

Brand Loyalty in the Construction Sector The Case of North Cyprus

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ABSTRACT

“Construction sector occupies an important place in the economy of the TRNC, and parallel to the population growth, the demands for buildings continue to increase” (building construction and parcel statistics, 2009). The figures released by the State Planning Organization (SPO) indicate that Urban building has been increased by 13.4% from 131,619(1997) to 308,405 (2009) floor area (m²). This dramatic expansion will result in appearance of the more construction company and of course the more contracts will be signed among contractor and the customers.

The objective of the thesis is to explore the source of customer satisfaction and dissatisfaction in the construction industry and understand how it can influence the brand loyalty to retain value customer and gain repeat business and to measure the brand loyalty influences. For this purpose a conceptual model were designed and be tested empirically by using structural equation modeling. Dimensions will be determined which can be significant predictors of overall home-buying satisfaction.

In the field of construction, brand loyalty can be defined by having more contracts by the mean of loyal customer with the contractor. For this reason 14 hypotheses were defined and their relationships were tested on the sample of 101 respondents. The results provide empirical support and positive relationship for 10 of 14 hypothesis examined.

Keywords: Construction industry, brand loyalty, customer satisfaction.

ÖZ

“İnşaat sektörü Kuzey Kıbrıs Türk Cumhuriyeti’nde önemli bir yere sahip olmakla birlikte, nüfusun büyümesi ile de bina yapımı artmaktadır” (İnşaat Statistikleri, 2009). KKTC Devlet Planlama Örgütü verilerine göre kırsal kesimdeki inşaat %13.4 oranında 131,619 m² ‘den (1997) 308,405 m²’ ye yükselmiştir (2009). İnşaat sektöründeki bu dramatik artış daha fazla inşaat firmalarının piyasaya girmesine ve bunun sonucu olarak da müşteriler ve inşaat firmaları arasında daha fazla anlaşmalar imzalamışlardır.

Bu çalışmanın amacı inşaat sektöründe müşteri tatmini ve tatminsizliğinin kaynaklarını araştırmak ve bunun marka bağlılığına etkisini incelemektir. Marka bağlılığını incelerken müşteri değerinin nasıl oluştuğunu ve tutumların nasıl tekrarlandığı yönünde bilimsel verileri ortaya çıkarmaktır. Bu amaçla kavramsal bir model oluşturulmuş ve empiric olarak da yapısal denklem modelleme kullanılmıştır. Genel olarak ev satın alınırken müşteri tatminini etkileyen boyutlar tesbit edilecektir.

İnşaat sektöründe marka bağlılığı, marka bağımlısı müşterilerin aracılığı ile daha fazla sözleşmenin yapılması ile tanımlanabilmektedir. Bu nedenle 101 inşaat yaptıran ve/veya ev alan müşterilerden bu konuda veriler toplanmış ve 14 hipotez ortaya konmuş ve uygun istatistiki yöntemler ile test edilmiştir. Elde edilen sonuçlar 14 hipotezden 10’unu empiric olarak desteklemiştir.

Anahtar Kelimeler: İnşaat sektörü, marka bağlılığı, müşteri tatmini.

DEDICATION

To all who have supported me

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TABLE OF CONTENTS

ABSTRACT	iii
ÖZ.....	iv
DEDICATION	v
ACKNOWLEDGMENT	vi
LIST OF TABLES	ix
1 INTRODUCTION.....	1
1.1 Retain Customer Relationship for Satisfaction and Loyalty	6
2 LITERATURE REVIEW	8
2.1 Traditional Problems in Construction Industry	10
2.2 Customer Satisfaction and Construction Industry	11
2.3 Loyalty and Satisfaction	14
2.4 Word of Mouth	15
2.5 Quality in construction industry	15
2.6 Contractor Performance	16
3 CONCEPTUAL BACKGROUND AND RESEARCH HYPOTHESIS	17
3.1 Conceptual Model.....	17
3.2 Contractor Image – Customer Expectations	19
3.3 Personal Needs – Customer Expectations	19
3.4 Word of Mouth – Customer Expectations	20
3.5 Past or Direct Experience – Customer Expectations	20
3.6 Customer Expectations – Contractor Performance.....	21
3.7 Contractor Performance – Customer Satisfaction	21
3.8 Quality of Construction Project – Customer Satisfaction.....	22

3.9 Customer Satisfaction – Competence Trust.....	23
3.10 Customer Satisfaction – Benevolence Trust.....	23
3.11 Customer Satisfaction – Loyalty Intention	24
3.12 Customer Satisfaction - Commitment.....	25
3.13 Benevolence Trust - Commitment.....	26
3.14 Competence Trust - Loyalty	26
3.15 Commitment - Loyalty.....	27
4 METHODOLOGY	29
4.1 Part One: How the Topic was selected	29
4.2 Part Two: The Proposal	29
4.3 Part Three: Literature Review.....	30
4.4 Part Four: Design the Questionnaire.....	30
4.5 Part Five: Pilot Questionnaire.....	32
4.6 Part Six: Analyzing Results and Conclusion	33
5 RESULTS.....	34
5.1 Validity of Hypotheses According to Survey Respondents Characteristics....	34
5.2 Measurement Model	42
5.3 Structural Model	46
6 CONCLUSION	50
6.1 Limitations	52
6.2 Implications	52
REFERENCES	54

LIST OF TABLES

Table 1: Increase the Proportion within the GDP by Construction Industry	3
Table 2: Sectorial Distribution of Fixed Capital Investment	4
Table 3: Measures	31
Table 4: Gender	34
Table 5: Age	36
Table 6: Marital Status	37
Table 7: Income	39
Table 8: Convergent Validity and Reliability	42
Table 9: Discriminant Validity	45
Table 10: Path Coefficients and T-Statistic	47
Table 11: Supported Hypotheses	49

Chapter 1

INTRODUCTION

The construction industry is consisting of many professions and organizations, and this is the reason of its complexity and has numerous problems because of its complicated nature of operation (Milakovich, 1995). Moreover, the industry of construction includes different phases such as: feasibility, finance, engineering, procurement and construction (Schultzel & unruh, 1996) and for delivering the quality, several people with different objectives such as customers, contractor and sub-contractors are involved.

Within the construction industry, there are clearly some companies, which vary in their level of service and materials, and attract variety customer with different needs. (Rowlinson & Walker, 1995) indicate that one of the features of the construction industry is that, the different construction processes are not the same, and there is no common standard for the services, and this makes it more difficult to guaranty the quality. And that is why the different contractors vary in their cost and speed.

The study of brand loyalty has become one of increasing interest to researchers and managers in many industries and is regarded as the source of competitive advantage. Having loyal customer in the construction industry does not have the simple formula but several factors can influence brand loyalty in this industry. Brand loyalty in

construction industry sector is highly competitive and is central to the success of the economics of the country.

Unexpectedly, there are a few researches evaluating the factors that influence customers to have brand loyal behaviors. There is considerable research on the brand loyalty and their results in the other industries, but none that has investigated loyalty determinants for construction industry.

“The construction industry was an important segment of the Turkish Cypriot economy and provided about 10 percent of employment and about 7 percent of GDP in the late 1980s. Demand for housing, especially for the refugees displaced by the events of 1974, extensive work on the infrastructure, and a rapidly expanding tourist industry accounted for much of this activity. Government financed housing programs for civil servants, also helped maintain the construction industry. The cost of government -financed housing of this kind was cheaper than in the private sector and permitted ordinary wage-earners to become homeowners” (Mongabay.com, 2013).

Construction industry has a vital and strategic role in the economic development of the society and it has the macroeconomic contributions to gross domestic product (GDP), gross fixed capital formation, employment and inter-sector linkages (United Nations Centre for Human Settlements, 1984). In terms of contribution to GDP, Construction industry activity represents a significant share of the economies in north Cyprus. According to state planning organization (2013), in the sectorial distribution of Gross Domestic Product, the contribution of the construction industry has decreased during these years but it has the potential to increase the proportion within the GDP:

Table 1: Increase the Proportion within the GDP by Construction Industry

2006	2007	2008	2009	2010
7.7%	7.8%	7.1%	6.4%	5.5%

“North Cyprus deals with economic problems of being a small island with limited natural resources and a very small domestic market which constitutes insufficient domestic demand that is required for any sectorial development” (Guncavdi & Kucukcifci, 2008).

