



**ADAPTING SERVQUAL FOR USE IN THE THEORY OF
PLANNED BEHAVIOR IN STUDYING CUSTOMER'S
BEHAVIORAL INTENTION TOWARDS
CONTRACTOR'S SERVICES IN
CHIANG RAI, THAILAND**

ITTIPOON NIRAPHAI

**MASTER OF BUSINESS ADMINISTRATION
IN
ENTREPRENEURIAL MANAGEMENT**

SCHOOL OF MANAGEMENT

MAE FAH LUANG UNIVERSITY

2015

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2015

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This research proposal is complete in nature in that it provides the entire research results and discussions based on the research design procedure outlined. The research proposal is outlined in the following sequence.

Firstly, abstract provides a quick overlook of the research purpose. Secondly, introduction that delineates the context and the theoretical background and literature review of the topics is presented. Thirdly, the research method section explains not only the method and design but most importantly it addresses the outcomes of the questionnaire development which has been analyzed by the use of reliability and exploratory factor analyses. Fourthly, the result section explains the statistical results of the research, and lastly, a comprehensive conclusion section, with implications, is presented.

The author would like to thank supervisor Dr. Tan, Chai Ching for his wholehearted kindness and professionally precise efforts. The ability to pick up the competency of the complete journey of a so-called rigorous research process is never easy and straightforward, which takes the supervisor a huge strength, mental and physical effort to make it happen. A research is a never-ending continuing inquiry process and still much can be done and accomplished further, which the author would hope it can be taken up in the future arising opportunity. The author expects to complete this thesis within one month time after the thesis proposal defense.

Ittipon Niraphai

Independent Study Title Adapting SERVQUAL for use in the Theory of Planned Behavior in Studying Customer's Behavioral Intention towards Contractor's Services in Chiang Rai, Thailand.

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Degree Master of Business Administration
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ABSTRACT

Contractors play a major role in construction projects, for instance, of houses. When the literature is reviewed that relates to construction contractors, the majority are technically driven, with their research objectives mainly focused on the technical aspects of the contractor's project delivery system, i.e. operations qualities in terms of construction delays, cost overruns and delivery failures. Realizing this gap, this research attempts to study how contractors influence the perceptions of clients towards behavioral intentions, customer loyalty and the various attributes of contractor service qualities.

An examination into the literature shows that theory of planned behavior can be adapted. In this research, the concept of SERVQUAL is also exploited in the operationalization of survey instrument, but is based on treating it as base for the client's in a construction project to believe they are in control of their decision making that relates to the quality works of the contractor engaged, and as such, the theory of

planned behavior (Ajzen, 1985), can be adapted to use for predicting the loyalty behavior of the clients towards the contractors. The use of service quality in perceived behavioral control measurement also replaces the subjective approach of the theory of planned behavior in attitudes and beliefs measurements, by now relying on more objective measures of the clients' perceptions towards the actual services experienced. This clearly is a point of entry of contribution to the theory of planned behavior.

Nevertheless, to carry the research forward, questionnaire instruments are not available in the literature, and the research thus uses interviews to provide the necessary themes and justify the patterns of the themes to help guide further literature review as well as questionnaire items development. Thus usefulness of this mixed method approach can lead to higher R-squared strength in multivariate regression analysis which is generally not feasible in the generically deductive approach to research design.

Apart from validating the applicability of the theory of planned behavior framework, this research also provides numerous key points of contributions, such as in terms of implications to the construction contractors. For instance, the ANOVA and correlations analyses of the data indicates that clients of higher income groups tend to perceive the services better serve to their requirements, and the most significant factors are service qualities relating to reliability (i.e. that the company can reliably meet the requirements, in terms of right quality the first time, delivering to the promise as demonstrated in the specifications or standards), tangibles as represented by the quality of works and the uses of quality materials, advanced technologies and equipment in the construction processes, and the assured safety conformance in design, basics of engineering works and in various other aspects of guarantees and warranties. And, although this research cannot provide similar significant evidences on other variables, i.e. behavioral intentions, or other aspects of service quality, and loyalty, but descriptively, the trend is there that the higher income groups perceive the services better serve to their expectations or requirements. Towards this end, the construction contractors would need to be proactive in engaging with lower-income groups to ensure

consistency of service attitude and competencies, and thus to help them build brand image of consistency of the treatments across different income groups. The same implication goes to the aspect of educational levels.

Keywords: Service Quality (SERVQUAL)/ Theory of Planned Behavior/ Subjective Norm/ Pricing/ Behavioral Intention/ Customer Loyalty/ Construction/ Contractor/ Chiang Rai.



TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	(3)
ABSTRACT	(4)
LIST OF TABLES	(9)
LIST OF FIGURES	(12)
CHAPTER	
1 INTRODUCTION	1
1.1 Background to the Research	1
1.2 Research Objective	5
1.3 Justification for the Research	6
1.4 Overview of Research Design and Methodology	9
1.5 Outline of the Research	10
1.6 Definitions	10
1.7 Limitations	13
1.8 Summary	14
2 LITERATURE REVIEW	15
2.1 Introduction	15
2.2 What property Investors Look For?	15
2.3 Theory of Planned Behavior for Selecting Construction Contractor	17
2.4 Service quality	20
2.5 Theoretical Conceptual Model Development	20

TABLE OF CONTENTS (continued)

	Page
CHAPTER	
3 METHODOLOGY	23
3.1 Introduction	23
3.2 Sampling	26
3.3 Questionnaire Development, Reliability and Validity Analysis	27
3.4 Reliability Analysis	29
4 RESULT AND ANALYSIS	39
4.1 Introduction	39
4.2 Respondent Profile	40
4.3 Concluding Research Question 1	51
4.4 Concluding Research Question 2	60
4.5 Concluding Research Question 3	62
5 CONCLUSION AND IMPLICATONS	146
5.1 Conclusion	146
5.2 Implication to Construction Constructors	151
5.3 Limitation and Delimitation	153
5.4 Further Resea	154
REFERENCES	156
APPENDICES	166
CURRICULUM VITAE	179

LIST OF TABLES

	Page
Table	
3.1 Service Quality	29
3.2 General Attitude	33
3.3 Behavior Intention	34
3.4 Subjective Norm	37
3.5 Attitude towards Pricing	37
3.6 Customer Loyalty	38
4.1 Multivariate Regression Analysis for Behavioral Intention towards External Environments	52
4.2 Multivariate Regression Analysis for Behavioral Intention towards Technical Quality	54
4.3 Multivariate Regression Analysis for Behavioral Intention towards Internal Environment	57
4.4 Multivariate Regression Analysis for Customer Loyalty	60
4.5 ANOVA Analysis of Educational Levels on Service Quality – Descriptive	62
4.6 ANOVA Result of Educational Levels on Service Quality	66
4.7 ANOVA Analysis of Educational Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive	69
4.8 ANOVA Result of Educational Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty	71
4.9 ANOVA Analysis of Income Levels on Service Quality – Descriptive	73
4.10 ANOVA Result of Income Levels on Service Quality	76

LIST OF TABLES (continued)

	Page
Table	
4.11 ANOVA Analysis of Income Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive	79
4.12 ANOVA Result of Income Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty	80
4.13 Significant Correlations between Income Levels and Reliability, Tangible	82
4.14 ANOVA Analysis of Comparative Study of Companies made on Service Quality – Descriptive	83
4.15 ANOVA Result of Comparative Study of Companies made on Service Quality	86
4.16 ANOVA Analysis of Comparative Study of Companies on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty	89
4.17 ANOVA Result of Comparative Study of Companies on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty	91
4.18 ANOVA Analysis of the Styles of House to be built on Service Quality – Descriptive	93
4.19 ANOVA Result of the Styles of House to be built on Service Quality	97
4.20 ANOVA Analysis of The Styles of House to be built on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive	100

LIST OF TABLES (continued)

	Page
Table	
4.21 ANOVA Result of the Styles of House to be built on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty	102
4.22 Correlation between Expecting Budget and Other Variables	104
4.23 ANOVA Analysis of the Media of Influence on Service Quality – Descriptive	105
4.24 ANOVA Result of the Media of Influence on Service Quality	110
4.25 ANOVA Analysis of the Media of Influence on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive	114
4.26 ANOVA Result of the Media of Influence on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty	117
4.27 Descriptive Profiles of the T-Test on Gender	119
4.28 T-Test Result on Gender	121
4.29 Descriptive Profile of the ANOVA Test on Marital Status	126
4.30 ANOVA Test Result on Marital Status	130
4.31 Descriptive Profile of the ANOVA Test Result on Age	135
4.32 ANOVA Test Result on Age	141

LIST OF FIGURES

Figure	Page
1.1 Client-Contractor Relationship Structure	2
2.1 The Theoretical Conceptual Model	21
4.1 Gender Profile	40
4.2 Income Profile	41
4.3 Marital Status	42
4.4 Age Profile	43
4.5 Education Profile	44
4.6 Occupation Profile	45
4.7 Style of House Currently Living In	46
4.8 Comparative Number Made Prior to Decision Making	47
4.9 The Style of House Intended to Build	48
4.10 Construction Budget Willing to Invest	49
4.11 Important Media of Impact to Decision Making	50
5.1 The Adapted Theory of Planned Behavior for Customer Loyalty	149

CHAPTER 1

INTRODUCTION

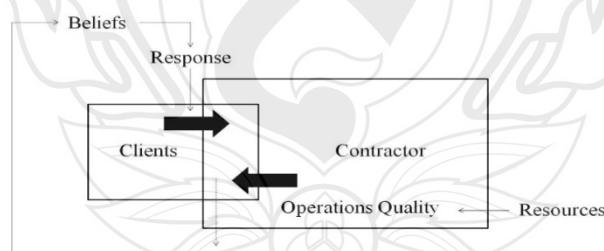
1.1 Background to the Research

Contractors play the major role in construction projects of buildings, port works, roads, drainage, and water works (Topcu, 2004), in particular for design-and-build construction projects (Palaneeswaran & Kumaraswamy, 2001). In Thailand, the relation between a customer (also called as a client, or investor, or employer) and “building contractor (known as builder) is governed by the “Thai civil laws, regulated by the Building Contract Act (BCA) and the Town and City Planning Act of Thailand”(Bangkok Condos, 2015), specifically governed by the chapter “hire of work” (Samui, 2015) which concerns qualities of construction works and the materials as well as other requirements or specifications as clearly stated in the technical drawings. Typically, in a contract, it includes contents, as governed and other aspects of the governing laws.

When the literature is reviewed that relates to construction contractors, the majority are technical driven, with their research objectives mainly focused on the technical aspects of the contractor’s project delivery system (Holt, Olomolaiye & Harris, 1995; Holt, 1998; Ng and Skitmore, 1999; Ng & Tang, 2010; Palaneeswaran & Kumaraswamy, 2001; Russell & Radtke, 1991; Westerveld, 2003), i.e. operations qualities in terms of construction delays, cost overruns and delivery failures (Awazu, 2004; Charoenngam & Maqsood, 2001; Oglesby, Parker and Howell, 1989), Research is lacking in how contractors influence the perceptions of clients, so that the clients can develop firm intention to engage with the contractor services and be a loyal customer.

To study how contractors, influence the perceptions of clients, Figure 1.1 is developed from synthesizing the publications of works relating to contractor-client relationships. Fundamentally, operations quality (i.e. quality, speed, dependability, flexibility, and cost) and service quality (empathy, responsiveness, reliability, tangible, and assurance) actually share the similar attributes (Slack, Chambers, & Johnston, 2010; Tan, 2014), and thus, what has been stressed on the operations side of the equation, as presented in Figure 1.1, can be inferred to the service domains of the same equation, in order to establish continuity of business relationship between the clients and the contractors.

A search through “science direct,” by using key word “construction contractor” and “service quality,” returned 13,316 published articles on 16 November 2015, and the majority of the works skewed towards the right side of Figure 1.1, relating to operations and technical issues. Other more marketing-oriented issues which have been addressed in the extant literature include, for instance, relationship (Sedita & Apa, 2015), collaboration (Adbull Rahman, Endut, Faisol & Paydar, 2014); Haghbin and Davoudi, 2014), sustainability, corporate social responsibility and ethics (Adnan, Hashim, Yusuwan & Ahmad, 2012; Whang & Kim, 2015; Wu, Fang, Liao, Xue, Li and Wang, 2015), and broad-based critical success factors or contractors’ attributes on construction project success (Alzahrani & Emsley, 2013).



Source Developed for this Research (Tan, 2015)

Figure 1.1 Client-Contractor Relationship Structure

The left-hand-side of client-contractor relationship in Figure 1.1 has not been appropriately addressed which deals with how the clients form the trust and belief to the works of the contractor so that they can continue to engage with the contractor. Although broad-based strategy for contractor strategy has been addressed to some degree in the extant literature (Han, Kim, Jang, & Choi, 2010), including trust, to some extent (cf. Manu, Ankrah, Chinyio & Proverbs, 2015), the studies have not been established to foster the development of sustainable client-contractor relationship and help to enlighten how the clients form the trust over the services. This research thus aims to fill the gap, by incorporating how the clients perceive the levels and scopes of service qualities as behavioral control, which is an aspect of trust determinants, and use what they trust in services as intention for further business relationship. The extant literature that describes how perceived quality is used in the theory of adapted theory has been almost non-existent, but nevertheless, Canniere, Pelsmacker and Geuens (2009) exploited relationship quality as concept for behavior control in the theory of planned behavior. The data of Canniere, Pelsmacker and Geuens (2009) were collected from seventy-one apparel retailers throughout Belgium, being situated in the peripheral areas in cities and villages, relating to low to mid-price ranges of services (Canniere, Pelsmacker, and Geuens, 2009). Based on relationship being established, belief or alternatively, as trust, is fostered, which leads to the positive response of consumers, and thus, characterizing as the driving theme of the theory of planned behavior (Ajzen, 1985). This research further extends this concept by the use of service quality.

Rooted in this service oriented theme, further research literature is reviewed relating to contractor services. Although the extant literature publications relating to contractor services provide no systematic organization of the service oriented factors in the clients-contractor relationship management, the fragmented knowledge nevertheless are of useful values in this research. For instance, in project management that deals with contractors, Manu, Ankrah, Chinyio and Proverbs (2015) identify, through 39 in-depth face-to-face interviews with main contractors and subcontractors in four projects, they discovered six important factors that influence trustworthiness and trustfulness during projects, namely change management process (i.e. openness in

dealing with variations), payment practices (i.e. getting paid on time, good payment terms and conditions), economic climate, perception of future work, job performance (i.e. ability to resolve problems, ability to self-manage work package, being honest when there is problem by getting everybody), and project-specific circumstances (i.e. flexibility of budget for the project, and specific performance demands of a project). Nevertheless, these are the views of the contractors and not of the clients. This research thus attempts the efforts on drawing from the views of the clients, with a particular focus in Chiang Rai province of Thailand, as this provincial region is of particular cultural influences, both Thai and the Chinese.

In sum, both the right-hand and left-hand sides of the client-contractor successful relationship structures are important, and certainly Figure 1.1 could further guide the logical conceptions for further research opportunities. But in this research, it aims to contribute to one of the missing link that deals with how customers use the perceptions over service quality as variable to influence their behavioral intention to engage with the contractors, and be loyal to them.

Specifically, among the 13,316 searched results of “Science Direct” journal indexing services, only one paper deals specifically and explicitly on service quality drawn from the perceptions of the clients pursuing design-and-build contractors in public projects in Singapore (Ling & Chong, 2005). To be exact, Ling and Chong (2005) exploited the SERVQUAL themes owed to Parasuraman, Zeithaml and Berry (1985; 1988; 1991; 1993).

In this research, the concept of SERVQUAL is also exploited in the operationalization of survey instrument, but is based on treating it as base for the clients in a construction project to believe they are in control of their decision making that relates to the quality works of the contractor engaged, and as such, the theory of planned behavior (Ajzen, 1985), can be adapted to use for predicting the loyalty behavior of the clients towards the contractors. The use of service quality in perceived behavioral control measurement also replaces the subjective approach of the theory of planned behavior in attitudes and beliefs measurements, by now relying on more objective

measures of the clients' perceptions towards the actual services experienced. This clearly is a point of entry of contribution to the theory of planned behavior.

1.2 Research Objective

The research objective is to study the nature of behavioral intention to engage in a construction contractor's service, through an exploratory nature of research study which explores and investigates the perceptions of the clients in the various domains of service quality, as measures of behavioral control in that the clients perceive that the service quality delivered instills the belief that quality as expected would be matched. The study adapts the concept of the theory of planned behavior. Although service quality has long been challenged and studied in the service industry, there is nevertheless no published data relating to what works of contractor projects that actually satisfy customers significantly. Thus, studying the nature and scopes of services that are perceived to represent the quality of services from the views of the customers becomes important, partly to create the knowledge that can be exploited to improve business performance, practically.

To address this research objective, two hypothetical questions and one demographics/psychographics oriented question are raised, namely as follows:

1.2.1 RQ 1 - Behavioral control represented by service quality and attitude towards pricing, and influence of the opinions of others as subjective norm, can significantly explain the variance of behavioral intention of the client

1.2.2 RQ 2 – Both the behavioral intention and pricing can significantly explain the variance of customer loyalty.

1.2.3 RQ 3 – Do any the following demographic and psychographic variables cause the significant differences on the perceived level of the variables involved in the suggested theoretical model, i.e. gender, marital status, age, education, occupation, monthly income, style of house in the present, comparing the construction companies before making the decision, styles of the house intended to build, the construction budget, and the media that impact to purchasing decision.

1.3 Justification for the Research

Industry wise, construction industry is a major economic driver in both developed and developing countries, which is often able to secure the priority of focus and support of the governments (Soetanto, 2007). According to PWC, (2015), delivering enabling infrastructure construction and development projects in Thailand, i.e. high-speed rail projects, are often the needed catalysts to resolve financial crisis, and the national investment budget on infrastructural construction would reach USD 58.5 billion by 2025. In a recent Kasikorn Bank Report, (2015), construction investment such as in infrastructural aspect would help lift up the long-term growth potential for Thailand. For Chiang Rai, situating in the center of the Great Mekong Region countries (Nucharee, 2012), the potential future development of various industries would boost many emerging new scopes of opportunities for construction engaging projects.

Chiang Rai, being geographically away from the cosmopolitan Bangkok, has been able to preserve the traditional Thai culture, evidenced by the pervading availability of building artifact, exhibition halls holding cultural heritage and the different ethnic villages. According to the Ministry of Social and Human Security (2010), the ability to preserve the Thai culture and blend it seamlessly with the trend of modern lifestyle, technological and industrial development is considered as the heart of “Thainess” (Ministry of Social and Human Security, 2010, p. 70). With the high-modernist state as a global phenomenon, it is important to study whether the traditional Thai culture i.e. the Feng-Shui norm of practice and the auspicious selection of dates for important events, is still influencing the service context. This has, in general, been neglected in the service quality study, which normally exploits the commonly used SERVQUAL instrument (Zeithmal, Bitner, & Grempler, Services Marketing, 2013).

As such, this research attempts to shed light on the significant influence of Thai cultural elements needed in construction service contracts and their project management. In this way, cultural element could be used as the subjective positioning of marketing strategy, as generalizable implication of this research, which aims to focus

on the intangible aspects of the offer or customer experience. Subjective positioning would also need to be balanced by its objective positioning counterpart which refers to the tangible and physical attributes that the construction contract service offers to customers. Both tangible and intangible or subjective and objective marketing positions are needed to establish unique value-driven targeting, positioning and differentiation strategy for competitive advantage (Bowie & Buttle, 2004).

Operationally, as noted in (McGeorge & Zou, 2013), the construction industry has been blamed on the inability of the industry to see the big picture and be more service oriented, i.e. in partnering with the construction contractor (Hellard, 1995). Part of the missing piece of information is about the perceived “value” by the customers (i.e. the real estate or construction project customers) which is still not rigorously studied and validated by the researchers. A key reason for not having a clear picture on value in construction projects such as contractor works is because of the complexity and vagueness of the attributes or features composed of “value” in construction (Fong, 1996). This research makes an attempt to study not only what is “valued” by the real-estate clients but also how the perceived values, i.e. in terms of different attributes of service quality, towards contributing to satisfy the clients and as well as in fostering the loyalty commitment of the clients.

The other issue that deals with construction project is pricing for the clients or cost for the contractors which may have some significant impact to how client would commit to a construction project investment. Uncertainty of cost control can be seen from the numerous types of construction contracts to be characterized according to the cost control ability, i.e. as lump-sum contracts, unit-price contracts, cost-plus contracts, or other more innovative concepts such as design-build, design-build-operate, bonds (guarantees), bid bonds “i.e. that guarantee the contractor to enter into a contract if determined to be the lowest responsible bidder and will provide the required payment and performance bonds, and insurance policies, or performance bonds i.e. that guarantee the performance of the contract requirements at the stated bid price” (Schexnayder & Mayo, 2003).

In sum, to better understand the perceived value by the real-estate clients in engaging construction contractor engagement, both pricing and different aspects of service quality, including perceived social or subjective norms that could influence the attitudes of the clients, would be taken as the possible determinants in this research, to study how they would influence client's intention and loyalty behavior.

The available literature is prevailed with the research findings of the factors that drive prospective buyers or investors to consider in making a decision on properties (Ratchatakulpat, Miller, & Marchant, 2009). Nevertheless, research results are not available that address how these customers decide on the engagement criteria with the construction contractor for their housing investment. Although these two are different domains and relate to the same application context, namely property investment, but one involves with consumer behavior on the investment decision, while the other deals with consumer behavior over the choice of construction contractor only. The key differentiation is that the latter, the choice of construction contractor, is more technical in nature.

Nevertheless, it is still important to study the bases for customers to decide on their housing investment, i.e. the buyer preference variables. Factors that the residential property investors prefer include domains of property physical, distance of the property to various venues, the environment of the property (Daly, Gronow, Jenkins, & Plimmer, 2003), and behavioral control i.e. through financial capability (Biamukda & Tan, 2015). A further examination of these research findings indicate that there is certain bridging point between property choice and construction choice – in functional, technical area of services offered.

Technical service attributes include, for instance, maintenance and interior design, size and configuration of the building, external “property scape”, appearance, and some of the infrastructural issues (Ratchatakulpat, Miller, & Marchant, 2009). These published attributes, together with the themes identified in the qualitative interviews, provide the bases for questionnaire development in this research.

1.4 Overview of Research Design

Fundamentally this research exploits inductive-deductive oriented approach in the research effort, which can be outlined as follows: First, the initial attempt in the literature search shows that there is a lack of publications concerning the service quality aspects of the construction contractors, and thus, the researcher skillfully incorporates the use of mixed method, by first engaging a series of interviews to identify the right themes of variables to proceed, as well as the possible interrelationship structure of the themes or variables. Second, based on the interviews-based findings, of the themes and their possible relationship structure, researcher proceeds to deduction stage, by focusing on the literature review based on the themes identified. This stage culminates in a conceptual model which is deemed feasible to provide the overall direction and guideline for this research. Third, based on proposed conceptual model and the research questions raised, as well as the operational definitions given in Chapter One, questionnaire-based survey instrument is developed, and is appropriately tested in pilot-testing stage, by engaging the subject expert in research and business management (the advisor) as well as few of the clients of the construction contractor services to arrive at the final set of the questionnaires. Reliability test is secured by the use inter-item consistency testing tool of SPSS version 20, represented by Cornbrash's Alpha coefficients. Fourth, the final data collection stage is initiated, and the data collected would then be subjected to the systematic descriptive and inferential statistical analysis, which an attempt on critical analytics aspects to help enrich the segmentation oriented insights identification. Fifth, the data analyzed would be systematically concluded, and the appropriate suggestions for implications, theoretically and on the practical domains, would shed light on the possible angles for the contribution of this research, and finally, the research concludes in suggesting areas for further research.

1.5 Outline of the Research

The structure of the thesis is organized in the five-chapter format as recommended by Nenty (2009) and Tan (2014), which Chapter One provides a snapshot of the overview of the entire thesis, but with a particular emphasis in justifying the significant meaning of the research, within the given background of the industry. In addition, to prevent confusion over some of the terms used in this research, operational definitions of the terms are also addressed in Chapter One. Having established the overview, Chapter Two provides a critical literature review which delineates not only the roles and significance of the individual constructs involved but also most importantly the structure and patterns of the interrelationships of the constructs. In Chapter Two, numerous research questions are also raised which are aimed to address the research objective that is raised. Chapter explains the methodological procedure in the way the research is to be approached, by first using interviews to help identify the themes (the variables) which guide the literature reviews in Chapter Two. The knowledge of the literature review, together with the interviews, help the researcher to design the reliable questionnaire survey instrument. Upon exploratory tests on the data collected, Chapter Four studies the data by the use of SPSS software, version 20, and in particular descriptive and inferential statistics techniques are used. In Chapter Five, the results are interpreted and concluded within the given context of the extant literature but with an added view to shed light on the contributions and also many dimensions of the implications are also presented.

1.6 Definitions

Definitions to terms which may cause any unnecessary confusion in the research efforts will have to be clarified (Perry, 2000), which can be accomplished by assigning meaning to the terms by specifying what is to be measured and how it is to be measured, according to the operational definition of the variable (Smith & Albaum, 2005).

1.6.1 Contractor

Contractor has been known to play a major role in any construction projects (Palaneeswaran & Kumaraswamy, 2001) as it has direct impact in the delivery of the final project outcomes i.e. in terms of acceptable standard, on time, and within budget (Tpocu, 2004). According to a Thai Law (Thai Law, 2014, p. 1), a contractor “shall construct the structure in conformance with the plans, specifications, and breakdown and binder receipt signed by contractor and owner, and will do so in a workmanlike manner.”

1.6.2 SERVQUAL

SERVQUAL is widely known as a survey instrument aimed to study and examine the quality of a generic service, which is normally known to have five service characteristics: reliability, responsiveness, assurance, empathy and tangibles (Parasuraman, Zeithmal, & Berry, 1985; 1988; 1991; 1993). According to an interviews-based research conducted by National University of Singapore (Ling & Chong, 2005), with design and build contractors that engaged with public projects in Singapore, “contractors who are reliable will keep clients’ interest at heart and are proactive in dealing with problems” (p. 819), and contractors who are responsive show commitment and efforts to hand over the project on time so as “not to affect clients’ cash-flow and business operations” (ibid, p. 819), and contractors who are shown to have assurance quality are those who have “competency in performing technical duties” (ibid, p. 819), and contractors who show empathy “provide good after-sale service and make an effort to understand clients’ needs” (ibid, p. 822), and tangibles are the typical product oriented characteristics of the project. The exploratory interviews based summary of SERVQUAL in contractor-client relationship provides a research gap for this research to explore further, based by using inductive and deductive research approach.

1.6.3 Subjective Norm

Subjective norm is the recognition of social pressure and preferences to, for instance, the clients that engage the contractor's services (Ajzen, 1991), which usually reflect the individual's knowledge or related comment about what is important for others (Finlay, Trafimow, & Moroi, 1999), and thus it measures the normative of belief without following the motivation. To measure subjective norm the survey instrument will seek the clients to indicate how the few others influence their decision making. Specifically, for this research, the subjective norm is factor that influences the behavior in part of the selection, the influence of the social condition and the opinion of people (i.e. family and friends). In other part the subjective norm direct affect to the decision making.

1.6.4 Behavioral Intention

Behavioral intention is a construct which indicates the intention of the clients to engage with contractor services, as a result of the ability of the contractor to meet the different facets of the service requirement. Behavioral intention has played a significant role in consumer behavioral theory (Blythe, 2008) and is also conceived as a "planned" behavior (Ajzen, 1985; 1991) of the clients towards further engagement with the services.

