

COMPARING CUSTOMER SATISFACTION WITH CHINA MOBILE AND CHINA TELECOM SERVICES: AN EMPIRICAL STUDY

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ABSTRACT

This paper aims to examine and compare customer satisfaction towards China Mobile and China Telecom services. The literature suggests that factors such as customer services, price, network quality, and product diversity influence customers' satisfaction with telecommunications organisations. A self-reporting questionnaire was developed and disseminated to 500 respondents in which 472 completed copies were returned. The results indicate that all of the influencing factors are significantly and positively correlated with overall satisfaction of China Mobile and China Telecom customers. However, satisfaction seems to be higher among China Mobile customers in terms of product diversity, while better customer service is recorded among China Telecom customers. This paper only focuses on a small sample size and that by using the outcome instead of process approach to test the model might raise the issue of generalizability in which future studies ought to address. Nevertheless, this study has advanced knowledge for it has provided information on the current state of customer satisfaction on China telecommunications organisations. It has confirmed the factors which significantly influence customer satisfaction with both China Mobile and China Telecom which are beneficial to the telecommunications service providers as they craft strategies towards increased mobile service use in the future.

JEL Classifications: JEL: M30

Keywords: customers service, price, network quality, product diversity, customer satisfaction, China

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INTRODUCTION

Customer satisfaction measures how a product or service meets or surpasses customers' expectations (Farris et al. 2010). It has been and will continue to be an important indicator to measure the market performance of any organization, particularly in this turbulent environment in order to achieve competitive edge by means of repeat purchase, customer loyalty, retention and referrals, as well as the ability to charge premium prices and reduce costs (Anderson et al. 2004; Eshghi et al. 2007; Russell-Bennett et al. 2007; Sharma 2014). For these reasons, customer satisfaction is very critical to both China Mobile and China Telecom, which represent two of the three major competitors in the telecommunications industry in the People's Republic of China (PRC).

Before the 1970s, telecommunications was rarely seen in the ordinary lives of common Chinese. However, with the reform policy implemented in the PRC in 1978, the telecommunications industry took off in a big way. With over 1.35 billion citizens, the PRC is now the largest mobile and network fixed-line in the world in terms of both network capacity and number of subscribers, yet this industry is growing at a fast pace (Chen et al. 2014). As of March 2012, the PRC has 284.3 million fixed-line subscribers and 1.01 billion mobile customers (Melanson 2012, March 30). In addition, The China Perspective (2011) reported that in 2010, the number of people using 3G and Internet services rose to 47.05 million and 450 million, respectively. The same year also witnessed the growth of mobile Internet users to 303 million. The PRC is ahead of other countries by having the most 3G users, i.e. 359.9 million in 2013 (see Table 1).

TABLE 1. MOBILE SUBSCRIBERS IN THE PRC BY OPERATOR (AS OF AUGUST 2013)

Operator	Subscribers	3G users
China Mobile	750.4 million	158.7 million
China Unicom	269.5 million	107.8 million
China Telecom	178.6 million	93.4 million
Total	1,198.5 million	359.9 million

Source: MobiThinking (2014).

Generally, there are six players in the telecommunications industry in the PRC. They comprise: (1) China Telecom Group which controls 70% of the fixed lines in the PRC; (2) China Netcom Group, which is the second largest fixed line service provider in the PRC, controlling 30% of the telecommunications backbone networks; (3) China Unicom, the only company with licenses to operate all of the telecommunications services in the PRC including fixed and mobile lines; (4) China Mobile Group which mainly focuses on broadband packet switched Internet Protocol networks and extends services from pure wireless voice services to data services and mobile image; (5) China Railway Communications which provides fixed lines, both local and long distance, data and VoIP services. In fact it is the only enterprise permitted to provide fixed-line services to the whole country; and (6) China Telecommunication Broadcast Satellite Corporation (China Sat) which provides and manages telecommunications satellite services. It is common to address these telecommunications company as “4+2”, representing four major operators (China Telecom, China Netcom, China Mobile, and China Unicom) and two minor operators (China Sat and China Railcom). Among them, the telecommunications industry is dominated by three organizations, namely China Mobile, China Telecom, and China Unicom. Since the restructuring exercise in May 2008 as a result of the direction from the Ministry of Information Industry, all of the three companies gained mobile, 3G, and fixed line licenses.