After the year of 2000 the financial problem of banking sector and also the bad policy of foreign currency of Turkey the crisis started in North Cyprus and this crisis caused the decline in the investment in different industrial sectors such as construction sector. In 2002 the economic got better because of the new banking system strategy and after that, because of the positive perspective of the solution and EU membership, foreign investors started to invest in the North Cyprus.

In that period, the economic continued to get better especially in the construction industry because of the increase in local and foreign demand for dwelling. But another crisis was the increasing of interest rates and decreasing the investments and consumption that caused increase in inflation rate and decrease the value in exchange rate on the other hand caused declining in the investment in public sector such as construction sector:

Table 2: Sectorial Distribution of Fixed Capital Investment

2006	2007	2008	2009	2010
127.6	68.5	40.4	36.5	46.2

The main reason for choosing the construction industry as the research context is that the construction industry has become an increasingly important sector as a foreign exchange earner in North Cyprus. This is because the construction industry is considered to hold the best prospect for contributing to the North Cyprus economy. The main objective of the construction industry in North Cyprus is to making this island as the destination region of calm, fresh air, spectacular environment because of its geographic situation. This indicates that the North Cyprus construction industry plays vital role as a foreign exchange earner.

The objective of the current thesis is to integrate and evaluate the concepts of loyalty, in the construction sector in North Cyprus and examine the conceptual model of loyalty in this sector. A second goal is to determine the strength of these relations base on the selected sample. Understanding the benefits of the brand loyalty will help Construction Company in North Cyprus and the contractors to obtain new customers as well as building loyalty among existing customers.

“Loyalty occurs when trust and commitment are tested. It can be viewed as the bankable capital of goodwill to reciprocate trust in times of adversity. One demonstration of an act of loyalty is to sacrifice something in the short term to maintain a long-term relationship and functioning for mutual advantage” (Walker et al., 2000). Considering the benefits of loyalty, the brand loyalty in the construction

industry is about how the customer can have loyal behavior for one Construction Company or contractor, and what the important factors that can affect this relation are. The results of this study provide construction professionals with an assessment of current factors that influence customer brand loyalty in North Cyprus.

Brand loyalty is a key element in sustaining stable demand and sales flows over time (Aaker, 1991). There are many researches for evaluating customer loyalty behavior because it is not only increase the revenues but decrease the marketing budget and advertising. Brand loyalty refers to a "biased behavioral response expressed over time by some decision-making unit with respect to one or more alternative brands out of a set of such brands" (Jacoby and Chestnut, 1978). During the last few years, search and practice the loyalty has been the controversial issue, and conducted many industries to move their marketing strategies form acquisition to customer loyalty.

The word of construction covers construction on land and in water, permanent and temporary, public and private, above ground and underground, including additions, alterations and repairs as well as immovable and movable establishments. Therefore the different type of buildings such as residential buildings (house, apartment) can be the subdirectory of the construction.

In the field of construction the importance of brand loyalty is the matter that the construction company must consider, because base on which subdirectory the construction they build, it is related to the safety, comfort, prestige, expenditure, heating, cooling, saving energy, and quality of the materials, green space and many other factors. Loyal customer in this industry can be the organizations, banks, investors, individual customer and every person who wants to buy a construction for

different goals. Customers know that there are many contractors, but not all of them are equal. Therefore they have to choose, and it is the time that brand loyalty comes into play.

Moreover in many companies concentrate on the efforts to improve quality to satisfy their customer in the marketplace. In fact, customer satisfaction can influence customer retention and after that it can cause to profitability and competitiveness (Anderson and Sullivan, 1993). According to Jones and Sasser (1995), the key for guaranty the customer loyalty and creating long term relationship and financial performance is the customer satisfaction (Jones and Sasser, 1995). Moreover, it is obvious that, customer satisfaction is the cause of strengthening the relationship between a customer and firms and of course this kind of collaboration is profitable (Storbacka and Grönroos, 1994).

1.1 Retain Customer Relationship for Satisfaction and Loyalty

There are some researches for investigating why customers switch from one brand. These studies concentrate on the reason behind the switching behavior such as price, promotion, changing life style any many other reasons (Baker and Lutz, 2000) (Erdem and Swait, 2004) (Mathur et al., 2003). Many on these studies indicate that when the customers choose a brand that brand becomes the preferred brand for the customer (Szymanski and Henard, 2001), and then they have positive attitude toward that brand.

The customers usually choose the brand of product or service by their choice not because they had to. Occasionally, because of the limitations or urgency they have to go for the alternative brand. Therefore they can alter their decision and their criteria

that they decide on the basis of that. Selnes (1993) suggests that brand loyal consumers purchase another brand when the preferred brand is not available. The facts indicate that, the customer who switches easily to the other brand has low level of loyalty.

The facts show that, the loyalty and satisfaction are two different concepts. As an illustration, in the industry of construction the customer may not purchase again at the same contractor even if he is satisfied. There are several reasons for this decision, for example, maybe the customer wants to try different contractors, or maybe the customer is price sensitive and wants to have a contract with the best deal and the better offer.

Chapter 2

LITERATURE REVIEW

(barlow and Ozaki, 2010) Believe that” Ensuring brand loyalty in house building is inherently difficult. Owner occupiers generally buy more than one dwelling in their lifetime and the majority of households relocate within a short distance of their current home. However, it is generally hard for house builders to offer a full range of house types in any given housing market area because of problems in securing land.” They intend to say that, because of this problem the customers tend to buy from the other house builders or buy the second hand houses or ignore their needs. Although there is no collected data, there are few customers who repeat their purchase from the same firm that they had transaction before. But there are some exceptions such as very large development sites. Regardless the above problem, in UK and US, low level of customer satisfaction force the customers to not purchase from the same house builders.

Moreover barlow and Ozaki (2010) indicate that, different reasons cause brand loyalty to be complicated and moreover, cause the performance measurement, that use in the other industries, to be useless in the construction industry. These reasons are: interaction time between service provider and customer, immobility of housing as a product and the nature of the land market and housing, low recommendation rates. Therefore, the construction firms try to find the appropriate way to retain customers and improve the relationship with them. They tend to say that, customer

satisfaction is the main strategy securing word-of-mouth sales. For improving the quality of their brand the other strategies can be applied to enhance brand loyalty, such as strategies for selling additional housing-related services customizing the products and services. However, they believe that this is not part of the construction industry's agenda.

Rob smith believes that, "loyalty occurs when the customer feels so strongly that you can best meet his or her relevant needs that your competition is virtually excluded from the consideration set and the customer buys almost exclusively from you" (Smith, 1998).

According to Griffin (1995), there are two factors for loyalty: emotional attachment that the product or service is choosing among the other alternatives with high comparison and repeat purchase. She also focuses on the four levels of loyalty:

- The high level of loyalty that firms must try to reach, named premium loyalty. The customers are persisting to the competitor's offerings.
- The other level is inertia loyalty that, customers have the potential to attract by the competitor's offerings. This kind of loyalty usually occurs when, the customers have high repeat purchase but have not emotional attachment to the provider. These customers are the best case to move to the premium loyalty category.
- In Latent loyalty the customers may have the emotional attachment to the service provider but they do not purchase frequently. The situational factors can cause infrequently purchases. To overcome this problem, the providers

should first define the reasons and then develop strategies to solve the problem.

- No loyalty customers that not be affected by loyalty programs.

2.1 Traditional Problems in Construction Industry

“The procurement of construction work has predominantly followed the traditional approach. In this approach, the client engages separate organizations for the three key services of design, measurement and cost advice, and construction. The problems of traditional procurement can be summarized as follows:

- The need to the fully developed design causes the increase in duration of the project and increase the cost as well.
- It is difficult to organize and control the subcontractors and their process of working, because they are more loyal to the architects who nominated them than the contractors.
- Usually there is gap between designers and contractors. The attitude of being separated from each other among these two groups, reduce the team work spirit that is necessary for the success of the project.
- For the projects that need advanced management and skills ad structures, the traditional system is not good.
- The traditional system has some major shortcomings such as poor communication between clients and contractors, long period for construction and design and problem of build ability. These problems are the results of the sequential nature of this system.
- The facility of the traditional route to respond to late demands for change has been identified as one of the main causes of delay and increased cost” (Proverbs and Cheok, 2000).

