

Chapter 8

Conclusions, Implications, Limitations, and Directions for Future Research

Introduction

In the previous seven chapters, research problems, objectives, hypotheses, methodology, analyses, and results were presented. Chapter 1 focused on the origin of this dissertation while the definition of the constructs was presented in the chapter 2. Chapter 3 presented the conceptual model and hypotheses development. Research design and methodology were presented in chapter 4. Chapter 5, 6, and 7 focused on the scale development procedure and the results.

For this final chapter, the main purposes are to present the summary of this dissertation together with the implications of the research results, discussion on important issues, limitations of the research, and suggestions for future research. There are five sections in this chapter: conclusions about research issues and hypotheses, conclusions about the research findings, implications, limitations, and future research.

Conclusions about Research Issues and Hypotheses

Research Issues

This dissertation was conducted in order to fulfill two important gaps in theory which were indicated in the literature. First, “trust” within a business-to-consumer context has been inadequately studied because it was not easy to define trust within this area. Second, most scales which were developed in western countries could not be generalized to Asian countries because of the cultural differences. Consequently, this dissertation attempted to develop a scale to measure Thai consumer’s trust based on three important research questions: What are the dimensions of Thai consumer’s trust in a business-to-consumer context?; Which are the most important dimensions of trust for Thai consumers? and; What are the

consequences of Thai consumer's trust? In order to fulfill the theoretical gaps and to answer the research questions, the objectives of this dissertation were (1) to develop a consumer's trust scale (SERVTRUST) which can be widely used to measure a consumer marketing service relationship within Thailand, (2) to investigate the dimensions of trust that is important to Thai consumers, and (3) to determine the consequences of Thai consumers' trust. This dissertation provided the SERVTRUST measurement scale for evaluating the level of Thai consumer's trust in service providers, health care and banking in particular. The manager of the service firms can use the dimension of consumer's trust in order to maintain and enhance the customer's satisfaction and loyalty. Moreover, this dissertation showed the relationships among SERVTRUST, its antecedents, and its consequences. Finally, this dissertation can be used as a blue print for other researchers who want to develop and validate the consumer's trust scale in the context of other countries.

Research Constructs

In this study, "trust" was defined as a consumer's willingness to rely on the service provider because of the consumer's confidence in the reliability and integrity of the service provider. Thirteen dimensions of trust were proposed based on the literature review. Benevolent trust is the behavior that reflects an underlying motivation to place the consumer's interests ahead of self-interest of the service provider. Confidential trust is the service provider's perceived willingness to keep personal information safe from others. Contractual trust was defined as an enforcement mechanism that a service provider relies on to maintain the relationship with the customer such as a guarantee. Credible trust was defined as the consumer's capability of determining a service provider's ability to meet their obligations. Experiential trust is the consumer's ability to predict and accurate service outcome. Expert trust is the service provider's perceived knowledge, authoritativeness, competence, and qualification. Friendly trust was defined as the provision of emotional support, the respectful handling of a customer's privacy and being tolerant of other business relationships. Information shared trust was defined as the sharing of private information between a service provider and a customer. Integrity trust means

the unwillingness of a service provider to sacrifice ethical standards to achieve an individual or organizational objective. Powerful trust means a consumer's belief that the service provider is capable of providing them with outcomes that match those the service provider says or promises. Reliable trust is the delivery of goods or services in a dependable and timely manner. Signed trust is evidence that the service provider can be trusted. Timely trust was defined as the efficiency of a service provider in responding to the consumer's needs.

Moreover, four causes and two consequences of trust were proposed. The causes of trust were communication, problem-solving, satisfaction, and quality of the service. The consequences of trust were commitment and loyalty. Communication is the formal as well as informal sharing of meaningful and timely information between a service provider and a customer. Problem-solving was defined as the consumer's evaluation of the service provider's ability to resolve the problems that may arise during and after a service exchange. Quality of the service was defined as the customer's evaluation of a service provider's service standard when it is compared to others. Satisfaction is a customer's cognitive and affective evaluation of a specific service provider. Commitment means a customer's enduring desire to use the service of a specific service provider. Loyalty is a repeat purchase behavior of the customer.

Research Hypotheses

From the literature review, there are six main hypotheses in this dissertation. (H1) Communication was proposed to be positively related with SERVTRUST. Communication was suggested to influence SERVTRUST by resolving disagreement between a customer and a service provider. (H2) Problem solving was proposed to be positively related to SERVTRUST. The previous research indicated that the level of trust depends on how well the service provider deals with problems the first-time they occur. (H3) The quality of service was proposed to be positively associated with SERVTRUST. There are a number of research papers indicating this relationship. Another antecedent of SERVTRUST, which was proposed for its relationship, was satisfaction. Many researchers both in a B2B and B2C context indicate the role of satisfaction as an antecedent with a positive

relationship with SERVTRUST. Hence, (H4) satisfaction was hypothesized to be positively associated with SERVTRUST.

For the consequences of SERVTRUST, commitment and loyalty were employed to test the behavior of SERVTRUST. (H5) Commitment was proposed to be positively associated with SERVTRUST because there is evidence in B2B and B2C research which confirms that SERVTRUST is the main factor driving commitment. Finally, (H6) loyalty was hypothesized to be positively related to SERVTRUST because it was described as the reflection of trust.

Research Methodology

This dissertation is descriptive research design using cross-sectional data collection together with self-administered questionnaires to survey 400 Thai consumers who were at least 20 years old and used a service related to a health care and banking service provider. There are three stages based on the suggested scale development procedure from Churchill (1979), and Parasuraman et al. (1988). Stage I is items generation. The domain and items of the constructs were generated from the literature review. Stage II involved scale development. Exploratory Factor Analysis was employed to identify the structure of the SERVTRUST measurement scale. Confirmatory Factor Analysis was employed to test how well the measured variables represented the construct. Stage III is an evaluation of the scale. Nomological validity of the SERVTRUST measurement scale was tested using Structural Equation Modeling technique.

Conclusions about Research Findings

From the conceptual definitions which were based on the literature review, 108 items for 19 constructs (benevolence, confidentiality, contractual, credibility, experience, expertise, friendship, information sharing, integrity, power, reliability, signal, timeliness, communication, problem solving, quality of the service, satisfaction, commitment, and loyalty) were generated. After data was analyzed by EFA, CFA and SEM, the research questions and objectives were discussed.