1.6.5 Customer Loyalty

Customer loyalty states the likelihood of a customer to return for the products or services offered (Bowen and Shoemaker, 1998, which can be conceived at two levels, at the initial stage of intentional behavior, and at the more matured stage of attitude formation. These two characteristics provide the theoretical linkages to the theory of planned behavior, which allows the theory to be adapted for use to predict customer loyalty in an application context that has very minimum published knowledge to be informed. The attitudinal state of loyalty implies a relatively higher level of customer's attachment and bonding to the company. Specifically, for this research, the

customer loyalty is described by the clients recommending the product or service to other and being proud to tell others about the company.

1.7 Limitations

This study is limited to analyze the perceptions and attitudes of the customers who have had engaged with the construction contractors in the housing building project, in order examine the interrelationship structure between the service enabled beliefs of the customers, factor of pricing and subjective norms in influencing the future intention of the customers and their loyalty to the construction company for further contractor investment projects.

In particular, this limitation is due to the following factors:

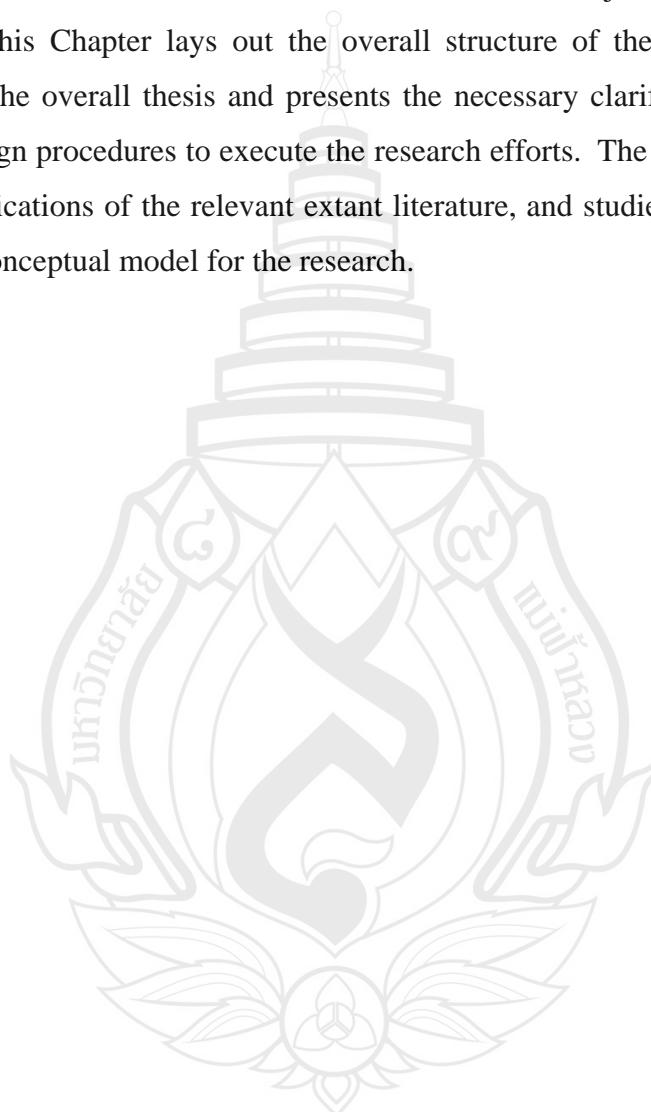
1.7.1 The participants are approached based on convenience and snowballing basis, and thus the types of the building project are diversified in nature, which implies projects of small-scale and large-scale are intermingled and thus the generalizability base of this research is lacking of contextual focus.

1.7.2 The measurement instrument underpins only to understand the current state of perceptions of the customers towards the levels of service quality, in the behavioral control variable of the adapted theory of planned behavior, which lacks the study of their expectation such as in terms of the levels of “importance.” As a result of this lacking in the measurement instrument, the research is lacking certain attitudinal or expectation information to help explain the nature of significant differences of some of the demographics and psychographic variables.

1.7.3 The other obvious limitation is sample size, and because of its limitation, the population generalization has to be taken cautiously.

1.8 Summary

Judging by the research gap which depicts a lack of study investigating the nature of services and behavioral intentions of the clients in a construction contractor service environment, this research thus raise the research objective and three research questions. This Chapter lays out the overall structure of the research, provides a snapshot of the overall thesis and presents the necessary clarifications to terms and research design procedures to execute the research efforts. The next chapter will drill into the publications of the relevant extant literature, and studies and organizes them into useful conceptual model for the research.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter, by reviewing into the extant literature, studies how customers form their intention by forming the beliefs through the quality of the construction contractor services which they felt matching to their expectations, including factor of pricing in the influence. The theory of planned behavior would be reasoned for the theoretical adaption in this research. As a result of the literature review, a conceptual model is proposed, together with the stated research objective and the three research questions needed to validate the conceptual model.

2.2 What Property Investors Look For?

The available literature is prevailed with the research findings of the factors that drive prospective buyers or clients to consider in making a decision on properties (Ratchatakulpat, Miller, & Marchant, 2009), research results are not available that address how these customers decide on the basis to decide on the engagement criteria with the construction contractor for their housing investment. Although these two are different domains but relate to the same application context, namely property investment, but one involves with consumer behavior on the investment decision, while the other deals with consumer behavior over the choice of construction contractor only. The key differentiation is that the latter, the choice of construction contractor, is more technical in nature.

Nevertheless, it is still important to study the bases for customers to decide on their housing investment, i.e. the buyer preference variables. Factors the residential property clients prefer on include domains of property physical, distance of the property to various venues, the environment of the property (Daly, Gronow, Jenkins, & Plimmer, 2003), and behavioral control i.e. through financial capability (Biamukda & Tan, 2015). A further examination of these research findings indicate that there is certain bridging point between property choice and construction choice – in functional, technical area of services offered.

Technical service attributes include, for instance, maintenance and interior design, size and configuration of the building, external “propertyscape”, appearance, and some of the infrastructural issues (Ratchatakulpat, Miller, & Marchant, 2009). These published attributes, together with the themes identified in the qualitative interviews, provide the bases for questionnaire development in this research.

Another important variable that is particularly revealing from the result of the interviews with the clients that deal with main contractor’s services on construction matters in Chiang Rai, Thailand, is Feng Shui. According to Hale (2006), Feng Shui has been a part of the business culture in Chiang Rai, and is perceived as a powerful force in shaping and improving people lives, as subjective norm in the theory of planned behavior that aims to position people within their environment to their best advantages. As an environmental science, Feng Shui is both a normative belief as well as evidences based approach that one uses to make sense of the world. As a result, Feng Shui has been transformed into a philosophical system that has the capacity for change built into the practices and the Feng Shui system (Hale, 2006).

Relating to construction, Feng Shui is a philosophical system, or an environmental science, from the normative belief of the Chinese and the ancient Thai, that can help to better position houses and offices, both outside (i.e. garden and layouts) and inside (i.e. decoration, layouts, colors, and designs), so as to create an environment conducive for better living and positive psychological effects. In short, “Feng Shui is about interpreting environments, and practitioners see a number of different approaches to connect with the energy or feel of a place, and fine-tune it to make it work for those

living or working there, by the guidelines of Feng Shui" (Hale, 2006). For instance, Yin and Yang principles are also parts of the guiding principles of Feng Shui which represent two forces, negative and positive, "that act together in order to create energy, and each attempts to gain dominance. Where one achieves dominance, an imbalance occurs, and so when one force becomes too strong its influence subsides and the other takes over" (Hale, 2006, p. 12). There are also other guiding principles in Feng Shui, such as by the use of five element concepts, namely wood, fire, earth, metal and water. For instance, "Water enables Wood to grow, Wood enables Fire to burn resulting in ashes or Earth, in which forms Metal, which in liquid form resembles Water. Or, in another cycle, Water extinguishes Fire, and in turn is soaked up by the Earth, which is depleted of energy by Wood in the form of trees, which can be destroyed by Metal tools" (Hale, 2006, p. 14).

2.3 Theory of Planned Behavior for Selecting Construction Contractor

Theory of planned behavior is a very robust theory that attempts to explain the behaviors of the customers, consumers, or the communities, or organization directed at some target object (Peter & Olson, 2010). Behaviors are of current and the future (Bagozzi & Warshaw, 1990). The target object chosen is the customer decision over the choices of construction contractor.

The robustness of the theory of planned behavior has been evidenced from the wide varieties of applications and research works in the extant literature. The following provides some of the list of applications

- 2.3.1 Nutrition-related behaviors of the youths (Shaun, 2015)
- 2.3.2 Dietary patterns of consumers (McDemontt, 2015)
- 2.3.3 Breast feeding practice (Guo, Wang, & Huang, 2015)
- 2.3.4 Traveler's pro-environmental behavior in green lodging (Han, 2015)
- 2.3.5 Recycling practices (Botetzagias, Dima, & Malesios, 2015)

2.3.6 Pharmacists' intention to utilize a prescription drug monitoring program database (Fleming, et al., 2014)

2.3.7 Online grocery buying intention (Hansen, Jensen, & Solgaard, 2004)

2.3.8 Customer dissatisfaction responses in restaurants (Cheng, Lam, & Hsu, n.d.)

Nevertheless, the application of the theory of planned behavior in the study of customer decision over construction contractors is non-existent, and this provides a knowledge gap to fill, and an application field to be examined.

Historically, theory of planned behavior (TPB) is an extended concept and work from the theory of reasoned action (TRA) (Ajzen, 1985; 1991). TRA relies on consumer's attitude toward the behavior and the influence of subjective norm to predict consumer's behavior towards a target object (Fishbein & Ajzen, 1975). The inherent weakness of TRA is that it is concerned with "rational, volitional, and systematic behavior" (Hansen, Jensen, & Solgaard, 2004), but in the practical world, many of the target behavior is not completely under the consumer's control (Sheppard, Hartwick, & Warshaw, 1988), and this leads to the development of TPB (Ajzen, 1985; 1991), by incorporating a behavioral control construct, and an additional action term.

Although TPB has not been empirically and theoretically addressed for consumer decision over construction contractor choices, the extant literature review do provide some important guidance towards the impacting factors involved:

2.3.9 Reducing contractual uncertainty (Walker, 2002) – This provides a guiding direction for the research to use qualitative interview that attempts to seek the customers to identify their preference and the factors that could drive the reduction of contractual uncertainty.

2.3.10 Consistent quality and value of the contractual works, which may involve input stage, in-process stage, and finished goods (Janipha, Ahmad, & Ismail, 2015).

2.3.11 Budgetary control (Jiang, Zhong, & Hu, 2010)

2.3.12 Favorable built environment (Andelin, Karhu, & Junnila, 2015)

While most of the contractor's attributes on construction project success focuses on the so-called Iron Triangle (on time, under budget, and according to specifications) (Zeithmal, Bitner, & Grembler, 2013b) this research focuses on the soft specifications and requirements, namely the service quality of the contractor works expected by the real-estate clients, but also includes technical performance requirement (Wite, 1988).

By the use of the theory of planned behavior and service quality as its behavioral control mechanisms, this research can lead to establish shared value between the contractors and the real- estate clients, essentially establishing customer trust and loyalty. Specifically, in this research the theory of planed behavior (TPB) involves three important constructs namely the attitude towards pricing and general aspect, subjective norm (manifested by the influence of opinion of the other), and behavior control. In this research, behavior control construct is measured by adopting the service quality concept. In other words, the inventors would have the confidence that their investment behaviors are under control when the construction contractor' s services are of reasonable, satisfied question.

Pursuing the understanding of service quality through a survey measurement was made widely popular by Parasuraman, Zeithaml, & Berry, (1988) introduced a multiple- attribute SERVQUAL instrument to capture five dimensions or attributes of service quality, known as reliability (i.e. dependability), responsiveness(i.e. prompt service), assurance (i.e. knowledge to instill confidence of the customers toward the service provider, and courtesy), empathy (i.e. caring, individual attention to the customers), and the tangible provision of the company.

Putting aside the multi-dimensionality of the service quality and trying to drill into the fundamental, service quality has to be able to characterize the process of the service in which the customer is exposed to (Lovelock, Patterson, & Walker,2001). Further it was noted that service quality should embrace both tangible and intangible characteristics (Lovelock & Wirtz, 2004), as all services have both tangible and intangible elements (Shostack, 1977).

2.4 Service Quality

Nevertheless, to be really successful in the use of service quality concept, it is important the implementation is customer oriented (Kearns, 1990), and having rooted in this understanding, this research approaches with the use of mixed method that first makes an attempt to locate the themes of the services the customers truly stress upon.

As such, the SERVQUAL instrument derived for this thesis is self-developed from interviews-based data analysis while adapting the generic concepts advocated in Parasuraman, Zeithaml, & Berry, (1988). Interviews provide the rich picture about what exactly the customers are aiming for in the services, which provides a way to fill the inherent gap of the SERVQUAL instrument. This aligns with the reality that customers are the ones that actually define quality (Berry, 1988).

In addition, the adapted version to measure service quality exploits the three essential components of a service, as suggested in (Gronroos, 1994), being the technical (i.e. the actual visible components), function (i.e. the expressive performance of the services such as in terms of the care and attention to the customers), and image qualities. These three components are to be included within the five generic domains of the service attributes known as “tangibles, reliability (i.e. consistency of performance), responsiveness (i.e. willingness or readiness of employees to provide the service, in speedy manner), empathy, and assurance advocated” (Parasuraman, Zeithaml, & Berry, 1988).

2.5 Theoretical Conceptual Model Development

The literature review can be summarized in the following theoretical conceptual model, as shown in Figure 1, which includes three research questions in order to provide the holistic picture of the interrelationship between the service quality, subjective norm, and pricing that effect to the behavioral intention and customer loyalty.



Figure 2.1 The Theoretical Conceptual Model

Specifically, Figure 2.1 reflects the adapted and extended version of the theory of planned behavior (Ajzen, 1985; 1991), by extending to customer loyalty as the representative of the client's behavior.

It is useful to study the state of customer loyalty as it reflects how the customers feel to the company's products and services and the intensity of the affection (Smith, 1998), which behaviorally, customer loyalty indicates the likelihood of a customer's returning to purchase the products or services (Bowen & Shoemaker, 1998).

As customer loyalty formation is a gradual formation nature, empirical research evidences show that it is necessary to delight and match the expectations and needs of the customers through value-creating, responsive, reliable, empathic, and quality-assured services oriented processes (Gummesson, 1987; Gronroos, 1990). As far as process orientation is concerned, the nature of the services processes and the quality outcome would be contextually contingent. Other research evidences that show the process centric role such as customized services toward realizing loyal customers can be found (Cannie, 1991), Barskey, (1995), Bhote, (1996), and Zeithaml and Bitner, (1996).

The three of research question are stated as follows:

2.5.1 RQ1: Behavior control represented by service quality and, attitude towards pricing, and influence of the opinions of other as subjective norm, can significant explain the variance of behavioral intention of the client.

2.5.2 RQ2: Both the behavioral intention and pricing can significance explain the variance of customer loyalty.

To study the roles played by the different demographic variables, the following research question is raised.

2.5.3 RQ3: Do any of the following demographic and psychographic variables cause the significance differences on the perceived level of the variables involved in the suggested theoretical model?

- 2.5.3.1 Gender
- 2.5.3.2 Marital status
- 2.5.3.3 Age
- 2.5.3.4 Education
- 2.5.3.5 Occupation
- 2.5.3.6 Monthly Income
- 2.5.3.7 Style of house in the present
- 2.5.3.8 Compare the construction companies before making the decision
- 2.5.3.9 Style of house that want to build
- 2.5.3.10 The construction budget
- 2.5.3.11 The media that impact to purchasing decision

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methods and justifies how they were selected. Section 3.2 outlines the research design procedure, which are then followed by describing the sampling procedure in Section 3.3 and finally this chapter presents how the questionnaire instrument was developed, including stating the reliability test results of each of the constructs, being confirmed through exploratory factor analysis.

This research uses both inductive and deductive approach to design the research approach. In other words, a mixed research method is used. While the former attempts to learn by experience, the latter relies on given theoretical base to provide the rules needed for analysis of the investigated.

Thus, mixed method allows an intertwined cyclical relationship between data and knowledge, in which theory is a mechanism that enables the researcher to provide a formal structure for organizing, analysis and evaluating the data- knowledge relationship (Halbert, 1965). In this research, while qualitative interviews- based method provides the rich data of the investigated, namely “service quality and the customer satisfaction, in the context of construction businesses, the quantitative- based survey method uses the existent theoretical structure of service quality” (Zeithmal, Bitner, & Grempler, 2013a), in the five service performance domains, enables the survey instrument to have organize structure. This allows content (i.e. substantive validity) and construct validities to be developed, rooted also in robust reliability platform.

Mixing qualitative and quantitative data also is a means of triangulation. According to Miles & Huberman, 1984) and Yin, (1994), triangulation is achieved by researchers searching for patterns of themes in the qualitative interview data analysis and that similarly occur in the quantitative-based survey acquired data. The triangulation provides the necessary validity and reliability for the research finding.

Thus, specifically the research design is listed as follows:

3.1.1 First , to obtain the possible themes for the exploratory research, interviews are conducted with five clients that have known to the researcher which had shown loyalty in that they have been using the same contractor for construction projects, such as for business expansion purposes. Interviews are conducted in an attempt to study what motivate them to engage with them behaviorally (i.e. loyalty) and attitude wise (i.e. intention).

3.1.2 After the interviews, themes that motivate the clients to behaviorally intend to engage with the contractors are identified. These themes, together with the contents, are them sorted out which have shown to align with the categories of SERVQUAL (Parasuraman, Zeithaml, & Berry, 1985; 1988; 1991; 1993) in the variables of the so-called belief domains that aim to operationalize the behavior control variable of the theory of planned behavior (Ajzen, 1985; 1991). These themes or constructs are concepts which are the conscious intentions of the researcher to be used for this specific research purpose. When the themes or constructs are made instrumentally measurable, they can be called or known as variables, which take on values spanned across 1 to 5 of the Liker Scales. Through themes that are directly revealed from the interviews, content validity can be ensured, which provides valid content measurement of the subject, theme, and topics. In other words, “content validity provides the quality of the instrument that concerns how the scale or instrument represents the universe of the property or characteristics being measured” (Smith & Albaum, 2005).

3.1.3 The patterns of relationships of the constructs or variables are studied to arrive at a theoretical, conceptual model that explains the interrelationship structure of the variables, from which research questions are raised. Research questions are raised instead of propositions for the fact that the themes are driven by interviews and thus the nature of the questionnaires development is broad- based in nature, and in addition, as

no other research publications are available, the exploratory nature of this research is best attended by the use of research questions. Nevertheless, both formats, whether research questions or hypothesis, or proposition statement, share the same objective – to address the research objective and to provide supporting evidences to validate or to study the structure of relationships of the themes.

3.1.4 Each of the construct or variable is then measured by questionnaire items that match with its “operational definition, which assigns meaning to a variable by specifying what is to be measured and how it is to be measured, and is a set of instructions defining how the researcher is going to treat the variable” (Smith & Albaum, 2005). Having rooted in appropriate operational definition, under the context of theory of planned behaviors, construct validation is preserved, not only indicated by the ability to predict the phenomenon of behavioral intention, its nature and customer loyalty towards the contractor’s services in a construction project, “but also in the ability to align with the criteria that permit answering theoretical questions of why it works and what deductions can be made concerning the theory underlying the instrument” (Smith & Albaum, 2005).

3.1.5 The themes identified as well as the questionnaires developed are critically assessed and evaluated by consulting back with the five loyal clients, as well as the research subject expert (supervisor of this thesis). While the five loyal clients of contracting services help shed light on the relevancy of the contents, supervisor helps to provide critical assessments to the reliability of the instrument through alignment of the questionnaire items and contents with the operational definition, i.e. attitudes and behavioral intention.

3.1.6 After the pilot test, final data collection proceeded. Data collected would first be subjected to internal consistency test, which “refers to estimates of reliability within single testing occasions, which in a sense is a modification of the alternative form approach but differs in that alternatives are formed by grouping variables” (Smith & Albaum, 2005). Exploratory factor analysis is used also to help identify the distinctive dimensions of the same construct, for instance exploratory factor analysis identifies three dimensions of behavioral intention, namely behavioral intention towards external environment, technical quality and internal environment.

Based on strong footing of evidences of reliability and exploratory factor analyses and descriptive statistics, multivariate statistical analysis, which is the main inferential analytics technique, is used to make conclusion. Multiple regression method is the main tool to help address each of the research questions raised, complemented by ANOVA and T-Test and correlations studies. For instance, while the F-test indicates that the overall regression model is significant, it does not follow that both the regression coefficients contribute significantly to overall accounted-for variance, and thus further t-tests of each of the regression coefficients are conducted to arrive at the final conclusion.

3.2 Sampling

The data were collected from the clients that engage with the contractor's services, in construction project. The data collected were from the different districts which allow this research to absorb as much variants due to lifestyle and preferences as possible. The construction project works involve home building, commercial building, town house, housing estates, government buildings, hotel, and dormitories. Contractor is main contractor which does not involve sub-contractor works, which implies that the client has extensive direct experiences with the services of the contractor, and any emerging problems would be directly addressed to the main contractor (Topcu, 2004).

The area that collect the information are the district in Chiang Rai such as Muang Chiang Rai, Mae Laos, Mae Sai, Chang san, Mae Jan to collect the different information from the customer, In the different area will be the different in behaviour and the living style (Lentnek, Lieber, & Sheskin, 1975).

3.3 Research Design

In this research, the mixed inductive and deductive approach exploits the experiential learning theory (Kolb & Kolb, 2002) that bridges data and knowledge (theory) through thematic analysis (critical reflection) and deductive analytics.

Nevertheless, in the mixed method, a rigid a priori theory is not maintained, and this allows the empirical data to lead with the emerging themes. Once the qualitative-based themes are identified, the themes then guide the scopes and depth of the literature review to search for the type of theory which can explain the phenomena. This is a skillful usage of grounded data as compared to the complete efforts spent on theory development (Glaser, 1990), which also leads to the groundwork for analytics generalizability (Eisenhardt, 1989).

Inductive data grounding can help some of the fuzzy and unstructured characteristics of the contractor's services since not much information is available in the existent publications

3.3 Questionnaire Development, Reliability and Validity Analysis

While service quality instrument for constructor-engagement in the property investment is not available, partial knowledge that relates in particular to the technical quality attributes can be located. For instance, in Ratchatakulpat, Miller and Marchant (2009, p. 282), property buyers are considered to stress on some of the technical service attributes that include, for instance, maintenance and interior design, size and configuration of the building, external “property cape”, appearance, and some of the infrastructural issues (These published attributes, together with the themes identified in the qualitative interviews, provide the bases for questionnaire development in this research.

To operationalize “property cape” (Ratchatakulpat, Miller, & Marchant, 2009) property clients, as identified through interviews-based method, use both rational and somehow irrational approaches (i.e. Feng Shui and selection of auspicious date for construction works etc.) to help make optimum decision, especially in areas of environmental fitness, both internal and external.

The instrument for service quality adapts the SERVQUAL concept of Parasuraman, Zeithaml, & Berry, (1988) as well as some of the fundamental service operations issues from Lovelock, Patterson, & Walker, (2001), Gronroos, (1994), and (Shostack, 1977), (Parasuraman, Zeithaml, & Berry, 1988) introduced a multiple-

attribute SERVQUAL instrument to capture five dimensions or attributes of service quality, known as reliability (i.e. dependability), responsiveness (i.e. prompt service), assurance (i.e. knowledge to instill confidence of the customers toward the service provider, and courtesy), empathy (i.e. caring, individual attention to the customers), and the tangible provision of the company. The original version of SERVQUAL was based on a 22-item, seven-point Likert Scale. Interviews-based thematic analysis is needed to provide a more customer oriented version of the SERVQUAL that deems applicable to the construction contractor businesses located in Chiang Rai province of Thailand. This is necessary as not all of the questions were immediately applicable to the construction contractor's context. In addition, construction contractor's project activities are highly complex, which may skew towards highly technical issues, while also needing the soft intangible and empathic caring and services.

Putting aside the multi-dimensionality of the service quality and trying to drill into the fundamental, service quality has to be able to characterize the process of the service in which the customer is exposed to (Lovelock, Patterson, & Walker, 2001). Further it was noted that service quality should embrace both tangible and intangible characteristics (Lovelock & Wirtz, 2004) as all services have both tangible and intangible elements (Shostack, 1977).

The fundamental service oriented attributes are important as published knowledge about the nature of service quality for the housing contractors is nearly non-existent, and thus the instrument is designed by taking a more customer-oriented view, which is made possible by first engaging with interview-based thematic analysis of the data. The customer-oriented themes would then be organized with the five-domain categorization of SERVQUAL in the study of contractor's service quality. Thus, this research develops a set of unique SERVQUAL instrument specifically applicable to the contractor business situations in Chiang Rai, Thailand. This ensures the service quality possesses the content validity within the robust construct validity of the original SERVQUAL from (Parasuraman, Zeithaml, & Berry, 1988).

The ability of the interviews-driven themes to match the SERVQUAL's five domains of service quality attributes give a sense of triangulation, but with added advantage of substantial or content validity that has high relevancy to the contextual issues on hand. This also leads to an understanding of a total service concept, which

involves some of the key structural choices i.e. the physical aspects of the contractor's service delivery system, and infrastructural choices such as the scheduling and decision making oriented issues in the services. The service quality instrument also is attempted to consider the integration choices for the customers that relate to pricing, all the way to quality management both of the building, its landscape and the external environment.

3.4 Reliability Analysis

The following Tables 3.1 to 3.6 present the questionnaire items that are factorized by the exploratory factor analysis technique and their reliability coefficients are also given, known as Cornbrash's Alpha.