Many telecommunications companies are now facing customer switching problems to other service providers, and such a fierce competition suggests that customer satisfaction has great significance, particularly through efforts to improve upon their competitive edge and to develop better marketing strategies (Hanif et al. 2010; Nimako 2012) to retain customers (Malhorta & Malhorta 2013) rather than wasting time and money on competition (Ashraf et al. 2013). Despite the importance of this topic, the available literature suggests that research on customer satisfaction with Chinese telecommunications organizations are rather limited (Chen et al. 2011; Deng et al. 2009; Wang & Lo, 2002; Xia 2005) although there exists a large body of scholarships on these areas in different settings (e.g. Al-Refaie et al. 2012; Chakraborty & Sengupta 2014; Gerpott et al. 2001; Hanif et al. 2010; Turel & Sorenko 2006; Yoon 2010). A study of such nature, particularly on the two major telecommunications companies (China Mobile and China Telecom), is therefore imperative to reflect on the strengths and weaknesses not only in terms of their marketing strategies but also the products and services they offer (Reibstein 2010). China Mobile and China Telecom have since launched multiple value-added products and services to attract more customers of different backgrounds. Thus, by narrowing the gaps in existing knowledge, appropriate measures can be identified to further improve the satisfaction level of their customers (Gustafsson et al. 2005). In addition, the findings allow the two telecommunications companies investigated to learn from the strengths of each other while taking necessary steps to overcome their weaknesses. These are the objectives of this study which are achieved through surveying the users of China Mobile and China Telecom’s services.

The rest of the paper is structured as follows. The extant literature on customer satisfaction is reviewed. This results in the development of hypotheses to be tested. The methodology employed is described next, followed by the findings. The results are then discussed where appropriate measures are suggested for both the telecommunications companies. The limitations along with the directions for future research are provided before the paper is concluded.

LITERATURE REVIEW

Customer Satisfaction

Customer satisfaction refers to how a product satisfies customers or how it fulfils customers’ needs and expectations (Anderson et al. 1994; Bitner & Zeithaml 2003). Although it represents customers’ subjective experience which is usually explained at the individual level, more often than not customer satisfaction functions at an aggregate level (Anderson et al. 1994).

Parker & Mathews (2001) suggest that there are two basic definitional approaches to the customer satisfaction concept. The first approach defines satisfaction as a process, while the second refers to the outcomes of a consumption experience. Customer satisfaction as a process is defined as an evaluation between what was expected and what was received (Olson & Dover 1979; Oliver 1997, 1981; Parasuraman et al. 1988; Tse &

Wilton 1988; Zeithaml et al. 1990), emphasizing on the perceptual, evaluative, and psychological processes (antecedents) that contribute to customer satisfaction (Vavra 1997). A lot of researches have been directed at understanding the process approach in evaluating customer satisfaction (Parker & Mathews 2001).

Oliver (1993) defines the outcome approach as the end-state satisfaction resulting from the consumption experience. This post-consumption state can be an outcome which occurs without comparing expectations, or perhaps a cognitive state of reward; fulfilment of a customer's response (Rust & Oliver 1994), an emotional response (Oliver 1981; Parker & Mathews 2001; Westbrook & Reilly 1983) that may occur as a result of comparing the expected and costs to the anticipated consequences and actual performance or a comparison of rewards (Vavra 1997), and state which relates to arousal and reinforcement (Rust & Oliver 1994). As such, it explains why customer satisfaction at lower levels result in defection, customer satisfaction at medium level results in indifference, while higher level of customer satisfaction results in customer's intention of repurchase, recommendations and loyalty (Eggert & Ulaga 2002; Fornell 1992; Lin & Wang 2006; Lo et al. 2010) as well as produces positive word of mouth publicity (Reichheld & Sasser 1990).

Parker & Mathews (2001) drew their approaches from various theories such as the discrepancy theory (Porter 1961), the contrast theory (Cardozo 1965; Howard & Sheth 1969), the expectation confirmation theory (Oliver 1997, 1981), the attribution theory (Folkes 1984; Weiner 1980, 1985), the value-percept theory (Westbrook & Reilly 1983), the equity theory (Fisk & Young 1985; Swan & Oliver 1985), and the comparison-level and generalized negativity theories (Pizam & Ellis 1999). They concluded that the two approaches (process and outcome) are complementary to each other.

Factors Influencing Customer Satisfaction

This study adopts Homburg & Bruhn's (1998) definition where satisfaction is an experience-based assessment made by customers of how far their expectations about the overall functionality or the individual characteristics of the services obtained from the provider have been fulfilled. In this context, customers assess the telecommunications service providers based on use experience and that rating is done in accordance to the service attributes which include customer service, price, network quality, and diversity of products which are explained in the following sub-sections.