The Dimensions of Thai Consumers' Trust in a Business-to-Consumer Context

As Ellen and Mark (1999), and Atuahene-Gima and Li (2002) indicated trust as a context specific construct, the author decided to divide SERVTRUST into three contexts: health care service industry, banking service industry, and for average scale.

SERVTRUST for Health Care Service Providers

For EFA, it was found that the SERVTRUST scale consisted of 59 items in 12 dimensions which were benevolence, confidentiality, credibility, experience, expertise, friendship, information sharing, integrity, power, reliability, signal, and timeliness. For each dimension and also overall, Cronbach's alpha was higher than 0.70, and item-to-total correlations were 0.471-0.847. Thus, the construct's reliability and validity were evident. In order to confirm the validity and reliability of the SERVTRUST measurement scale, the previous 59 items with 12 dimensions were analyzed using the Confirmatory Factor Analysis technique. The result showed that the SERVTRUST scale for health care service providers consisted of 17 items in five dimensions: expertise, timeliness, benevolence, integrity, and credibility. All factor loadings were higher than 0.70 and significance. Other fit indices showed an acceptable fit ($\chi^2 = 236.41$, $df = 109$, $\chi^2/df = 2.17$, $P\text{-value} = 0.00$, $RMSEA = 0.054$, $NFI = 0.98$, $CFI = 0.99$, $SRMR = 0.041$, $GFI = 0.93$, $AGFI = 0.91$). The item-total correlation and construct reliability were higher than the suggested cutoff point. This indicated the existence of the scale's internal consistency and reliability. The results showed that all variance-extracted estimates exceeded the fifty percent rule of thumb, and there was no squared correlation value greater than the variance-extracted estimates. Hence, it could be concluded that the five dimensions of the SERVTRUST scale for health care service providers had convergent and discriminant validity. From the SEM analysis, the result showed that the correlations between factor scores for each dimension of SERVTRUST for health care service providers and its antecedent and consequent variables were positively related to one another as hypothesized, however, the path from service quality to SERVTRUST was not significant at $p < 0.05$.

The model had an acceptable fit (RMSEA=0.073, NFI=0.97, CFI=0.98, SRMR=0.050, GFI=0.90, AGFI=0.87). From the Sobel's test of the mediating effect, it was found that the SERVTRUST was a partial mediator among the antecedent and consequent variables as proposed. This led to the conclusion of acceptable nomological validity of this SERVTRUST measurement scale. For the SERVTRUST scale in detail, please see the theoretical implication.

SERVTRUST for Banking Service Providers

For EFA, it was found that the SERVTRUST scale for banking service providers consisted of 57 items in 12 dimensions which were benevolence, timeliness, integrity, experience, credibility, confidentiality, power, reputation, friendship, information sharing, signal, expertise, and reliability. For each dimension and also overall, Cronbach's alpha was higher than 0.70, and item-to-total correlations were 0.575-0.82, above the critical value at 0.4. Therefore, the construct's reliability and validity were evident. In order to confirm the validity and reliability of the SERVTRUST measurement scale, the previous 57 items with 12 dimensions were analyzed using the Confirmatory Factor Analysis technique. From the result, it was found that the SERVTRUST scale for banking service providers consisted of 20 items in five dimensions: benevolence, timeliness, integrity, credibility, and reputation. All factor loadings were higher than 0.70 and significant. Other fit indices had an acceptable fit ($\chi^2 = 307.97$, $df = 160$, $\chi^2/df = 1.92$, $P\text{-value} = 0.00$, $RMSEA = 0.048$, $NFI = 0.98$, $CFI = 0.99$, $SRMR = 0.040$, $GFI = 0.93$, $AGFI = 0.91$). The item-total correlation and construct reliability were higher than the suggested cutoff point. This indicated the existence of the scale's internal consistency and reliability. The results showed that all variance-extracted estimates exceeded the fifty percent rule of thumb, and there was no squared correlation value greater than the variance-extracted estimates. Hence, it could be concluded that the five dimensions of SERVTRUST scale for banking service providers had convergent and discriminant validity. From the SEM analysis, the results showed that the correlations between factor scores for each dimension of SERVTRUST for banking service providers and its antecedent and consequent variables were positively related to one another as hypothesized. However, the path from service quality to SERVTRUST was not significant at

$p < 0.05$. The model had an acceptable fit ($\chi^2/df=2.97$, RMSEA=0.070, NFI=0.98, CFI=0.98, SRMR=0.049, GFI=0.91, AGFI=0.87). From the Sobel's test of the mediating effect, it was found that the SERVTRUST was a partial mediator among the antecedent and consequent variables as proposed. This led to the conclusion of acceptable nomological validity of this SERVTRUST measurement scale. Please see the theoretical implication section for the final SERVTRUST scale in detail for banking service providers.

SERVTRUST for Average Scale

For EFA, it was found that SERVTRUST scale for average scale consisted of 60 items in 11 dimensions which were timeliness, benevolence, expertise, reliability, integrity, confidentiality, power, credibility, friendship, information sharing, and privacy. For each dimension and also overall, Cronbach's alpha was higher than 0.70, and item-to-total correlations were 0.459-0.840. The construct's reliability and validity were therefore evident. In order to confirm the validity and reliability of the SERVTRUST measurement scale, the previous 60 items with 11 dimensions were analyzed using the Confirmatory Factor Analysis technique. The results indicated that the SERVTRUST scale for average scale consisted of 18 items in five dimensions: timeliness, benevolence, expertise, integrity, and power. All factor loadings were higher than 0.70 and significant. Other fit indices had an acceptable fit ($\lambda^2 = 240.26$, $df = 125$, $\lambda^2/df = 1.92$, $P\text{-value} = 0.00$, RMSEA = 0.048, NFI = 0.98, CFI = 0.99, SRMR = 0.034, GFI = 0.94, AGFI = 0.91). The item-total correlation and construct reliability were higher than the suggested cutoff point. This indicated the existence of the scale's internal consistency and reliability. The results showed that all variance-extracted estimates exceeded the fifty percent rule of thumb, and there was no squared correlation value greater than the variance-extracted estimates. Hence, it could be concluded that the five dimensions of SERVTRUST for average scale had convergent and discriminant validity. SEM analysis showed that the correlations between factor scores for each dimension of SERVTRUST for average scale and its antecedent and consequent variables were positively related to one another as hypothesized. However, the path from service quality to SERVTRUST was not significant at $p < 0.05$. The model had an acceptable fit ($\chi^2/df=2.73$, RMSEA=0.066,

NFI=0.98, CFI=0.99, SRMR=0.041, GFI=0.91, AGFI=0.88). From the Sobel's test of the mediating effect, it was found that SERVTRUST was a partial mediator among the antecedent and consequent variables as proposed. This led to the conclusion of acceptable nomological validity of this SERVTRUST measurement scale. The final SERVTRUST scale for average scale in detail was shown in the theoretical implication.