Table 3.1 Service quality

Construct	Questionnaire Items	References	Cornbrash's Alpha
Service	1. The company is high experienced in producing construction works	Developed by researcher	$\alpha = 0.932$
Quality			
Reliable	2. The company always delivers the product and service of quality right the first time 3. The company provides its service at the time it promises to do so 4. Has trustable in company image 5. The company keeps customers informed about when service will be performed 6. When company promises to do something by a certain time it does so – delivery is always on time		

Table 3.1 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
	7. When problem arises the company shows a sincere interest in solving it		
Service	1. The company always finishes the job before or within the	Developed by researcher	$\alpha = 0.877$
Quality			
Responsiveness:	specified period		
Respond	2. Flexible to meet any additional needs or changes required by the customers i.e. add or reduce the building materials needed in the construction.		
	3. Employees in the company give us prompt service		
	4. Employees in the company are always willing to help us		
	5. Employees in the company are never too busy to respond to our request		
Service	1. Can easily contact the	Developed	$\alpha = 0.855$
Quality	company to request for	by researcher	
Responsiveness:	additional information, or for		
Solving	problem-solving, etc.		
problem	2. Have the ability to solve the immediate problems		

Table 3.1 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
	<p>3. Flexible to modify or change the design of any part of the building.</p> <p>4. The company keeps customer informed about when service will be performed</p>		
Service	1. The behavior of employees in the company instills confidence in us	Developed by researcher	$\alpha = 0.922$
Quality Assurance:			
Performance	<p>2. The company is able to control the price of the building to be no more than the estimated price</p> <p>3. The performance of employees in the company instills confidence in us</p> <p>4. The expertise of company helps to solve construction problem in quality manner</p> <p>5. The company are able to control budget that is suitable for the building</p> <p>6. Employees in the company have the knowledge to answer our requests</p>		

Table 3.1 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
	7. The company quality checks the process of building		
Service Quality Assurance:	1. The company offers the construction guarantee and warrantee	Developed by researcher	$\alpha = 0.884$
Safety standard	2. The company designs the work based on the basics of engineering		
Service Quality Empathy	3. The location of the companies is easily and comfortably accessed 4. The company shows caring to customers by offering products and services at reasonable prices” 5. The company gives us individual attention 6. The company’s employees always pay personal attention to our needs 7. Employees of the company understand our specific need 8. The company has operating hours that are convenient to the customer 9. The company commits to prevent accidents from the construction	Developed by researcher	$\alpha = 0.845$

Table 3.1 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
Service	1. Employees of the company are friendly	Developed by researcher	$\alpha = 0.862$
Quality			
Empathy:	2. Employees of the company always make an effort to establish good relationship with us		
Relationship	3. The company offers several channels (i.e. by telephone, by email, by fax, by call center, by face-to-face) of contact for the convenient reach by the customers”		

Table 3.2 General attitude

Construct	Questionnaire Items	References	Cornbrash's Alpha
General attitude	4. Feng Shui is important when I want to build the building 5. The auspicious conformance is important when I want to build the building	Developed by researcher	$\alpha = 0.819$

Table 3.2 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
	<p>6. I will follow in the kind of buildings of nearby area</p> <p>7. When decide to select the construction company, I think about the brand first</p> <p>8. I concern about my budget before making the decision</p> <p>9. I concern about the place that I want to build my house</p> <p>10. I concern about living space before making the decision</p> <p>11. I concern about quality of building before making the decision</p>		

Table 3.3 Behavioral intention

Construct	Questionnaire Items	References	Cornbrash's Alpha
Behavioral intention towards External environment	1. If I want to build the building, I would engage with this company as if provides Feng Shui services	Developed by researcher	$\alpha = 0.859$

Table 3.3 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
	<p>2. If I want to build the building, I would engage with this company as it always conforms to auspicious data in the construction work</p> <p>3. If I want to build the building, I would engage with this company as it always designs and build the building to match the building's style of nearby area</p> <p>4. If I want to build the building, I would engage with this company as it provides the best Feng Shui models</p> <p>5. If I want to build the building I would engage with this company as it often provides lower price in construction.</p>	Developed by researcher	$\alpha = 0.859$
Behavioral intention towards Technical Quality	<p>1. If I want to build the building, I would engage with this company as it has the high quality of building</p> <p>2. If I want to build the building, I would engage with this company as it has the reliability of construction works</p>	Developed by researcher	$\alpha = 0.850$

Table 3.3 (Continued)

Construct	Questionnaire Items	References	Cornbrash's Alpha
Behavioral intention towards Internal environment	<p>3. If I want to build the building, I would engage with this company as it provides the well-organized infrastructures system of the building</p> <p>1. If I want to build the building, I would engage with this company as it always attends to the quality of the internal landscape and construction workmanship.</p> <p>2. If I want to build the building, I would engage with this company as it has shown quality design in the living space.</p> <p>3. If I want to build the building, I would engage with this company as it always discusses the quality of the building beforehand in great detail</p>		Developed by $\alpha = 0.875$ researcher

Table 3.4 Subjective Norm

Construct	Questionnaire Items	References	Cornbrash's Alpha
Subjective norm	<p>1. I always obtain the opinion of family in my purchasing decision</p> <p>2. I always obtain the opinion of friends in my purchasing decision</p> <p>3. Advertising media of company can help me to make purchasing decision</p>	Developed by researcher	$\alpha = 0.495$

Table 3.5 Attitude towards pricing

Construct	Questionnaire Items	References	Cornbrash's Alpha
Attitude towards pricing	<p>1. The price can be negotiated in the construction building</p> <p>2. The price of construction is cheaper than other companies</p> <p>3. The company's products and services have reasonable prices.</p> <p>4. Customer can arrange a payment with a company in appropriate period</p> <p>5. The company has wide ranges (choice) of building price to enable the customer to make good decision</p>	Developed by researcher	$\alpha = 0.857$

Table 3.6 Customer Loyalty

Construct	Questionnaire Items	References	Cornbrash's Alpha
Customer Loyalty	<p>1. Based on my past experience with the service of the company, I will recommend this company to others</p> <p>2. Based on my past experience with the service of the company, this company is always my first preference in the future when I want to build new building</p> <p>3. I am proud to tell others about quality and standard of this company</p> <p>4. When I have problem in the building, I will think about this company first</p> <p>5. This company's services have the uniqueness, so I will continue to use this company</p>	Developed by researcher	$\alpha = 0.943$

CHAPTER 4

RESULT AND ANALYSIS

4.1Introduction

This section lays out the discussion in sequence to present the results to address the three research questions raised. The literature review in Chapter 2 raised three research questions to be addressed. The use of interviews helps first to identify the themes and patterns of themes, which the themes become the guidelines for further literature review and incorporation of some concepts in questionnaire development. In doing so the research should be able to gain higher R-squared strengths in the multivariate regression analysis, and the main reason is that there is a lack of research that attempts to the roles played by service quality, subjective norms and pricing in influencing the attitudes and behaviors of the customers in engaging with construction contractor service.

4.2 Respondent Profile

As shown in Figure 4.1, there are 56 per cent of male participants in the survey who have had used the construction contract services in Chiang Rai, and female stands at 44 per cent

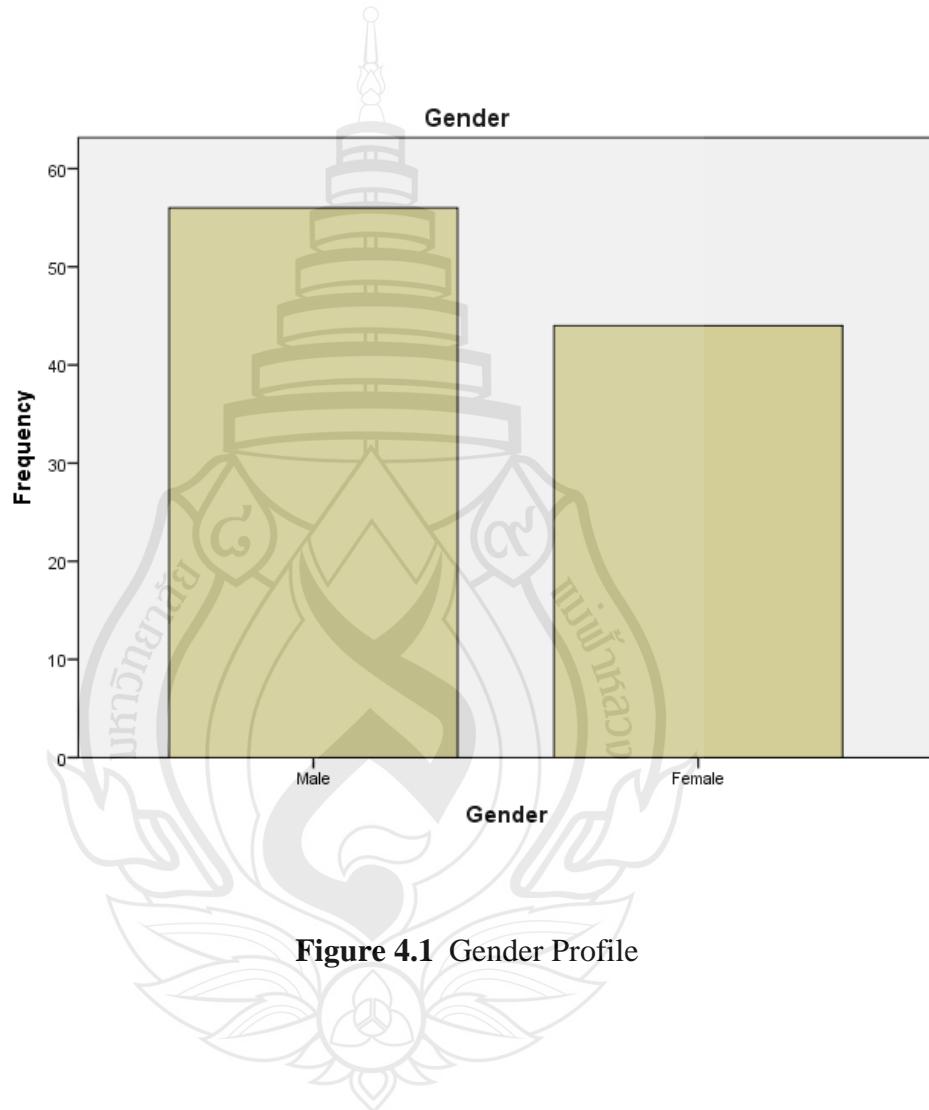


Figure 4.1 Gender Profile

All the participants in the survey are Thai, with 40 per cent of them at monthly income level less than 20,000 Baht, 32 per cent on range 20,001-40,000 Baht, 23 per cent on range 40,001-60,000 Baht, and 5 per cent over 60,000 Baht, as indicated in Figure 4.2.

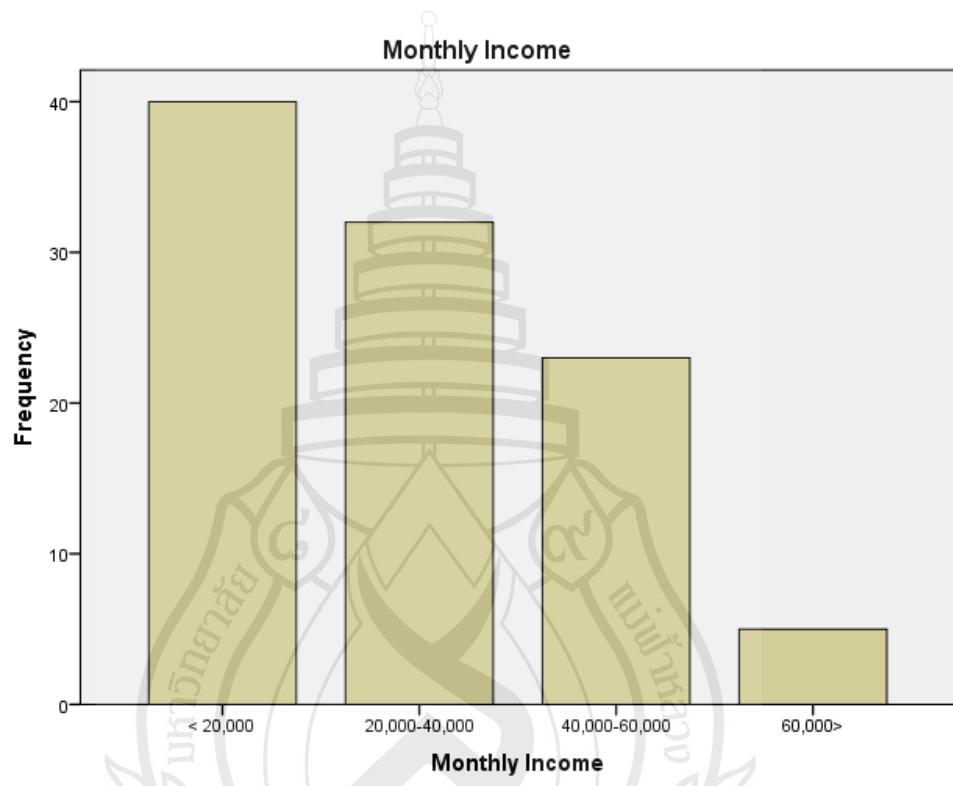


Figure 4.2 Income Profile

Among them, as indicated in Figure 4.3, the majorities are married, at 67 per cent, with the rest being single at 29 per cent, and divorced at 4 per cent.

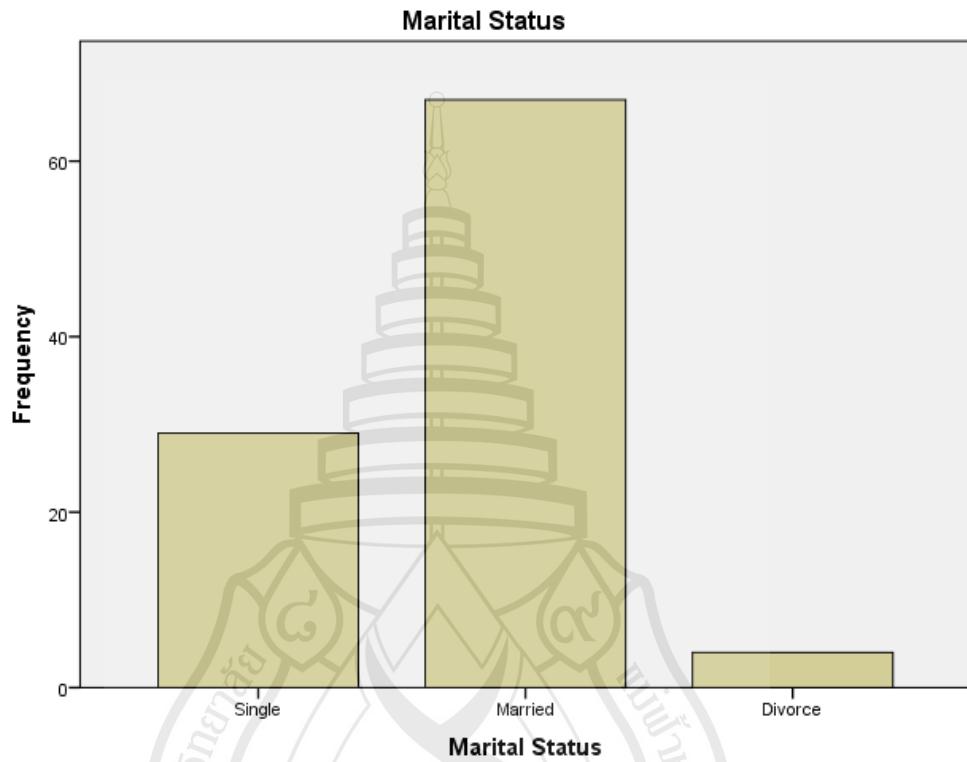


Figure 4.3 Marital Status

Age wise, as shown in indicated in Figure 4.4, 20 per cent is 21-30, 50 per cent is 31-40, 24% is 41-50, 15 per cent is 51-60, and 1 per cent is over 60 years old.

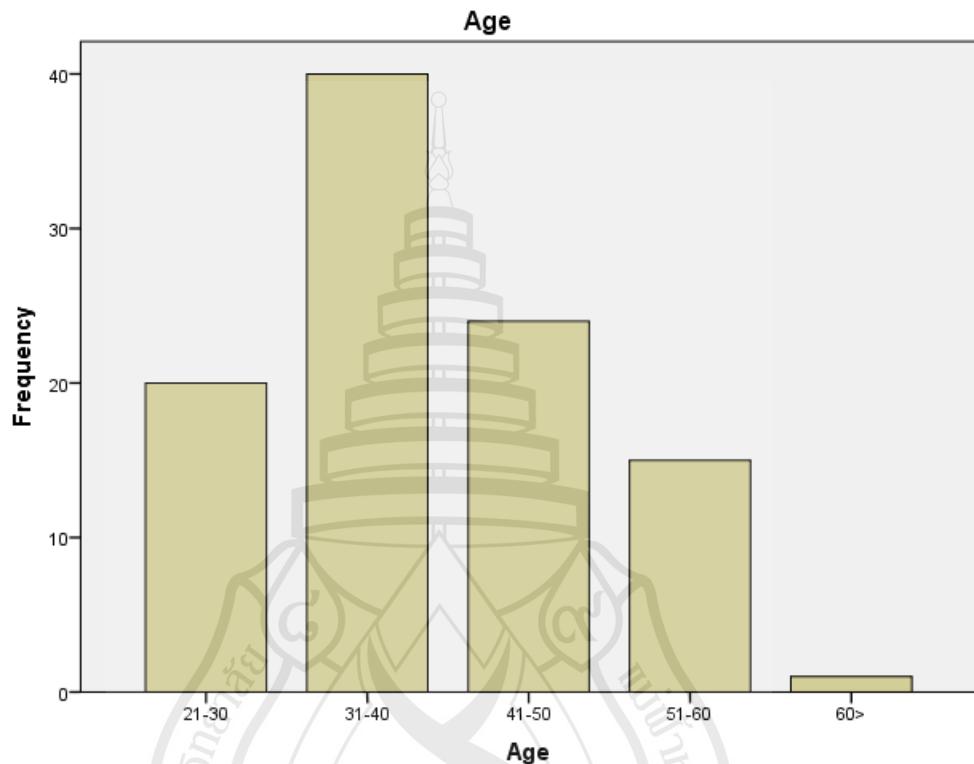


Figure 4.4 Age Profile

Majorities of the participants, as shown in Figure 4.5, hold Bachelor degree at 62 per cent, while Master degree at 25 per cent, and the rest being high-school diploma at 5 per cent, vocational degree at 7 per cent, and doctorate degree 1%.

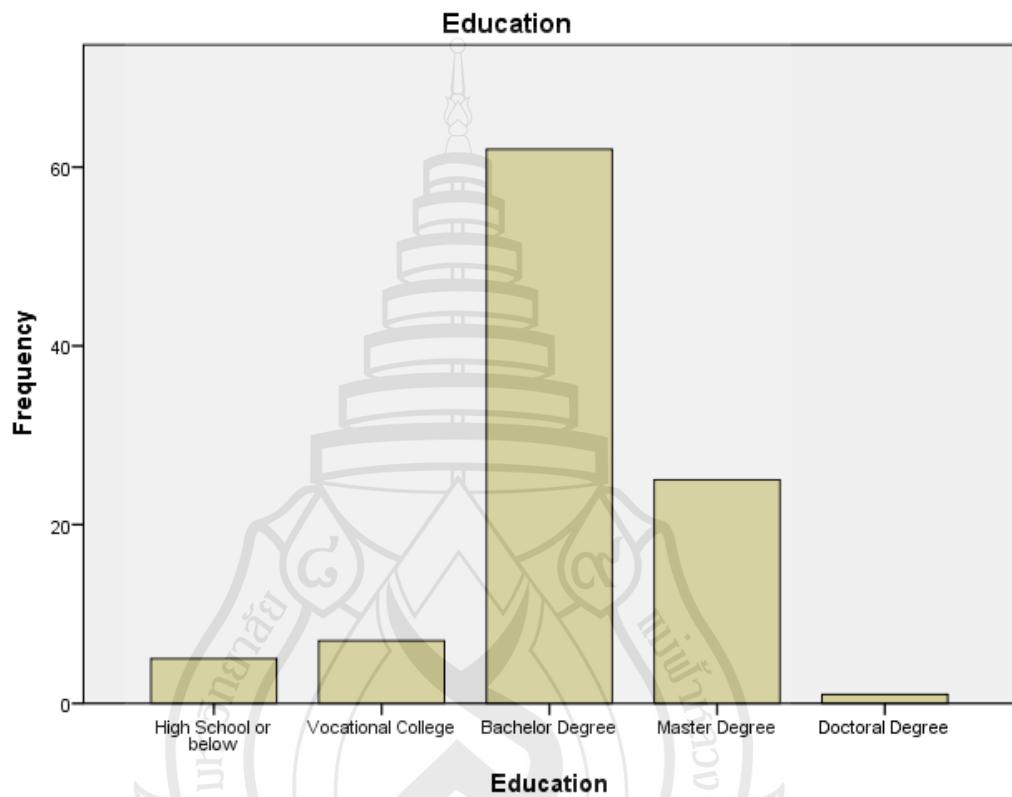


Figure 4.5 Education Profile

In terms of occupation, as shown in Figure 4.6, 60 per cent of the survey participants belong to business owner or the so-called entrepreneurs, while the rest of the participants are equally distributed between private employees, at 21 per cent, and government officers, at 19 per cent.

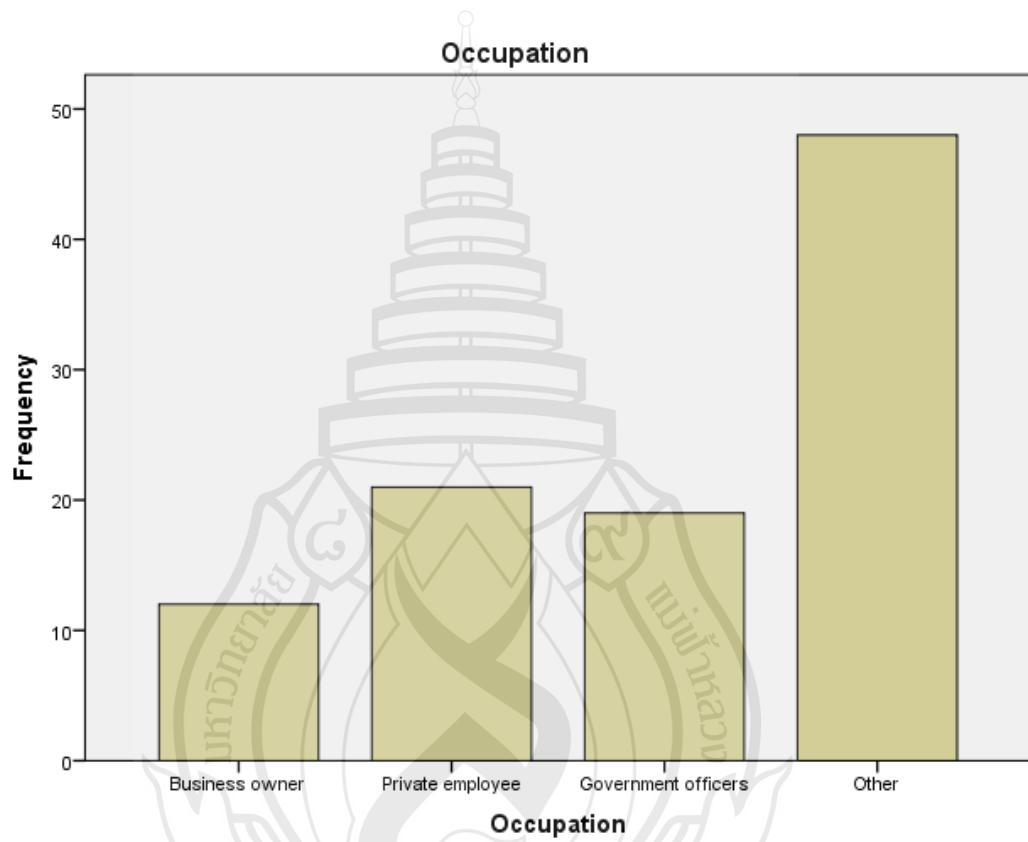


Figure 4.6 Occupation Profile

As shown in Figure 4.7, all the participants of the survey responded that they currently stay in single-house style, at 68 per cent, and two-floor single house at 26 per cent, while the rest as townhouse at 5 per cent, and commercial buildings at 1 per cent.

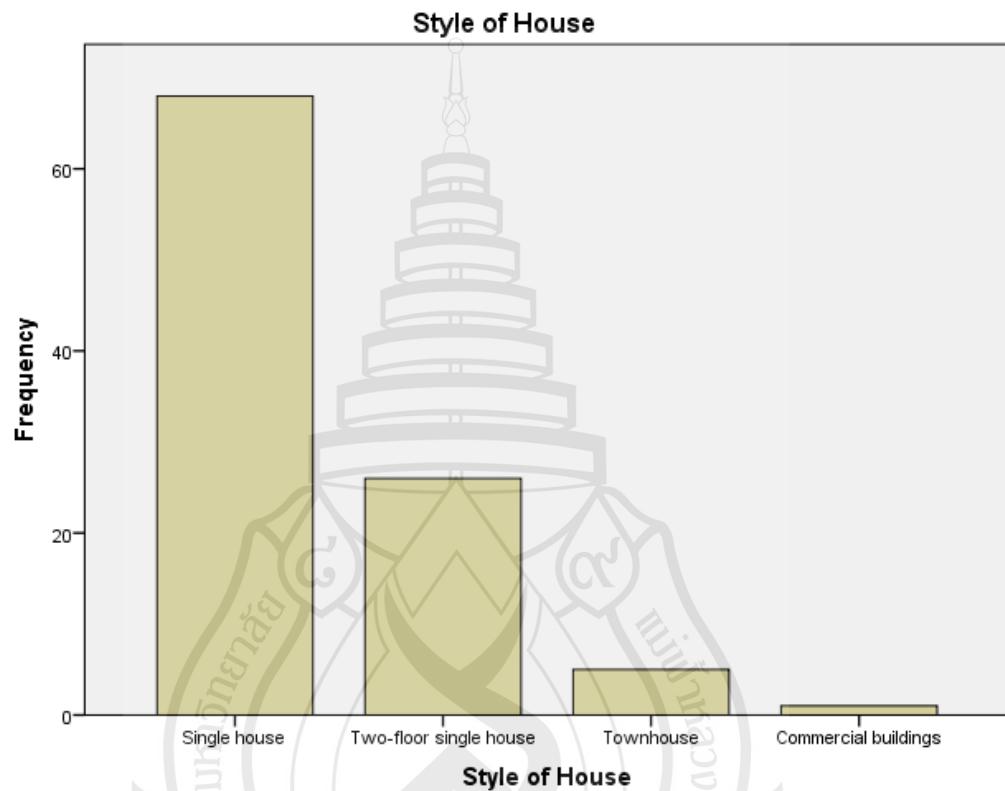


Figure 4.7 Style of House Currently Living In

The data, shown in Figure 4.8, also indicate that majorities of the participants to this survey have made numerous comparisons prior to making the purchase decision on the contractual services for construction, i.e., between two companies at 28 per cent, between three companies at 31 per cent, more than four companies at 15 per cent, and one company at eight per cent. The other 18 per cent of the participants show no comparative effort in the decision making.

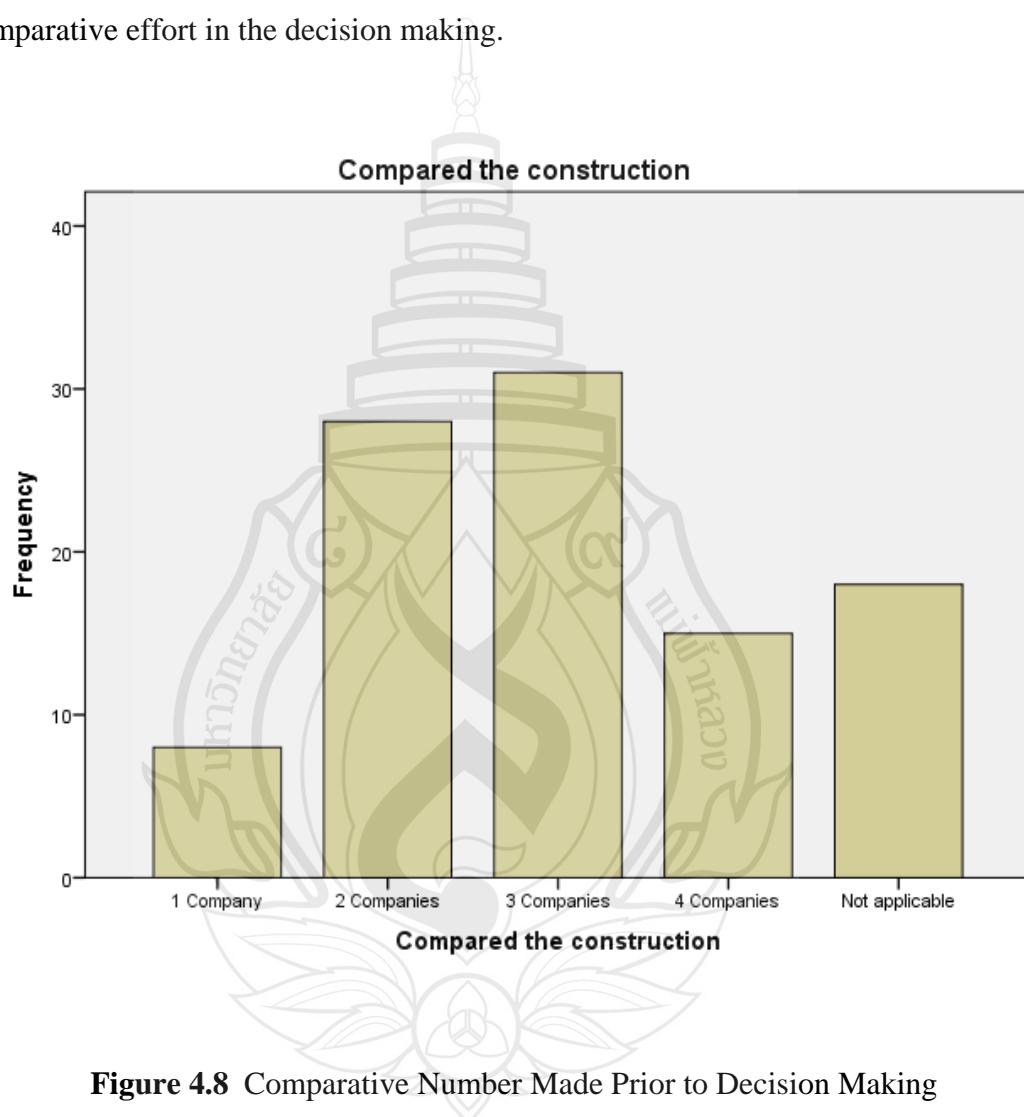


Figure 4.8 Comparative Number Made Prior to Decision Making

The research also asked for the preferences of the style of house which the survey participants would like to have them built in the future, which are useful as market preference for the construction industry. As shown in Figure 4.9, majorities of them prefer single house at 52 per cent, two-floor single-house at 34 per cent, housing estates at six per cent, commercial buildings at five per cent, while the others are 1 per cent each for townhouse, condominium and apartments.