2.2 Customer Satisfaction and Construction Industry

Most of the research and surveys about the construction industry is about the customer satisfaction and service quality in this industry. Customer satisfaction is a about perceived quality and perceptions – the extent to which perceived quality match with expectations. Customers usually evaluate the perceived performance with some standard indices, and they are satisfied if their perceptions are more than what they expected from the services. And they are dissatisfied when their perceived performance is less than the standards.

Traditionally, in construction industry, the success of the project is based on the three fundamental aspects, cost, time and quality (Pinto , 1988). These important measures are easy to apply and very objective and can be assessed only at the end of the project. But they found that they should include the customer satisfaction to have the long term relationship. Therefore, the researchers developed they framework (Latham and Saari, 1979).

The importance of customer satisfaction is accentuated in competitive markets (Kotler, 2000; Jones and Sasser, 1995). They tend to say that, when the customer is completely satisfied, can turn into loyal customer, but the customers who merely satisfied; there is the possibility to switch to the other service provider when the service provider proposes the better offer.

Understanding the customers need is necessary in warranting customer satisfaction, and there is a relationship between the demands for construction product and the use of the facility. (Ahmed and Kangari, 1995) Indicate that communication skills,

customer orientation and response to complaints have significant effect in the overall satisfaction of the customer in the construction industry.

The importance of customer satisfaction, and use it as an index for assessing the quality from the customer's perspective, have been considered by many researchers in construction industry (Barrett ,2000; Maloney,2002; Yasamis and Mohammadi, 2002). For instant Perry John Forsythe (2007) designed a conceptual model for customer satisfaction in Australian residential construction that is a combination of marketing theory and construction concepts. "The framework aims to determine how empirical data from construction firms and real customers, fits marketing theory. In this framework, customer satisfaction is modeled as a gap between two constructs: pre-purchase expectations and purchase perceptions.

Forsythe surveys the process of purchase decision that is the marketing concept in the residential industry and explain it as, the housing needs recognition, searching for the contractor, and compare with the other contractors, the process of signing the contract, and the outcome during the construction and after complete the construction. In the other words, Forsythe tried develop the fundamental for the costomer satisfaction in the construction industry by evaluating the concept of pre purchase expectations and perceptions of actual outcome, such as product quality, price, service quality.

Finally he concluded that both pre purchase expectations and perceptions during or after construction can influence purchase decision and it can be end up to customer satisfaction evaluations. He also says that during the construction the dynamic thing can take place that influence the customer satisfaction. The service and product

quality, price and many other things have important impact on customer satisfaction but the passing of time can lead to updating the perceptions and expectations and also the way that quality or price impact the customer satisfaction.

According to Jones and Sasser (1995), the situation where the customer is completely satisfied, is the key to securing customer loyalty and creating superior long term financial benefit. It is also obvious that when the customer is highly satisfied, it can lead to the intensification of the relationship between a customer and a contractor, and this sense of cooperation is profitable (Storbacka and Grönroos, 1994).

Accordingly, customer satisfaction is a principal factor in the development of the construction process and the customer relationship. It is natural that, construction firms should pay more attention to customer satisfaction because of its expected effects on future projects and their reputation by WOM.

In fact, there is a complex relationship between contractor and customer in construction industry, because while simultaneously interact and operate, each group collaborates with some other groups. Therefore, customer satisfaction must be considered as a relationship rather than transaction construct (Homburg and Rudolph, 2000). Therefore the transactional marketing management models will not produce good outcomes in construction industry. Moreover, customer and contractor collaborate with each other's; the customer's input has effective implications for the result of the construction project. It is difficult to extract past experiences and customer feedback in the others projects because of the nature of the construction process such as complexity, and uniqueness of each construction project.

2.3 Loyalty and Satisfaction

Satisfaction must be measured in the company periodically to understanding about how satisfied the customer of the service. The problem is that, in the construction industry the extent to which customer was satisfied is recognized after completing the project (Torbica and Stroh, 2001). In such a situation the solution is to find out the affective features of satisfaction to satisfy the customer and retain the relationship with him for the future contracts and convert the customer to the loyal customer.

In the competitive economy, instead of trying to have transactional relationship with customers, the businesses must consider to yield more satisfied and loyal customer. Traditionally, it was considered that the satisfied customer is less price sensitive, purchase adding service or product and will be loyal longer than the other customers (Zineldin, 2000). But now the researchers believe that, having the satisfied customers who have the choice to purchase the service and products from the others is not enough for loyalty. In order to have the loyal customer, the customer must be satisfied totally (Jones and Sasser, 1995).

“Customer loyalty is not the same as customer satisfaction. Customer satisfaction measures how well a customer's expectations are met by a given transaction, while customer loyalty measures how likely a customer is to repurchase and engage in partnership activities. Satisfaction is a necessary but not a sufficient condition for loyalty. In other words, we can have satisfaction without loyalty, but it is hard to have loyalty without satisfaction” (Shoemaker and Lewis, 1999).

2.4 Word of Mouth

The facts show that when there are widespread effects when the service provider fails to satisfy the customers and customers spread their dissatisfaction message via word-of-mouth” (Tarp, 1982). On the other hand, the satisfied customer can be a cause of superior profitability and the reputation of the firm, when becomes loyal customer (Jones and Sasser, 1995; Hartline & Jones, 1996). It is clear that, building and retain relationship with the customer is vital in competitive market and because the positive word of mouth has significant effect on the acquisition of new customers and retaining them can be a critical factor for ensuring the competitiveness.

Research shows that, the cost of marketing and sales and the completion for the price can reduce when the customer is loyal to the brand. This can be done by having long term relationship with customer for more sales in future and also by the customer satisfaction that can affects the firm reputation.

2.5 Quality in construction industry

There is deference between product and process quality that must be consider in construction industry. The product quality consist of quality in the instrument, materials, and technology used in the construction while the quality in the process or service quality is about the way of managing and integrating the process during the construction (Arditi and Gunaydin, 1997).

For evaluating the level of quality in the construction industry it is important to consider the contracting facility, contracting services and the constructed facility. In the other words, the product and service quality must be considered together. In fact, when the process is done and interaction between contractor and customer is

finished, the customer can see the ultimate and completed product. Therefore, the service is the mean to transfer the resources to construction product (Arditi and Mohammadi, 2002).

2.6 Contractor Performance

Research conducted by Sami Kärnä examines construction base on the satisfaction and quality and by dividing the customer group to private and public customer. The focus is to evaluate these customer groups' perceptions of the contractors' performance (2004). Kärnä indicates that, in the construction project, the contractor performance can be assessed by three comparisons, all of which impact customer satisfaction:

1. Comparison between the qualities of the construction, the customer's expectations and the adjusted goals for the building.
2. Comparison between the quality of the construction process and the experiences which have emerged during the process.
3. Comparison between the customer's expectations and experiences.

