognitive and Affective Trust in IT Service Encounter

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Abstract

The purpose of this study is to examine the impact of IT service quality on trust, commitment and intention to continuously use the IT service. Service quality in this research is measured in two dimensions (technical and functional) while trust measured in two dimensions (cognitive and affective). An empirical model is proposed here, consisting of technical quality, functional quality, cognitive trust, affective trust, commitment and intention to use. The model was tested using 215 data points collected in a global electronics firm. Study results show that the cognitive and affective dimensions of trust are affected by functional and technical service quality. Interestingly, functional service quality seems to have effects stronger than technical service quality contrary to the expectation that technical quality of outcome would be more important than functional in case of IT services. Also, affective trust seems to maintain stronger effects than cognitive trust in raising the commitment level of IT service client. Further implications and limitations are discussed.

Keywords: Technical quality, Functional quality, Trust, Affective Trust, Cognitive Trust, Commitment, IT service

1. Introduction

In the IT service industry that develops and maintains information systems, a product is considered to consist of not only an information system provided as final outcome, but also the entire process in which its developer analyzes customers’ needs, evaluates the system’s usability after implementation and maintains the system by way of continuous feedback. A high level of trust is required between IT service providers and their customers, or service users, while the service providers listen to what their customers need and give them feedback, in a continuous and repeated manner [1]. Many of IT service users (i.e., customers) are not likely to have good knowledge of the services they use or purchase. Therefore, a customer decides whether to maintain relationships with IT service providers and continue to use their systems, based on trust in those service providers and their services.

An information system developer is to information system purchasers what a service provider is to its customers. Further, they are like partners to each other and can be deemed members of a team who works together to attain the same goal of developing an information system. In a company, the department responsible for information systems and other departments or employees who use them belong to the same organization but work in physically different places and perform different roles like in the service provider-customer relationship. Advanced information and communication technologies help create “smart work” environments where businesses and customers (or business customers), as well as in-house organizations, can communicate seamlessly with each other and work together anytime, anywhere. As the smart work environments facilitate efficient working and quick response to

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customer needs, the existing interest in IT services is being expanded to service quality and trust perceived in a service-providing process rather than to information systems themselves.

In light of such a change, this study divided customer-perceived IT service quality into two dimensions: one is the quality of services provided via a complete information system and the other is the quality of an IT service provider’s behavior patterns and functioning procedures involved in the entire development process. Customer-perceived trust was measured by distinguishing between cognitive trust formed as a result of the efficient, accurate performance of tasks and affective trust built through frequent communication or seamless feedback. Based on some existing literature, we established the relationships of impacts the technical or functional quality of IT services has on cognitive trust and affective trust and developed a structural model of impacts on the commitment to relationships and the intention to continue using IT services, through the medium of trust. Hypotheses were tested using an empirical analysis of data collected by a questionnaire survey of those in our sample who had ever used any IT service.

2. Literature Review

2.1. IT Service Quality

Services, unlike physical products, are characterized by invisibility due to their intangibility, heterogeneity of their contents or levels, and inseparability of their production and consumption [2][3]. IT services that develop and maintain information systems cover not only the services provided by the systems themselves, but also service providers’ behavior patterns and functioning procedures involved in development and maintenance process [4][5].

Service quality can be defined as customers’ perception and evaluation of those services. Zeithaml (1988) defined service quality as “the consumer’s judgment about an entity’s overall excellence or superiority.” In their study where SERVQUAL was developed as a measure of service quality, Parasuraman et al. (1988) stated that “service quality is a form of attitude, related but not equivalent to satisfaction, and results from a comparison of expectations with perceptions of performance."[6] In addition, there are many studies arguing that a positive relationship exists between IT service quality and customer trust and that service quality can lead to customer satisfaction and intention of continuous use [5][7-9].

In general service quality research, the service quality has been tested by a multidimensional construct [4][10-12]. Grönroos(1993) distinguished the service itself (what) from the service delivery process (how) and described them as technical quality and functional quality, respectively. Berry et al. (1985) and Parasuraman & Zeithaml (2005) measured service quality by distinguishing between the quality of service outcomes and the quality of service-providing processes.

Some studies conducted in IT service environments determine technical quality by measuring the performance of mobile phones perceived by their users and report the results from using SERVQUAL to measure functional quality [13]. A study of communication effectiveness between IT service providers and their customers distinguishes the technical and functional quality of IT services in measuring IT service quality [5].