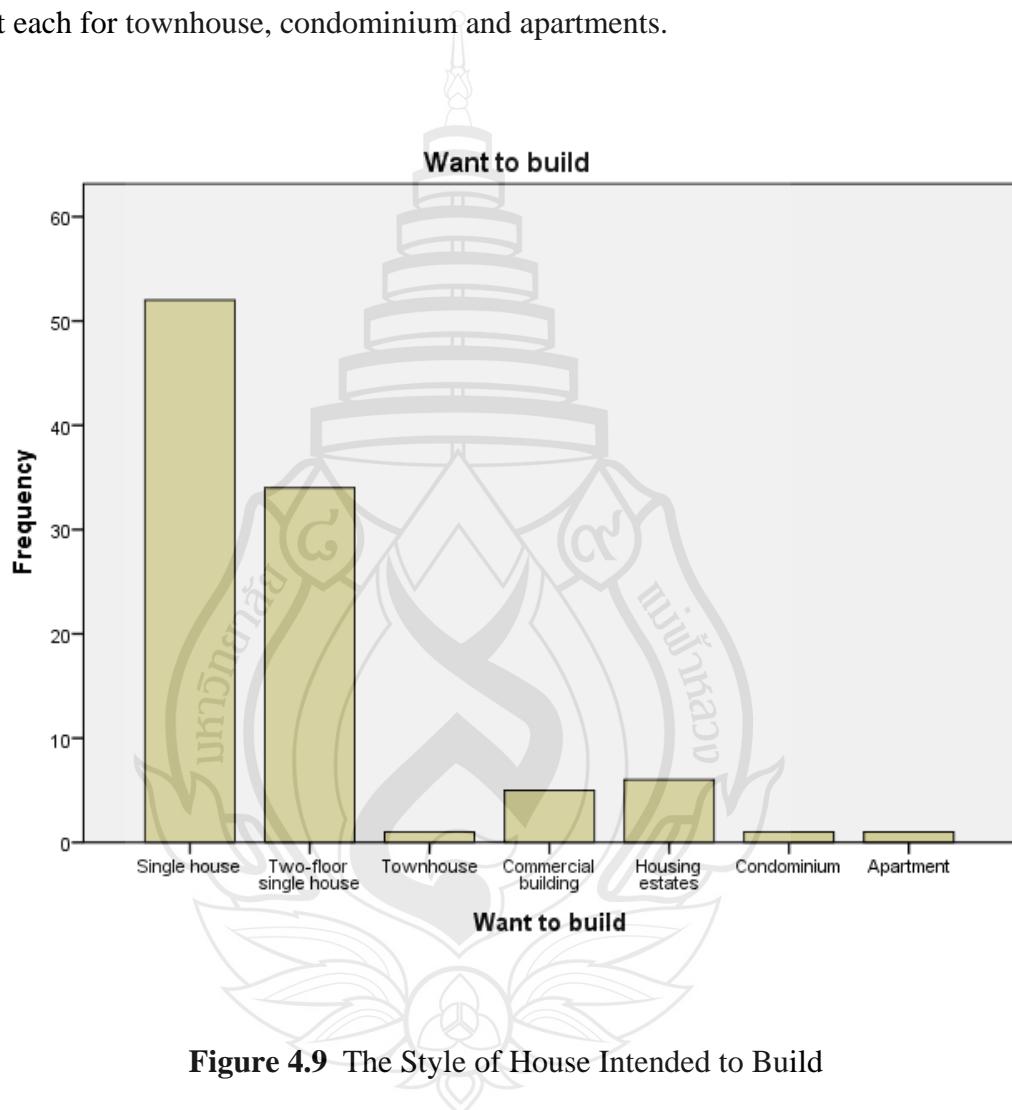


Figure 4.9 The Style of House Intended to Build

For the housing styles preferences, the participants, as shown in Figure 4.10, indicate that they are willing to invest less than 500,000 Baht at eight percent, half-a million to 1 Million Baht at 14 per cent, 1M-1.5M Baht at 23 per cent, 1.5M-2M Baht at 23 per cent, 2M-2.5Million Baht at 10 per cent, 2.5Million to 3Million Baht at 11 percent, with the rest of 11 per cent intending to invest more than 3 Million Baht.

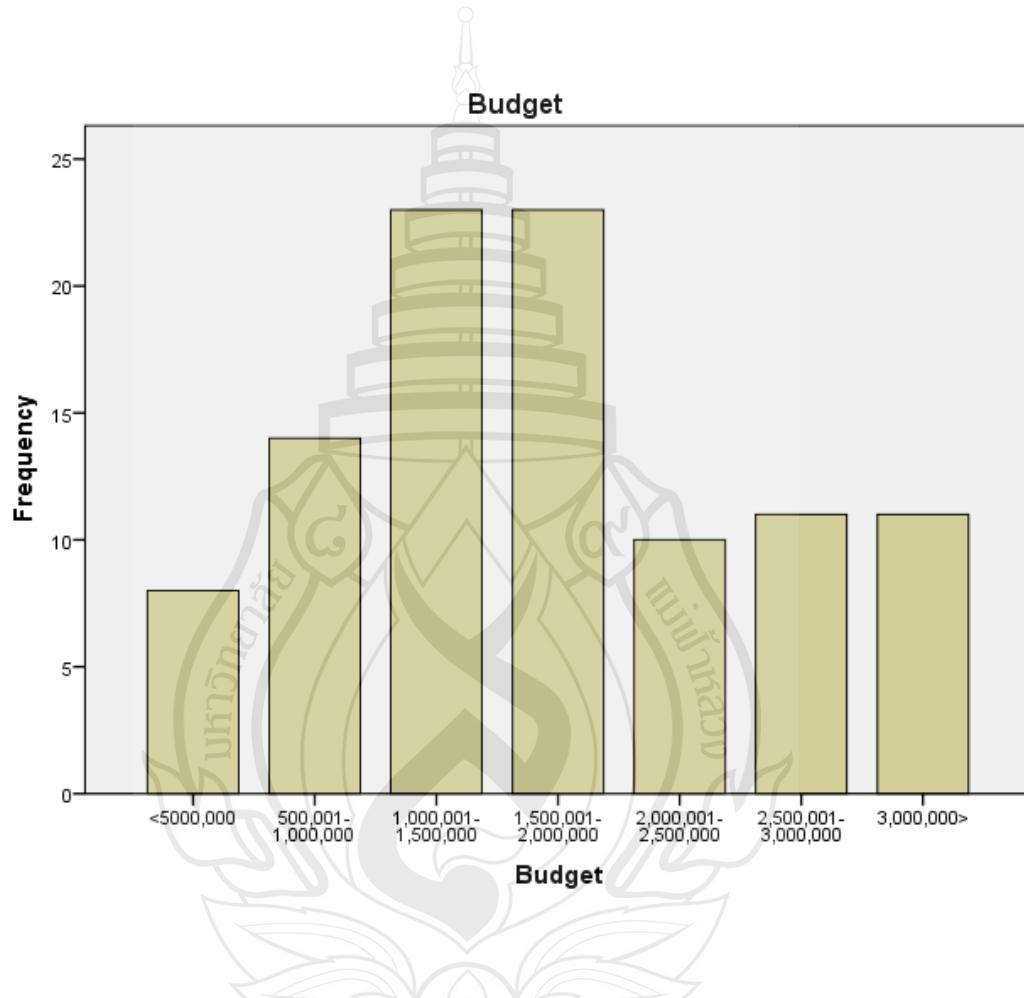


Figure 4.10 Construction Budget Willing to Invest

In addition, as shown in Figure 4.11, family members and circles of friends and partners seem to have significant influence to the decision making of the survey participants, at respectively, 20 per cent, 18 per cent, and 11 per cent. Marketing communication media through advertising and public relations, and architects, or engineers, or designers also influence the decision making at 15 per cent and 10 per cent, respectively. Construction material stores are also perceived to influence the decision making in investment at five per cent. The research also shows that those who make decision without consultation with others, standing at 21 per cent.

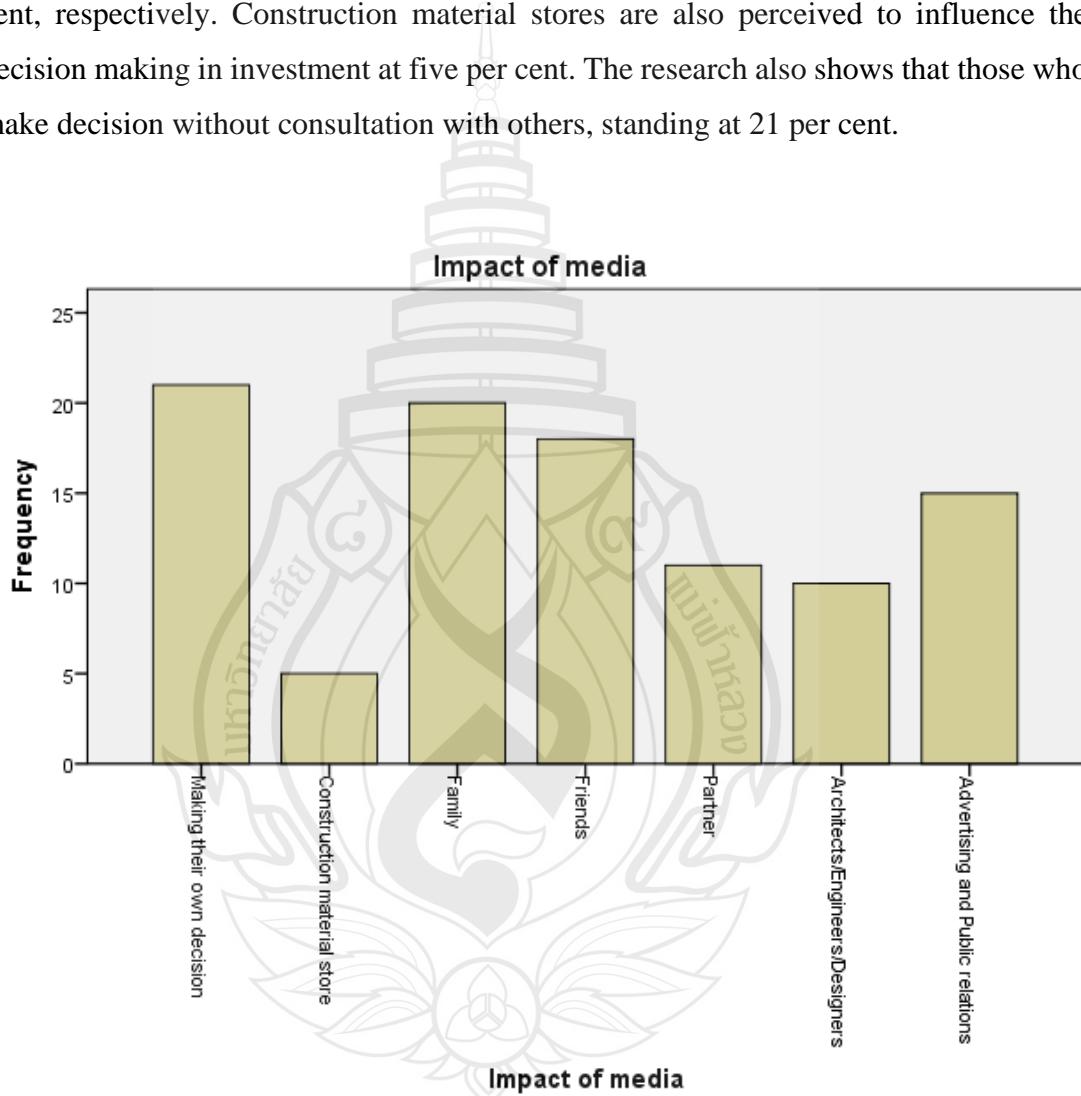


Figure 4.11 Important Media of Impact to Decision Making

4.3 Concluding Research Question 1

As shown in the “Method” section, through the exploratory factor analysis, there are three factored dimensions for the behavioral intention construct, namely as behavioral intention towards external environment, towards technical quality, and towards internal environment.

External environment deals with some of the uniquely differentiated services provided by the construction contractors such as Feng Shui, the auspicious date incorporation in the project works, the matching of the building design styles in aligning with the building styles of nearby areas. Behavioral intention towards the technical quality would describe the investors’ tendency to engage with the contractor services if the company is able to provide high quality building construction works, being reliable and capable to provide well organized infrastructural system of the building. Behavioral intention towards the internal environment would reflect the intention to engage because of the quality works of the contractors towards the internal landscape and construction workmanship, the design in the living space, and the discussion over the quality of the building beforehand in great detail with the client.

The following three Tables, Table 4.1 to Table 4.3, present the results of the multivariate regression analysis for the three separate dimensions of the behavioral intention. The first Table 4.1 explains the two main predictors, namely subjective norms and the intangible part of the service quality in explaining the variability of the behavioral intention towards external environment, for 49.3 per cent, which concerns about Feng Shui, auspicious date selection, and the matching of the building styles in nearby areas, and as such, the investors would need to obtain opinion from other members of the family, friends as well as through the advertising media of the construction contractor.

Table 4.1 Multivariate Regression Analysis for Behavioral Intention towards External Environments

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702 ^a	.493	.423	.59962

a. Predictors: (Constant), Subjective Norm, SQ. Reliable Company image, SQ. Assurance: Legally Registered, Attitude towards Pricing, SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates), SQ. Empathy, SQ. Tangibles, SQ. Assurance: Safety Standard, SQ. Relationships, SQ. Responsiveness: Problem Solving, SQ. Responsiveness: Respond, SQ. Assurance: Performance

b. Dependent Variable: Behavioral Intention towards External Environment

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	30.420	12	2.535	7.051	.000 ^b
1	Residual	87	.360		
	Total	99			

a. Dependent Variable: Behavioral Intention towards External Environment

b. Predictors: (Constant), Subjective Norm, SQ. Reliable Company image, SQ. Assurance: Legally, Attitude towards Pricing, SQ. Intangible, SQ. Empathy, SQ. Tangibles, SQ. Assurance: Safety Standard, SQ. Relationships, SQ. Responsiveness: Problem Solving, SQ. Responsiveness: Respond, SQ. Assurance: Performance

Table 4.1 (Continued)

Model	Coefficients ^a					
	Unstandardized		Standardized		t	Sig.
	Coefficients	Coefficients	Std.	Beta		
	B	Std. Error				
1 (Constant)	.256	.615			.417	.678
SQ. Reliable Company image	-.114	.108		-.109	-1.06	.291
SQ. Tangibles	-.208	.167		-.171	-1.24	.215
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	.593	.124		.567	4.795	.000
SQ. Responsiveness: Respond	-.095	.234		-.082	-.404	.687
SQ. Responsiveness: Problem Solving	.028	.204		.024	.139	.890
SQ. Assurance: Performance	.037	.276		.029	.132	.895
SQ. Assurance: Safety Standard	-.082	.195		-.074	-.422	.674
SQ. Assurance: Legally Registered	-.004	.120		-.004	-.033	.974
SQ. Empathy	.051	.175		.037	.290	.773

Table 4.1 (Continued)

Model	Coefficients ^a					
	Unstandardized		Standardized		t	Sig.
	Coefficients	Coefficients	Std. Error	Beta		
SQ. Relationships	-.098	.174		-.079	-.564	.574
Attitude towards Pricing	.231	.177		.185	1.303	.196
Subjective Norm	.560	.111		.415	5.056	.000

a. Dependent Variable: Behavioral Intention towards External Environment

As to Table 4.2, assurance aspect of the construction contractor service is the single most important predictor to explain the variance of the behavioral intention towards technical quality, partly because of the complexity of the technical works involved as well as the large sum of investment budget for the housing construction. Thus, it is important the contractor ensures their employees have the knowledge to answer any emerging requests, perform quality checks in every step, and can instill the necessary confidence to the investors, and the organization itself can control the price of the building to no more than the estimated price and is able to solve construction problem in quality manner. Collectively, these factors can explain 42.8 per cent of the variance of behavioral intention towards technical quality.

Table 4.2 Multivariate Regression Analysis for Behavioral Intention toward Technical Quality

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.654 ^a	.428	.357	.48416

a. Predictors: (Constant), SQ. Reliability, SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates), SQ. Empathy, SQ. Assurance: Legally Registered, SQ. Reliable Company image, SQ. Relationships, SQ. Assurance: Safety Standard, SQ. Tangibles, SQ. Responsiveness: Problem Solving, SQ. Responsiveness: Respond, SQ. Assurance: Performance

b. Dependent Variable: Behavioral Intention towards Technical Quality

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.455	11	1.405	5.994 .000 ^b
	Residual	20.628	88	.234	
	Total	36.083	99		

a. Dependent Variable: Behavioral Intention towards Technical Quality

b. Predictors: (Constant), SQ. Reliability, SQ. Intangible, SQ. Empathy, SQ. Assurance, SQ. Reliable Company image, SQ. Relationships, SQ. Assurance: Safety Standard, SQ. Tangibles, SQ. Responsiveness: Problem Solving, SQ. Responsiveness: Respond, SQ. Assurance: Performance

Table 4.2 (Continued)

Model	Coefficients ^a					
	Unstandardized		Standardized		t	Sig.
	Coefficients	Std. Error	Coefficients	Beta		
1 (Constant)	1.744	.407			4.283	.000
SQ. Reliable	-.004	.091		-.005	-.046	.964
Company image						
SQ. Tangibles	-.037	.144		-.039	-.255	.799
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	.014	.099		.018	.146	.884
SQ. Responsiveness: Respond	-.085	.171		-.096	-.496	.621
SQ. Responsiveness: Problem Solving	.147	.167		.161	.883	.379
SQ. Assurance: Performance	.065	.222		.068	.293	.770
SQ. Assurance: Safety Standard	.330	.155		.387	2.127	.036
SQ. Assurance: Legally Registered	-.078	.098		-.100	-.796	.428
SQ. Empathy	-.026	.137		-.024	-.187	.852
SQ. Relationships	.189	.136		.200	1.392	.167
Attitude towards Pricing	.120	.145		.136	.826	.411

Table 4.3, shows that pricing (BETA 0.385) is the single attribute for explaining the variance of behavioral intention towards the internal environment, and this is because of the additional investment needed to provide a different quality outlook to the internal landscapes and quality works.

Table 4.3 Multivariate Regression Analysis for Behavioral Intention towards Internal Environment

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747 ^a	.558	.497	.45252

- a. Predictors: (Constant), Attitude towards Pricing, SQ. Assurance: Legally Registered, SQ. Reliable Company image, SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates), SQ. Empathy, SQ. Tangibles, SQ. Assurance: Safety Standard, SQ. Relationships, SQ. Responsiveness: Problem Solving, SQ. Reliability, SQ. Responsiveness: Respond, SQ. Assurance: Performance
- b. Dependent Variable: Behavioral Intention towards Internal Environment

Table 4.3 (Continued)

ANOVA^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.481	12	1.873	9.149	.000 ^b
	Residual	17.816	87	.205		
	Total	40.297	99			

a. Dependent Variable: Behavioral Intention towards Internal Environment
 b. Predictors: (Constant), Attitude towards Pricing, SQ. Assurance: Legally Registered, SQ. Reliable Company image, SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates), SQ. Empathy, SQ. Tangibles, SQ. Assurance: Safety Standard, SQ. Relationships, SQ. Responsiveness: Problem Solving, SQ. Reliability, SQ. Responsiveness: Respond, SQ. Assurance: Performance

Coefficients^a							
Model	Unstandardized Coefficients		Standardized Coefficients			t	Sig.
		Coefficients		Coefficients			
		B		Std. Error	Beta		
1	(Constant)	1.248	.394			3.172	.002
	SQ. Reliable	.026	.085		.031	.308	.759
	Company image						
	SQ. Tangibles	-.267	.136		-.270	-1.95	.054

Table 4.3 (Continued)

Model	Coefficients ^a					
	Unstandardized		Standardized		t	Sig.
	Coefficients	Std. Error	Coefficients	Beta		
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	.079	.094	.094	.094	.849	.398
SQ. Responsiveness: Respond	-.018	.178	-.020	-.103	.918	
SQ. Responsiveness: Problem Solving	.260	.156	.270	1.665	.100	
SQ. Assurance: Performance	.115	.208	.114	.554	.581	
SQ. Assurance: Safety Standard	.200	.147	.222	1.364	.176	
SQ. Assurance: Legally Registered	-.047	.093	-.057	-.507	.613	
SQ. Empathy	-.075	.130	-.067	-.576	.566	
SQ. Relationships	.055	.130	.055	.422	.674	
Attitude towards Pricing	.024	.136	.025	.174	.862	

a. Dependent Variable: Behavioral Intention towards Internal Environment

4.4 Concluding Research Question (RQ2)

Three most significant predictors to be able to explain the variance of the investor loyalty for further engagement and positive word of mouth introduction to other investors are pricing (at BETA of 0.315), behavioral intention towards the external environment (at BETA of 0.230), and behavioral intention towards technical quality (at BETA of 0.388). Customer loyalty is unitary in nature for this research finding, being characterized by the investors' first preference in the future when they want to reinvest in new construction, or for refurbishment or problems rectification, and show loyal attitude to continue to use the company's services, including recommending the contractor and informing to others about the quality works of the contractor services. Overall, these factors can collectively explain 50.5 per cent of the variance of customer loyalty, as shown in Table 4.4.

Table 4.4 Multivariate Regression Analysis for Customer Loyalty

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711 ^a	.505	.473	.51816

a. Predictors: (Constant), Pricing, Subjective Norm, Behavior: Soft Service Quality, Behavioral Intention: External Environment, Behavioral Intention: Technical Quality, Behavioral Intention: Internal Environment

Table 4.4 (Continued)

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.499	6	4.250	15.828	.000 ^b
	Residual	24.970	93	.268		
	Total	50.468	99			

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1 (Constant)	-.550	.530		-.1037	.302	
Behavioral Intention:	.208	.082	.230	2.536	.013	
External Environment						
Behavioral Intention:	.459	.131	.388	3.500	.001	
Technical Quality						
Behavioral Intention:	-.189	.130	-.169	-1.457	.148	
Internal Environment						
Behavior: Soft Service	106	102	102	1.039	.300	
Quality	.169	.104	.139	1.620.008	.03	
Subjective Norm	.355	.118	.315			
Pricing						

4.5 Concluding Research Question (RQ3)

This section attempts to address by the use of, predominantly, ANOVA and t-test, to examine the significant roles of the demographics and psychographics variables addressed in the research, relating to gender, marital status, age, education, monthly income, occupation, style of house in the present, the number of comparisons made on the construction companies before making the customers, the styles of the house to build, the construction budget, and the media that impact to purchasing decisions.

The results of ANOVA Analysis presented in Table 4.5 to 4.8 show no significant roles played by educational levels on service quality, pricing attitude, subjective norm, behavioral intentions, and customer loyalty.