The Important Dimensions of Trust for Thai Consumers

As mentioned in the chapter 2 literature review, "trust" had been researched little in a business-to-consumer context, but had mostly been referred to in a business-to-business way. Hence, the dimensions of trust in business-to-consumer were developed from the business-to-business research. Although some dimensions (such as reliability, integrity, benevolence, and others) were the most often mentioned, there were not many research papers to indicate which dimension was the most important from a consumer's perspective. This dissertation therefore identified the important dimension of Thai consumer's trust, or SERVTRUST, based on the factor loading from the SEM analysis.

For health care service providers, it was found that "benevolence" is the most important dimension of SERVTRUST. Its factor loading is 0.83 which is the highest significant factor loading among the five dimensions (expertise=0.77, timeliness=0.55, benevolence=0.83, integrity=0.71, and credibility=0.76). Hence, 69 percent of the variance in this original variable can be explained by SERVTRUST.

For banking service providers, it was found that "benevolence" is the most important dimension of SERVTRUST the same as for SERVTRUST for health care service providers. Its factor loading is 0.77 which is the highest among the five dimensions (benevolence=0.77, timeliness=0.65, integrity=0.71, credibility=0.71, and reputation=0.73). Therefore, 59 percent of the variance in this original variable can be explained by SERVTRUST.

For average scale, it was found that "benevolence" is the most important dimension of SERVTRUST too. Its factor loading is 0.79 which is the highest among the five dimensions (timeliness=0.76, benevolence=0.79, expertise=0.76,

integrity=0.71, and power=0.76). SERVTRUST can explain 62 percent of the variance in this original variable.

All in all, the most important dimension of Thai consumer's SERVTRUST for service providers was "benevolence". As mentioned in chapter 2, Sirdeshmukh et al. (2002) and Colwell et al. (2004) defined this dimension of consumer's trust as the behavior that reflected an underlying motivation to place the consumer's interests ahead of self-interest. Based on the given definition and the results of this study, the author defined "benevolence" as the behavior of a service provider which reflects understanding, caring, sacrifice, and respect toward customers. For the implication of this result, please see the implications section.

The Antecedents of SERVTRUST

From hypotheses testing, four antecedents of SERVTRUST were proposed. All of the antecedents: communication (H1), problem solving (H2), quality of the service (H3), and satisfaction (H4) were proposed to be positively related to the SERVTRUST. The result showed that only "quality of the service" was not significant related to SERVTRUST.

For health care service providers, the result indicated that all hypotheses structural paths were supported at $p < 0.05$ and 0.01 , except the relationship between service quality and SERVTRUST. However, its relationship direction was as expected. Hence, it can be concluded that there are three antecedents of SERVTRUST for health care service providers (communication, problem solving, and satisfaction). This result is consistent with the previous research papers, for instance, Spake et al. (2003) and Deutsch (1958) who presented evidence that consumer's trust was established based on communication. Although communication was indicated as the most important antecedent of consumer's trust (Spake et al., 2003), this dissertation found that "problem solving" is an extremely important antecedent of Thai consumer's SERVTRUST because its standardized total effect between "problem solving" and "SERVTRUST" was higher than others, and significant at $p < 0.05$. This is consistent with Tax et al. (1998).

For banking service providers, the result indicated that all hypotheses structural paths were supported at $p < 0.05$ and 0.01 levels, except the relationship between service quality and SERVTRUST. However, its relationship direction was as expected. The same as for health care service providers, it can be concluded that there are three antecedents of SERVTRUST for banking service providers (communication, problem solving, and satisfaction). This result is consistent with the previous research papers such as Spake et al. (2003), Tax et al. (1998), and Chiou et al. (2002). Communication, therefore, is not the most important antecedent of consumer's trust as indicated by Spake et al. (2003). This dissertation found that "satisfaction" is the most influential on the level of Thai consumer's SERVTRUST for banking service providers. The standardized total effect between "satisfaction" and "SERVTRUST" was higher than others and statistically significant at $p < 0.05$ level.

For average scale, all hypotheses structural paths were supported at $p < 0.05$ or 0.01, except the relationship between service quality and SERVTRUST, which was the same for health care and banking service providers. However, its relationship direction was as expected. It can be concluded that there are three antecedents of SERVTRUST for average (communication, problem solving, and satisfaction). This result is consistent with the previous research papers such as Spake et al. (2003), Tax et al. (1998), and Chiou et al. (2002). As for the health care service providers, "problem solving" is the most important predictor of SERVTRUST for instead of communication as indicated by Spake et al. (2003). The standardized total effect between "problem solving" and "SERVTRUST" was 0.39, and statistically significant at $p < 0.05$ level.

From the results, although the relationship between quality of service and SERVTRUST is positive as expected, it is insignificant. This means there would be other factors influencing the relationship of these two latent variables. Ellen and Mark (1999) found in their research that physical facility, which is one of the dimensions of quality of service, has no relationship with trust. On the other hand, it is positively associated with satisfaction which was hypothesized as one of the antecedents of SERVTRUST. They also indicated that this kind of relationship can be found only for strong relationship customers. In this study, the author does not classify the customers based on the level of the relationship. The combined data was analyzed. Thus, if a

large number of strong relationship customers were unintentionally included, the relationship between quality of service and SERVTRUST should be insignificant as shown in the result. Because of the relationship between quality of service and satisfaction, it is possible to say that satisfaction is a mediator of the relationship between quality of service and SERVTRUST. Hence, quality of service would have an indirect effect with SERVTRUST instead of the direct effect as proposed.