2.2. Trust

In determining the degree of relationship between a service provider and customers, trust plays an important role of forging relationships as confidence in each other’s honesty and belief[14] and helps to reduce inherent uncertainty which can occur in transaction environments [15]. In the fields of IT service research, trust, along with commitment, is studied as a measure of the quality of relationships between service providers and their customers [16].

Previous studies state that the level or degree of trust is determined by both rational and emotional attributes [17-22]. In his empirical study of professionals and managers from a wide range of industrial sectors, McAllister (1995) demonstrated that trust can be divided into two dimensions: cognitive quality and affective quality.

Cognitive trust is calculative trust arising from a reciprocal relationship [20][23]. Service users (i.e., customers) can develop cognitive trust only if a service provider has sufficient reasons and capabilities
to gain trust from its customers. Affective trust refers to a state of feeling that develops from personal experiences in service transaction processes, such as care and concern for others [18][20][24]. As affective ties are deepened, trust in others can go beyond knowledge-based cognitive trust [11]. Affective trust tends to develop relatively stronger between people in closer relationships and works to reduce the transparency of relationships [21].

In an IT service environment, building trust with customers or partners helps reduce the uncertainty of relationships and improve the performance of transactions [16]. Since it also facilitates customers’ voluntary participation, IT service providers need to make further efforts to have reciprocal activities promoted [25]. Park et al. (2012) demonstrated in their study that IT service quality has a positive impact on customer trust and commitment.

3. Research Model and Hypothesis

3.1. Research Model

For analyzing how to IT service quality via trust and commitment effects on client’s intention, the conceptual model guiding this research is depicted in Figure. 1.

![Research Model](image)

**Figure 1. Research Model**

3.2. IT Service Quality and Trust

In a study by Sharma & Patterson (1999), the quality of services provided by a financial planner is divided into two forms: technical quality (i.e., service outcome) and functional quality (i.e., the financial planner’s attitude). The results of their study show that both the two quality forms have a positive impact on trust and commitment and that technical quality is characterized by having a strong impact on trust compared to functional quality. Chakrabarty et al. (2007) measured service quality in IS outsourcing environments using SERVQUAL and found the positive impact of service quality on building customer trust. Park et al. (2012) also divided service quality into two dimensions, namely technical quality and functional quality. The results of their study show that both dimensions of service quality are positively associated with trust. Lee & Kim (1999) emphasized the importance of trust as an element of partnership quality for successful IT services. It is not limited to particular services that customers build trust in service providers based on his/her perception of service quality. It is rather an important issue across the services.

Since it is difficult for customers to evaluate invisible things, they pay attention to tangible things like service outcomes and develop trust based on such things. Therefore, from the perspective of customers, the quality of technical service outcome corresponds to perception through cognitive processes [21]. Therefore, the following hypothesis is proposed:

**Hypothesis 1:** Technical quality of IT services is positively associated with cognitive trust.

While service outcome is visibly expressed, the functional aspects of a process are related to both the cognitive and affective aspects of trust because it was determined by invisible interaction with attitude and emotion [21]. In this study, we supposed that the functional aspects of IT services would
influence two concepts of trust depending on the level of trust perceived by customers in service delivery.

Hypothesis 2: Functional quality of IT services is positively associated with cognitive trust.
Hypothesis 3: Functional quality of IT services is positively associated with affective trust.

3.3. Trust and Intention of Continuous Use

McAllister (1995) stated that cognitive trust underlies affective trust. Scott (2000) asserted that, in inter-organizational learning with information technology, affective trust was based on cognitive trust developed by frequent face-to-face interactions. There is a report that once cognitive trust is built in engineers in an organization, it influences affective trust and ties and leads to more open and active information sharing. Johnson & Grayson (2005) showed that in financial advisory services, cognitive trust had a positive impact on affective trust. Consequently, the following hypothesis can be formulated:

Hypothesis 4: Cognitive trust is positively associated with affective trust.