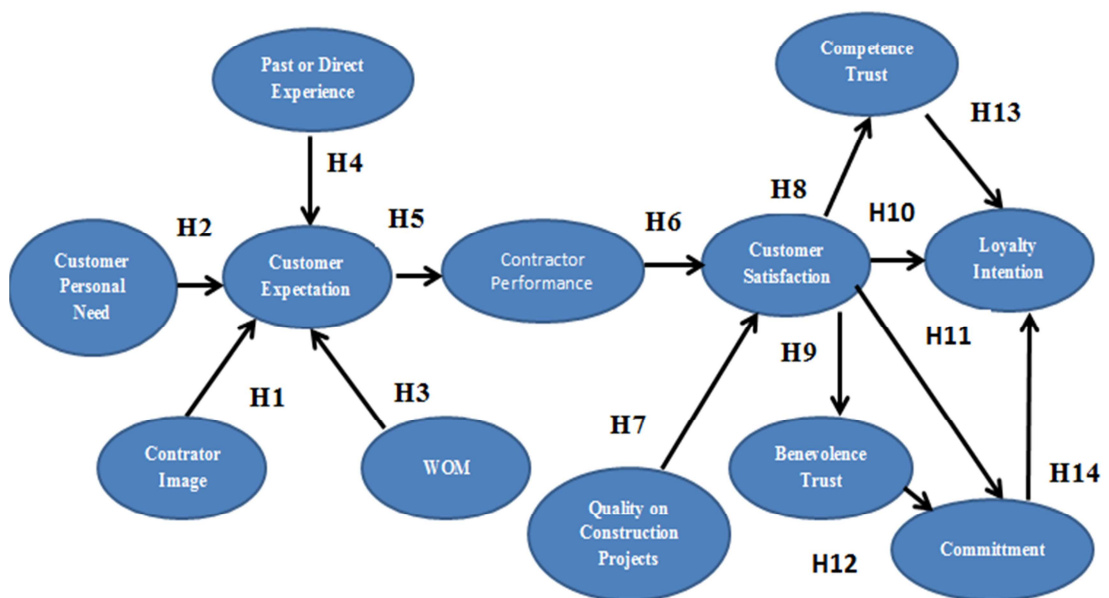
Chapter 3

CONCEPTUAL BACKGROUND AND RESEARCH

HYPOTHESIS

3.1 Conceptual Model

The conceptual model that is shown below is designed for the purpose of evaluating the different factors on the brand loyalty in construction industry:



This figure illustrates the various relationships that influence brand loyalty. As it mentioned before, because of the importance of customer satisfaction in brand

loyalty, the conceptual model determines the factors that influence customer satisfaction in advance. The aim is to evaluate these relationships in the construction industry and determine the strength of these relations based on the selected sample.

Thus, based on the conceptual model the following hypotheses are presented:

H1: There is a positive effect of contractor image on the customer expectations.

H2: There is a positive effect of personal needs on the customer expectations

H3: There is a positive effect of word of mouth (WOM) on the customer expectations

H4: There is a positive effect of Past or direct experience on the customer expectations

H5: There is a positive effect of Customer expectations on the contractor performance

H6: There is a positive effect of Contractor performance on the customer satisfaction

H7: There is a positive effect of the quality of construction project on the customer satisfaction

H8: There is a positive effect of Customer satisfaction on the competence trust

H9: There is a positive effect of Customer satisfaction on the benevolence trust

H10: There is a positive effect of Customer satisfaction on the Loyalty intention

H11: There is a positive effect of Customer satisfaction on the commitment to the contractor

H12: There is a positive effect of the Benevolence trust on the commitment to the contractor

H13: There is a positive effect of the Competence trust on the brand loyalty

H14: There is a positive effect of the Commitment to the contractor on the loyalty

H1: There is a positive effect of contractor image on the customer expectations.

3.2 Contractor Image – Customer Expectations

The expectation is the prediction and belief of happening something as result of the specific action (Malony, 2002). In the other words, it can be define as what customer wants and desires to be done by the contractors. The customer will be satisfied when the performance of the contractor is greater than what he or she perceived, and because the construction industry provides services to the customers to meet their expectations, if the customers have some images about the contractor, it can be affect their expectations. Kärnä (2004) believes that, there are several factors that can influence the customer expectations about the contractors, on which the satisfaction is built. One of these factors is the image and reputations of the contractors.

H2: There is a positive effect of personal needs on the customer expectations.

3.3 Personal Needs – Customer Expectations

For monitoring the quality of the service that is provided by the construction industry and contractors it is necessary to be aware of customer expectations and evaluate their expectations (Gilbert and Wong, 2003). It is obvious that, when the contractor meet the expectations of the customers or exceed those expectations, the customer will be satisfied.

It must be noted that, the different customers have different needs and therefore their expectations are different. In the other words, the customer expectations vary because of the different needs that they have and because of that reason their needs must be specified and priorities.

H3: There is a positive effect of word of mouth (WOM) on the customer expectations.

3.4 Word of Mouth – Customer Expectations

There are two approaches to search about the quality of the service internal search and external search. Word of mouth is one the external searches that affects the customer expectations (Beales et al., 1981). Word of mouth has a distinct role in building the customer expectations (Duane et al., 1979).

These words or statements are made by the person that usually is out of the service provider and is about what he or she thinks about the service. The importance of word of mouth is that the services are not predictable and are not easy to evaluate until buying them and therefore the word of mouth can give the valuable information about the services. In construction industry these word of mouth can be very useful in shaping the customer expectation about the contractors and the construction firms.

H4: There is a positive effect of Past or direct experience on the customer expectations.

3.5 Past or Direct Experience – Customer Expectations

The past experience as well as word of mouth is the determinant factor for shaping the customer expectations and is defined as the previous experience about some service that is related to the current service. It includes the services from the same service provider or the service from the other industry (Carol and Yalch, 1980). The difference between experienced customer and inexperienced customer can be result in the having different expectations because of the different level of knowledge about the service (Zeithaml and Berry, 1985).

H5: There is a positive effect of Customer expectations on the contractor performance.

3.6 Customer Expectations – Contractor Performance

In most countries, the construction firms and contractors who exercise the construction projects pay a few attentions to the customer expectations, and it is an important issue in the evaluating customer satisfaction and overall assessment of service quality (Hellard, 1993). In the other words, there is a gap between the level of performance that delivers to the customer and what customer expected. And as a result of existence of this kind of gap, the customer will not be satisfied at the end, because what the customer perceived and expected is far away from the delivered service.

In the construction industry, there are many problems that can led to widening this gap, among them it can be cited the complexity of the process of construction. This complexity can be in the number and diversity of different phases in construction projects.

H6: There is a positive effect of Contractor performance on the customer satisfaction.

3.7 Contractor Performance – Customer Satisfaction

In order to satisfy the customer as it noted before, is exceeding his or her expectations. And the main focus is to define and find their expectations of the contractor performance. Of course different customers have different expectations, and the construction project is a complex project with different phases and different procedures, therefore it should be known that how the expectations of customer differ from each other and then try to meet that expectations and satisfy the customer.

As a case in point, Al-Momany (2000) examined the quality of service in construction project that delivered by the contractor and customer expectations and finally their satisfactions, and came to the result that because of the poor performance on behalf of the contractors, the customers were not satisfied.

According to Kärnä (2004), to know about the satisfied customer it should be consider that the customer evaluate the contractor performance in three approaches:

- Comparing the quality the construction project with his experience that is gained during the project
- Comparing his experience with his expectations
- Comparing his expectations with the quality of building

H7: There is a positive effect of the quality of construction project on the customer satisfaction.

3.8 Quality of Construction Project – Customer Satisfaction

“Satisfaction in the construction industry can be defined as how well a contractor meet the customer expectations, and the quality on construction projects can be regarded as the fulfillment of expectations” (Barrett, 2000). Arditi and Gunaydin (1997), believe that, there is distinction between product quality and process quality that must be separately considered in the construction industry.

They indicate that, the product quality refers to the quality of the materials, and the instrument or the use of high technology, but the quality of process relate to the quality of management of the projects, the quality of design and development of the project and construct the project and also the quality of the maintaining. In fact the quality of construction project is the combination of product and service quality

(Maloney, 2002). And according to the Kärnä (2004), the building quality can be divided to technical quality and functional quality and the process quality can be divided to management and design.

H8: There is a positive effect of Customer satisfaction on the competence trust.

3.9 Customer Satisfaction – Competence Trust

The competence trust is of type of trust that is the response of such question about:” is there ability to do the work correctly and competently?” (Davis, 1995). Having such trust in construction industry can assure that there is technical support and engineering service to complete the project. If there is any customer who satisfied from the service provided by the contractors, it means that the project and the contractor have met the customer expectations and even exceeded his expectations and made the customer satisfied. After satisfying, the satisfied customers believe that the contractor has the ability to perform the project properly.

H9: There is a positive effect of Customer satisfaction on the benevolence trust.