Table 4.5 ANOVA Analysis of Educational Levels on Service Quality – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliability	High School or below	5	4.5000	.40505	.18114
	Vocation	7	3.8750	.39528	.14940
	College				
	Bachelor Degree	62	4.3347	.77313	.09819
	Master Degree	25	4.6000	.45214	.09043
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.3838	.68563	.06856

Table 4.5 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliable Company image	High School or below	5	4.4000	.41833	.18708
	Vocation College	7	3.5000	.28868	.10911
	Bachelor Degree	62	4.0806	.82080	.10424
	Master Degree	25	4.2800	.61373	.12275
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.1150	.75161	.07516
SQ. Tangibles	High School or below	5	4.3500	.33541	.15000
	Vocation College	7	3.7500	.28868	.10911
	Bachelor Degree	62	4.3347	.70847	.08998
	Master Degree	25	4.4400	.52678	.10536
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.3275	.64618	.06462
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Date)	High School or below	5	4.1333	.38006	.16997
	Vocation College	7	3.6667	.72008	.27217
	Bachelor Degree	62	4.0108	.83408	.10593
	Master Degree	25	4.2400	.57349	.11470
	Doctoral Degree	1	4.6667	.	.
	Total	100	4.0567	.75516	.07552

Table 4.5 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ.	High School or	5	4.0400	.45607	.20396
Responsiveness:	below				
Respond	Vocation College	7	3.6000	.43205	.16330
	Bachelor Degree	62	4.1935	.75961	.09647
	Master Degree	25	4.3120	.51016	.10203
	Doctoral Degree	1	4.6000	.	.
	Total	100	4.1780	.68514	.06851
	Total	100	4.2450	.66190	.06619
SQ. Assurance:	High School or	5	4.2857	.41650	.18626
Performance	below				
	Vocation College	7	3.7755	.46553	.17595
	Bachelor Degree	62	4.2972	.68843	.08743
	Master Degree	25	4.5086	.44622	.08924
	Doctoral Degree	1	4.8571	.	.
	Total	100	4.3186	.62743	.06274
SQ. Assurance:	High School or	5	4.3000	.44721	.20000
Safety	below				
Standard	Vocation College	7	3.7857	.63621	.24046
	Bachelor Degree	62	4.3306	.77852	.09887
	Master Degree	25	4.5600	.48563	.09713
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.3550	.70816	.07082

Table 4.5 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Assurance: Legally Registered	High School or below	5	4.6000	.54772	.24495
	Vocation	7	3.8571	.69007	.26082
	College				
	Bachelor Degree	62	4.4194	.84054	.10675
	Master Degree	25	4.7600	.52281	.10456
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.4800	.77172	.07717
SQ. Empathy	High School or below	5	4.2571	.30971	.13851
	Vocation	7	3.6122	.29409	.11116
	College				
	Bachelor Degree	62	4.2051	.60809	.07723
	Master Degree	25	4.2857	.51010	.10202
	Doctoral Degree	1	4.0000	.	.
	Total	100	4.1843	.57153	.05715
SQ. Relationships	High School or below	5	4.2000	.18257	.08165
	Vocation	7	4.0000	.19245	.07274
	College				
	Bachelor Degree	62	4.4355	.71820	.09121
	Master Degree	25	4.5200	.51890	.10378
	Doctoral Degree	1	4.6667	.	.
	Total	100	4.4167	.63630	.06363

Table 4.6 ANOVA Result of Educational Levels on Service Quality

Descriptive						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	3.578	4	.894	1.978	.104
	Within Groups	42.962	95	.452		
	Total	46.539	99			
SQ. Reliable Company image	Between Groups	4.591	4	1.148	2.124	.084
	Within Groups	51.337	95	.540		
	Total	55.928	99			
SQ. Tangibles	Between Groups	3.109	4	.777	1.931	.111
	Within Groups	38.228	95	.402		
	Total	41.337	99			
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	2.437	4	.609	1.072	.375
	Within Groups	54.019	95	.569		
	Total	56.457	99			

Table 4.6 (Continued)

Descriptive						
		Sum of Squares	df	Mean Square	F	Sig.
SQ.	Between	3.076	4	.769	1.683	.160
Responsiveness:	Groups					
Respond	Within	43.396	95	.457		
	Groups					
	Total	46.472	99			
SQ.	Between	2.477	4	.619	1.439	.227
Responsiveness:	Groups					
Problem Solving	Within	40.895	95	.430		
	Groups					
	Total	43.373	99			
SQ. Assurance:	Between	3.291	4	.823	2.190	.076
Performance	Groups					
	Within	35.683	95	.376		
	Groups					
	Total	38.974	99			
SQ. Assurance:	Between	3.787	4	.947	1.961	.107
Safety Standard	Groups					
	Within	45.860	95	.483		
	Groups					
	Total	49.647	99			

Table 4.6 (Continued)

Descriptive						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Assurance:	Between Groups	5.246	4	1.312	2.320	.062
Legally Registered	Within Groups	53.714	95	.565		
	Total	58.960	99			
SQ. Empathy	Between Groups	2.635	4	.659	2.107	.086
	Within Groups	29.703	95	.313		
	Total	32.339	99			
SQ. Relationships	Between Groups	1.801	4	.450	1.118	.353
	Within Groups	38.282	95	.403		
	Total	40.083	99			

Table 4.7 ANOVA Analysis of Educational Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Attitude towards Pricing	High School or below	5	3.9200	.10954	.04899
	Vocational College	7	3.6571	.35989	.13603
	Bachelor Degree	62	4.2645	.70852	.08998
	Master Degree	25	4.3840	.44692	.08938
	Doctoral Degree	1	4.6000	.	.
	Total	100	4.2380	.63417	.06342
Subjective Norm	High School or below	5	3.4000	.54772	.24495
	Vocational College	7	3.9524	.35635	.13469
	Bachelor Degree	62	3.6559	.61838	.07853
	Master Degree	25	3.8267	.52810	.10562
	Doctoral Degree	1	3.0000	.	.
	Total	100	3.7000	.58507	.05851
Behavioral Intention towards External Environment	High School or below	5	3.5333	.70119	.31358
	Vocational College	7	3.6667	.66667	.25198
	Bachelor Degree	62	3.6478	.86371	.10969
	Master Degree	25	3.5533	.68333	.13667
	Total	100	4.3275	.64618	.06462

Table 4.7 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Behavioral	High School or below	5	4.3000	.20917	.09354
Intention towards	Vocational College	7	4.0357	.36596	.13832
Internal Environment)	Bachelor Degree	62	4.3911	.72939	.09263
	Master Degree	25	4.4700	.47500	.09500
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.3875	.63800	.06380
Behavioral	High School or below	5	4.4000	.79582	.35590
Intention towards	Vocational College	7	4.2381	.37090	.14019
Technical Quality	Bachelor Degree	62	4.5054	.67141	.08527
	Master Degree	25	4.6267	.41186	.08237
	Doctoral Degree	1	5.0000	.	.
	Total	100	4.5167	.60372	.06037
Customer Loyalty	High School or below	5	4.0800	.30332	.13565
	Vocational College	7	3.6286	.55891	.21125
	Bachelor Degree	62	4.0839	.72478	.09205
	Master Degree	25	4.0960	.78554	.15711
	Doctoral Degree	1	4.0000	.	.
	Total	100	4.0540	.71399	.07140

Table 4.8 ANOVA Result of Educational Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Attitude towards Pricing	Between Groups	3.575	4	.894	2.343	.060
	Within Groups	36.241	95	.381		
	Total	49.647	99			
Subjective Norm	Between Groups	1.907	4	.477	1.417	.234
	Within Groups	31.981	95	.337		
	Total	33.889	99			
Behavioral Intention towards External Environment	Between Groups	.355	4	.089	.138	.968
	Within Groups	61.346	95	.646		
	Total	61.701	99			
Behavioral Intention towards Internal Environment	Between Groups	1.451	4	.363	.887	.475
	Within Groups	38.846	95	.409		
	Total	40.297	99			

Table 4.8 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Behavioral	Between	1.155	4	.289	.786	.537
Intention towards	Groups					
Technical Quality	Within	34.928	95	.368		
Customer Loyalty	Groups					
	Total	36.083	99			
	Between	1.373	4	.343	.664	.619
	Groups					
	Within	49.096	95	.517		
	Groups					
	Total	50.468	99			

The results of ANOVA Analysis presented in Tables 4.9-4.12 shows that respondents of higher income groups tend to perceive at higher mean of agreeableness to the qualities received in aspects of reliability (i.e. that the company can reliably meet the requirements, in terms of right quality the first time, delivering to the promise as demonstrated in the specifications or standards), tangibles as represented by the quality of works and the uses of quality materials, advanced technologies and equipment in the construction processes, and the assured safety conformance in design, basics of engineering works and in various other aspects of guarantees and warranties. Evidences are also shown by the correlation analysis, presented in Table 4.13.

Nevertheless, the reasons for the significances are not clear at the questionnaire-based survey level, and further research by the use of interviews-based approach could help shed light on this, but the experiences of the researcher in the construction industry intuitively reckons that the clients and investors of the higher income groups have closer engagement with the contractors, and thus the contractors provide more attentive to the needs of their clients. Although the results of ANOVA test show no significant

differences on other variables, i.e. behavioral intentions, or other aspects of service quality, and loyalty, but descriptively, the trend is there that the higher income groups perceive the services better serve to their expectations or requirements.

Table 4.9 ANOVA Analysis of Income Levels on Service Quality – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliability	< 20,000	40	4.0406	.85080	.13452
	20,000-40,000	32	4.5430	.48424	.08560
	40,000-60,000	23	4.7120	.30253	.06308
	60,000>	5	4.6000	.44546	.19922
	Total	100	4.3838	.68563	.06856
SQ. Reliable	< 20,000	40	4.0406	.85080	.13452
	20,000-40,000	40	3.8500	.88579	.14005
	Company image	32	4.2031	.59378	.10497
	40,000-60,000	23	4.3913	.58303	.12157
	60,000>	5	4.4000	.65192	.29155
SQ. Tangibles	Total	100	4.1150	.75161	.07516
	< 20,000	40	4.0750	.77252	.12215
	20,000-40,000	32	4.4609	.46710	.08257
	40,000-60,000	23	4.5435	.54696	.11405
	60,000>	5	4.5000	.30619	.13693
Total		100	4.3275	.64618	.06462

Table 4.9 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Intangible	< 20,000	40	3.9083	.87050	.13764
(Choices of	20,000-40,000	32	4.1562	.61629	.10895
Building	40,000-60,000	23	4.1884	.73736	.15375
Models, Feng	60,000>	5	4.0000	.62361	.27889
Shui	Total	100	4.0567	.75516	.07552
SQ.	< 20,000	40	4.0563	.81155	.12832
Responsiveness:	20,000-40,000	32	4.3047	.52645	.09306
Problem Solving	40,000-60,000	23	4.4348	.50123	.10451
	60,000>	5	4.5000	.46771	.20917
	Total	100	4.2450	.66190	.06619
SQ. Assurance:	< 20,000	40	4.1179	.78372	.12392
Performance	20,000-40,000	32	4.4152	.49268	.08710
	40,000-60,000	23	4.4907	.44519	.09283
	60,000>	5	4.5143	.29623	.13248
	Total	100	4.3186	.62743	.06274
SQ. Assurance:	< 20,000	40	4.1250	.88252	.13954
Safety Standard	20,000-40,000	32	4.4531	.57304	.10130
	40,000-60,000	23	4.6087	.45117	.09408
	60,000>	5	4.4000	.41833	.18708
	Total	100	4.3550	.70816	.07082
	< 20,000	40	4.1250	.88252	.13954
	20,000-40,000	32	4.4531	.57304	.10130

Table 4.9 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
	40,000-60,000	23	4.6087	.45117	.09408
	60,000>	5	4.4000	.41833	.18708
	Total	100	4.3550	.70816	.07082
SQ. Assurance:	< 20,000	40	4.2500	.89872	.14210
Legally Registered	20,000-40,000	32	4.5938	.66524	.11760
	40,000-60,000	23	4.6087	.65638	.13686
	60,000>	5	5.0000	.00000	.00000
	Total	100	4.4800	.77172	.07717
SQ. Empathy	< 20,000	40	4.0357	.59718	.09442
	20,000-40,000	32	4.2188	.54788	.09685
	40,000-60,000	23	4.3540	.55641	.11602
	60,000>	5	4.3714	.37253	.16660
	Total	100	4.1843	.57153	.05715
SQ. Empathy	< 20,000	40	4.0357	.59718	.09442
	20,000-40,000	32	4.2188	.54788	.09685
	40,000-60,000	23	4.3540	.55641	.11602
	60,000>	5	4.3714	.37253	.16660
	Total	100	4.1843	.57153	.05715
SQ. Relationships	< 20,000	40	4.3333	.75862	.11995
	20,000-40,000	32	4.4479	.54615	.09655
	40,000-60,000	23	4.4928	.58491	.12196
	60,000>	5	4.5333	.29814	.13333
	Total	100	4.4167	.63630	.06363

Table 4.10 ANOVA Result of Income Levels on Service Quality

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	8.232	3	2.744	6.877	.000
	Within Groups	38.307	96	.399		
	Total	46.539	99			
SQ. Reliable Company image	Between Groups	5.220	3	1.740	3.294	.024
	Within Groups	50.708	96	.528		
	Total	55.928	99			
SQ. Tangibles	Between Groups	4.342	3	1.447	3.755	.013
	Within Groups	36.995	96	.385		
	Total	41.337	99			
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	1.613	3	.538	.941	.424
	Within Groups	54.844	96	.571		
	Total	56.457	99			

Table 4.10 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ.	Between	3.102	3	1.034	2.289	.083
Responsiveness:	Groups					
Respond	Within	43.370	96	.452		
	Groups					
	Total	46.472	99			
SQ.	Between	2.693	3	.898	2.118	.103
Responsiveness:	Groups					
Problem Solving	Within	40.680	96	.424		
	Groups					
	Total	43.372	99			
SQ. Assurance:	Between	2.783	3	.928	2.461	.067
Performance	Groups					
	Within	36.191	96	.377		
	Groups					
	Total	38.974	99			
SQ. Assurance:	Between	3.915	3	1.305	2.739	.048
Safety Standard	Groups					
	Within	45.733	96	.476		
	Groups					
	Total	49.647	99			

Table 4.10 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Assurance: Legally Registered	Between Groups	4.263	3	1.421	2.494	.065
	Within Groups	54.697	96	.570		
	Total	58.960	99			
	Between Groups	1.759	3	.586	1.841	.145
	Within Groups	30.580	96	.319		
SQ. Empathy	Total	32.339	99			
	Between Groups	.510	3	.170	.413	.744
	Within Groups	39.573	96	.412		
	Total	40.083	99			
SQ. Relationships						

Table 4.11 ANOVA Analysis of Income Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Attitude towards Pricing	< 20,000	40	4.1150	.77907	.12318
	20,000-40,000	32	4.2750	.56739	.10030
	40,000-60,000	23	4.3304	.43738	.09120
	60,000>	5	4.5600	.38471	.17205
	Total	100	4.2380	.63417	.06342
Subjective Norm	< 20,000	40	3.7417	.57729	.09128
	20,000-40,000	32	3.6354	.64123	.11335
	40,000-60,000	23	3.7101	.54406	.11344
	60,000>	5	3.7333	.59628	.26667
	Total	100	3.7000	.58507	.05851
Behavioral Intention towards External Environment	< 20,000	40	3.8167	.70489	.11145
	20,000-40,000	32	3.4740	.74669	.13200
	40,000-60,000	23	3.5217	.89936	.18753
	60,000>	5	3.5000	1.08653	.48591
	Total	100	3.6233	.78946	.07895
Behavioral Intention towards Internal Environment	< 20,000	40	4.3125	.78803	.12460
	20,000-40,000	32	4.3047	.59138	.10454
	40,000-60,000	23	4.5761	.40195	.08381
	60,000>	5	4.6500	.13693	.06124
	Total	100	4.3875	.63800	.06380

Table 4.11 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Behavioral	< 20,000	40	4.4500	.74172	.11728
Intention	20,000-40,000	32	4.4688	.56707	.10025
towards	40,000-60,000	23	4.6522	.39541	.08245
Technical	60,000>	5	4.7333	.27889	.12472
Quality	Total	100	4.5167	.60372	.06037
Customer	< 20,000	40	3.9950	.69943	.11059
Loyalty	20,000-40,000	32	4.0438	.63395	.11207
	40,000-60,000	23	4.1652	.86477	.18032
	60,000>	5	4.0800	.71554	.32000
	Total	100	4.0540	.71399	.07140

Table 4.12 ANOVA Result of Income Levels on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Attitude towards Pricing	Between Groups	1.364	3	.455	1.135	.339
	Within Groups	38.452	96	.401		
	Total	39.816	99			

Table 4.12 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Subjective Norm	Between Groups	.211	3	.070	.200	.896
	Within	33.678	96	.351		
	Total	33.889	99			
Behavioral Intention	Between Groups	2.523	3	.841	1.364	.258
towards External Environment	Within Groups	59.179	96	.616		
	Total	61.701	99			
Behavioral Intention	Between Groups	1.607	3	.536	1.329	.269
towards Internal Environment	Within Groups	38.690	96	.403		
	Total	40.297	99			
Behavioral Intention	Between Groups	.908	3	.303	.826	.483
towards Technical Quality	Within Groups	35.175	96	.366		
	Total	36.083	99			
Customer Loyalty	Between Groups	.430	3	.143	.275	.843
Customer Loyalty	Within Groups	50.038	96	.521		
	Total	50.468	99			

Table 4.13 Significant Correlations between Income Levels and Reliability, Tangible and Assurance

Correlations					
	Monthly Income	SQ. Reliability	Reliable Company	SQ. Tangibles	SQ. Assurance: Safety Standard
Monthly Income	1	.378** .000	.292** .003	.288** .004	.242* .015
	100	100	100	100	100
SQ. Reliability	.378** .000	1	.682** .000	.779** .000	.688** .000
	100	100	100	100	100
SQ. Reliable	.292** .003	.682** .000	1	.587** .000	.516** .000
	100	100	100	100	100
Company image	.288** .004	.779** .000	.587** .000	1	.668** .000
	100	100	100	100	100
SQ. Tangibles	.242* .015	.688** .000	.516** .000	.668** .000	1
	100	100	100	100	100
Safety Standard					

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The results of the ANOVA analysis in Table 4.14-4.17 shows that no matter how many companies the clients or investors made prior to their decision making on the selection of construction contractors, they are no signifiacan differences on all the variables involved in the research studdy, i.e. service quality, pricing attitude, subjective norms, the three facets of behavioral intention and customer loyalty. Thus, to the marketers of the construction service contractors, it is important they maintain consistent works in the service quality, i.e., assurance and intangibility, and improve their relationship management initiatives to influence the subjective norms of the clients and investors, including pricing strategies, as these are the main variables to directly impact on customer loyalty.

Table 4.14 ANOVA Analysis of Comparative Study of Companies made on Service Quality – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliability	1 Company	8	4.4688	.51213	.18107
	2 Companies	28	4.3393	.57116	.10794
	3 Companies	31	4.3548	.92483	.16610
	4 Companies	15	4.7250	.33139	.08557
	Not applicable	18	4.1806	.59752	.14084
	Total	100	4.3838	.68563	.06856
SQ. Reliable	1 Company	8	4.5000	.46291	.16366
Company image	2 Companies	28	4.1964	.49701	.09393
	3 Companies	31	4.0645	.96386	.17311
	4 Companies	15	4.3000	.75119	.19396
	Not applicable	18	3.7500	.66972	.15786
	Total	100	4.1150	.75161	.07516

Table 4.14 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Tangibles	1 Company	8	4.4375	.63738	.22535
	2 Companies	28	4.3482	.52414	.09905
	3 Companies	31	4.2419	.81005	.14549
	4 Companies	15	4.6500	.47996	.12392
	Not applicable	18	4.1250	.57041	.13445
	Total	100	4.3275	.64618	.06462
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Date)	1 Company	8	4.1250	.97488	.34467
	2 Companies	28	4.0833	.55648	.10516
	3 Companies	31	4.0323	.81810	.14694
	4 Companies	15	4.3333	.76636	.19787
	Not applicable	18	3.7963	.79326	.18697
	Total	100	4.0567	.75516	.07552
SQ. Responsiveness: Respond	1 Company	8	4.1750	.89083	.31495
	2 Companies	28	4.2500	.49479	.09351
	3 Companies	31	4.0516	.81644	.14664
	4 Companies	15	4.4400	.47329	.12220
	Not applicable	18	4.0667	.73884	.17415
	Total	100	4.1780	.68514	.06851
SQ. Responsiveness: Problem Solving	1 Company	8	4.2188	.55802	.19729
	2 Companies	28	4.2857	.55990	.10581
	3 Companies	31	4.1452	.83110	.14927
	4 Companies	15	4.5000	.40089	.10351
	Not applicable	18	4.1528	.69736	.16437
	Total	100	4.2450	.66190	.06619

Table 4.14 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Assurance:	1 Company	8	4.2679	.52036	.18397
	2 Companies	28	4.3622	.43900	.08296
	3 Companies	31	4.2258	.83444	.14987
	4 Companies	15	4.5619	.46594	.12031
	Not applicable	18	4.2302	.62200	.14661
	Total	100	4.3186	.62743	.06274
SQ. Assurance:	1 Company	8	4.1875	.59387	.20996
	2 Companies	28	4.4107	.57821	.10927
	3 Companies	31	4.2097	.89232	.16027
	4 Companies	15	4.8000	.36839	.09512
	Not applicable	18	4.2222	.69074	.16281
	Total	100	4.3550	.70816	.07082
SQ. Assurance:	1 Company	8	4.5000	.75593	.26726
	2 Companies	28	4.5000	.74536	.14086
	3 Companies	31	4.3226	.94471	.16967
	4 Companies	15	4.8000	.41404	.10690
	Not applicable	18	4.4444	.70479	.16612
	Total	100	4.4800	.77172	.07717
SQ. Empathy	1 Company	8	4.1964	.63859	.22578
	2 Companies	28	4.2908	.44413	.08393
	3 Companies	31	4.1152	.60206	.10813
	4 Companies	15	4.3810	.63583	.16417
	Not applicable	18	3.9683	.58092	.13692
	Total	100	4.1843	.57153	.05715

Table 4.14 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Relationships	1 Company	8	4.2917	.62836	.22216
	2 Companies	28	4.5238	.50044	.09457
	3 Companies	31	4.3333	.80737	.14501
	4 Companies	15	4.6000	.50709	.13093
	Not applicable	18	4.2963	.59286	.13974
	Total	100	4.4167	.63630	.06363

Table 4.15 ANOVA Result of Comparative Study of Companies made on Service Quality

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	2.629	4	.657	1.422	.23
	Within Groups	43.910	95	.462		
	Total	46.539	99			
SQ. Reliable Company image	Between Groups	4.362	4	1.090	2.009	.09
	Within Groups	51.566	95	.543		
	Total	55.927	99			
SQ. Tangibles	Between Groups	2.634	4	.658	1.616	.17
	Within Groups	38.703	95	.407		
	Total	41.337	99			

Table 4.15 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	2.444	4	.611	1.075	.373
	Within Groups	54.012	95	.569		
	Total	56.457	99			
SQ. Responsiveness: Respond	Between Groups	1.893	4	.473	1.009	.407
	Within Groups	44.578	95	.469		
	Total	46.472	99			
SQ. Responsiveness: Problem Solving	Between Groups	1.489	4	.372	.845	.500
	Within Groups	41.883	95	.441		
	Total	43.373	99			
SQ. Assurance: Performance	Between Groups	1.370	4	.342	.865	.488
	Within Groups	37.604	95	.396		
	Total	38.974	99			

Table 4.15 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Assurance:	Between Groups	4.254	4	1.063	2.226	.072
Safety Standard	Within Groups	45.394	95	.478		
	Total	49.648	99			
SQ. Assurance:	Between Groups	2.341	4	.585	.982	.421
Legally Registered	Within Groups	56.619	95	.596		
	Total	58.960	99			
SQ. Empathy	Between Groups	1.887	4	.472	1.472	.217
	Within Groups	30.451	95	.321		
	Total	32.339	99			
SQ. Relationships	Between Groups	1.427	4	.357	.877	.481
	Within Groups	38.657	95	.407		
	Total	40.083	99			

Table 4.16 ANOVA Analysis of Comparative Study of Companies on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Attitude towards Pricing	1 Company	8	4.3000	.66762	.23604
	2 Companies	28	4.2143	.55758	.10537
	3 Companies	31	4.2258	.78950	.14180
	4 Companies	15	4.3867	.40332	.10414
	Not applicable	18	4.1444	.63173	.14890
	Total	100	4.2380	.63417	.06342
Subjective Norm	1 Company	8	3.9167	.49602	.17537
	2 Companies	28	3.7262	.63540	.12008
	3 Companies	31	3.7312	.55390	.09948
	4 Companies	15	3.6444	.68390	.17658
	Not applicable	18	3.5556	.52394	.12349
	Total	100	3.7000	.58507	.05851
Behavioral Intention towards External Environment	1 Company	8	3.8958	.97157	.34350
	2 Companies	28	3.4345	.85868	.16227
	3 Companies	31	3.6882	.70677	.12694
	4 Companies	15	3.7222	.94211	.24325
	Not applicable	18	3.6019	.58895	.13882
	Total	100	3.6233	.78946	.07895

Table 4.16 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Behavioral	1 Company	8	4.3125	.43814	.15490
	2 Companies	28	4.4107	.61695	.11659
	3 Companies	31	4.2742	.75926	.13637
	4 Companies	15	4.5833	.46930	.12117
	Not applicable	18	4.4167	.65305	.15392
	Total	100	4.3875	.63800	.06380
Intention towards Internal Environment	1 Company	8	4.7083	.37533	.13270
	2 Companies	28	4.3929	.53713	.10151
	3 Companies	31	4.4194	.79334	.14249
	4 Companies	15	4.8000	.30342	.07834
	Not applicable	18	4.5556	.53627	.12640
	Total	100	4.5167	.60372	.06037
Customer Loyalty	1 Company	8	4.1750	.57009	.20156
	2 Companies	28	4.0714	.64455	.12181
	3 Companies	31	4.0065	.86946	.15616
	4 Companies	15	4.3200	.61783	.15952
	Not applicable	18	3.8333	.63338	.14929
	Total	100	4.0540	.71399	.07140

Table 4.17 ANOVA Result of Comparative Study of Companies on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Attitude towards Pricing	Between Groups	.540	4	.135	.327	.859
	Within Groups	39.275	95	.413		
	Total	39.816	99			
Subjective Norm	Between Groups	.847	4	.212	.609	.657
	Within Groups	33.042	95	.348		
	Total	33.889	99			
Behavioral Intention towards External Environment	Between Groups	1.878	4	.469	.745	.563
	Within Groups	59.824	95	.630		
	Total	61.701	99			
Behavioral Intention towards Internal Environment	Between Groups	1.049	4	.262	.635	.639
	Within Groups	39.248	95	.413		
	Total	40.297	99			

Table 4.17 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Behavioral	Between	2.248	4	.562	1.57	.186
Intention	Groups					
towards	Within	33.835	95	.356		
Technical	Groups					
Quality	Total	36.083	99			
Customer	Between	2.134	4	.533	1.04	.387
Loyalty	Groups					
	Within	48.335	95	.509		
	Groups					
	Total	50.468	99			

In the perspectives of the styles of house to be built, as presented by the ANOVA results in Table 4.18 to Table 4.21, investors on single-houses intention as compared to two-floor single houses show the lower perceived ability of the construction contractors to meet the expectations in aspects of empathy and responsiveness, and thus the clients and investors are less loyal for future engagement. The other styles could not be analyzed through either ANOVA or t-test as there are not sufficient numbers of sample sizes for the comparative purposes.