Kettinger et al. (2009) suggested that the customer-perceived value of IT services has a significant impact on the intention to reuse the services. The development of trust between customers and a service provider leads to positive word-of-mouth effects on the provider’s services, and such effects constitute a major determinant of whether to adopt the services subsequently [19]. Service providers attempt a variety of strategies to attract repeat purchases from customers by building highly productive and efficient processes. This leads customers to believe the quality and prices of services are reasonable and encourage them to continue using the services [27]. Johnson & Grayson (2005) refer to two dimensions (cognitive and affective) of trust that are positively associated with the anticipation of future interactions. As an ideal result of service marketing, this implies the intent of partners to maintain relationships. The intention of continuous use as proposed in this study can be understood in the same context. Therefore, the following hypotheses are proposed:

Hypothesis 5: Cognitive trust in IT experts is positively associated with intention to use IT services.
Hypothesis 6: Affective trust in IT experts is positively associated with intention to use IT services.

3.4. Trust and Commitment

A relationship is built on invisible reciprocal commitment. In individual-to-individual, individual-to-organization and organization-to-organization relationships, commitment is very important in maintaining the relationships. In an IT service sector, customers’ trust is positively associated with relationship commitment [5]. Carr (2006) stressed that trust promotes customers’ voluntary participation and it leads to promote extent mutually. Sharma & Patterson (1999) found that in the professional service sector, a higher level of customers’ trust in a service provider was associated with a greater degree of commitment. Therefore, the following hypotheses are proposed.

Hypothesis 7: Cognitive trust in IT experts is positively associated with their client’s commitment.
Hypothesis 8: Affective trust in IT experts is positively associated with their client’s commitment.

3.5. Commitment and Intention of Continuous Use

Commitment formed in accordance with trust improves loyalty levels [28], and it leads to successful relationship building and lasts reciprocally [29]. Commitment that leads to a longer term relationship elicits continuous use from clients and it can be a factor for business continuity [27]. Hence, we propose the following hypothesis:

Hypothesis 9: Commitment is positively associated with the intention to continue using IT services.
4. Methodology

4.1. Data Collection and Characteristics of Respondents

A survey was conducted of employees of global electronics firm A. 215 data were sampled from a population of 507 employees who had ever used any IT service. All respondents completed the survey online. The number of respondents by job category was 62 (28.8%) for research and development, 62 (28.8%) for accounting and planning, 51 (23.7%) for manufacturing, 21 (9.8%) for production engineering, 10 (4.7%) for sales and 8 (3.7%) for purchasing. The respondents’ work experience was <1 year for 83 people (38.6%), ≥1 but <3 years for 47 (21.9%), ≥3 but <5 years for 32 (14.9%), ≥5 but <10 years for 28 (13.0%), and ≥10 years for 25 (11.6%). Mainly used systems included ERP (Enterprise Resource Planning) reported from 71 respondents (33.0%), general management systems such as E.P. from 54 (24.1%), PDM (Product Development Management) from 51 (23.7%), SPM (Strategic Purchasing Management) from 24 (11.2%), PMS (Project Management System) from 12 (5.6%) and other systems from 3 (1.4%).

4.2. Operational Definitions of Variables

In this study, we employed a questionnaire survey to verify the proposed research model and adapted existing questionnaire items—whose validity was verified—for use in this study. Each questionnaire item was measured on a 7-point Likert scale (1 = strongly disagree; 4 = neutral; and 7 = strongly agree). The questionnaire consisted of 23 items. The operational definitions of measures and measurement items are as follows:

First, the quality of IT services was measured with six items for technical quality and four items for functional quality, based on a previous study [5]. Technical quality, meaning the outcome of IT service performance; and functional quality was defined as the degree of users’ perception of the service delivery process. Second, cognitive trust was measured with four items presented by Sharma & Patterson (1999), and the measure of affective trust was based on three items used in the final analysis by Johnson & Grayson (2005). Third, commitment was defined as the desire to continue an IT service relationship, as presented in the studies by Park et al. (2012) and Sharma & Patterson (1999), and three items were used to measure the commitment. Finally, the intention of continuous use as an outcome variable was measured three items regarding the personal intention to continue the use of IT services [30]. Table 1 provides a detailed list of measurement items used in this study.

5. Data Analysis and Study Results

In order to verify a structural equation-based measurement model and structural model, this study tested research hypotheses using partial least square (PLS) analysis. The PLS analysis is applicable when relatively small samples are used, because its requirements for sample size and residual distribution are not strict. The PLS analysis allows the theoretical structural model and measurement model to be evaluated at the same time [31].