3.10 Customer Satisfaction – Benevolence Trust

Trust has a vital role in the partnering studies and it is more helpful to establish the trust in the relationship between two sides of the project (Bennett and Jayes, 1995). It is obvious that, trust is based on the processing and evaluating the data and information that we have already obtained, in the other words, it is based on the past experience, but focus on the future. It provides assurance that the customer who satisfied before by the service of the contractor and has good image about the contractor, will not motivated to change the service provider or contractor. Therefore the trust can guarantee the stability and durability of the relationship.

There are two aspects of trust the first one corresponds to the credibility and honestly and willingness to keep promises and the other one is benevolence trust, that is about the partner's willingness to pay attention to the other side's needs and about the good intentions of the partner (Ganesan, 1994). In the construction industry, the benevolence trust can be defined as the willingness of the contractor to respond to the customer's needs and be reliable in the materials and conducting the project and understanding and appreciating the requirements of the customer.

H10: There is a positive effect of Customer satisfaction on the Loyalty intention.

3.11 Customer Satisfaction – Loyalty Intention

The role of Customer satisfaction that results in loyalty intention has been surveyed in many researches. In fact, the satisfaction is the connector of the perceived value and expectation to the loyalty. It creates long term relationship between service provider and customer (Cronin et al., 2000). On the other hand, loyalty is the commitment on behalf of the customer to keep relationship with the service provider and keep using their service in the future (Oliver, 1980).

This kind of satisfaction can lead the customer to have loyalty intention toward the service and recommend the service to the others. Oliver (1980), indicate that, the loyalty has different aspects such as affective, cognitive and action loyalty. Affective loyalty is the emotional attachment to the service provider while cognitive loyalty is the evaluation process and evaluated statement to be loyal to the service and at the end the action loyalty is the intention to behave as loyal to the service. The goal is to survey whether the satisfied customer in the construction industry will have the loyalty intention or not.

H11: There is a positive effect of Customer satisfaction on the commitment to the contractor.

3.12 Customer Satisfaction - Commitment

In order to distinguish between the customer who is true loyal and the one who is very loyal to the service, it can be considered the other concept that is more attitudinal and named commitment (Bloemer and Kasper, 1995). For this purpose, the two different type of commitment must be considered: The affective commitment and the consequence commitment.

The affective commitment is about customer feeling and emotion about service provider, in this commitment the customer has the sense of belonging to the service provider. On the other hand, in the continuous commitment the economic issues will be the most important thing to decide to remain with the service provider (Zins, 2001). In continuous commitment the customer thinks that ending the relationship will be expensive for him.

Satisfaction is the main factor of maintaining the relationship between customer and service provider (Anderson et al., 1997). This hypothesis can be argued that, the customer who experiences the fulfillment of his needs by the mean of contractor expect the same or even better service in the future from the service provider.

Therefore the customer values the interaction with the service provider and prefers this provider among the other alternatives in the industry and will be committed to him (Morgan and Hunt, 1994).

H12: There is a positive effect of the Benevolence trust on the commitment to the contractor.

3.13 Benevolence Trust - Commitment

The service provider who is benevolent can be assure to think about the favorite of the customer, but only having the motivation is not sufficient; the service provider must behave in a certain way to operationalize his motivation in the management and practice. In the other words, he should reflect the motivation of benevolence. He should demonstrate that he puts the customer opinion in the priority rather than his interest (Sirdeshmukh et al., 2002).

Benevolence is the evidence of trust, and the service provider is recognized as benevolent when he demonstrates the benevolent behavior. Although Ganesan (1994) argued that, the benevolence trust is create between two individual, Sirdeshmukh et al. (2002), believe that the service providers can provide the situation to create the benevolence trust, that the customer trust them as the service provider who respect their interests.

This hypothesis tries to examine the relationship between the benevolence trust and commitment, in the other words, it suggest that if the contractor concerns about the customer's interest, and respect his opinion, the customer will be committed to him.

H13: There is a positive effect of the Competence trust on the brand loyalty.

3.14 Competence Trust - Loyalty

Lusch(2008), believe that, service is the specialized competence to benefit the customer. He means competence as the skills and knowledge. In fact the

precondition of each relationship is competence trust (Sako, 1992). In order to obtain the loyal customer, first it is necessary to get their trust (Reichheld & Schefer, 2000). In fact, trust is the key component of maintaining the relationship. When the customer trusts the service provider that has the competence to conduct the project, he or she becomes more loyal and will tend to sign more contracts with the contractor.

In this hypothesis, loyalty is considered as the result of competence trust. In fact, it is considered that more competence trust in the contractor creates a higher level of customer loyalty. Lau & Lee (1999) surveyed the connection between trust in a brand and brand loyalty. They found that there is a significant relationship between trust and loyalty. Moreover, Reichheld and Schefer (2000) believe that “To gain the loyalty of a customer, you must first gain their trust”.

This hypothesis claims that if a customer has competence trust in the contractor, this trust can lead to loyalty to the contractor. In other words, when a contractor has a high level of technical experience and can do the project properly, the customer will be loyal to him.

H14: There is a positive effect of the Commitment to the contractor on the loyalty.

3.15 Commitment - Loyalty

Commitment plays a vital role in the relationship between customer and service provider. As mentioned before, customer commitment has at least two components: the first one is based on emotional linking which is named affective commitment and the other is based on the cost of switching and economic issues which is named continuance commitment (Gundlach, Achrol and Mentzer, 1995).

Anderson and Barton (1992), argue that, the relationship management programs, that build shared value are more effective than the programs that focus on the switching cost and the bondage. In the other words, building the affective commitment has the influential and positive effect on the customer loyalty and showing the loyal intention such as willingness to pay more for the service offered by service provider. On the other hand the continuance commitment has the negative effect on some aspects of customer loyalty such tending to pay more for the services. In this hypothesis, it is suggested that the affective commitment can lead to the customer loyalty.

Chapter 4

METHODOLOGY

In this chapter the methodology of the thesis will be described. It will include the summary of the literature review and brief explanation of how the influential factors of brand loyalty were defined and how the conceptual model was shaped. Moreover, it explains that, how the questionnaire modified and finalized, and how the data were collected. In fact, the methodology gives the survey the credibility, because it defines the underlying structure of the project. The general approach of this thesis can be divided into six parts:

4.1 Part One: How the Topic was selected

Having loyal customer in the construction industry is the issue that can attract the attention. Because of the experience gained in this sector and after consulting with the supervisor the general concept for the thesis was defined: "brand loyalty in the construction industry". For having more information and better understanding about the topic, a number of article and related studies were searched, and this helped to create the appropriate approach for the thesis.

4.2 Part Two: The Proposal

After selecting the topic for the thesis the academic papers and previous research were gathered and the opinion of different researchers and experts were surveyed. And finally the objectives, design, schedule of the thesis were defined.

4.3 Part Three: Literature Review

As all the research and studies, first of all, it is necessary to conduct and study the point of view and the opinion of the previous research that conducted by the professors and experts to have a general idea about the subject. Surprisingly, most of the research papers related to the construction industry are about the customer satisfaction in this sector and service quality in construction projects, and there are a few articles concern with the brand loyalty in construction industry and this made the thesis more difficult to conduct.

4.4 Part Four: Design the Questionnaire

Because the research is exploratory, the best approach for collecting the data and conduct the research was questionnaire survey (Bailey et al., 1995). Usually, exploratory research can get the expectations and point of view of different type of customers.

Conducting a comprehensive literature review help us to have a general approach of the main idea and also is very useful for structuring and designing the questionnaire. The questionnaire of this thesis was conducted after reading the literature review. The questionnaire modified during many sessions with the supervisor, and finally, it finalized and was ready to distribute and collect the data. The questionnaire divided into 14 sections, each section evaluates one of the hypotheses with asking a number of questions. The respondents are asked by focusing on one aspect of the specific relation in each question. The overall questions of the questionnaire are 59 questions.

The questions were designed to collect the assessment the degree of agreement of different respondents with each question. For assessing the extent of agreement the

five-point Likert scale was used, from strongly disagree to strongly agree. Therefore, the respondents could show their degree of agreement with the questions. The number of questions for each relation and their references are shown in the table 3.