In conclusion, three of four hypothesized antecedents were supported: (H1) communication and SERVTRUST, (H2) problem solving and SERVTRUST, and (H4) satisfaction and SERVTRUST. Although H3 (quality of the service and SERVTRUST) is not supported, its relationship is positive as proposed. Hence, there are three antecedents of Thai consumer's SERVTRUST: communication (Deutsch, 1958; Morgan and Hunt, 1994; Spake et al., 2003), problem solving (Oikawa and Tanner, 1992; Tax et al., 1998; Xiaohua and Charlie, 2002), and satisfaction (Chiou et al., 2002; Gounaris and Venetis, 2002; Kwon and Suh, 2004).

The Consequences of SERVTRUST

Two consequences, which are commitment (H5) and loyalty (H6), of consumer's trust was proposed as the consequences of Thai consumer's SERVTRUST based on several articles such as Arjun and Morris (2001), and Chaudhuri and Holbrook (2002) indicated a positive relationship between commitment and trust while Francis and Jamie (2002) indicated a positive relationship between loyalty and trust. From the hypotheses testing of the study, it was found that the structural hypothesized path were supported at $p < 0.05$ level.

For health care service providers, it was found that the relationship between commitment and SERVTRUST, and loyalty and SERVTRUST were significant at $p < 0.01$ level. The findings supported previous research. Furthermore, it was found that for health care service providers, loyalty was influenced by SERVTRUST more than commitment.

For banking service providers, it was found that the relationship between commitment and SERVTRUST, and loyalty and SERVTRUST were statistically significant at $p < 0.01$ level too. The findings supported previous research. Again, it

was found that, for banking service providers, loyalty was influenced by SERVTRUST more than commitment.

For average scale, it was found that the relationship between commitment and SERVTRUST, and loyalty and SERVTRUST were statistically significant at $p < 0.01$ level, which is the same as for health care and banking service providers. The findings were supported previous research. Hence, it was found that for average scale, loyalty was influenced by SERVTRUST more than commitment.

In conclusion, this dissertation found that SERVTRUST leads to commitment and loyalty of the customers. Hence, trust, or SERVTRUST, is the key criteria for a successful relationship between the service providers and customers (Tax et al., 1998; Peter et al., 2002; Lucas, 2005).

Implications

As mentioned in the first chapter, the focus of this dissertation is to develop a scale to measure trust in consumer marketing-service relationships in Thailand named SERVTRUST. This scale will establish an accurate measurement scale which can reflect the level of Thai consumer's trust. Moreover, the service providers will be informed of more accurate dimensions of Thai consumer's trust which they can use as a tool to gain their customer's commitment and loyalty. Thus, the implications of this dissertation can be categorized into two sections: theoretical and managerial.

Theoretical Implications

As discussed earlier, the lack of research about consumer's trust, and differences in culture, led to the need to develop a reliable and valid trust measurement scale for Thai consumers. Although some Thai researchers (e.g. Jirawat, 2003) employed the scale to measure Thai consumer's trust from well known articles (e.g. Crosby et al., 1990; Doney and Cannon, 1997), the conclusions based on the scale may not be accurate due to the variation of the psychometric properties of the scale between countries (Netemeyer et al., 1991). Moreover, trust is indicated as a

context specific construct (Ellen and Mark, 1999; Atuahene-Gima and Li, 2002), and not a global trait (Zand, 1972; Kumar, 1996). As such, using one scale for all service types may not reflect the actual level of trust.

From the results of the dissertation, it was found that customer trusts the service provider in different ways based on the type of service they receive. In order to reflect the actual Thai consumer's trust, the measurement scale must vary widely across service industries.

For health care service providers, the measurement scale must evaluate the level of service provider's expertise, timeliness, benevolence, integrity, and credibility. Table 8.1 shows the measurement items for each dimension. The reliability and validity of the scale have been confirmed using CFA and SEM analyses. Hence, using this SERVTRUST scale for measuring the Thai consumer's trust in health care service provider will reflect the actual level of Thai consumer's trust.

Table 8.1
SERVTRUST Scale for Health Care Service Providers

Dimensions	Items
Expert trust	<ul style="list-style-type: none"> • My service provider is very knowledgeable. • My service provider knows his/her service very well. • My service provider is an expert in his/her area.
Timely trust	<ul style="list-style-type: none"> • My service provider has services available when I want them. • My service provider always accommodates my last minute requests. • My service provider responds to my requests immediately.

Table 8.1 (Continued)

Dimensions	Items
Benevolent trust	<ul style="list-style-type: none"> • My service provider has made sacrifices for me in the past. • My service provider is like a friend. • I feel my service provider has been on my side. • My service provider acts as if I am always right. • My service provider treats me with respect.
Integrity trust	<ul style="list-style-type: none"> • My service provider has a great deal of integrity. • My service provider is honest. • My service provider has high moral principles.
Credible trust	<ul style="list-style-type: none"> • I believe in my service provider's guarantee. • My service provider has been frank in dealing with me. • Promises made by my service provider are reliable.

For banking service providers, the measurement scale must evaluate the level of service provider's benevolence, timeliness, integrity, credibility, and reputation. Table 8.2 shows the measurement items for each dimension. The reliability and validity of the scale have been confirmed using CFA and SEM analyses. Hence, using this SERVTRUST scale for measuring the Thai consumer's trust in banking service providers will reflect the actual level of Thai consumer's trust.

Table 8.2
SERVTRUST Scale for Banking Service Providers

Dimensions	Items
Benevolent trust	<ul style="list-style-type: none"> • My service provider has made sacrifices for me in the past. • My service provider is like a friend. • I feel my service provider has been on my side. • In the future, I can count on my service provider to consider how his/her decision and actions will affect me. • My service provider acts as if I am always right. • My service provider treats me with respect.
Timely trust	<ul style="list-style-type: none"> • My service provider shares his/her confidential information with me. • My service provider promptly provides all kinds of information that I want. • My service provider has services available when I want them. • My service provider always accommodates my last minute requests. • My service provider responds to my requests immediately.
Integrity trust	<ul style="list-style-type: none"> • My service provider has a great deal of integrity. • My service provider brings high standards to his/her work. • My service provider is honest.
Credible trust	<ul style="list-style-type: none"> • My service provider has been frank in dealing with me. • Promises made by my service provider are reliable. • My service provider does not make false claims.
Reputed trust	<ul style="list-style-type: none"> • My service provider has insisted on error-free transaction and records. • I can rely on my service provider. • My service provider has a good reputation in the market.