5.1. Analysis of the Measurement Model

Gefen & Straub (2005) suggested that the PLS analysis is required to assess convergent and discriminant validity to determine whether the constructs of observed variables are properly loaded. Accordingly, we examined convergent and discriminant validity based on the results of a confirmatory factor analysis.

Convergent validity means that theoretically closely-related constructs have statistically significant correlations [33]. This suggests that the observed variables for individual latent constructs should be loaded with significant t-values. For the PLS-based analysis of convergent validity, we carried out a confirmatory factor analysis and investigated the size of factor loadings for relevant variables of individual measurement items. If there is a loading of ≥ 0.7 between a measurement item and its corresponding variable, the construct validity is deemed satisfactory [31]. As listed in Table 1, all items
showed a factor loading of $\geq 0.7$. In order to identify the internal consistency of measurement items, we examined their composite reliability, Cronbach’s $\alpha$ and average variance extracted (AVE). The measurement results revealed that the inter-construct reliability was achieved with values of $\geq 0.7$ in composite reliability (0.867-0.937) and Cronbach’s $\alpha$ (0.812-0.919) and with values of $\geq 0.5$ in AVE (0.659-0.847).

Table 1. Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technical Quality</strong></td>
<td>TQ1 Required IT request has been successfully achieved.</td>
<td>0.883</td>
<td>3.716</td>
<td>0.845</td>
</tr>
<tr>
<td></td>
<td>TQ2 IT system was easily accessible and usable.</td>
<td>0.882</td>
<td>3.740</td>
<td>0.811</td>
</tr>
<tr>
<td></td>
<td>TQ3 Most of the system requirements were met.</td>
<td>0.881</td>
<td>3.679</td>
<td>0.865</td>
</tr>
<tr>
<td></td>
<td>TQ4 Information provided by the system was accurate.</td>
<td>0.891</td>
<td>3.656</td>
<td>0.826</td>
</tr>
<tr>
<td></td>
<td>TQ5 Information provided by the system was useful.</td>
<td>0.787</td>
<td>3.456</td>
<td>1.019</td>
</tr>
<tr>
<td><strong>Functional Quality</strong></td>
<td>FQ1 IT service provider kept promises on requests.</td>
<td>0.866</td>
<td>3.730</td>
<td>0.885</td>
</tr>
<tr>
<td></td>
<td>FQ2 IT service provider gives you attention about requirements.</td>
<td>0.894</td>
<td>3.540</td>
<td>0.903</td>
</tr>
<tr>
<td></td>
<td>FQ3 IT service provider gives you feedback on requirements.</td>
<td>0.828</td>
<td>3.507</td>
<td>0.929</td>
</tr>
<tr>
<td></td>
<td>FQ4 IT service provider provided prompt service.</td>
<td>0.868</td>
<td>3.591</td>
<td>0.905</td>
</tr>
<tr>
<td><strong>Cognitive Trust</strong></td>
<td>CT1 I have confidence in IT service provider.</td>
<td>0.890</td>
<td>3.684</td>
<td>0.880</td>
</tr>
<tr>
<td></td>
<td>CT2 I have no reservations about acting on IT service provider’s advice.</td>
<td>0.874</td>
<td>3.833</td>
<td>0.868</td>
</tr>
<tr>
<td></td>
<td>CT3 IT service provider is trustworthy.</td>
<td>0.833</td>
<td>3.563</td>
<td>0.927</td>
</tr>
<tr>
<td></td>
<td>CT4 I can rely on IT service provider.</td>
<td>0.911</td>
<td>3.749</td>
<td>0.926</td>
</tr>
<tr>
<td><strong>Affective Trust</strong></td>
<td>AT1 If I share my problems with IT service provider, I feel he or she would respond caringly.</td>
<td>0.817</td>
<td>3.684</td>
<td>0.891</td>
</tr>
<tr>
<td></td>
<td>AT2 IT service provider displays a warm and caring attitude towards me.</td>
<td>0.891</td>
<td>3.726</td>
<td>0.947</td>
</tr>
<tr>
<td></td>
<td>AT3 I can talk freely with IT service provider about my problems at work and know that he or she will want to listen.</td>
<td>0.847</td>
<td>3.712</td>
<td>1.007</td>
</tr>
<tr>
<td><strong>Commitment</strong></td>
<td>CM1 I intend to maintain my relationship indefinitely.</td>
<td>0.899</td>
<td>3.279</td>
<td>0.928</td>
</tr>
<tr>
<td></td>
<td>CM2 I am very committed to the relationship with IT Service.</td>
<td>0.929</td>
<td>3.502</td>
<td>0.914</td>
</tr>
<tr>
<td></td>
<td>CM3 I should put maximum effort into maintaining my relationship with IT service provider.</td>
<td>0.939</td>
<td>3.553</td>
<td>0.908</td>
</tr>
<tr>
<td><strong>Intention to Use</strong></td>
<td>IN1 I intend to continue using IT service rather than discontinue using it.</td>
<td>0.848</td>
<td>3.802</td>
<td>0.964</td>
</tr>
<tr>
<td></td>
<td>IN2 My intentions are to continue using IT service than use any alternative means.</td>
<td>0.879</td>
<td>3.465</td>
<td>0.996</td>
</tr>
<tr>
<td></td>
<td>IN3 If I could, I would like to continue using IT service as much as possible.</td>
<td>0.860</td>
<td>3.633</td>
<td>0.930</td>
</tr>
</tbody>
</table>