Table 3: Measures

Relation	Number	Reference
Contractor's Image – Customer Expectations	4	(Al-Shorafa, 2008)
Personal needs – Customer Expectations	1	(David Gilbert, Robin K.C. Wong, 2003)
WOM – Customer Expectation	1	(Valarie A. Zeithaml , Leonard L. Berry, A. Parasuraman, 1993)
Past or Direct Experience – Customer Expectations	3	(Valarie A. Zeithaml , Leonard L. Berry, A. Parasuraman, 1993)
Customer Expectations – Contractor Performance	4	(Ayman H. Al-Momani, 2000)
Contractor Performance – Customer Satisfaction	6	(Kärnä, 2004)
Quality of Construction Project – Customer Satisfaction	9	(Kärnä, 2004), (David Arditi, Dong-Eun Lee, 2010)
Customer Satisfaction – Competence Trust	5	(Jeffrey K. Pinto, 2009)
Customer Satisfaction – Benevolence Trust	4	(Gurviez, 2003), (Akintola Akintoye, 2000), (Peter Shek Pui Wong, Sai On Cheung, 2005)
Customer Satisfaction – Loyalty Intention	4	(Archana Kumar, Heejin Lim, 2008)
Customer Satisfaction – Commitment	3	(Hennig-Thurau, 2004), (Dimitriades, 2006)
Benevolence Trust – Commitment	4	(Pi-Chuan Sun, Chia-Min Lin, 2010)

Competence Trust – Loyalty	6	(Pi-Chuan Sun, Chia-Min Lin, 2010), (Bonaventure Boniface, Amos Gyau, Randy Stringer and Wendy Umberger, 2010), (Lloyd C. Harris, Mark M.H. Goode, 2004)
Commitment – Loyalty	5	(Fullerton, 2003)

The questionnaire did not send to the respondents, but gave them in the place and collected after completing. The respondents were the civil engineers, architects, students and the other people who selected randomly. Unfortunately, none of the construction industry in the North Cyprus tended to collaborate with the research and complete the questionnaire.

In order to safeguard of the questionnaire, the respondents were asked to not answer the questions immediately and without thinking about that. Moreover, they were requested to ask question if there is any vague in the questions. All the questionnaires were collected in the period of one and half month. The demographic of the respondents was expressed in terms of sex, age, the city where they live, nationality, occupation, the marital status, education, and income.

4.5 Part Five: Pilot Questionnaire

First, the pilot survey with few respondents was used and the questionnaires were distributed between a sample of 25 respondents to evaluate the result and investigating whether the questionnaire is reliable and relevant or not and also to get the criticism and comments of respondents in order to improve the final questionnaire. The respondents were informed about the purpose of the study before given the questionnaires. They also be assured that they response will only be used for aggregate survey analyses and will treat them with the strictest confidentiality.

They also were told that, individual responses will not be given to anyone for any purpose. The respondent of the pilot survey were from different background and the purpose of this pilot survey was to take into account any other issues in construction industry related to brand loyalty that were not mentioned in the survey. Some of these comments were helpful in improving the survey and questionnaire. After investigating the result and finalizing some part of the questionnaire, these one two-page questionnaires, gave to the students, peoples, the civil engineers and the architects.

4.6 Part Six: Analyzing Results and Conclusion

The survey was carried out in early October 2013 and the respondent rate was approximately 100 percent. The demographic characteristic of the selected sample demonstrate that the majority of respondents are male. The questionnaires were filled by 58 males and 43 females that were origin of North Cyprus, Iran, Turkey, Nigeria, Azerbaijan and Cameron.

In fact two different groups were identified for this survey: The customers and the contractors. The customers were the people who wanted to have contract with the contractor to build a construction; they can be the ordinary people, the organizations, or the real states agencies. The other group was the contractor that included the construction firms, the contractors, the civil engineers and the architectures. After collecting the data, the data were arranged and analyzed and the statistic results were obtained. As a result, the analyzed data were surveyed to see whether they justify the hypothesis and support them or not. And finally, considering the results, the conclusions obtained were stated. The total of 101 questionnaires was useful for analyzing, that is a response rate of 100 percent that is very satisfactory.

Chapter 5

RESULTS

5.1 Validity of Hypotheses According to Survey Respondents

Characteristics

In order to survey the difference between the answers of different respondent, the following groups were designed and analyzed by SPSS software:

Gender

Of the 101 respondents, a total of 58 (57.4 percent) were male while 43 (42.6 percent) were female. As it is shown in the table 4:

Table 4: Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	58	57,4	57,4	57,4
Female	43	42,6	42,6	100,0
Total	101	100,0	100,0	

In order to test whether there is any difference between Male and Female respondents for the variables examined in the study, we used independent t-test:

H₀: There is NO difference between Male and Female respondents

H_a: There is difference between Male and Female respondents

The results show that, for the following questions, we found that there is significant difference ($\alpha = 0.10$) in the answers between Male and Female respondents:

CI1: Price that the contractor firm offers (compared to the client's estimate) can influence customer expectations.

It can be concluded that the female are more price sensitive than male, and because of that the price of contractor can influence their expectations.

CT2: If the contractor can answer customer's questions clearly, he will be the first choice when the customer wants to buy construction.

Based on the answers, it can be concluded that, female respondents' perception is that the contractor's answers are important. They pay more attention to their questions and the answers that provided by the contractors.

CL5: When customer is committed to a contractor, staying with contractor is as much a matter of necessity as it is of choice.

It means that, male respondents' perception is more positive (higher) compared to women, in other words staying with contractor is more necessary for men rather than women. It can be interpreted that, men and women are not the same in commitment to the contractors and their reasons for commitment are different. As a result, Men and women respond differently to the questions about price, contractor performance and commitment.

Age

The age group of 18-30 (66.3 percent) and 31-40 (24.8 percent) account for the biggest portion of the sample followed by group 41-50 (8.9 percent), as it is shown in table 5:

Table 5: Age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18 - 30	67	66,3	66,3	66,3
31 - 40	25	24,8	24,8	91,1
41 - 50	9	8,9	8,9	100,0
Total	101	100,0	100,0	

In order to test whether there is any difference to the answers of the questionnaire according to the ages of the respondents, we use One Way ANOVA statistics.

The hypothesis will be as:

H_0 : There is NO difference among different ages of the respondents

H_a : There is difference among different ages of the respondents

CI1: Price that the contractor firm offers (compared to the client's estimate) can influence customer expectations.

PE3: Customer expectations are more realistic because of the knowledge he gained.

CE1: The contractor's performance can be enhanced if they consider their customer expectations.

CE2: Contractors always seek easy alternative solution and tries to save money by using cheap materials have no consider to customer expectations.

CE3: Contractor performances are based on cost not on value of work and customer expectations

CP5: Management of work safety on site can influence customer satisfaction.

CS5: When the customer is satisfied he believes the contractor has the ability to perform productively.

CT4: If the contractor provides special service, the customer will be loyal to him.

CL2: When customer is committed to a contractor, he will accept higher prices if contractor raises its prices.

CL5: When customer is committed to a contractor, staying with contractor is as much a matter of necessity as it is of choice.

For the following above questions the H0 will be rejected at Alfa=10% and conclude that the answers for the above questions differ according to the ages of the respondents.

Marital Status

As it is shown in table 6, the majority of the respondents were single with the proportion of 59.4 percent and the rest were married (40.6 percent):

Table 6: Marital Status

Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Married	41	40,6	40,6	40,6
Single	60	59,4	59,4	100,0
Total	101	100,0	100,0	

In order to test whether there is any difference between Married and Single respondents we use independent t-test.