For average scale, the measurement scale must evaluate the level of service provider's timeliness, benevolence, expertise, integrity, and power. Table 8.3 shows the measurement items for each dimension. The reliability and validity of the scale have been confirmed using CFA and SEM analyses.

Table 8.3
SERVTRUST for Average Scale

Dimensions	Items
Timely trust	<ul style="list-style-type: none"> • My service provider promptly provides all kinds of information that I want. • My service provider returns my calls promptly. • I always get the information I ask from my service provider in a timely fashion.
Benevolent trust	<ul style="list-style-type: none"> • My service provider has made sacrifices for me in the past. • My service provider is like a friend. • I feel my service provider has been on my side. • In the future, I can count on my service provider to consider how his/her decision and actions will affect me. • My service provider treats me with respect.
Expert trust	<ul style="list-style-type: none"> • My service provider is an expert in his/her area. • I have faith in my service provider's recommendation. • I would listen to my service provider because of his/her expertise.
Integrity trust	<ul style="list-style-type: none"> • My service provider has a great deal of integrity. • My service provider brings high standards to his/her work. • My service provider is honest. • My service provider has high moral principles.
Power trust	<ul style="list-style-type: none"> • I think that my service provider can influence my decisions on options I have. • I tend to follow my service provider's recommendations. • By going along with my service provider's recommendations, I avoided some of the problems other customers face.

However, there is a controversy about the generalization of the scale. As stated earlier that trust is a context specific in nature, applying one of the previous

SERVTRUST scales to other service industries seems to be unreliable. Please see the direction for future research section for more detail.

Managerial Implications

As mentioned in the first chapter, this dissertation contributed to defining the exact dimensions of trust in a Thai business-to-consumer context. The managers in each service industry can use the suggested dimensions to gain the customer's commitment and loyalty which are very important for continuing and maintaining valued customers in a long term relationship (Arjun and Morris, 2001). In addition, this dissertation also provides the direction of enhancing the consumer's trust for each service industry.

Managerial Implications in General

"Benevolence" was found as the most important dimension of Thai consumer's trust, or SERVTRUST. For this study, the definition of benevolence is "the behavior of a service provider which reflects understanding, caring, sacrifice, and respect toward customers". In the context of inter-firm and inter-group, Atuahene-Gima (2002) indicated that benevolent trust involves showing consideration and sensitivity for the other party's needs and interests by acting in a way that protect them, and away from taking advantage of the other party for the benefit of one's own interest. In the business-to-consumer context, benevolent behaviors show the evidence of trust (Sirdeshmukh et al., 2002) because the service providers explicitly indicate to consumer that they have a willingness to assume fiduciary responsibility (Flavian et al., 2006). Jirawat (2003) also suggested that in order to gain Thai consumer's trust, the service provider must improve the service employee's operational benevolence. He is also indicated that it is "a crucial behavior in Thailand and other Southeast Asian countries since individuals in collectivist countries give emphasis to independence" (p. 212). Thus, the benevolent trust is a crucial acting that must be performed at a cost to the service providers, whose Thai consumers are the target market, with or without appropriate benefits.

As mentioned earlier, benevolence is “the behavior of a service provider which reflects understanding, caring, sacrificing, and respecting toward customers”. There are four key words here. “Understanding” means that customers realize when they share their problems with the service provider that they will receive understanding from the service provider. The key for the service provider is to understand the problems of the customers and offer the services to meet customer’s needs and wants. “Caring” is the belief that the service provider is interested in the customers’ welfare, which includes physical and mental health and happiness. The service provider should not take unexpected actions that will negatively affect the customers’ benefits. “Sacrificing” is the customers’ perception that the service provider did the best in making an effort to service them in the past. The service providers must have a willingness to assume fiduciary responsibility (Sirdeshmukh et al., 2002). Finally, the service provider must “respect” their customers. Thai consumers want the service provider to treat them with respect and admiration. This is an interesting issue for Thai society as the “hierarchical system of social prestige” (Patterson and Smith, 2001a, p. 429). It seems to be the norm in every service firm in Thailand that ask their staff to smile and greet with a “Wai”, and say “Sawadee Krub/Kha” to every customer in order to show their respect and admiration toward them.

The results of this dissertation indicate that in order to increase the level of trust, commitment, and loyalty, service providers must have a very good formal and informal communication. As Michela and Holbrook (2001) stated, communication “lies at the heart of a relationship between customers and a firm”. The information that the service providers want to communicate to the customers must be clear and transparent because the relationship would end if the customers didn’t feel comfortable (Spake et al., 2003). In addition, the service provider must be good at solving the problems that may arise during and after the service exchange. This research confirms that the level of trust will be increased if the service provider can handle the problems the first-time the customers experience them (Tax et al., 1998). The customer will trust the service provider if they find that the service provider goes out of their way in order to solve the problem. Furthermore, the customers expect that the service provider must have a very quick and easy method of service recovery.

Another factor increasing the level of consumer's trust is satisfaction. Ellen and Mark (1999) indicated that the two most influential dimensions of satisfaction are cumulative satisfaction, and transaction-specific satisfaction. However, in this study it was found that cumulative satisfaction is the most influential dimension of satisfaction, which is consistent with Gounaris (2002). The customer will trust the service provider if they are always delighted and happy about their decision to choose their service provider. Hence, the service provider must provide customers with good service in order to make them satisfied with their experience.