Table 4.18 ANOVA Analysis of the Styles of House to be built on Service Quality – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Attitude towards Pricing	Single house	52	4.2909	.71902	.09971
	Two-floor single house	34	4.5331	.65446	.11224
	Townhouse	1	4.5000	.	.
	Commercial building	5	4.5000	.69034	.30873
	Housing estates	6	4.5417	.42328	.17280
	Condominium	1	3.5000	.	.
SQ. Reliability	Apartment	1	3.3750	.	.
	Total	100	4.3838	.68563	.06856
	Single house	52	3.6795	.53203	.07378
	Two-floor single house	34	3.7647	.61698	.10581
	Townhouse	1	5.0000	.	.
	Commercial building	5	3.6000	.54772	.24495
	Housing estates	6	3.2778	.71233	.29081
	Condominium	1	4.0000	.	.
	Apartment	1	4.0000	.	.
	Total	100	3.7000	.58507	.05851

Table 4.18 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliable	Single house	52	3.9519	.76222	.10570
Company image	Two-floor house	34	4.3824	.74933	.12851
	Townhouse	1	4.5000	.	.
	Commercial building	5	4.0000	.70711	.31623
	Housing estates	6	4.1667	.51640	.21082
	Condominium	1	3.5000	.	.
	Apartment	1	4.0000	.	.
	Total	100	4.1150	.75161	.07516
SQ. Tangibles	Single house	52	4.2596	.70357	.09757
	Two-floor house	34	4.4559	.58215	.09984
	Townhouse	1	5.0000	.	.
	Commercial building	5	4.6000	.37914	.16956
	Housing estates	6	4.0000	.57009	.23274
	Condominium	1	3.7500	.	.
	Apartment	1	4.0000	.	.
	Total	100	4.3275	.64618	.06462
SQ.	Single house	52	4.0000	.75563	.10479
Responsiveness:	Two-floor house	34	4.4412	.55000	.09432
Respond	Townhouse	1	4.8000	.	.
	Commercial building	5	4.4000	.54772	.24495

Table 4.18 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ.	Housing estates	6	4.2000	.21909	.08944
	Condominium	1	3.2000	.	.
	Apartment	1	3.6000	.	.
	Total	100	4.1780	.68514	.06851
	Single house	52	4.1250	.67246	.09325
	Two-floor house	34	4.4412	.62176	.10663
	Townhouse	1	5.0000	.	.
	Commercial building	5	4.4000	.37914	.16956
	Housing estates	6	4.2917	.57915	.23644
	Condominium	1	3.0000	.	.
SQ. Assurance: Performance	Apartment	1	3.2500	.	.
	Total	100	4.2450	.66190	.06619
	Single house	52	4.1951	.71570	.09925
	Two-floor house	34	4.5042	.50750	.08704
	Townhouse	1	4.4286	.	.
	Commercial building	5	4.4000	.58379	.26108
	Housing estates	6	4.2619	.39812	.16253
	Condominium	1	4.0000	.	.
	Apartment	1	4.5714	.	.
	Total	100	4.3186	.62743	.06274

Table 4.18 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Assurance:	Single house	52	4.1923	.81742	.11336
Safety Standard	Two-floor house	34	4.5882	.51450	.08824
	Townhouse	1	5.0000	.	.
	Commercial building	5	4.6000	.65192	.29155
	Housing estates	6	4.1667	.40825	.16667
	Condominium	1	4.0000	.	.
	Apartment	1	4.5000	.	.
	Total	100	4.3550	.70816	.07082
SQ. Assurance:	Single house	52	4.4038	.79852	.11073
Legally Registered	Two-floor house	34	4.6176	.73915	.12676
	Townhouse	1	4.0000	.	.
	Commercial building	5	4.6000	.89443	.40000
	Housing estates	6	4.5000	.83666	.34157
	Condominium	1	4.0000	.	.
	Apartment	1	4.0000	.	.
	Total	100	4.4800	.77172	.07717
SQ. Empathy	Single house	52	4.0302	.58413	.08100
	Two-floor house	34	4.3866	.52932	.09078
	Townhouse	1	4.7143	.	.
	Commercial building	5	4.4571	.34107	.15253

Table 4.18 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
	Housing estates	6	4.1429	.33806	.13801
	Condominium	1	4.7143	.	.
	Apartment	1	3.1429	.	.
	Total	100	4.1843	.57153	.05715
SQ.	Single house	52	4.3141	.70915	.09834
Relationships	Two-floor house	34	4.6176	.48640	.08342
	Townhouse	1	4.6667	.	.
	Commercial building	5	4.6000	.54772	.24495
	Housing estates	6	4.2222	.45542	.18592
	Condominium	1	4.3333	.	.
	Apartment	1	3.0000	.	.
	Total	100	4.4167	.63630	.06363

Table 4.19 ANOVA Result of the Styles of House to be built on Service Quality

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	3.236	6	.539	1.15	.335
	Within Groups	43.303	93	.466		8

Table 4.19 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliable	Between Groups	4.435	6	.739	1.33	.250
Company image	Within Groups	51.493	93	.554		5
	Total	55.927	99			
SQ. Tangibles	Between Groups	2.708	6	.451	1.08	.376
	Within Groups	38.629	93	.415		7
	Total	41.337	99			
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	5.089	6	.848	1.53	.175
	Within Groups	51.367	93	.552		6
	Total	56.457	99			
SQ. Responsiveness: Respond	Between Groups	5.929	6	.988	2.26	.044
	Within Groups	40.542	93	.436		7
	Total	46.472	99			

Table 4.19 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ.	Within	38.072	93	.409		
Responsiveness:	Groups					
Problem Solving	Total	43.373	99			
SQ. Assurance:	Between	2.195	6	.366	.925	.481
Performance	Groups					
	Within	36.779	93	.395		
	Groups					
	Total	38.974	99			
SQ. Assurance:	Between	4.302	6	.717	1.47	.197
Safety Standard	Groups					
	Within	45.346	93	.488		
	Groups					
	Total	49.647	99			
SQ. Empathy	Between	4.654	6	.776	2.60	.022
	Groups					
	Within	27.684	93	.298		
	Groups					
	Total	32.339	99			
SQ.	Between	4.392	6	.732	1.90	.088
Relationships	Groups					
	Within	35.692	93	.384		
	Groups					
	Total	40.083	99			

Table 4.20 ANOVA Analysis of The Styles of House to be built on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Attitude towards Pricing	Single house	52	4.0808	.69987	.09705
	Two-floor house	34	4.4353	.48360	.08294
	Townhouse	1	4.2000	.	.
	Commercial building	5	4.6800	.41473	.18547
	Housing estates	6	4.4000	.43818	.17889
	Condominium	1	3.0000	.	.
	Apartment	1	3.8000	.	.
	Total	100	4.2380	.63417	.06342
Subjective Norm	Single house	52	3.6795	.53203	.07378
	Two-floor house	34	3.7647	.61698	.10581
	Townhouse	1	5.0000	.	.
	Commercial building	5	3.6000	.54772	.24495
	Housing estates	6	3.2778	.71233	.29081
	Condominium	1	4.0000	.	.
	Apartment	1	4.0000	.	.
	Total	100	3.7000	.58507	.05851

Table 4.20 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Behavioral	Single house	52	3.6026	.77344	.10726
Intention	Two-floor house	34	3.7843	.82013	.14065
towards	Townhouse	1	2.3333	.	.
External	Commercial	5	3.6333	.84492	.37786
Environment	building				
	Housing estates	6	3.3333	.62361	.25459
	Condominium	1	2.6667	.	.
	Apartment	1	3.1667	.	.
	Total	100	3.6233	.78946	.07895
Behavioral	Single house	52	4.2404	.71222	.09877
Intention	Two-floor house	34	4.5882	.47227	.08099
towards Internal	Townhouse	1	5.0000	.	.
Environment	Commercial	5	4.7000	.54199	.24238
	building				
	Housing estates	6	4.4167	.51640	.21082
	Condominium	1	3.5000	.	.
	Apartment	1	3.7500	.	.
	Total	100	4.3875	.63800	.06380
Behavioral	Single house	52	4.4615	.67043	.09297
Intention	Two-floor house	34	4.6275	.48384	.08298
towards	Townhouse	1	5.0000	.	.
Technical	Commercial	5	4.8000	.44721	.20000
Quality	building				

Table 4.20 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
	Housing estates	6	4.1667	.69121	.28219
	Condominium	1	4.3333	.	.
	Apartment	1	4.0000	.	.
	Total	100	4.5167	.60372	.06037
Customer Loyalty	Single house	52	3.9077	.72757	.10090
	Two-floor house	34	4.2765	.64950	.11139
	Townhouse	1	4.6000	.	.
	Commercial building	5	4.5600	.51769	.23152
	Housing estates	6	3.7333	.68896	.28127
	Condominium	1	3.0000	.	.
	Apartment	1	4.0000	.	.
	Total	100	4.0540	.71399	.07140

Table 4.21 ANOVA Result of the Styles of House to be built on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Attitude towards Pricing	Between Groups	5.469	6	.912	2.46	.029
					8	

Table 4.21 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Subjective Norm	Within Groups	34.346	93	.369		
	Total	39.816	99			
	Between Groups	3.154	6	.526	1.59	.159
Behavioral Intention towards External Environment	Within Groups	30.735	93	.330		
	Total	33.889	99			
	Between Groups	4.196	6	.699	1.13	.351
Behavioral Intention towards Internal Environment	Within Groups	57.505	93	.618		
	Total	61.701	99			
	Between Groups	4.558	6	.760	1.97	.077
Behavioral Intention towards Technical Quality	Within Groups	35.739	93	.384		
	Total	40.297	99			
	Between Groups	2.246	6	.374	1.02	.412
Quality	Within Groups	33.837	93	.364		
	Total	36.083	99			

Table 4.21 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Customer Loyalty	Between Groups	6.105	6	1.017	2.13	.057
	Within	44.363	93	.477		3
	Total	50.468	99			

In the aspect of construction budget paid, as shown in Table 4.22, the customers who are in higher ranges of construction investment budgets perceive the construction contractors are more able to deliver in aspects of reliable image (with correlation strength of 0.297**), tangibles (with correlations strength of 0.210*), assurance quality in domains of performance (with correlations strength of 0.236*) and safety standard (with correlations strength of 0.274**), and empathy (with correlations strength of 0.209*). Nevertheless, the precise reasons for this positive correlation pattern would only be clarified reliably through interviews based data collection method. Thus, this result of this questionnaire-based approach provides the possible entry points for further research.

Table 4.22 Correlation between Expecting Budget and Other Variables

	Budget Level
Reliable Company Image	0.297**
Tangibles	0.210*
Assurance: Performance	0.236*
Assurance: Safety Standard	0.274**
Empathy	0.209*

Tables 4.23-4.26 present the results of the ANOVA analysis of the media of influence on service quality and other post-service consumption variables such as loyalty show no significant differences on the media of influence. Nevertheless, descriptively, the results do indicate that clients or investors who make the decisions on their own or by the suggestions of the construction material stores and media through advertising and public relations have lower mean of customer loyalty. Thus, this could imply to the construction contractors to pay more focus on sharpening up their marketing communication messages and relationship initiatives to the clients, investors, the construction material stores and advertisement design efforts. Efforts should be stressed to collaborate with the construction material stores as they provide influence through words of mouth and recommendation which can be uncontrollable to some extent.

Table 4.23 ANOVA Analysis of the Media of Influence on Service Quality – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliability	Making their own decision	21	4.3512	.49940	.10898
	Construction material store	5	4.0750	1.59491	.71327
	Family	20	4.3188	.79624	.17805
	Friends	18	4.5556	.61420	.14477
	Partner	11	4.4205	.65496	.19748

Table 4.23 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
	Architects/Engineers	10	4.5875	.43720	.13826
	Advertising and Public relations	15	4.2500	.60319	.15574
	Total	100	4.3838	.68563	.06856
SQ.	Making their own decision	21	4.0952	.68226	.14888
Reliable					
Company	Construction material store	5	4.2000	1.52480	.68191
image					
	Family	20	3.8500	.85993	.19229
	Friends	18	4.3333	.68599	.16169
	Partner	11	4.1818	.84477	.25471
	Architects/Engineers	10	4.2500	.48591	.15366
	Advertising	15	4.0667	.49522	.12786
	Total	100	4.1150	.75161	.07516
SQ.	Making their own decision	21	4.1548	.61480	.13416
Tangibles					
	Construction material store	5	4.2000	1.25499	.56125
	Family	20	4.2750	.74295	.16613
	Friends	18	4.3889	.59546	.14035
	Partner	11	4.5227	.51786	.15614
	Architects/Engineers	10	4.5000	.56519	.17873
	Advertising	15	4.3500	.52440	.13540
	Total	100	4.3275	.64618	.06462

Table 4.23 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Intangible (Feng Shui, and Auspicious Dates)	Making their own decision	21	3.8095	.87921	.19186
	Construction material store	5	3.8667	1.64317	.73485
	Family	20	4.1500	.57710	.12904
	Friends	18	3.8704	.64816	.15277
	Partner	11	4.3636	.37873	.11419
	Architects/Engineers	10	4.5333	.47661	.15072
	Advertising	15	4.0222	.73966	.19098
SQ. Responsiveness: Problem Solving	Total	100	4.1780	.68514	.06851
	Making their own decision	21	4.1667	.49582	.10820
	Construction material store	5	3.9000	1.50624	.67361
	Family	20	4.2000	.75044	.16780
	Friends	18	4.3194	.61120	.14406
	Partner	11	4.5455	.49772	.15007
	Architects/Engineers	10	4.3750	.42898	.13566
	Advertising	15	4.1333	.65374	.16880
	Total	100	4.2450	.66190	.06619

Table 4.23 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ.	Making their own	21	4.4286	.63808	.13924
Assurance:	decision				
Safety	Construction material	5	3.9000	1.67332	.74833
Standard	store				
	Family	20	4.4000	.66094	.14779
	Friends	18	4.4167	.64739	.15259
	Partner	11	4.2727	.81742	.24646
	Architects/Engineers	10	4.4000	.56765	.17951
	Advertising	15	4.3000	.52780	.13628
	Total	100	4.3550	.70816	.07082
SQ.	Making their own	21	4.5238	.60159	.13128
Assurance:	decision				
Legally	Construction material	5	4.0000	1.22474	.54772
Registered	store				
	Family	20	4.3500	.93330	.20869
	Friends	18	4.7222	.57451	.13541
	Partner	11	4.4545	.93420	.28167
	Architects/Engineers	10	4.7000	.48305	.15275
	Advertising	15	4.3333	.81650	.21082
	Total	100	4.4800	.77172	.07717

Table 4.23 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Empathy	Making their own decision	21	4.0408	.56990	.12436
	Construction material store	5	4.0000	.95831	.42857
	Family	20	4.2429	.60271	.13477
	Friends	18	4.1587	.52521	.12379
	Partner	11	4.3766	.54688	.16489
	Architects/Engineers	10	4.4429	.38949	.12317
	Advertising	15	4.0857	.55539	.14340
	Total	100	4.1843	.57153	.05715
SQ. Relationships	Making their own decision	21	4.2857	.46291	.10102
	Construction material store	5	3.9333	1.68984	.75572
	Family	20	4.4667	.57634	.12887
	Friends	18	4.5000	.60768	.14323
	Partner	11	4.6970	.40701	.12272
	Architects/Engineers	10	4.7333	.37843	.11967
	Advertising and Public relations	15	4.1778	.56155	.14499
	Total	100	4.4167	.63630	.06363

Table 4.23 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Relationships	Making their own decision	21	4.2857	.46291	.10102
	Construction material store	5	3.9333	1.68984	.75572
	Family	20	4.4667	.57634	.12887
	Friends	18	4.5000	.60768	.14323
	Partner	11	4.6970	.40701	.12272
	Architects/Engineers	10	4.7333	.37843	.11967
	Advertising and Public relations	15	4.1778	.56155	.14499
	Total	100	4.4167	.63630	.06363

Table 4.24: ANOVA Result of the Media of Influence on Service Quality

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	1.813	6	.302	.628	.707
	Within Groups	44.726	93	.481		

Table 4.24 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
	Total	46.539	99			
SQ. Reliability	Between Groups	1.813	6	.302	.628	.707
	Within Groups	44.726	93	.481		
	Total	46.539	99			
SQ. Reliable Company image	Between Groups	2.573	6	.429	.748	.613
	Within Groups	53.354	93	.574		
	Total	55.928	99			
SQ. Tangibles	Between Groups	1.555	6	.259	.606	.725
	Within Groups	39.782	93	.428		
	Total	41.337	99			
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	5.589	6	.931	1.70	.129
	Within Groups	50.868	93	.547		
	Total	56.457	99			

Table 4.24 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ.	Between	1.444	6	.241	.497	.809
Responsiveness:	Groups					
Respond	Within	45.027	93	.484		
	Groups					
	Total	46.472	99			
SQ.	Between	2.213	6	.369	.833	.547
Responsiveness:	Groups					
Problem Solving	Within	41.159	93	.443		
	Groups					
	Total	43.373	99			
SQ. Assurance:	Between	1.061	6	.177	.434	.855
Performance	Groups					
	Within	37.913	93	.408		
	Groups					
	Total	38.974	99			
SQ. Assurance:	Between	1.398	6	.233	.449	.844
Safety Standard	Groups					
	Within	48.250	93	.519		
	Groups					
	Total	49.648	99			

Table 4.24 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Assurance: Legally Registered	Between Groups	3.400	6	.567	.949	.465
	Within Groups	55.560	93	.597		
	Total	58.960	99			
SQ. Empathy	Between Groups	1.904	6	.317	.970	.450
	Within Groups	30.435	93	.327		
	Total	32.339	99			
SQ. Relationships	Between Groups	4.426	6	.738	1.924	.085
	Within Groups	35.657	93	.383		
	Total	40.083	99			

Table 4.25 ANOVA Analysis of the Media of Influence on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty – Descriptive

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Attitude towards Pricing	Making their own decision	21	4.0571	.56619	.12355
	Construction material store	5	3.8800	1.52709	.68293
	Family	20	4.4900	.53695	.12007
	Friends	18	4.2111	.43641	.10286
	Partner	11	4.4182	.71808	.21651
	Architects/Engineers/ Designers	10	4.3600	.44020	.13920
	Advertising and Public relations	15	4.0933	.59936	.15476
Subjective Norm	Total	100	4.2380	.63417	.06342
	Own decision	21	3.8413	.54384	.11868
	Construction material	5	3.2667	.72265	.32318
	Family	20	3.7833	.69480	.15536
	Friends	18	3.5185	.52670	.12414
	Partner	11	3.6667	.53748	.16206
	Architects/Engineers/ Designers	10	3.9000	.38650	.12222
	Advertising	15	3.6444	.61032	.15758
	Total	100	3.7000	.58507	.05851

Table 4.25 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Behavioral	Making their own	21	3.5952	.89376	.19503
Intention	decision				
towards	Construction	5	3.9000	.61914	.27689
External	material store				
Environment	Family	20	3.7417	.71426	.15971
	Friends	18	3.3426	.86029	.20277
	Partner	11	3.7273	.91976	.27732
	Architects/	10	3.8500	.55249	.17471
	Engineers/				
	Designers				
	Advertising	15	3.5222	.74766	.19304
	Total	100	3.6233	.78946	.07895
Behavioral	Making their own	21	4.3333	.54962	.11994
Intention	decision				
towards	Construction	5	4.0500	1.73566	.77621
Internal	material store				
Environment	Family	20	4.5625	.54937	.12284
	Friends	18	4.3889	.47140	.11111
	Partner	11	4.4545	.64049	.19311
	Architects/	10	4.2500	.58926	.18634
	Engineers/				
	Designers				
	Advertising	15	4.3833	.53341	.13773
	Total	100	4.3875	.63800	.06380

Table 4.25 (Continued)

Descriptive						
		N	Mean	Std. Deviation	Std. Error	
Behavioral	Making their own	21	4.3810	.46291	.10102	
Intention	decision					
towards	Construction	5	4.0667	1.58815	.71024	
Technical	material store					
Quality	Family	20	4.7667	.39143	.08753	
	Friends	18	4.6296	.55881	.13171	
	Partner	11	4.6667	.42164	.12713	
	Architects/Engineers	10	4.3667	.45677	.14444	
	/Designers					
	Advertising and	15	4.3778	.66508	.17172	
	Public relations					
	Total	100	4.5167	.60372	.06037	
Customer	Making their own	21	3.9238	.66476	.14506	
Loyalty	decision					
	Construction	5	3.4800	.85557	.38262	
	material store					
	Family	20	4.1700	.78210	.17488	
	Friends	18	4.1556	.69131	.16294	
	Partner	11	4.2182	.84121	.25363	
	Architects/Engineers	10	4.2200	.44672	.14126	
	/Designers					
	Advertising	15	3.9200	.69611	.17974	
	Total	100	4.0540	.71399	.07140	

Table 4.26 ANOVA Result of the Media of Influence on Attitude towards Pricing, Subjective Norms, Behavioral Intention and Customer Loyalty

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Attitude towards Pricing	Between Groups	3.431	6	.572	1.46	.200
	Within Groups	36.385	93	.391		
	Total	39.816	99			
Subjective Norm	Between Groups	2.548	6	.425	1.26	.283
	Within Groups	31.341	93	.337		
	Total	33.889	99			
Behavioral Intention towards External Environment	Between Groups	2.884	6	.481	.760	.603
	Within Groups	58.817	93	.632		
	Total	61.701	99			
Behavioral Intention towards Internal Environment	Between Groups	1.482	6	.247	.592	.736
	Within Groups	38.814	93	.417		
	Total	40.297	99			

Table 4.26 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Behavioral	Between	3.641	6	.607	1.73	.120
Intention	Groups				9	
towards	Within	32.443	93	.349		
Technical	Groups					
Quality	Total	36.083	99			
Customer	Between	3.299	6	.550	1.08	.378
Loyalty	Groups				4	
	Within	47.169	93	.507		
	Groups					
	Total	50.468	99			

2 Gender wise, the t-test results presented in Table 4.27 and Table 4.28 shows no significant role of gender in depicting signs of significant differences on any of the variables involved.

Table 4.27 Descriptive Profiles of the T-Test on Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
SQ. Reliability	Male	56	4.4152	.64935	.08677
	Female	44	4.3438	.73489	.11079
SQ. Reliable Company image	Male	56	4.2232	.68702	.09181
	Female	44	3.9773	.81379	.12268
SQ. Tangibles	Male	56	4.3527	.62300	.08325
	Female	44	4.2955	.68044	.10258
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Male	56	4.0179	.82736	.11056
	Female	44	4.1061	.65798	.09919
SQ. Responsiveness: Respond	Male	56	4.1571	.73728	.09852
	Female	44	4.2045	.61981	.09344
SQ. Responsiveness: Problem Solving	Male	56	4.1741	.67068	.08962
	Female	44	4.3352	.64687	.09752
SQ. Assurance: Performance	Male	56	4.2934	.62503	.08352
	Female	44	4.3506	.63624	.09592
SQ. Assurance: Safety Standard	Male	56	4.3661	.71026	.09491
	Female	44	4.3409	.71343	.10755

Table 4.27 (Continued)

	Gender	N	Mean	Std. Deviation	Std. Error Mean
SQ. Assurance: Legally Registered	Male	56	4.5179	.73833	.09866
	Female	44	4.4318	.81833	.12337
SQ. Empathy	Male	56	4.2041	.60539	.08090
	Female	44	4.1591	.53115	.08007
SQ. Relationships	Male	56	4.3452	.69038	.09226
	Female	44	4.5076	.55447	.08359
Attitude towards Pricing	Male	56	4.2036	.67742	.09052
	Female	44	4.2818	.57920	.08732
Subjective Norm	Male	56	3.7083	.62300	.08325
	Female	44	3.6894	.53987	.08139
Behavioral Intention towards External Environment	Male	56	3.5655	.85910	.11480
	Female	44	3.6970	.69352	.10455
Behavioral Intention towards Internal Environment	Male	56	4.3482	.65830	.08797
	Female	44	4.4375	.61504	.09272
Behavioral Intention towards Technical Quality	Male	56	4.4940	.62601	.08365
	Female	44	4.5455	.57999	.08744

Table 4.27 (Continued)

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Behavior: Soft Service	Male	56	4.3393	.76934	.10281
Quality	Female	44	4.5909	.54210	.08172
Customer Loyalty	Male	56	4.0250	.65734	.08784
	Female	44	4.0909	.78646	.11856
Intention	Male	56	4.0714	.70342	.09400
	Female	44	4.1591	.82668	.12463

Table 4.28 T-Test Result on Gender

Independent Samples Test					
	Levene's Test		t-test for		
	for Equality of	Variances	for Equality of	Means	
	F	Sig.	F	Sig.	
SQ. Reliability	Equal variances assumed	2.723	.102	.515	.98
	Equal variances not assumed			.508	86.491
SQ. Reliable	Equal variances assumed	1.150	.286	1.638	.98
Company					
image	Equal variances not assumed			1.605	84.039

Table 4.28 (Continued)**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	F	Sig.
SQ. Tangibles	Equal variances assumed	.739	.392	.438	.98
	Equal variances not assumed			.433	88.337
SQ. Intangible	Equal variances assumed	.979	.325	-.578	.98
	Equal variances not assumed			-.594	97.979
SQ. Responsiveness: Respond	Equal variances assumed	.362	.549	-.342	.98
	Equal variances not assumed			-.349	97.521
SQ. Responsiveness: Problem Solving	Equal variances assumed	.291	.591	-1.211	.98
	Equal variances not assumed			-1.216	93.927
SQ. Assurance: Performance	Equal variances assumed	1.405	.239	-.451	.98
	Equal variances not assumed			-.450	91.710

Table 4.28 (Continued)**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	F	Sig.
SQ.	Equal variances	.823	.367	.176	.98
Assurance:	assumed				
Safety					
Standard					
SQ.	Equal variances not			.175	92.291
Assurance:	assumed				
Legally	Equal variances	.912	.342	.551	.98
Registered	assumed				
	Equal variances not			.545	87.584
	assumed				
	Equal variances not			-1.304	97.942
	assumed				
Attitude	Equal variances	.001	.979	-.611	.98
towards	assumed				
Pricing	Equal variances not			-.622	97.263
	assumed				
Subjective	Equal variances	.612	.436	.160	.98
Norm	assumed				
	Equal variances not			.163	97.019
	assumed				

Table 4.28 (Continued)**Independent Samples Test**

		Levene's Test		t-test for	
		for Equality of		Equality of	
		Variances	Means	F	Sig.
Behavioral	Equal variances	2.966	.088	-.825	.98
Intention	assumed				
towards	Equal variances not			-.847	97.915
External	assumed				
Environment					
Behavioral	Equal variances	.570	.452	-.693	.98
Intention	assumed				
towards	Equal variances not			-.699	95.045
Internal	assumed				
Environment					
Behavioral	Equal variances	.274	.602	-.421	.98
Intention	assumed				
towards	Equal variances not			-.425	95.313
Technical	assumed				
Quality					

Table 4.28 (Continued)**Independent Samples Test**

		Levene's Test		t-test for	
		for Equality of		Equality of	
		Variances	Means	F	Sig.
Behavior:	Equal variances	2.304	.132	-1.839	.98
Soft Service	assumed				
Quality	Equal variances not assumed			-1.916	.96.954
Customer	Equal variances	1.857	.176	-.456	.98
Loyalty	assumed				
	Equal variances not assumed			-.447	.83.493
Intention	Equal variances	1.296	.258	-.573	.98
	assumed				
	Equal variances not assumed			-.562	.84.468
Behavior:	Equal variances	2.304	.132	-1.839	.98
Soft Service	assumed				
Quality	Equal variances not assumed			-1.916	.96.954
Customer	Equal variances	1.857	.176	-.456	.98
Loyalty	assumed				
	Equal variances not assumed			-.447	.83.493

Similarly, relating to marital status, ANOVA test results in Table 4.29 and Table 4.30 show that marital status also plays no significant role in causing any significant differences on the levels of perceptions of the variables involved.