H₀: There is NO difference between Married and Single respondents

H_a: There is difference between Married and Single respondents

For the following questions the answers of Married and Single respondents are NOT same, in other words there is difference therefore reject the hypothesis in the following questions:

CI1: Price that the contractor firm offers (compared to the client's estimate) can influence customer expectations

CI4: Availability of highly qualified technical staff in the contractor firm, can influence customer expectations

CE1: The contractor's performance can be enhanced if they consider their customer expectations

CE2: Contractors always seek easy alternative solution and tries to save money by using cheap materials have no consider to customer expectations

CE3: Contractor performances are based on cost not on value of work and customer expectations

CP1: Skill of contractor's workers can influence customer satisfaction

CP3: Tending to notices of defect can influence customer satisfaction

CP5: Management of work safety on site can influence customer satisfaction

CS4: When the customer is satisfied he believes the contractor will look out for my interests throughout the life of the project

CS5: When the customer is satisfied he believes the contractor has the ability to perform productively

CSB2: Satisfied customers believe in that contractor is reliable of material and supply

CSB3: When customer is satisfied he believes the contractor understands and appreciates his requirements and difficulties, he will trust the contractor

CSL4: Satisfied customer would encourage friends and relatives to use this carrier

Income

The respondents are classified into four categories based on their income, and the table 7, demonstrates the percentage of each group. The level of income is based on the Turkish Lira currency. The research considers four groups for level of income. It must be mentioned that, the respondent who did not indicate their level of income, are shown as number of 99 in the analysis.

Table 7: Income

Income	Frequency	Percent	Valid Percent	Cumulative Percent
under 1000	31	30,7	30,7	30,7
1,000 - 2,000	20	19,8	19,8	50,5
2,000 - 3,000	11	10,9	10,9	61,4
More than 3,000	12	11,9	11,9	73,3
99	27	26,7	26,7	100,0
Total	101	100,0	100,0	

In order to test whether there is any difference to the answers of the questionnaire according to the level of income of the respondents, we use One Way ANOVA statistics.

The hypothesis will be as:

H_0 : There is NO difference among different respondent's income level

H_a : There is difference among different respondent's income level

For the following questions, the H_0 will be rejected at $\text{Alfa}=10\%$ and conclude that the answers for the above questions differ according to the income level of the respondents:

CI1: Price that the contractor firm offers (compared to the client's estimate) can influence customer expectations.

CI4: Availability of highly qualified technical staff in the contractor firm, can influence customer expectations.

PN1: If people's needs for settling are different, then there will be a significant difference in their expectations of desired construction service quality.

CE2: Contractors always seek easy alternative solution and tries to save money by using cheap materials have no consider to customer expectations.

CE3: Contractor performances are based on cost not on value of work and customer expectations.

CP3: Tending to notices of defect can influence customer satisfaction.

CP4: Cleanliness and order on site can influence customer satisfaction.

CP5: Management of work safety on site can influence customer satisfaction.

CP6: Tending to official obligations can influence customer satisfaction.

QCP1: Management and implementation of agreed quality assurance procedures can influence customer satisfaction.

QCP7: The ability to provide the right service at the first time with minimum amount of rework can influence customer satisfaction.

QCP8: The variation in the completion time of the contract compared to the scheduled date can influence customer satisfaction.

CS4: When the customer is satisfied he believes the contractor will look out for my interests throughout the life of the project.

CS5: When the customer is satisfied he believes the contractor has the ability to perform productively.

CSB1: Satisfied customer thinks that the contractor always looking to improve its response to consumer needs.

CSB4: Failure of integrity involves lying; cheating or hiding facts in project team will tarnish trust.

CSC3: For the Satisfied customer the contractor has the strong identification.

CT4: If the contractor provides special service, the customer will be loyal to him.

CL5: When customer is committed to a contractor, staying with contractor is as much a matter of necessity as it is of choice.

In the other words, their responses are different about these relations:

Contractor Image- Customer expectations, Personal needs- Customer expectations, Customer expectations- Customer performance, Customer performance- Customer satisfaction, Quality of construction project- Customer satisfaction, Customer satisfaction- Competence trust, Customer satisfaction- Benevolence trust, Customer satisfaction- Commitment, Competence trust- Loyalty, Commitment- Loyalty.

For analyzing the conceptual model, the partial least squares (PLS) were applied.

Because” it is suitable when the goal of the study is to explain an outcome of interest and the measures for constructs are derived from archival data”(Gefen et al, 2011). In other words, it applies a component-based approach to assessment. PLS can analysis a structural model (estimating the relationships between theoretical models) and a

measurement model (estimating the reliability and validity of measures) (Karahanna et al., 2006). In fact, PLS is a favorable analyzer because it needs a small number of samples and places less restrictive demands on residual distribution (Chin et al., 2003).

5.2 Measurement Model

Two step approaches were used as Anderson and Gerbing (1988) suggested. First, the validity and reliability were evaluated and then discriminant validity was done. The reliability of the items can be tested by observing the loading factor of the items. Factor loading higher than 0.7 can be highly reliable and less than 0.5 should be deleted. Convergent validity is for when more than one item are used to measure a relation, and finally, AVE (average variance extracted), is the summation of the square of the factor loadings divided to summation of the square of the factor loading plus summation of the error variance (Fornell and Larcker, 1981).

If the AVE. is less than 0.5 the validity of the relation is questionable. Therefore, for satisfying the requirements for reliability, Composite reliability should be greater than 0.7 and the AVE should be higher than 0.5. Furthermore, the square root of AVE should be higher than zero for discriminant validity.

Table 8 shows the assessment of convergent validity and reliability:

Table 8: Convergent Validity and Reliability

Model construct	Measurement item	Loading	CR	AVE	Cronbach's Alpha
Benevolence Trust	BT1	0,735431	0,920360	0,745807	0,881843
	BT2	0,963317			
	BT3	0,963146			
	BT4	0,765991			

	BT2	0,735431			
Customer Expectation	CE2	0,729119	0,261966	0,388484	0,252937
	CE3	0,806279			
Contractor Image	CI1	0,680107	0,256890	0,351180	-0,286049
	CI3	0,822533			
Commitment	CL1	0,772559	0,957157	0,819021	0,941609
	CL2	0,983012			
	CL3	0,776633			
	CL4	0,982535			
Contractor Performance	CL5	0,981534			
	CP1	0,582391	0,821937	0,442445	0,741927
	CP2	0,586072			
	CP4	0,801878			
	CP5	0,772197			
	CP6	0,712114			
Customer Satisfaction	CS1	0,509821	0,842803	0,523725	0,763655
	CS2	0,750399			
	CS3	0,854546			
	CS4	0,759919			
	CS5	0,698488			
Loyalty Intention	CSL1	0,998324	0,999406	0,997629	0,999208
	CSL2	0,998730			
	CSL3	0,999287			
	CSL4	0,998914			
Competence Trust	CT1	0,807164	0,937585	0,791291	0,909294
	CT2	0,972148			
	CT3	0,971320			
	CT4	0,790644			
Past Direct Experience	PE3	0,950009	0,149331	0,422395	-0,185491
Customer Personal Need	PN1	1,000000	1,000000	1,000000	1,000000

Quality of Construction Project	QCP1	0,727722	0,695637	0,819021	0,741927
	QCP4	0,649196			
	QCP5	0,705935			
	QCP8	0,598355			
	QCP9	0,673811			
WOM	WOM1	1,000000	1,000000	1,000000	1,000000

As it shown in the table 8, the factor loading less than 0.5 has been dropped, moreover, in some constructs such as, customer expectation, contractor image, contractor performance and past or direct experience, the AVE that considers the variance capture by the indicators, is less than 0.5, it means that, the variance captured by the construct is less than the measurement error, and therefore, the validity of construct is questionable. In other words, AVE higher than 0.5 suggests that, the items of construct explain more variance than the error terms (Fornell and Larcker, 1981).

Furthermore, discriminant validity determines whether the measures of constructs are different from one another. Discriminant validity can be examined whether the square root of AVE is larger than the correlation coefficients (Parolia et al., 2007). The alpha coefficients for the items within each construct are sufficiently high, all of them except past direct experience, contractor image, and customer expectations are above the minimum, for Satisfaction that is 0.70. The discriminant validity of the constructs is shown in the table 9. In this table, the names of the constructs are shown by two letters:

Table 9: Discriminant Validity

	B T	C O	C T	C I	C P	C N	C S	C E	L I	P E	Q P	W M
B T	.863											
C O	.949	.954										
C T	.964	.958	.989									
C I	-.066	-.008	-.036	.592								
C P	.030	-.019	-.019	.480	.666							
C N	-.001	.011	.021	.373	.394	1.00						
C S	.044	.019	.027	.404	.648	.490	.724					
C E	.046	-.003	.074	-.375	-.290	-.201	-.350	.623				
L I	.966	.982	.971	-.010	.004	.019	.043	.007	.999			
P E	.060	.045	.022	.532	.472	.297	.433	-.356	.039	.650		
Q P	-.025	-.032	-.028	.494	.530	.327	.503	-.312	.002	.390	.548	
W M	-.021	-.016	-.006	-.071	.077	.103	.020	-.034	-.008	.023	.085	1.0

In the table 9: BT is Benevolence Trust; CO is Commitment; CT is Competence Trust; CI is Contractor Image; CP is Contractor performance; CN is Customer Personal Need ;CS is Customer satisfaction; CE is Customer expectations ;LI is Loyalty intention ;PE is Past direct Experience ;QP is Quality of construction Project and WM is Word of Mouth.