Managerial Implications for Health Care Service Providers

For health care service providers, it was found that they must show expertise, timeliness, benevolence, integrity, and credibility in order to be a trusted service provider. It is interesting that the most important dimension of trust is "benevolent trust" instead of "expert trust". This means the customers (patients) want the health care service providers (doctors) to show sacrifice and respect. It is the health care service provider's humanistic behavior which refers to the values and actions of the clinician, facility, or system to demonstrate that they have an interest in and respect for their patient's needs and wants (O'Malley, Collins, Haidet, Johnson, Kallen, Sharf, Wray, and Zeno, 2007). The service provider also has to be friendly and act as though the customer is always right. For example, the Choteputsin's family who provides a testimonial for Bumrungrad International Hospital, Bangkok Thailand, posted their admirable statement on the hospital's website as follows:

"I was very impressed by the doctors' hospitality because they took very good care of my father. They also gave me very clear and understandable advice, never got from other hospitals. The doctors treated us as their family's member. I was really very impressed and I felt that they were my family's member too. Thank you very much to doctors" (Choteputsin, 2007).

This may be a key success of the Bumrungrad International Hospital. As Choteputsin indicated, no other hospitals treat them like this. So, in order to gain more customers' trust, commitment, and loyalty, other hospitals must train their physicians

and staff to understand the patient's needs and wants including respect and be friendly. It is a requirement for doctors to have "a good character and qualification of listening and understanding the different kind of problems and aspect of patients" (Phaosavasdi, Taneepanichskul, Tannirandorn, Thamkhantho, Pruksapong, and Kanjanapitak, 2005).

However, benevolent trust is not the only dimension of SERVTRUST to be a trusted health care service provider, but other dimensions (expertise, timeliness, integrity, and credibility) are also important. It is natural that the patients need to see a doctor who is very knowledgeable. As reported from the Medical Council of Thailand, the number of medical error cases is increasing dramatically each year, from only 52 cases in 1988 to 222 in 2004 and 443 in 2006 (Trisonthornwat, 2007). Therefore Thai's patients are concerned about the expertise of the trusted doctor. Moreover, at present, some health care service providers are not concerned with the patient's benefits as their first priority. They against their moral principles and concern only their own benefit because of the change of socioeconomic (Phaosavasdi et al., 2005). Hence, it was found that Thai patients concentrate on the integrity trust of the health care service providers more than ever. Thai patients want doctors who have a great deal of integrity, honesty, and high moral principles. In addition, health care service providers must provide a reliable guarantee and deal frankly with patients.

To increasing the level of patient's trust in health care service providers, the most important factor is "problem-solving". As described earlier, the health care service provider must be good at solving problems that may arise during and after the service procedure. The level of patient's trust will be significantly increased if the health care service provider can handle problems the first-time the patients experience them. The main problems to be dealt with include medical errors and the patient's misunderstandings (Trisonthornwat, 2007). Doctors must be more careful and trained to avoid medical errors. If patients lack understanding, communication with their doctor can perhaps solve this problem, and therefore increase the level of patient's trust. Trisonthornwat (2007) indicated that communication is needed for doctors. He insisted that in general, doctors must explain and communicate in an understandable, friendly and timely manner with a patient. Moreover, if the health care service

provider can make the patient to be delighted and happy with their decision, the patients will trust in the health care service provider. Not only will the level of patient's trust in the service provider increase, but also their level of commitment and loyalty.

Implications for Banking Service Providers

As in the case of health care service providers, the customers of banking service providers also evaluated bank's trustworthiness. This was based mostly on the "benevolence" of the service provider, that (1) had a high standard, and (2) the difficulty of switching (Ball, Coelho, and Machás, 2004). In order to gain "benevolence trust" banking service providers have to show their sacrifice and respect to the customer. Although nowadays banking service providers have applied information technology to assist their customers, personal communication is still needed. Hence, the banking service provider also has to be friendly and act as though the customer is always right.

Furthermore, banking service providers must focus on other dimensions of trust which are timely trust, integrity trust, credible trust, and reputed trust. For timely trust, the customers expect the banking service provider to provide information and services promptly as requested. The bank's staff must also be trained and informed about the full range of the bank's products and services in order to respond to the customer immediately. Large numbers of counter-transaction staff, automatic teller machines and bank branches should be provided. For integrity trust, the customers expect the banking service provider to be honest and have a high standard. The banking service providers must show the strength of internalized value including responsibility, ability to prevent and resolve conflicts, and ability to take the customer's goals as a goal of the bank (Deutsch, 1958). Moreover, the customers also want the banking service provider to be sincere and reliable. This is called "credible trust" which could be presented in the form of reliable promises and clearly stated interest rates and transactional fees. The last dimension of Thai consumer's trust is the most interesting point. It is "reputed trust" which is the combination of "reliable trust" and "signal trust". This dimension indicates that the reputation of the banking service provider in the market is a clue whether or not the provider can be trusted. Reputation

comes from error-free transactions and accurate records, market share, and awards from the external organizations.

As discussed earlier, in order to increase the level of customer's commitment and loyalty, the banking service provider must encourage the degree of consumer's trust using three important antecedents: communication, problem solving, and satisfaction. For the banking service industry, the most important antecedent of consumer's trust is "satisfaction". Ellen and Mark (1999) identify the most two influential dimensions of satisfaction which are cumulative satisfaction (an overall satisfaction evaluated through past experience) and transaction-specific satisfaction (an immediate evaluation of the most recent transaction experience). The banking service provider must satisfy both cumulative and transaction-specific transactions for customers. In addition, communication is also an important antecedent of consumer's trust in a banking service provider. Deutsch (1958) presented evidence that communication will establish trust based on four basic features of a co-operative expression of intention, expectation, reaction, and restoration. The banking service provider can communicate to their customers through both formal (advertising, press release, etc.) and informal (word-of-mouth) ways. Finally, the ability of banking service providers in problem-solving also influences the level of customer trust. The banking service providers' staff must be trained in order to be good at solving problems that may arise during and after transactions. Overall, not only does the level of consumer's trust in a banking service provider increase, but also their level of commitment and loyalty.