Table 4.29: Descriptive Profile of the ANOVA Test on Marital Status

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliability	Single	29	4.3190	.86059	.15981
	Married	67	4.4160	.60981	.07450
	Divorce	4	4.3125	.59073	.29536
	Total	100	4.3838	.68563	.06856
SQ. Reliable Company image	Single	29	4.1379	.85457	.15869
	Married	67	4.1418	.70607	.08626
	Divorce	4	3.5000	.57735	.28868
	Total	100	4.1150	.75161	.07516
SQ. Tangibles	Single	29	4.3879	.75766	.14069
	Married	67	4.3022	.60699	.07416
	Divorce	4	4.3125	.51539	.25769
	Total	100	4.3275	.64618	.06462
SQ. Intangible (Choices of Feng Shui, and Auspicious Dates)	Single	29	4.1724	.88918	.16512
	Married	67	4.0000	.69872	.08536
	Divorce	4	4.1667	.69389	.34694
	Total	100	4.0567	.75516	.07552

Table 4.29 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Responsiveness: Respond	Single	29	4.1448	.86997	.16155
	Married	67	4.1791	.61213	.07478
	Divorce	4	4.4000	.32660	.16330
	Total	100	4.1780	.68514	.06851
SQ. Responsiveness: Problem Solving	Single	29	4.2241	.85132	.15809
	Married	67	4.2687	.58113	.07100
	Divorce	4	4.0000	.40825	.20412
	Total	100	4.2450	.66190	.06619
SQ. Assurance: Performance	Single	29	4.3399	.79394	.14743
	Married	67	4.3092	.54176	.06619
	Divorce	4	4.3214	.80284	.40142
	Total	100	4.3186	.62743	.06274
SQ. Assurance: Safety Standard	Single	29	4.3621	.90531	.16811
	Married	67	4.3582	.60180	.07352
	Divorce	4	4.2500	.95743	.47871
	Total	100	4.3550	.70816	.07082
SQ. Assurance: Legally Registered	Single	29	4.5172	.82897	.15394
	Married	67	4.4776	.74586	.09112
	Divorce	4	4.2500	.95743	.47871
	Total	100	4.4800	.77172	.07717
SQ. Empathy	Single	29	4.2266	.59089	.10973
	Married	67	4.1642	.55287	.06754
	Divorce	4	4.2143	.87676	.43838
	Total	100	4.1843	.57153	.05715

Table 4.29 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Relationships	Single	29	4.4598	.81851	.15199
	Married	67	4.3980	.54815	.06697
	Divorce	4	4.4167	.68718	.34359
	Total	100	4.4167	.63630	.06363
Attitude towards Pricing	Single	29	4.1241	.82707	.15358
	Married	67	4.2925	.53860	.06580
	Divorce	4	4.1500	.55076	.27538
	Total	100	4.2380	.63417	.06342
Subjective Norm	Single	29	3.8391	.67624	.12558
	Married	67	3.6318	.54783	.06693
	Divorce	4	3.8333	.33333	.16667
	Total	100	3.7000	.58507	.05851
Behavioral Intention towards External Environment	Single	29	3.8103	.78771	.14627
	Married	67	3.5448	.80381	.09820
	Divorce	4	3.5833	.28868	.14434
	Total	100	3.6233	.78946	.07895
Behavioral Intention towards Internal Environment	Single	29	4.2328	.85808	.15934
	Married	67	4.4739	.51149	.06249
	Divorce	4	4.0625	.51539	.25769
	Total	100	4.3875	.63800	.06380

Table 4.29 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
Behavioral Intention towards Technical Quality	Single	29	4.4598	.83292	.15467
	Married	67	4.5423	.48491	.05924
	Divorce	4	4.5000	.57735	.28868
	Total	100	4.5167	.60372	.06037
Behavior: Soft Service Quality	Single	29	4.3793	.86246	.16016
	Married	67	4.4776	.61196	.07476
	Divorce	4	4.5000	.57735	.28868
	Total	100	4.4500	.68718	.06872
Customer Loyalty	Single	29	4.1172	.67298	.12497
	Married	67	4.0418	.74796	.09138
	Divorce	4	3.8000	.40000	.20000
	Total	100	4.0540	.71399	.07140
Intention	Single	29	4.1379	.74278	.13793
	Married	67	4.1119	.78731	.09619
	Divorce	4	3.8750	.25000	.12500
	Total	100	4.1100	.75739	.07574

Table 4.30 ANOVA Test Result on Marital Status

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	.212	2	.106	.222	.801
	Within Groups	46.327	97	.478		
	Total	46.539	99			
SQ. Reliable Company image	Between Groups	1.576	2	.788	1.407	.250
	Within Groups	54.351	97	.560		
	Total	55.928	99			
SQ. Tangibles	Between Groups	.150	2	.075	.176	.839
	Within Groups	41.187	97	.425		
	Total	41.337	99			
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	.652	2	.326	.567	.569
	Within Groups	55.805	97	.575		
	Total	56.457	99			

Table 4.30 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Responsiveness:	Between Groups	.229	2	.115	.240	.787
	Within Groups	46.242	97	.477		
	Total	46.472	99			
SQ. Problem Solving	Between Groups	.290	2	.145	.327	.722
	Within Groups	43.082	97	.444		
	Total	43.372	99			
SQ. Assurance: Performance	Between Groups	.019	2	.010	.024	.976
	Within Groups	38.955	97	.402		
	Total	38.974	99			
SQ. Assurance: Safety Standard	Between Groups	.046	2	.023	.045	.956
	Within Groups	49.601	97	.511		
	Total	49.648	99			

Table 4.30 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Assurance: Legally Registered	Between Groups	.252	2	.126	.208	.812
	Within Groups	58.708	97	.605		
	Total	58.960	99			
SQ. Empathy	Between Groups	.083	2	.041	.124	.883
	Within Groups	32.256	97	.333		
	Total	32.339	99			
SQ. Relationships	Between Groups	.077	2	.039	.094	.911
	Within Groups	40.006	97	.412		
	Total	40.083	99			
Attitude towards Pricing	Between Groups	.606	2	.303	.750	.475
	Within Groups	39.209	97	.404		
	Total	39.816	99			

Table 4.30 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Subjective Norm	Between Groups	.943	2	.472	1.389	.254
	Within Groups	32.946	97	.340		
	Total	33.889	99			
Behavioral Intention towards External Environment	Between Groups	1.434	2	.717	1.154	.320
	Within Groups	60.267	97	.621		
	Total	61.701	99			
Behavioral Intention towards Internal Environment	Between Groups	1.617	2	.808	2.027	.137
	Within Groups	38.680	97	.399		
	Total	40.297	99			
Behavioral Intention towards Technical Quality	Between Groups	.139	2	.069	.188	.829
	Within Groups	35.944	97	.371		
	Total	36.083	99			

Table 4.30 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Behavior: Soft Service Quality	Between Groups	.206	2	.103	.215	.807
	Within Groups	46.544	97	.480		
	Total	46.750	99			
Customer Loyalty	Between Groups	.384	2	.192	.372	.690
	Within Groups	50.084	97	.516		
	Total	50.468	99			
Intention	Between Groups	.244	2	.122	.209	.812
	Within Groups	56.546	97	.583		
	Total	36.083	99			
Customer Loyalty	Between Groups	.534	2	.267	.209	.812
	Within Groups	51.771	97	.583	.500	.608
	Total	36.083	99			

Table 4.31 Descriptive Profile of the ANOVA Test Result on Age

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Reliability	21-30	20	4.2000	.67668	.15131
	31-40	40	4.3281	.81438	.12876
	41-50	24	4.5625	.52389	.10694
	51-60	15	4.4500	.51060	.13184
	60>	1	5.0000	.	.
	Total	100	4.3838	.68563	.06856
SQ. Reliable Company image	21-30	20	4.0750	.73045	.16333
	31-40	40	4.0250	.85448	.13510
	41-50	24	4.1875	.70422	.14375
	51-60	15	4.2333	.56273	.14530
	60>	1	5.0000	.	.
	Total	100	4.1150	.75161	.07516
SQ. Tangibles	21-30	20	4.3125	.67315	.15052
	31-40	40	4.2313	.75189	.11888
	41-50	24	4.4583	.45245	.09236
	51-60	15	4.3667	.59662	.15405
	60>	1	4.7500	.	.
	Total	100	4.3275	.64618	.06462
SQ. Intangible	21-30	20	4.0167	.71308	.15945
	31-40	40	4.1500	.85051	.13448

Table 4.31 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
	41-50	24	4.0556	.64954	.13259
	51-60	15	3.8889	.75242	.19427
	60>	1	3.6667	.	.
	Total	100	4.0567	.75516	.07552
SQ. Responsiveness:	21-30	20	4.1600	.70666	.15801
Respond	31-40	40	4.1450	.77392	.12237
	41-50	24	4.2583	.54845	.11195
	51-60	15	4.1333	.67047	.17311
	60>	1	4.6000	.	.
	Total	100	4.1780	.68514	.06851
SQ. Responsiveness:	21-30	20	4.1125	.69526	.15547
Problem Solving	31-40	40	4.2563	.75211	.11892
	41-50	24	4.2917	.54507	.11126
	51-60	15	4.3000	.58401	.15079
	60>	1	4.5000	.	.
	Total	100	4.2450	.66190	.06619
SQ. Assurance:	21-30	20	4.2071	.58714	.13129
Performance	31-40	40	4.3000	.75023	.11862
	41-50	24	4.4107	.51990	.10612
	51-60	15	4.3333	.49976	.12904
	60>	1	4.8571	.	.
	Total	100	4.3186	.62743	.06274

Table 4.31 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Assurance: Performance	21-30	20	4.2071	.58714	.13129
	31-40	40	4.3000	.75023	.11862
	41-50	24	4.4107	.51990	.10612
	51-60	15	4.3333	.49976	.12904
	60>	1	4.8571	.	.
	Total	100	4.3186	.62743	.06274
SQ. Assurance: Safety Standard	21-30	20	4.2500	.69774	.15602
	31-40	40	4.3500	.84883	.13421
	41-50	24	4.5000	.53161	.10851
	51-60	15	4.2333	.56273	.14530
	60>	1	5.0000	.	.
	Total	100	4.3550	.70816	.07082
SQ. Assurance: Legally Registered	21-30	20	4.4500	.75915	.16975
	31-40	40	4.4000	.84124	.13301
	41-50	24	4.4583	.72106	.14719
	51-60	15	4.7333	.70373	.18170
	60>	1	5.0000	.	.
	Total	100	4.4800	.77172	.07717
SQ. Empathy	21-30	20	4.1929	.51461	.11507
	31-40	40	4.1429	.61975	.09799
	41-50	24	4.2560	.59870	.12221
	51-60	15	4.1524	.52201	.13478
	60>	1	4.4286	.	.

Table 4.31 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
SQ. Relationships	Total	100	4.1843	.57153	.05715
	21-30	20	4.4167	.52843	.11816
	31-40	40	4.4250	.74339	.11754
	41-50	24	4.4167	.59181	.12080
	51-60	15	4.3556	.58373	.15072
	60>	1	5.0000	.	.
	Total	100	4.4167	.63630	.06363
Attitude towards Pricing	21-30	20	4.2900	.63403	.14177
	31-40	40	4.1900	.71604	.11322
	41-50	24	4.3167	.60696	.12390
	51-60	15	4.1867	.48678	.12569
	60>	1	4.0000	.	.
	Total	100	4.2380	.63417	.06342
Subjective Norm	21-30	20	3.7833	.64232	.14363
	31-40	40	3.7500	.61208	.09678
	41-50	24	3.5972	.55586	.11346
	51-60	15	3.5778	.47920	.12373
	60>	1	4.3333	.	.
	Total	100	3.7000	.58507	.05851
Behavioral	21-30	20	3.8250	.76944	.17205
Intention towards External	31-40	40	3.7375	.66118	.10454
Environment	41-50	24	3.4861	.93756	.19138
	51-60	15	3.2444	.80639	.20821

Table 4.31 (Continued)

Descriptive					
		N	Mean	Std. Deviation	Std. Error
	60>	1	4.0000	.	.
Behavioral Intention	Total	100	3.6233	.78946	.07895
towards Internal	31-40	40	4.3688	.75953	.12009
Environment	41-50	24	4.3542	.59853	.12218
	51-60	15	4.4167	.49701	.12833
	60>	1	5.0000	.	.
	Total	100	4.3875	.63800	.06380
Behavioral Intention	21-30	20	4.5167	.64414	.14403
towards Technical	31-40	40	4.5000	.69594	.11004
Quality	41-50	24	4.4861	.55586	.11346
	51-60	15	4.5778	.36659	.09465
	60>	1	5.0000	.	.
	Total	100	4.5167	.60372	.06037
Behavior: Soft	21-30	20	4.4000	.59824	.13377
Service Quality	31-40	40	4.5250	.81610	.12904
	41-50	24	4.3333	.63702	.13003
	51-60	15	4.4667	.51640	.13333
	60>	1	5.0000	.	.
	Total	100	4.4500	.68718	.06872

Table 4.31 (Continued)

Descriptive					
	N	Mean	Std. Deviation	Std. Error	
Customer Loyalty	21-30	20	4.0000	.50680	.11332
	31-40	40	4.0800	.84708	.13393
	41-50	24	4.0000	.70772	.14446
	51-60	15	4.0933	.61814	.15960
	60>	1	4.8000	.	.
	Total	100	4.0540	.71399	.07140
Intention	21-30	20	4.0500	.58264	.13028
	31-40	40	4.1000	.89299	.14119
	41-50	24	4.1042	.72200	.14738
	51-60	15	4.1667	.67259	.17366
	60>	1	5.0000	.	.
	Total	100	4.1100	.75739	.07574
Customer Loyalty	21-30	20	3.9667	.53966	.12067
	31-40	40	4.0667	.84799	.13408
	41-50	24	3.9306	.72883	.14877
	51-60	15	4.0444	.64077	.16545
	60>	1	4.6667	.	.
	Total	100	4.0167	.72687	.07269

Table 4.32 ANOVA Test Result on Age

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Reliability	Between Groups	2.011	4	.503	1.07	.374
	Within Groups	44.528	95	.469		
	Total	46.539	99			
SQ. Reliable Company image	Between Groups	1.475	4	.369	.644	.633
	Within Groups	54.452	95	.573		
	Total	55.927	99			
SQ. Tangibles	Between Groups	.987	4	.247	.581	.677
	Within Groups	40.349	95	.425		
	Total	41.337	99			
SQ. Intangible (Choices of Building Models, Feng Shui, and Auspicious Dates)	Between Groups	.955	4	.239	.409	.802
	Within Groups	55.502	95	.584		
	Total	56.457	99			

Table 4.32 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Responsiveness: Respond	Between Groups	.413	4	.103	.213	.931
	Within Groups	46.059	95	.485		
	Total	46.472	99			
SQ. Responsiveness: Problem Solving	Between Groups	.519	4	.130	.288	.885
	Within Groups	42.854	95	.451		
	Total	43.373	99			
SQ. Assurance: Performance	Between Groups	.759	4	.190	.472	.756
	Within Groups	38.214	95	.402		
	Total	38.974	99			
SQ. Assurance: Safety Standard	Between Groups	1.364	4	.341	.671	.614
	Within Groups	48.283	95	.508		
	Total	46.539	99			

Table 4.32 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
SQ. Assurance: Legally Registered	Between Groups	1.518	4	.380	.628	.644
	Within Groups	57.442	95	.605		
	Total	58.960	99			
SQ. Empathy	Between Groups	.268	4	.067	.199	.938
	Within Groups	32.070	95	.338		
	Total	32.339	99			
SQ. Relationships	Between Groups	.399	4	.100	.239	.916
	Within Groups	39.684	95	.418		
	Total	40.083	99			
Attitude towards Pricing	Between Groups	.391	4	.098	.236	.918
	Within Groups	39.425	95	.415		
	Total	39.816	99			

Table 4.32 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Subjective Norm	Between Groups	1.118	4	.279	.810	.522
	Within Groups	32.771	95	.345		
	Total	33.889	99			
Behavioral Intention towards External Environment	Between Groups	4.082	4	1.020	1.683	.160
	Within Groups	57.619	95	.607		
	Total	61.701	99			
Behavioral Intention towards Internal Environment	Between Groups	.441	4	.110	.263	.901
	Within Groups	39.856	95	.420		
	Total	40.297	99			
Behavioral Intention towards Technical Quality	Between Groups	.323	4	.081	.215	.930
	Within Groups	35.760	95	.376		
	Total	36.083	99			

Table 4.32 (Continued)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Behavior: Soft Service Quality	Between Groups	.908	4	.227	.471	.757
	Within Groups	45.842	95	.483		
	Total	46.750	99			
Customer Loyalty	Between Groups	.735	4	.184	.351	.843
	Within Groups	49.733	95	.524		
	Total	50.468	99			
Intention	Between Groups	.917	4	.229	.390	.815
	Within Groups	55.873	95	.588		
	Total	56.790	99			
Customer Loyalty	Between Groups	.762	4	.191	.351	.843
	Within Groups	51.544	95	.543		
	Total	52.306	99			

CHAPTER 5

CONCLUSION AND IMPLICATIONS

5.1 Conclusion

The research objective is to study the nature of behavioral intention to engage in a construction contractor's service, through an exploratory nature of research study which explores and investigates the perceptions of the clients in the various domains of service quality, as measures of behavioral control in that the clients perceive that the service quality delivered instills the belief that quality as expected would be matched. The study adapts the concept of the theory of planned behavior.

From the service-centered dominant logic view, effective service is a result of the application of specialized competences (knowledge and skills) through deeds, processes, and performances to the customers (Vargo & Lusch, 2004). Service oriented concept plays a key role to increase scientific understanding of marketing theories (Hunt, 1991) that attempt to study the relations among concepts (Bacharach, 1989) that aim to satisfy customers and establish customer loyalty.

Although service quality has long been challenged in the service industry (Zeithmal, Bitner, & Grempler, 2013a), there is no published data relating to what works of contractor projects that satisfy customers (property investors) significantly. Thus, studying the nature and scopes of services that are perceived to represent quality of services from the views of the customers becomes important, partly to create the knowledge that can be exploited to improve business performance, practically (Lehman & Jocz, 1997), and partly to contribute to the body of knowledge to further enrich the theory of marketing (Hunt, 1991).

Having able to establish the positive association between contextually oriented service quality and customer satisfaction, this research finding also provides implying clues to identify points of difference to state customer value proposition. Clearly positioning the differentiating points of value proposition in the eyes of customers is important as it allows customers to choose a contractor- offer from among the alternative choices. To do that, it is crucial the contractor knows accurately the deeper knowledge of what drives the value for the customers (Anderson, Narus, & van Rossum, 2006), and make an effort to strengthen the value of the services in order to project a more salient, appealing and available images to the customers.

This thesis thus integrates research relating to service quality perception, attitude, subjective norms, and behavioral intention to engage with the organization and customer's loyalty in the framework that depicts the theory of planned behavior. Based on a sample size of 100 respondents that study their perceptions on the variables involved, the validity of the theory of planned behavior is supported. The theory of planned behavior incorporates three types of belief that lead to the investors having the perceived confidence to proceed with further relationship with the contractors through behavioral intention and loyalty. The three beliefs are namely normative attitude, housing investor's perceived ability to control their decision made that is represented by the perceived service quality received, and the subjective norms being influenced by family, circles of friends and media of advertising relating to the contractors.

5.1.1 Concluding Research Questions 1 and 2

From the service-centered dominant logic view, effective service is a result of the application of specialized competences (knowledge and skills) through deeds, processes, and performances to the customers (Vargo & Lusch, 2004). Service oriented concept plays a key role to increase scientific understanding of marketing theories (Hunt, 1991) that attempt to study the relations among concepts (Bacharach, 1989) that aim to satisfy customers and establish customer loyalty.

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works of contractor projects that satisfy customers (property investors) significantly. Thus, studying the nature and scopes of services that are perceived to represent quality of services from the views of the customers becomes important, partly to create the knowledge that can be exploited to improve business performance, practically (Lehman & Jocz, 1997), and partly to contribute to the body of knowledge to further enrich the theory of marketing (Hunt, 1991).

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This paper thus integrates research relating to service quality perception, attitude, subjective norms, and behavioral intention to engage with the organization and customer's loyalty in the framework that depicts the theory of planned behavior. Based on a sample size of 100 housing clients that have had dealt with contractor' s engineering and construction project works, the theory of planned behavior is statistically supported. The theory of planned behavior incorporates three types of belief that lead to the clients having the perceived ability to proceed with further relationship with the contractors through behavioral intention and loyalty. The three beliefs are namely normative attitude, housing client' s perceived ability to control their decision made that is represented by the perceived service quality received, and the subjective norms being influenced by family, circles of friends and media of advertising relating to the contractors. The overall structure of the SERVQUAL adapted theory of planned behavior that is applicable to the construction contractor's services in the Northern part of Thailand, Chiang Rai, is shown in Figure 5.1

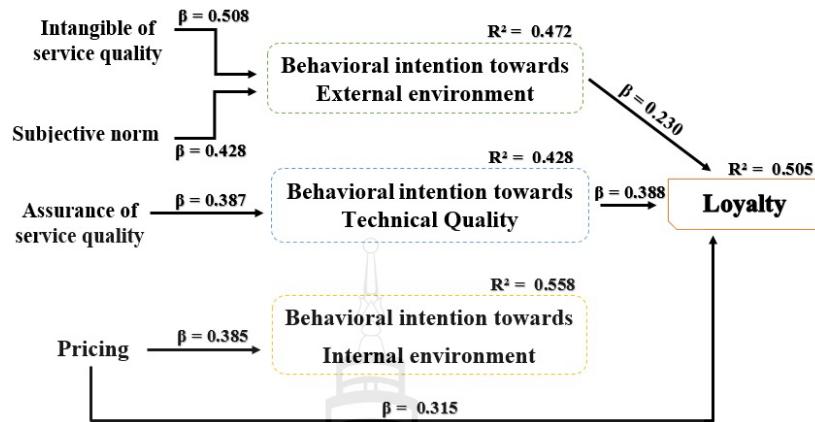


Figure 5.1 The Adapted Theory of Planned Behavior for Customer Loyalty

Specifically, behavioral intention is shown to be multi-dimensional in nature, which describes behavioral intention towards external environment, technical quality and internal environment of the invested building, and collectively, together with pricing, they account for 50.5 per cent of the variances of customer loyalty. The standard coefficients, BETA, are 0.230 for the behavioral intention towards external environment, 0.388 for behavioral intention towards technical quality, and 0.315 for pricing. As to the behavioral intention towards external environment, it can be accounted for 47.2 per cent of its variances, by intangible service quality at BETA 0.508 and subjective norm at BETA 0.428. The “assurance” aspect of service quality is also tested to explain 42.8 per cent of the variances of behavioral intention towards technical quality, at BETA of 0.387. Pricing is extremely important to predict the behavioral intention towards the internal environment i.e. living space design and quality of the building. Pricing single-handedly can explain for 55.8 per cent of the variances of behavioral intention towards internal environment at BETA of 0.385.

Demographically, there are no significance differences through T-Test and ANOVA Test, on the involved constructs between the gender, marital status, age ranges, different degree holders, career types, except on the income groups which indicate that the higher the age group the higher perceived service quality on the

safety standard of assurance. The same theoretical structure that explains the clients's behavioral intention and loyalty applies to clients who have had compared 1, 2, 3, 4 or more than 4 companies before making investment decision. For clients choosing between single-story house and two-floor-story houses, clients on the latter would expect more pricing bargains.

All the above constructs were measured based on reliable instrument proven with Cronbach's Alpha coefficients over 0.80.

5.1.2 Concluding Demographics and Psychographics Variables

Clients of higher income groups tend to perceive the services better serve to their requirements, and the most significant factors are service qualities relating to reliability (i.e. that the company can reliably meet the requirements, in terms of right quality the first time, delivering to the promise as demonstrated in the specifications or standards), tangibles as represented by the quality of works and the uses of quality materials, advanced technologies and equipment in the construction processes, and the assured safety conformance in design, basics of engineering works and in various other aspects of guarantees and warranties.

This research shows also that no matter how many companies the clients or investors made prior to their decision making on the selection of construction contractors, they are no significant differences on all the variables involved in the research study, i.e. service quality, pricing attitude, subjective norms, the three facets of behavioral intention and customer loyalty. Thus, to the marketers of the construction service contractors, it is important they maintain consistent works in the service quality, i.e., assurance and intangibility, and improve their relationship management initiatives to influence the subjective norms of the clients and investors, including pricing strategies, as these are the main variables to directly impact on customer loyalty.

In the aspect of construction budget paid, the clients or investors who are in higher ranges of construction investment budgets perceive the construction contractors are more able to deliver in aspects of reliable image (with correlation strength of 0.297**), tangibles (with correlations strength of 0.210*), assurance quality in domains

of performance (with correlations strength of 0.236*), and safety standard (with correlations strength of 0.274**), and empathy (with correlations strength of 0.209*). Nevertheless, the precise reasons for this positive correlation pattern would only be clarified reliably through interviews based data collection method.

Lastly, the results of the ANOVA analysis on the media of influence on service quality and other post-service consumption variables such as loyalty show no significant differences on the media of influence. Nevertheless, descriptively, the results do indicate that clients or investors who make the decisions on their own or by the suggestions of the construction material stores and media through advertising and public relations have lower mean of customer loyalty. Thus, this could imply to the construction contractors to pay more focus on sharpening up their marketing communication messages and relationship initiatives to the clients, investors, the construction material stores and advertisement design efforts. Efforts should be stressed to collaborate with the construction material stores as they provide influence through words of mouth and recommendation which can be uncontrollable to some extent.

5.2 Implication to Construction Constructors

There are many aspects of implication to construction contractors.

First, the construction industry has been blamed on the inability of the industry to see the big picture and be more service oriented, i.e. in partnering with the construction contractor (Hellard, 1995). Part of the missing piece of information is about the perceived “value” by the customers (i.e. the real estate or construction project customers) which is still not rigorously studied and validated by the researchers. A key reason for not having a clear picture on value in construction projects such as contractor works is because of the complexity and vagueness of the attributes or features composed of “value” in construction (Fong, 1996). This research reveals two significantly important values that would drive to the intention of the customers to engage in construction work contracts, regarding the expectations of the construction contractors to attend to the needs of the external environment and technical qualities.

External environment deals with some of the uniquely differentiate services provided by the construction contractors such as Feng Shui, the auspicious date incorporation in the project works, the matching of the building design styles in aligning with the building styles of nearby areas. Technical qualities represent the expectations of the construction contractors in providing high quality building construction works, showing reliability in the technical works and the ability to provide well-organized infrastructural system of the building. In addition to values, it is also important the construction contractors pay attention to the attitude of the investors in domains of negotiation, choices of payment scheme as well as choices enabled by a variety of ranges of options of services, and comparative differences with other construction contractors in the market.

Specifically, the construction service contractors would need to maintain consistent works in the service quality, i.e., assurance and intangibility, and improve their relationship management initiatives to influence the subjective norms of the clients and investors, including pricing strategies, as these are the main variables to directly impact on customer loyalty.

Second, this research shows that clients of higher income groups tend to perceive the services better serve to their requirements, and the most significant factors are service qualities relating to reliability (i.e. that the company can reliably meet the requirements, in terms of right quality the first time, delivering to the promise as demonstrated in the specifications or standards), tangibles as represented by the quality of works and the uses of quality materials, advanced technologies and equipment in the construction processes, and the assured safety conformance in design, basics of engineering works and in various other aspects of guarantees and warranties. And, although this research cannot provide similar significant evidences on other variables, i.e. behavioral intentions, or other aspects of service quality, and loyalty, but descriptively, the trend is there that the higher income groups perceive the services better serve to their expectations or requirements. Towards this end, the construction contractors would need to be proactive in engaging with lower-income groups to ensure consistency of service attitude and competencies, and thus to help them build brand

image of consistency of the treatments across different income groups. The same implication goes to the aspect of educational levels. Although the ANOVA test shows no significance on the role of influence by educational levels, but descriptive presentation indicates that it shares the similar trend with the income level variable.

5.3 Limitation and Delimitation

From the ANOVA and T-Test Analyses of the various demographics and psychographics variables, in examining their roles of significance in influencing the perceptions of the clients on the domains of service quality, behavioral intentions and customer loyalty, it is obvious that there are certainly correlational trends, i.e. between income levels and the perceived service quality in areas of reliability, tangibles and safety aspect of assurance. If the research measurement instrument includes asking the respondents to address their scales of “importance,” this additional attitudinal or expectation information would probably help to provide certain direction or scope of explanations to the significant differences. Nevertheless, based on the perceptions structure of the interrelationships of the variables, the non-inclusion of the “importance” scales would not affect the validity of the final models illustrated.

The other obvious limitation is the sample size, which could be expanded further. But, the key constraint or limitation is not about the size itself, but about the nature of the population representatives that are addressing to more focal types or nature of the construction contractual works, such as towards single-house, two-floor single houses townhouses and commercial buildings. Nevertheless, these questions are asked but on the last section of the survey instrument, located the questionnaire items on the theoretical variables. However, because the questionnaire items were designed based first on theme identification of interviews, the statistical analysis is more able to generate high R-squared strengths in describing the patterns of themes (or variables) that lead to the confirmation of the final model. Having rooted in high R-squared

strength (i.e. R-squared more than 0.5), according to Cohen (1992), reduced sample size is feasible to justify validity, i.e. sample size of 59 for five predictors in multiple regression analysis. As the multi-regression analysis involves more than five predictors, higher sample size would be needed, and this research bases the output on valid sample size of 100 clients addressing to their perceptions over the contractual services and states of loyalty and future behavioral intentions to re-engage the services.