Discriminant validity refers to the low correlations that should exist between different measurements designed to measure different constructs. The correlation coefficients of latent variables should show an appropriate pattern of factor loadings, and observed variables should be highly loaded onto allocated factors. In PLS, the discriminant validity can be deemed adequate when the square roots of AVE values are greater than inter-variable correlation coefficients. In Table 2, the values on the right hand are the correlation coefficients of individual variables and the values in the diagonal are the square roots of AVEs. As indicated in the table, square-rooted AVE values are greater than other correlation coefficients, and thus the requirements for discriminant validity are satisfied.
Table 2. Discriminant Validity Analysis

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
<th>AVE</th>
<th>TQ</th>
<th>FQ</th>
<th>CT</th>
<th>AT</th>
<th>CM</th>
<th>IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Quality</td>
<td>0.919</td>
<td>0.919</td>
<td>0.714</td>
<td>0.845</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Quality</td>
<td>0.922</td>
<td>0.887</td>
<td>0.659</td>
<td>0.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Trust</td>
<td>0.930</td>
<td>0.900</td>
<td>0.736</td>
<td>0.638</td>
<td>0.718</td>
<td>0.858</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective Trust</td>
<td>0.888</td>
<td>0.812</td>
<td>0.820</td>
<td>0.615</td>
<td>0.720</td>
<td>0.706</td>
<td>0.906</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>0.945</td>
<td>0.913</td>
<td>0.844</td>
<td>0.592</td>
<td>0.705</td>
<td>0.638</td>
<td>0.708</td>
<td>0.919</td>
<td></td>
</tr>
<tr>
<td>Intention to re-use</td>
<td>0.867</td>
<td>0.828</td>
<td>0.847</td>
<td>0.656</td>
<td>0.690</td>
<td>0.653</td>
<td>0.582</td>
<td>0.634</td>
<td>0.920</td>
</tr>
</tbody>
</table>

TQ: Technical Quality, FQ: Functional Quality, CT: Cognitive Trust, AT: Affective Trust, CM: Commitment, IN: Intention to re-use

5.2. Analysis of the Structural Model

Since the analysis of the measurement model revealed that the research model is reliable and valid, we tested the proposed hypotheses using a structural model. A bootstrap analysis was conducted to test the hypotheses in the PLS. The structural model is used to represent a set of dependent relationships between latent variables, or inter-variable correlations. It also indicates measurement coefficients as well as the standard error and t-value for each coefficient. A two-tailed test is performed at a 5% significance level in case of t-value ≥ 1.96. As illustrated in Figure 2, our path analysis found that the technical quality of IT services was significantly associated with cognitive trust ($\beta=0.279$, t=4.215). The functional quality of IT services also was found to have a significant impact on both cognitive trust ($\beta=0.528$, t=8.042) and affective trust ($\beta=0.439$, t=6.559). Consequently, hypotheses 1, 2 and 3 were supported. There was a significant relationship between cognitive and affective trust ($\beta=0.391$, t=6.074), which supported hypothesis 4. Significant relationships were also found between cognitive trust and intention of continuous use ($\beta=0.390$, t=5.020) and between cognitive trust and commitment ($\beta=0.276$, t=3.212). Therefore, hypotheses 5 and 7 were supported. Meanwhile, there was no significant relationship between cognitive trust and the intention of continuous use ($\beta=0.064$, t=0.769), and hypothesis was therefore rejected. However, affective trust was significantly associated with commitment ($\beta=0.513$, t=6.701), and thus hypothesis 8 was accepted. There was also a significant relationship between commitment and intention of continuous use ($\beta=0.338$, t=4.322), which supported hypothesis 9 accordingly. User-perceived cognitive trust explained 55.7% of variance in technical and functional quality of IT services, and affective trust accounted for 59.9% of variance in functional quality and cognitive trust. Commitment explained 54% of variance in cognitive and affective trust, and the intention of continuous use explained 50.8% of variance in cognitive trust and commitment. These percentages of explained variance (explanatory power) greater than 10% test power presented by Falk & Miller (1992) [34] indicate that the structural model has a good fit.