Limitations

Test-retest Reliability

Test-retest reliability is the method to assess the constant of a score from one occasion to another (DeVellis, 2003). In this dissertation, the test-retest reliability is not utilized. The SERVTRUST scale may limit to the nature of phenomenon. However, Churchill (1979) indicated that this type of reliability should not be used because of the respondents' memories. He believed that answers from a second survey would not differ from the first. Thus, the two tests would have small measurement error and high correlation of the total score. DeVellis (2003) stated that the problems of test-retest reliability are: (1) the nature of the characteristics of the items; (2) the social desirability; and (3) the change in the situation. He identified that test-retest reliability should be used only when the researcher is confident that the phenomenon is stable. As a result, the author does not employ test-retest reliability in this study because (1) the author can not fully control the phenomenon's stability throughout the procedure of the scale development, and (2) it is difficult to recruit the same 400 of respondents for two tests.

Generalization of the Scale

This dissertation only surveyed the context of health care and banking service industries. It puts constraints on the generalizability of the SERVTRUST scales for other service industries. Moreover, the questionnaires were distributed only to Thai consumers who were in the Bangkok area. Consequently, the SERVTRUST scales may or may not be generalizable to other provinces, as well as other Asian countries. Ellen and Mark (1999), Atuahene-Gima and Li (2002), Zand (1972), and Kumar (1996) suggested that trust is a context or situation specific construct, and not a global trait. Other researchers who want to employ this scale into their study should also be concerned about the generalizability of the scale in the contexts of their study. Hence, before using the SERVTRUST scales in another context, the scale needs to be tested for its reliability and validity.

Reciprocal Inferences

In this study, the author does not present reciprocal inferences. From the literature review, the relationship between satisfaction and trust is still confusing. Chioiu et al. (2002) found that satisfaction acts as the consequence of trust, and leads to loyalty. In their research, they concluded that trust positively affected overall satisfaction in both a high and low-knowledge customer group. They insisted that trust is very important for satisfaction formation in the financial service industry. At this point, satisfaction could be both an antecedent and consequence of trust. However, this study hypothesized satisfaction as the antecedent of trust without testing of the reciprocal inferences because “the value of cross-sectional research is in falsifying hypotheses, rather than proving causality” (Popper, 1959).

Midpoint Responding

After the first and second questionnaire, “don’t know” was provided for the respondents who lacked knowledge with or an opinion of statements. It was found that only nine percent of 500 respondents did not answer “don’t know”, so the data could not be analyzed further. As a result, the author decided to use a seven-point Likert scale. However, this could be a limitation of this dissertation because the respondents were forced to give their opinion to every statement. It was found that 85.80% of respondents answered “neither agree nor disagree”. This is called “midpoint responding”, or MPR because (1) the respondent did not desire to reveal their true opinion, (2) the respondent was uncertain about their position, or (3) there was a lack of interest in an issue (Baumbartner and Steenkamp, 2001).

Directions for Future Research

This section will make suggestions for future research. These include: (1) the test of SERVTRUST scale for other service industries; (2) metric equivalence; (3) the number of response-categories; and (4) the reverse-wording of items.

SERVTRUST Scale for Other Service Industries

As stated earlier, trust was identified as a context or situation specific construct (Ellen and Mark, 1999; Atuahene-Gima and Li, 2002), not a global trait (Zand, 1972; Kumar, 1996). Thus, using the previous SERVTRUST scales, which are developed in the context of health care and banking service industries, seems to be unreliable and invalid. The key question here is what is the SERVTRUST scale for other service industries? There are two possibilities: use the average scale of SERVTRUST, or use only dimensions which appear in both health care and banking service sectors. Both have to be further researched.

For the first alternative, future research could use the SERVTRUST for average scale which was presented in the Table 8.3. This scale was compiled from the average score of each statement of SERVTRUST for health care and banking service providers. Therefore, the average score was employed in the analysis, the same as SERVTRUST for health care and banking service providers. So in general, it could be concluded that the SERVTRUST for average scale represents the scale to measure Thai consumer's trust in other service providers. However, there are some different dimensions of SERVTRUST among these three categories. For average scale, timely trust, benevolent trust, and integrity trust are presented the same as for health care and banking service providers. This shows the consistency of those three dimensions of trust. On the other hand, the drawback of using the average scale is from expert trust and power trust. Expert trust was found only for average scale and the scale for health care service providers. This dimension will therefore not be a good measurement of consumer's trust in low-contact service as bank. For health care and banking services, power trust was not presented. This dimension appears only in the average scale. Hence, it would not be appropriate if this dimension was used to evaluate the consumer's trust in either high (e.g. health care) or low (e.g. bank) contact services. Hence, future research should employ this average scale of SERVTRUST to test its reliability and validity in the context of other service industries.

Owing to the drawback of the first alternative, the author recommends that future researchers use only the dimensions which are in both the health care and

banking service industries. Table 8.4 presents the SERVTRUST scale for other service industries.

Table 8.4
SERVTRUST Scale for Other Service Industries

Dimensions	Items
Timely trust	<ul style="list-style-type: none"> • My service provider has services available when I want them. • My service provider always accommodates my last minute requests. • My service provider responds to my requests immediately. • My service provider shares his/her confidential information with me. • My service provider promptly provides all kinds of information that I want.
Benevolent trust	<ul style="list-style-type: none"> • My service provider has made sacrifices for me in the past. • My service provider is like a friend. • I feel my service provider has been on my side. • In the future, I can count on my service provider to consider how his/her decisions and actions will affect me. • My service provider acts as if I am always right. • My service provider treats me with respect.
Integrity trust	<ul style="list-style-type: none"> • My service provider has a great deal of integrity. • My service provider brings high standards to his/her work. • My service provider is honest. • My service provider has high moral principles.

However, there is a drawback for using the previously suggested SERVTRUST scale for further research because it was a combination of the most consistent dimensions of the SERVTRUST scale which were developed for use in the

context of health care and banking services. Hence the scale's reliability and validity must be re-tested.

Metric equivalence

As stated by Ellen and Mark (1999) trust is context specific and interacts differently with different kinds of customers. As a result, future research should focus on the generalizeability of the SERVTRUST scale or domains common to two or more countries in order to obtain the scale's reliability and validity. Netemeyer et al. (1991), who did research in a cross-national assessment of reliability and validity, stated that reliability and validity are important issues for obtaining accurate information; that "if the psychometric properties of a scale vary widely across countries, conclusions based on the scale may actually reflect artifacts due to unreliability and lack of validity" (p.320). In addition, Raajpoot (2004) identifies three sets of variables which affect consumer's evaluations in different cultures. These three dimensions include personal value, national cultural orientations, and socio-demographic factors. Metric equivalence must therefore be employed to show that the "scale and scoring procedures are equally familiar to informants across countries, and when scores obtained across countries have the same meaning and interpretation" (Bensaou, Coyne, and Venkatraman, 1999, p. 673). Using LISREL statistical software package to examine the metric equivalence, Bensaou et al. (1999) suggested that same-form equivalence, factorial equivalence, and error variance equivalence must be presented. Then it can be concluded that the scores obtained in one country have the same meaning and interpretation in other countries.