The other aspect of limitation that relates to sample size is more obvious in aspects of demographics or psychographics analysis. For instance, in the perspectives of the styles of house to be built, lower perceived ability of the construction contractors to meet the expectations in aspects of empathy and responsiveness, and thus the clients and investors are less loyal for future engagement, for single-houses as compared to two-floor single houses. The other styles could not be analyzed through either ANOVA or t-test as there are not sufficient numbers of sample sizes for the comparative purposes.

5.4 Further Research

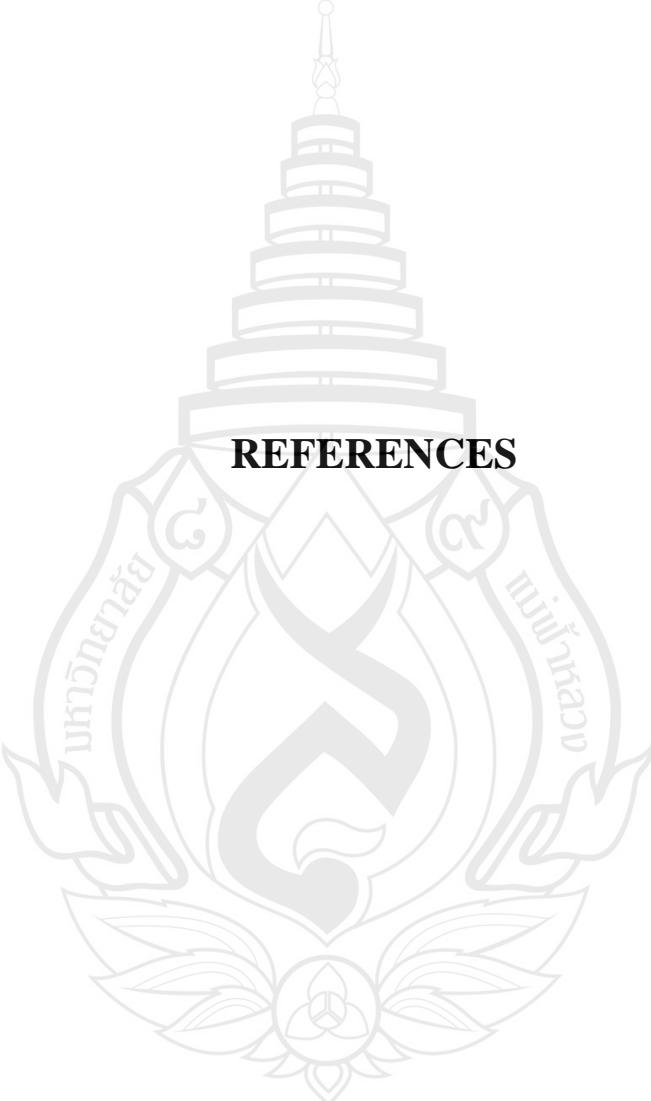
This result of this questionnaire-based approach provides the possible entry points for further research.

First, the results of ANOVA shows that respondents of higher income groups tend to perceive at higher mean of agreeableness to the qualities received in aspects of reliability (i.e. that the company can reliably meet the requirements, in terms of right quality the first time, delivering to the promise as demonstrated in the specifications or standards), tangibles as represented by the quality of works and the uses of quality materials, advanced technologies and equipment in the construction processes, and the assured safety conformance in design, basics of engineering works and in various other aspects of guarantees and warranties. Nevertheless, the reasons for the significances are not clear at the questionnaire-based survey level, and further research by the use of interviews-based approach could help shed light on this, but the experiences of the researcher in the construction industry intuitively reckons that the clients and investors

of the higher income groups have closer engagement with the contractors, and thus the contractors provide more attentive to the needs of their clients.

Second, in the aspect of construction budget paid, the clients or investors who are in higher ranges of construction investment budgets perceive the construction contractors are more able to deliver in aspects of reliable image (with correlation strength of 0.297**), tangibles (with correlations strength of 0.210*), assurance quality in domains of performance (with correlations strength of 0.236*) and safety standard (with correlations strength of 0.274**), and empathy (with correlations strength of 0.209*). Nevertheless, the precise reasons for this positive correlation pattern would only be clarified reliably through interviews based data collection method.





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APPENDIX

APPENDIX

SERVEY QUESTIONAIRES

Questionnaires for “The influenced factors of consumers that select the construction company in Chiang Rai”

Dear all participant,

I'm Mr. Ittipon Niraphai (Child), a Master student in Business Administration, with major in Entrepreneurial management program in the School of Management at Mae Fah Luang University, Chiang Rai, Thailand.

I would like to thank you sincerely for your participation in this survey. This survey is a part of the research for my thesis, to attempt to understand **the service quality towards customer satisfaction and customer behavioral in the construction business**

This survey will only take about 20-30 minutes. It is important that no any question is skipped, as your answers are very important to provide insights to help improve construction business operation strategies and to better deliver value of product and services. Thank you for your kind participation.

Sincerely,

Contact: Mr. Ittipon Niraphai (Child)

Phone: 087-5214629

Email: Child.999@hotmail.com

Supervisor: Dr. Chai Ching Tan

Email: drcctan@yahoo.com

Senior Lecturer, Mae Fah Luang University

QUESTIONNAIRE

“The influenced factors of consumers that select the construction company in Chiang Rai”

(ปัจจัยที่มีผลผลกระทบต่อลูกค้าในการเลือกใช้บริการของบริษัทรับเหมาก่อสร้างในเชียงราย)

You are required to address your responses to questionnaires survey by first identifying a house which you have been involved in the construction's decision-making process until the house is finally built. In other words, you are to state your responses that reflect your perceived reality in each of the questionnaire statements, by circling the best choice that you, please indicate the degree of your agreement or disagreement to the following items by circling one of the numbers, Which have the following meaning.

1 = strongly disagree;

2 = disagree;

3 = neither agree nor disagree;

4 = agree;

5 = strongly agree

Please answer these items carefully, thinking about how you are generally. Do not spend too much time on any one item.

คุณจะต้องตอบสนองแบบสอบถามการสำรวจครั้งนี้ โดยระบุกระบวนการตัดสินใจในการก่อสร้างบ้านจนถึงสร้างบ้านเสร็จสมบูรณ์ในที่สุด คุณจะต้องระบุคำตอบของคุณที่สะท้อนความเป็นจริงที่คุณรับรู้ในแต่ละแบบสอบถาม โดย วงกลมเลือกข้อที่ดีที่สุด

(กรุณาระบุคำตอบของคุณจากการตัดสินใจในการก่อสร้างบ้านในแต่ละข้อที่มีความหมายดังต่อไปนี้

1 = ไม่เห็นด้วยอย่างยิ่ง;

2 = ไม่เห็นด้วย;

3 = พอกประเมณ;

4 = เห็นด้วย;

5 = เห็นด้วยอย่างยิ่ง)

(กรุณาตอบรายการเหล่านี้อย่างรอบคอบ อย่าใช้เวลามากเกินไปในแต่ละรายการ)

QUESTIONNAIRE

No. ลำดับที่	The influence factors to select the construction company ปัจจัยที่มีอิทธิพลในการเลือกใช้บริการบริษัทรับเหมาก่อสร้าง	Disagree ไม่เห็น ด้วย		Neutral กลาง	Agree เห็นด้วย	
		1	2		3	4
Service quality :Reliable in construction company (คุณภาพของการบริการ: ความน่าเชื่อถือของบริษัท)						
1)	The company is high experienced in producing construction works (บริษัทเป็นบริษัทที่มีประสบการณ์ในการสร้างสิ่งปลูกสร้าง)	1	2	3	4	5
2)	The company has good reputation (บริษัทเป็นบริษัทที่มีชื่อเสียงดี)	1	2	3	4	5
3)	The company is recognized in the construction market (บริษัทเป็นที่ยอมรับในวงการก่อสร้าง)	1	2	3	4	5
4)	The company always delivers the product and service of quality right the first time (บริษัทมอบบริการและผลิตภัณฑ์ที่ดีให้ได้ถูกต้อง)	1	2	3	4	5
5)	The company provides its service at the time it promises to do so (บริษัทให้บริการตรงตามเวลาที่ได้กำหนดไว้)	1	2	3	4	5
6)	Has trustable in company image (ภาพลักษณ์ของบริษัทเชื่อถือได้)	1	2	3	4	5
7)	The company keeps customers informed about when service will be performed (บริษัทจะบอกรายละเอียดให้กับลูกค้าก่อนดำเนินการ)	1	2	3	4	5
8)	When company promises to do something by a certain time it do so – delivery is always on time (บริษัทมีความตั้งใจในการส่งมอบงาน)	1	2	3	4	5
9)	When problem arises the company shows a sincere interest in solving it (มีอคิดปัญหาในการก่อสร้างขึ้น บริษัทพร้อมที่จะแก้ไข)	1	2	3	4	5
10)	The company always ensures to meet the quality specifications or standards (บริษัททำงานได้อย่างมีมาตรฐานและคุณภาพ)	1	2	3	4	5

Service quality :Tangibles in construction company (คุณภาพของการบริการ: ลักษณะที่ลูกค้าต้องได้รับของบริษัท)						
11)	The portfolio of building shows the quality of work (ผลงานของบริษัทแสดงให้เห็นถึงคุณภาพของงาน)	1	2	3	4	5
12)	The company's choices of materials are appealing (บริษัทเลือกใช้วัสดุที่มีมาตรฐานในการก่อสร้าง)	1	2	3	4	5
13)	The company uses high quality of construction equipment that have standard (บริษัทเลือกใช้อุปกรณ์ที่มีมาตรฐานในการก่อสร้าง)	1	2	3	4	5
14)	A lot of building models are offered to help the customer make the decision easily (มีแบบของตั้งปููกสร้างให้เลือกหลากหลายช่วงให้ลูกค้าตัดสินใจได้ง่ายขึ้น)	1	2	3	4	5
15)	The company uses advanced technologies in the construction (บริษัทใช้เทคโนโลยีใหม่ๆเข้ามายังการก่อสร้าง)	1	2	3	4	5
16)	The company have the Feng Shui to respond the customer's building needs (บริษัทมีการสร้างตั้งปููกสร้างตามหลักสร้างจูย์เพื่อตอบสนองความต้องการของลูกค้า)	1	2	3	4	5
17)	The company have the auspicious confirmation before building to respond the customer's building needs (บริษัทมีคือตุกย์งามยามดีในการก่อสร้างเพื่อตอบสนองความต้องการของลูกค้า)	1	2	3	4	5
Service quality : Responsiveness in construction company (คุณภาพของการบริการ: การตอบสนองของบริษัท)						
18)	The company always finishes the job before or within the specified period (บริษัทสร้างตั้งปููกสร้างเสร็จก่อนหรือในระยะเวลาที่กำหนด)	1	2	3	4	5
19)	Can easily contact the company to request for additional information, or for problem-solving, etc (สามารถติดต่อกับบริษัท เพื่อขอข้อมูลหรือเพื่อแก้ไขปัญหา)	1	2	3	4	5
20)	Have the ability to solve the immediate problems (มีความสามารถในการแก้ปัญหาเฉพาะหน้า)	1	2	3	4	5

21)	Flexible to modify or change the design of any part of the building. (สามารถปรับเปลี่ยนรูปแบบด้วยตัวเองได้ตามที่ลูกค้าต้องการ)	1	2	3	4	5
22)	Flexible to meet any additional needs or changes required by the customers i.e. add or reduce the building materials needed in the construction. (ลูกค้าสามารถเพิ่มหรือลดวัสดุก่อสร้างได้ตามที่ลูกค้าต้องการ)	1	2	3	4	5
23)	The company keeps customer informed about when service will be performed (บริษัท ให้ลูกค้าทราบเกี่ยวกับการบริการก่อนที่จะดำเนินการ)	1	2	3	4	5
24)	Employees in the company give us prompt service (พนักงานใน บริษัท ให้บริการอย่างรวดเร็ว)	1	2	3	4	5
25)	Employees in the company are always willing to help us (พนักงานใน บริษัท ยินดีที่จะช่วยลูกค้าเสมอ)	1	2	3	4	5
26)	Employees in the company are never too busy to respond to our request (พนักงานใน บริษัท พร้อมที่จะตอบสนองต่อการร้องขอของลูกค้า)	1	2	3	4	5
Service quality : Assurance in construction company (คุณภาพของการบริการ: การรับประกันของบริษัท)						
27)	The behavior of employees in the company instills confidence in us (พฤติกรรมในการทำงานของพนักงานในบริษัททำให้ลูกค้ามั่นใจ)	1	2	3	4	5
28)	The company is able to control the price of the building to be no more than the estimated price (บริษัท สามารถควบคุมราคาในการก่อสร้างโดยไม่ให้เกินที่ได้ตกลงกันไว้)	1	2	3	4	5
29)	The performance of employees in the company instills confidence in us (ประสิทธิภาพในการทำงานของพนักงานในบริษัททำให้ลูกค้ามั่นใจ)	1	2	3	4	5
30)	The expertise of company helps to solve construction problem in quality manner (ความเชี่ยวชาญของ บริษัท จะช่วยให้การแก้ไขปัญหาในการก่อสร้างที่มีคุณภาพ)	1	2	3	4	5
31)	The company are able to control budget that is suitable for the building (บริษัท มีความสามารถในการควบคุมงบประมาณที่เหมาะสมสำหรับการสร้าง)	1	2	3	4	5
32)	The company offers the construction guarantee and warranty (บริษัท มีการรับประกันในงานก่อสร้าง)	1	2	3	4	5
33)	Employees in the company have the knowledge to answer our requests	1	2	3	4	5

	(พนักงานใน บริษัท ที่มีความรู้เพื่อที่จะตอบการร้องขอของลูกค้า)				
34)	The company designs the work based on the basics of engineering (บริษัท ออกแบบและสร้างการทำงานที่มีพื้นฐานของวิศวกรรม)	1	2	3	4
35)	The company quality checks the process of building in every step (บริษัทมีการตรวจสอบคุณภาพของลิ่งปููกสร้างในทุกขั้นตอน)	1	2	3	4
36)	The company is legally registered (บริษัท เป็นบริษัทที่จดทะเบียนลูกค้าด้วยตามกฎหมาย)	1	2	3	4
Service quality : Empathy in construction company (คุณภาพของการบริการ: ความอาใจใส่ของบริษัท)					
37)	Employees of the company are friendly (พนักงานของ บริษัท มีความเป็นมิตรกับลูกค้า)	1	2	3	4
38)	Employees of the company always make an effort to establish good relationship with us (พนักงานของ บริษัท สร้างความสัมพันธ์ที่ดีกับลูกค้า)	1	2	3	4
39)	The location of the companies is easily and comfortably accessed (สถานที่ตั้งของ บริษัท เข้าถึงได้ง่ายและสะดวกสบายกับลูกค้า)	1	2	3	4
40)	The company shows caring to customers by offering products and services at reasonable prices (บริษัท แสดงให้เห็นว่าการคุ้มครองลูกค้าโดยนำเสนอผลิตภัณฑ์และบริการในราคาย่อมเยามาก些)	1	2	3	4
41)	The company gives us individual attention (บริษัท ให้ความสนใจกับลูกค้าเป็นรายบุคคล)	1	2	3	4
42)	The company's employees always pay personal attention to our needs (พนักงานของ บริษัท จะให้ความสนใจกับลูกค้าเป็นบุคคลเพื่อที่จะตอบสนองความต้องการของลูกค้า)	1	2	3	4
43)	Employees of the company understand our specific need (พนักงานของบริษัท เข้าใจถึงความต้องการที่แท้จริงของลูกค้า)	1	2	3	4
44)	The company has operating hours that are convenient to the customer (บริษัทมีการเปิดปีนเวลา เพื่อตอบสนองความสะดวกสบายของลูกค้า)	1	2	3	4

45)	The company commits to prevent accidents from the construction (บริษัท มีความมุ่งมั่นที่จะป้องกันการเกิดอุบัติเหตุจากการก่อสร้าง)	1	2	3	4	5
46)	The company offers several channels (i.e. by telephone, by email, by fax, by call center, by face-to-face) of contact for the convenient reach by the customers (บริษัท มีหลายช่องทางในการติดต่อ (เช่น ทางโทรศัพท์, ทางอีเมล, ทางแฟกซ์, ทางศูนย์บริการ, ออกใบอนุญาต) เพื่อให้ลูกค้าเข้าถึงความสะดวกสบายในการติดต่อ)	1	2	3	4	5
Pricing (ด้านราคา)						
47)	The price can be negotiated in the construction building (สามารถเจรจาต่อรองราคาในการก่อสร้างได้)	1	2	3	4	5
48)	The price of construction is cheaper than other companies (ราคาในการก่อสร้างถูกกว่าบริษัทอื่นๆ)	1	2	3	4	5
49)	The company's products and services have reasonable prices. (สินค้าและบริการของบริษัทมีราคาที่เหมาะสม)	1	2	3	4	5
50)	Customer can arrange a payment with a company in appropriate period (ลูกค้าสามารถแบ่งจ่ายเงินได้เป็นจังหวะ)	1	2	3	4	5
51)	The company has wide ranges (choice) of building price to enable the customer to make good decision (บริษัท มีราคาที่หลากหลายของลิ้งปููกสร้างเพื่อให้ลูกค้าตัดสินใจได้ดีขึ้น)	1	2	3	4	5
Attitude toward the behavior: (ทัศนคติที่มีต่อพฤติกรรม)						
52)	Feng Shui is important when I want to build the building (วางแผนที่สำคัญ เมื่อต้องการก่อสร้าง)	1	2	3	4	5
53)	The auspicious conformance is important when I want to build the building (ถูกยิ่งตามที่เป็นสิ่งสำคัญ เมื่อต้องการก่อสร้าง)	1	2	3	4	5
54)	I will follow in the kind of buildings of nearby area (ลักษณะของลิ้งปููกสร้างลักษณะเดียวกันในพื้นที่ใกล้เคียง)	1	2	3	4	5
55)	When decide to select the construction company, I think about the brand first (เมื่อต้องการเลือกบริษัทที่รับเหมา ก่อสร้าง ลักษณะเดียวกัน ริ่งแบบนี้เป็นอันดับแรก)	1	2	3	4	5
56)	I concern about my budget before making the decision (ลักษณะของงบประมาณก่อสร้างที่จะตัดสินใจ)	1	2	3	4	5

57)	I concern about the place that I want to build my house (ลั่นค่านึงถึงสถานที่จะใช้ในการก่อสร้าง บ้านของลั่น)	1	2	3	4	5
58)	I concern about living space before making the decision (ลั่นค่านึงถึงพื้นที่ใช้สอยของตัวตึก ก่อนจะตัดสินใจ)	1	2	3	4	5
59)	I concern about quality of building before making the decision (ลั่นค่านึงถึงคุณภาพของสิ่งปลูกสร้างก่อนที่จะตัดสินใจ)	1	2	3	4	5
Subjective norm: (การถือความ)						
60)	I always obtain the opinion of family in my purchasing decision (ความคิดเห็นของครอบครัวมีส่วนในการตัดสินใจซื้อของลั่น)	1	2	3	4	5
61)	I always obtain the opinion of friends in my purchasing decision (ความคิดเห็นของเพื่อนๆมีส่วนในการตัดสินใจซื้อของลั่น)	1	2	3	4	5
62)	Advertising media of company can help me to make purchasing decision (สื่อโฆษณาต่างๆ มีส่วนช่วยในการตัดสินใจซื้อของลั่น)	1	2	3	4	5
Purchasing behavior intention : (พฤติกรรมในการเลือกซื้อ)						
63)	If I want to build the building, I would engage with this company as it provides the best Feng Shui models (หากลั่นต้องการที่จะสร้างสิ่งปลูกสร้าง ลั่นจะหาบริษัท ที่ให้บริการที่ดีในเรื่องของเชิงชุช ของสิ่งปลูกสร้าง)	1	2	3	4	5
64)	If I want to build the building, I would engage with this company with lower price in construction (หากลั่นต้องการที่จะสร้างสิ่งปลูกสร้าง ลั่นจะหาบริษัท ที่มีราคาในการก่อสร้างถูก ที่สุด)	1	2	3	4	5
65)	If I want to build the building, I would engage with this company that have the high quality of building (หากลั่นต้องการที่จะสร้างสิ่งปลูกสร้าง ลั่นจะหาบริษัท ที่มีมาตรฐานและคุณภาพที่ดี)	1	2	3	4	5
66)	If I want to build the building, I would engage with this company that provides the good quality of service (หากลั่นต้องการที่จะสร้างสิ่งปลูกสร้าง ลั่นจะหาบริษัท ที่มีมาตรฐานในการบริการ)	1	2	3	4	5
67)	If I want to build the building I would engage with this company that have the reliability of construction works (หากลั่นต้องการที่จะสร้างสิ่งปลูกสร้าง ลั่นจะหาบริษัท ที่มีความน่าเชื่อถือในการ ก่อสร้าง)	1	2	3	4	5
68)	If I want to build the building, I would engage with this company that provides the well-organized infrastructures system of the building (e.g. good system of water drain, logically positioning of the light system)	1	2	3	4	5

	(หากลัพท์ต้องการที่จะสร้างสิ่งปลูกสร้าง ผู้จะหาบริษัท ที่ให้บริการระบบโครงสร้าง พื้นฐานที่ดี (ชั้นระบบห่อระบบหน้า, การวางแผนที่ดีของระบบแสง))					
Customer Loyalty						
69)	Based on my past experience with the service of the company, I will recommend this company to others (ผู้จะแนะนำบริษัทกับคนอื่นๆ)	1	2	3	4	5
70)	Based on my past experience with the service of the company, this company is always my first preference in the future when I want to build new building (ผู้จะคิดถึงบริษัทนี้เป็นบริษัทแรกหากผู้จะต้องการที่จะสร้างสิ่งปลูกสร้างใหม่ในอนาคต)	1	2	3	4	5
71)	I am proud to tell others about quality and standard of this company (ผู้ภูมิใจที่จะบอกคนอื่นเกี่ยวกับคุณภาพของบริษัทนี้)	1	2	3	4	5
72)	When I have problem in the building, I will think about this company first (เมื่อผู้จะมีปัญหาเรื่องของบ้านสิ่งปลูกสร้าง ผู้จะนึกถึงบริษัทนี้เป็นบริษัทแรก)	1	2	3	4	5
73)	This company's services have the uniqueness, so I will continue to use this company (ผู้จะและนิยมใช้บริการของบริษัทนี้ความเป็นเอกลักษณ์ ดังนั้น ผู้จะใช้บริการของบริษัทนี้ต่อไป)	1	2	3	4	5

General Information (ข้อมูลทั่วไป)

Please mark '✓' in the box that best describes you.

(โปรดใส่เครื่องหมายถูกลงในช่องว่าง)

1. Gender (เพศ): 1. Male (ผู้ชาย) 2. Female (ผู้หญิง)

2. Marital status: 1. Single (โสด) 2. Married (สมรส) 3. Divorce (หย่าร้าง)

(สถานะการสมรส)

3. Age (Years) (อายุ) 1. < 20 2. 21-30 3. 31-40

4. 41-50 5. 51-60 6. 60 >

4. Education: (การศึกษา) 1. High school or below (มัธยมศึกษา หรือ ต่ำกว่า) 2. Vocational College (ปวช./ปวส.)

<p>3. Bachelor Degree (ปริญญาตรี)</p> <p>4. Master Degree (ปริญญาโท)</p> <p>5. Doctoral Degree (ปริญญาเอก)</p> <p>5. Occupation: employees (อาชีพ)</p> <p>6. Nationality: (สัญชาติ)</p> <p>8. Monthly Income: (เงินเดือน)</p> <p>9. Style of house that you live in the present (ลักษณะบ้านพักที่ท่านอาศัยอยู่ในปัจจุบัน)</p>	<p><input type="checkbox"/> 3. Bachelor Degree (ปริญญาตรี)</p> <p><input type="checkbox"/> 4. Master Degree (ปริญญาโท)</p> <p><input type="checkbox"/> 5. Doctoral Degree (ปริญญาเอก)</p> <p>1. Business owner/Entrepreneurs 2. Private (หุ้นส่วนตัว) (พนักงานเอกชน)</p> <p>3. Government officers 4. Other (ข้าราชการ) (อาชีพอื่นๆ)</p> <p>1. Thailand 2. None-Thai citizen (ไทย) (คนต่างด้าว)</p> <p>1. < 20,000 Baht 2. 20,001-40,000 Baht (เงินเดือน) (เงินเดือน)</p> <p>3. 40,001-60,000 Baht 4. Over 60,000 Baht > (เงินเดือน) (มากกว่า)</p> <p>1. Single house 2. Two-floor single house (บ้านเดี่ยว) (บ้านเดี่ยวสองชั้น)</p> <p>3. Townhouse Commercial buildings (ทาวน์โฮม) (อาคารพาณิชย์)</p> <p>10. You focus on the document contract or not (ท่านให้ความสำคัญกับการทำสัญญาที่เป็นเอกสารหรือไม่)</p> <p><input type="checkbox"/> Yes (ใช่) <input type="checkbox"/> No (ไม่)</p>
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11. How many that you have compared the construction companies before making purchase decision towards your FINAL company choice?

(ท่านได้มีการเบรี่ยນเพียงผู้รับเหมา ก่อสร้างอย่างไร)

<input type="checkbox"/> 1. 1 company (1 บริษัท)	<input type="checkbox"/> 2. 2 companies (2 บริษัท)
<input type="checkbox"/> 3. 3 companies (3 บริษัท)	<input type="checkbox"/> 4. More than 4 (มากกว่า 4 บริษัท)
<input type="checkbox"/> 5. Not applicable as I do not use the construction company (ไม่ได้ใช้บริการบริษัทก่อสร้าง)	

12. What is the style of house that you want to build?

(ท่านมีความสนใจในการสร้างบ้านประเภทใด)

<input type="checkbox"/> 1. Single house house (บ้านเดี่ยว)	<input type="checkbox"/> 2. Two-floor single house (บ้านเดี่ยวสองชั้น)
<input type="checkbox"/> 3. Townhouse (ทาวน์โฮม)	<input type="checkbox"/> 4. Commercial buildings (อาคารพาณิชย์)
<input type="checkbox"/> 5. Housing estates (หมู่บ้านจัดสรร)	<input type="checkbox"/> 6. Condominium (คอนโดมิเนียม)
<input type="checkbox"/> 7. Apartment (อพาร์ทเม้นท์)	

13. The construction budget that you are willing to pay

(งบประมาณในการก่อสร้างที่ท่านคาดว่าจะใช้ก่อสร้างในอนาคต)

<input type="checkbox"/> 1. < 500,000 Baht Baht	<input type="checkbox"/> 2. 500,000-1,000,000
<input type="checkbox"/> 3. 1,000,001-1,500,000 Baht	<input type="checkbox"/> 4. 1,500,001- 2,000,000 Baht
<input type="checkbox"/> 5. 2,000,001-2,500,000 Baht	<input type="checkbox"/> 6. 2,500,001- 3,000,000 Baht
<input type="checkbox"/> 7. 3,000,000 Baht >	

14. The important media that directly impact to your buying decision

(ท่านทราบข้อมูลของผู้รับเหมาจากแหล่งใดบ้าง)

- 1. Making their own decisions (ตัดสินใจด้วยตัวเอง)
- 2. Suggested by construction material stores (ร้านวัสดุก่อสร้างแนะนำ)
- 3. From Family (คนในครอบครัว)
- 4. From Friends (เพื่อน)
- 5. From Partner (ผู้ร่วมงาน)
- 6. From Architects / Engineers / Designers (สถาปนิก/วิศวกร)
- 7. From advertising and public relations (การโฆษณาและประชาสัมพันธ์)



CURRICULUM VITAE

CURRICULUM VITAE

NAME

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DATE OF BIRTH

9 December 1991

ADDRESS

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