Figure 2. Structural Model
6. Conclusions

In this study, we conducted an empirical analysis of how IT service quality consisting of technical and functional quality is associated with two dimensions of trust (i.e., cognitive and affective trust), commitment and the intention to continue using the services. The analysis results showed that technical quality had a significant impact on cognitive trust that functional quality was significantly associated with both cognitive and affective trust. The impact of service quality on cognitive trust was greater with functional quality ($\beta=0.528$) than technical quality ($\beta=0.279$). This finding is consistent with Park et al. (2012) and reconfirms that the behavior of IT service providers in IT service environments is a critical factor in building service users’ trust. So to speak, excellent IT service experiences with the service provider such as active communication and seamless feedback in a service delivery process provide a cognitive basis for trust in the IT service and, at the same time, make service users feel dependable and reliable with the service provider. On the contrary, if an IT system is successfully established and used, it may be rather taken for granted and seems to have a relatively low influence. In a smart work environment where cooperation and communication can take place effectively and actively, functional quality is likely to get high and helps the service provider build trust with customers.

Second, the results of our analysis indicated that cognitive trust was significantly associated with affective trust. This supports the findings of existing literature and suggests that if rational trust in an IT service and their provider is built through reliable sources, it can influence affective belief and contribute to strengthening the overall level of trust [19][21][26].

Third, it was found that cognitive trust had a direct impact on the intention of continuous use and the impact was amplified by a partial intermediary role of commitment. In contrast, affective trust had no direct impact on the intention of continuous use but was indirectly associated with the intention of continuous use by the intermediary effect of commitment. Like in studies by Carr (2006) and Park et al. (2012), the findings of this study confirmed that trust has an impact on relationship commitment. Those findings also suggest that if trust is rational and built on reasonable grounds, it may influence the intention of continuous use but affective trust alone has a limited impact on the intention to continue using IT services or systems. Therefore, it would be a foolish thing to seek trust by means of just affective and feeling-based approaches without focusing on high-quality information systems which constitute the nature of IT services. In other words, it is undesirable to rely on the affect-based trust in attracting customers and keeping them loyal. However, this is not to say that affective trust can be neglected. Clearly, affective trust also has a positive impact on relationship commitment and helps elicit customers’ intention of continuous use. This study distinguished between two dimensions of trust, one of the elements that constitute relationship quality in IT service environments, and conducted an analysis of how the two dimensions work in the service environments. We believe that such trust analyses will further broaden the significance of trust in the academic context. There was a report that the two dimensions of trust had a significant effect on the performance of organizations in the automobile, textile, electricity and steel industries [20], but few studies have attempted to analyze the cognitive and affective dimensions of trust in IT service environments. Therefore, this empirical study of two trust dimensions in an IT service environment will provide a benchmark for future studies and the findings of this study will be of help to other studies of trust development in relationships between different interested parties in IT service fields, including service providers and customers.

Since the conclusions of this study have been drawn based on its limitations, further studies should be considered and duly weighed. The survey data collected in this study are limited in diversity because the sample was recruited from sole firm. To generalize study results, therefore, future studies need to gather data from a larger number of business entities in a variety of industries. Moreover, this study only examined the two forms of IT service quality—technical and functional quality—as two of the factors that influence cognitive and affective trust in IT service environments. Future studies need to investigate a wider range of correlations literature reviews of other antecedents that can influence customers in winning trust from the other side.
7. References