The bolded numbers the square root of the variance shared between the constructs and their measures and off diagonal numbers are correlations among constructs. By comparing the square root of AVE with the numbers under the diagonal, it can be identified that each construct is more related to its own measures than the measure of the others.

5.3 Structural Model

Once the construct measures have been confirmed as reliable and valid, the next step is to assess the structural model results. This involves examining the model's predictive capabilities and the hypothesized relationships between the constructs. By using the bootstrapping technique, the path analysis and the t-statistics were calculated for each hypothesis relationships.

Structural model path coefficients can be interpreted relative to one another. If one path coefficient is larger than another, its effect on the inner variable is greater. These coefficients represent the estimated change in the inner variable for a unit change in a predictor construct.

Before evaluating the size of the path coefficient, their significance must be examined. To examine their significance, the Bootstrapping was used.

After examining the significance of relationships, the relevance of significant relationships should be assessed. Path coefficients in the structural model may be significant, but their size may be so small that they do not warrant managerial attention.

Table 10 shows the path coefficient and T-Statistic of the structural model:

Table 10: Path Coefficients and T-Statistic

	Path Coefficient	Standard Deviation (STDEV)	T Statistics (O/STERR)
Commitment -> Loyalty Intention	0,632047	0,248906	2,539302
Competence Trust -> Loyalty Intention	0,365013	0,264040	1,382413
Contractor Image -> Customer Expectation	0,252177	0,242857	1,038378
Contractor Performance -> Customer Satisfaction	0,444809	0,119964	3,707853
Customer Personal Need -> Customer Expectation	-0,040832	0,116220	0,351337
Customer Satisfaction -> Benevolence Trust	0,044597	0,222696	0,200259
Benevolence Trust -> Commitment	-0,050842	0,121320	0,341327
Customer Satisfaction -> Commitment	0,019244	0,168433	0,114254
Customer Satisfaction -> Competence Trust	0,027503	0,190243	0,144570
Customer Satisfaction -> Loyalty Intention	0,021066	0,225384	0,093468
Customer Expectation -> Contractor Performance	-0,290029	0,232583	1,246992
Past Direct Experience -> Customer Expectation	-0,208775	0,273496	0,763356

Quality Construction Project -> Customer Satisfaction	0,322778	0,138387	2,332430
WOM -> Customer Expectation	0,365013	0,104334	0,414277

As the result of path analysis are presented in the table above, the commitment is related to loyalty intention as mentioned in H14 (path coefficient=0.632, t=2.539), contractor image is related to customer expectations as mentioned in H1(path coefficient=0,252, t=1,038), competence trust is related to loyalty intention as mentioned in H13 (path coefficient=0.365, t=1.382), a test of H6 proves that, contractor performance is related to the customer satisfaction(path coefficient=0.444, t=3.707), a test of H9 reveals that, customer satisfaction is related to benevolence trust (path coefficient=0.044, t=0.200), a test of H11 shows that, customer satisfaction is related to commitment(path coefficient=0.019, t=0.114), as mentioned in the H8, customer satisfaction is related to competence trust(path coefficient=0.027, t=0.144), customer satisfaction is related to loyalty intention(path coefficient=0.021, t=0.093) as indicated in H10, quality of construction project is related to customer satisfaction(path coefficient=0.322, t=2.332)as mentioned in H7, and finally a test of H3 proves that, word of mouth is related to customer expectations(path coefficient=0.365, t=0.414).

The supported Hypotheses by this research are shown in the table 11. As it is shown in this table the four hypotheses are not supported by the research:

Table 11: Supported Hypotheses

Hypothesis	Path Coefficient	Supported
H1	0,252177	Yes
H2	-0,040832	No
H3	0,365013	Yes
H4	-0,208775	No
H5	-0,290029	No
H6	0,444809	Yes
H7	0,322778	Yes
H8	0,027503	Yes
H9	0,044597	Yes
H10	0,021066	Yes
H11	0,019244	Yes
H12	-0,050842	No
H13	0,365013	Yes
H14	0,632047	Yes

Chapter 6

CONCLUSION

There are many studies that evaluated the impact of customer satisfaction in the construction industry, but a few were conducted for assessing the factors that influence the brand loyalty in this industry. The conceptual model of this research has fourteen hypotheses; the first part surveys the influence of different factors on customer expectations, such as past or direct experience, customer personal needs, contractor image and word of mouth.

The result of the research, support H1 (There is an interactive effect of contractor image on the customer expectations) and H3 (There is an interactive effect of word of mouth (WOM) on the customer expectations), therefore, it confirms that, word of mouth and contractor image can influence the customer expectations in construction industry. However, the negative links between customer personal needs and customer expectations (H2) and between past or direct experience and customer expectations (H4) are not significant, as it seems these relations usually exist in the real world.

The H5 (There is an interactive effect of Customer expectations on the contractor performance) and H12 (There is an interactive effect of the Benevolence trust on the commitment to the contractor) has the same situation and the research does not support them.

The influence of contractor performance on the customer satisfaction (H6) is supported by the results. It indicates that, customer satisfaction in construction industry can be defined as how well the contractor performs to meet the customer needs. The results also supports the H7, indicates that, the quality of construction industry influence the customer satisfaction, and based on the questionnaire, this quality is the quality of products and service during the construction project.

H8 is supported by the results. It means that, in construction industry when the customer is satisfied, he believes that the contractor has the ability to perform the project. The results indicate that, the satisfied customer believes that the contractor pays attention to his interests (H9). The influence of customer satisfaction on loyalty intention is also supported (the satisfied customer tends to behave as loyal customer, H10). The influence of customer satisfaction on commitment (H11) and influence of competence trust and commitment on loyalty is also supported by the results of the research. The entire hypothesis except H2, H4, H5 and H12 were supported by the results.

In conclusion of the above, ten hypotheses out of fourteen hypotheses were supported by this research and four hypotheses were not supported. This research can be replicated and results could be more validated by gathering more data to better generalizing. It means that, by choosing greater sample and more experienced sample, the results will be different, because the unsupported hypotheses seems to be the influential factors on customer expectations. Moreover, the benevolence trust is usually an important factor for commitments.

6.1 Limitations

Like many of empirical research, there are some limitations that must be considered in this research. First, many of construction industry and people in North Cyprus refused to contribute and participate in the research; therefore, there was a limitation of expert respondents who know about the importance of loyalty in industries. Additionally, because of the different cultures, needs, expectations, the result of the research should not be generalized. For generalizing the findings to the other countries, the caution should be taken and it needs more research.

Moreover, the majority of the respondents had a few years of experience in construction industry. It is necessary that an organized research and interview should be conducted to collect more insights. And finally, the relationship between past and direct experience in construction industry seems to be higher than what the results indicate, therefore it should be apply with caution for adopting the research findings for predict this relationship.

6.2 Implications

Construction firms should focus on building the customer relationship and try to create satisfied and loyal customers. In this industry, it is very important to have satisfied customer. It is clear that, the satisfaction level varies between different customers, therefore, there must be an organization to supervise the act of different construction firms, and of course there must be the government regulations, under which this organization makes decisions.

Moreover, like other service providers, it is important in this industry to be responsible for the service, after delivering the product. It can be an influential factor

of customer satisfaction. These satisfied customers can be turned to loyal customers and can be beneficial for the construction firms by repeating the business with the specific firm. They should develop the strategies to deliver the high quality service and performance to elevate customer satisfaction and after that by creating trust and commitment bring the customer to the level of loyalty.

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