Number of Response Categories

As discussed in chapter 5, the first pre-testing used four-point rating scales. Only four of 13 dimensions of the proposed SERVTRUST scale passed reliability testing. This showed that the reliability of the proposed scale was as low as 0.008. Although some lowly correlated item-to-total correlation items were eliminated, the reliability was still lower than the 0.7 cut-off point. This is evidence of an unsuitable

number of response categories. Hence, the author recoded the data to another format and it was found that a three-point rating scale gave the highest Cronbach's alpha. As a result, the scale's categories and anchors were changed. Respondents were asked to indicate the extent to which each statement applied to both types of service provider (health and banking services respectively), with the possible responses: applies a lot; applies a little; or don't know. Then, the questionnaire with the new scale's categories and anchors was distributed to 500 respondents. Unfortunately, the results showed that there was low or no correlation among the items. Only 45 of 500 respondents did not answer "don't know", so the data could not be analyzed further. As a result, this version of the questionnaire seemed to be unusable and further revision was needed. Hence, all items were re-considered and revised based on the two previous data sets. Therefore, a key question for future research is; how many response categories should a scale include?

In the revised questionnaire, the author decided to use a seven-point Likert scale because it is easier to answer than the previous rating scale (Abe, 2004) and it is also the best for a self-administered research design (Hair et al., 2006b). Respondents were asked to show the extent to which they agreed with statements, with the possible responses: strongly disagree; disagree; somewhat disagree; neither agree nor disagree; somewhat agree; agree; and strongly agree. Fortunately, the result of the reliability analysis showed an acceptable Cronbach's alpha for all of the proposed constructs. From this, it can be suggested that for future research, a seven-point Likert scale should be used in consumer research because it provides improved reliability. The author therefore tested the bias between the second and third version of the questionnaire by comparative analysis.

This analysis was done only for the data from the banking service sector. For the second version of the questionnaire, it was found that 90 percent of respondents, or 455 of 500, answered "don't know". This might be the reason for the low reliability of this version of the questionnaire. When the third version of questionnaire was analyzed, it was found that 85.80% of respondents answered "neither agree nor disagree". This is called "midpoint responding", or MPR (Baumbartner and Steenkamp, 2001). Baumbartner and Steenkamp (2001) defined the MPR as "the tendency to use the middle scale category regardless of content" (p.

145). They also indicated that this type of response style occurs based on three reasons: (1) the respondent does not desire to reveal their true opinion; (2) the respondent is uncertain about their position; and (3) the respondent's lack of interest in an issue. These reasons for midpoint responses can be used to explain the phenomenon of "don't know" responses in the second questionnaire. It can be concluded that, although, the scale's categories and anchor were changed, the increase in reliability still contains of response biases. However, this result is better than using only a three- or four- point rating scale.

In addition, Green (1970) suggested that if possible, at least a six-point, or even an eight-point rating scale should be used to secure a response in order to cover the hypothesized space (p.38). Hence, for future research, the test of differences among six, seven and eight-point rating scales should be done. This will reveal the suitable number of categories to be included in Thai consumer research.

Reverse-Worded Items

The author does not suggest that reverse-worded items should be included in the scale in future research. The results of pre-testing showed that Cronbach's alpha of the proposed constructs dramatically decreased when the reverse-worded items were re-coded. For instance, the "confidential trust" construct contained two reverse-worded items which were "my service provider disclosed my personal information to others without my permission", and "some personal information that I gave to my service provider is incorrect". Before recoding, the reliability of this construct was 0.651 and the inter-item correlation matrix was completely positive. After recoding, its reliability decreased, to be only -0.174 and its inter-item correlation matrix was completely negative. For other proposed constructs (credible trust, experiential trust, and signal trust), the result was the same, although the inter-item correlation was not completely negative after recoding. Hence, using reverse-worded items would generate problems (DeVellis, 2003), as a result of response style.

Wong et al. (2003) indicated in their article entitled "Do reverse-worded items confound measures in cross-cultural consumer research?", that the using of reverse-worded items in Asian countries was not a very good idea because the

respondents are not concerned with the differences between positive-worded and reverse-worded items. A mixed-worded format will limit the scale's cross-cultural and nomological validity. Moreover, Rodebaugh, Woods, Thissen, Heimberg, Chambless, and Rapee (2004) analyzed convergent validity and indicated that positive-worded items had a significantly stronger association with theoretically related measures than did the reverse-worded items. Because of the difficulty in using positive and also reverse-worded items, Wong et al.(2003) suggested that only positive-worded items should be employed.

Conclusion

This chapter presented the summary of this dissertation together with the implications of the research, discussion on important issues, limitations of the research, and suggestions for future research. The author concludes that two important theory gaps have been partially fulfilled. These include the lack of study of trust, first, in the context of B2C and also in the context of Asian countries. The author found that:

1. The SERVTRUST scale for health care service providers consisted of 17 items in five dimensions (expertise, timeliness, benevolence, integrity, and credibility).
2. The SERVTRUST scale for banking service providers consisted of 20 items in five dimensions (benevolence, timeliness, integrity, credibility, and reputation).
3. The SERVTRUST for average scale consisted of 18 items in five dimensions (timeliness, benevolence, expertise, integrity, and power).

The results assure the existence of scale reliability and validity. The author has established a measurement scale which can accurately reflect the level of Thai consumer's trust. Consequently, service providers can use these proposed scales as a means to gain their customer's commitment and loyalty. However, there are two important limitations which are the absence of test-retest reliability and the generalizability of the scales. Future research should focus on the generalizability of

the scales in other service industries and countries. Researchers also have to carefully determine the number of response categories and the use of reverse-worded items.