Customer Service

Customer service is recognized as the key for telecommunications service providers to add value to mobile networks rather than the products or services provided (Al-Refaie et al. 2012; Chen et al. 2011). This explains why service quality has received considerable research attention (Lien & Kao 2008). In developing customer satisfaction, the telecommunications providers must be careful with the customer services they offer in view that such satisfaction is decided by his or her assessment of a service (Kim et al. 2004). This is because when complaints are not handled properly, customers will begin to seek for other service providers (Ahn et al. 2006; Malhotra & Malhotra, 2013). On the other hand, politeness and good attitude of service personnel leaves an active impression on customers which lead to their satisfaction.

Good customer service is created together with the customer in a service situation. According to Rissanen (2005), good customer service entails service production, service package, service quality, and service culture. In addition, customers must be served as an individual since he or she is assessing the service during the overall service process. The contact personnel are potentially the most significant feature that impacts on customers, being the front line staff of organizations (Soderlund & Rosengren 2008; Wang & Lo 2002) to respond to customers' queries. Accordingly, the personnel need high professional skills, be willing to serve, and have the spirit of making significant contributions to their organizations.

Chen et al. (2011) found that service quality within the context of mobile communications industry has significant positive influence on customer satisfaction. It is therefore believed that the level of customer service, including the platform of which the services are offered and the ability of the customer service operators to answer customers' questions will affect customers' satisfaction level and subsequently their brand choice. In other words, better service quality in a particular product and/or services may likely to increase the levels of customer satisfaction towards it (Tan et al. 2014).

Price

Price is amount of money charged for a product or service (Kotler & Armstrong 2010). In other words, it represents the sum of values that customers exchange for the benefits of having or using a product or service, or a combination of other goods and services offered by the same company (Stanton et al. 1994). Customers feel satisfied when the price they pay for the product or service is equal or more than what they actually get, in line with the concept "you get what you pay for". Because of this, pricing structure was found to be the determinant

of customer satisfaction for any organization in order to build a sustainable competitive differentiation (Chakraborty & Sengupta 2014; Santouridis & Trivellas 2010).

The marketing literature has demonstrated the inclination of researchers toward price fairness in relation to customer satisfaction (Al-Refaie et al. 2012; Hermann et al. 2007; Kukar-Kinney et al. 2007; Martin-Consuegra et al. 2007). Price fairness refers to assessments by consumers of whether the seller's price is reasonable, justifiable or acceptable (Bolton et al. 2003; Kukar-Kinney et al. 2007; Xia et al. 2004). Price fairness is a very important issue leading towards satisfaction where charging a fair price helps to develop customer satisfaction and loyalty (Martin-Consuegra et al. 2007). Hermann et al. (2007) and Malina Hanum et al. (2012) attest that customer satisfaction is directly influenced by price perceptions, while indirectly through the perception of price fairness. According to Lommeruda & Sjørgard (2003), telecommunications services are undifferentiated products and therefore, customers will only be willing to pay for services when they are satisfied, otherwise, they will look for another service provider. As such, the level of price does have a significant influence in improving the degree of customer satisfaction. As a matter of fact, Turel & Serenko (2006) insist that price is one of the two very important measures of customer satisfaction. It is therefore posited that the price charged by the telecommunications operator, including package and tariff, will affect customer's satisfaction level and subsequently their brand choice.

Network Quality

Network quality has been recognized as one of the relevant factors when evaluating service quality in determining the overall customer satisfaction (Negi 2009; Rahman et al. 2011). Among the issues of network quality reported in the PRC include signal of mobile phone coverage and sending and receiving of short messages. Specifically, there is a significant gap in network quality in terms of weak coverage of mobile phone network. When network quality such as coverage or call quality does not meet expectations, it results in complaints (Chen et al. 2011).

This is evident from the complaints received by the Ministry of Information Technology and Telecommunications in 2012 whereby service quality and communications quality are reported as the main target of complaints. The number of complaints will undoubtedly lead to customer dissatisfaction in light of the expectations customers have over the price they pay for and the services they receive (Ahn et al. 2006). As such, network quality of the telecommunications operator, including signal coverage and its competitiveness, is expected to affect customers' satisfaction level and subsequently their brand choice.

Diversity of Products

Berger et al (2007) found that product variety has a significant positive effect on brand choice when mediated by perceived quality, where product diversity also affects perceived quality positively. This is aligned to the principle of "the more, the better" where consumers tend to be more satisfied with more goods and/or services offered when other conditions remain constant.

Product differentiation strategy can thus act as a tool of competitive advantage adopted by organizations to offer products that satisfies individual customer's needs (Shammot 2011). As a result, customers are willing to pay more for products that cater to their individual size, taste, style, need or expression (Dirisu et al. 2013). Young people, in particular, look past pricing for the value found in diversity and individuality in a product (Kodama 2011). As such, it is believed that the degree of competitiveness of the telecommunications operator, including product varieties and the degree of customization, will influence customers' satisfaction level and subsequently brand choice.

Research Variables and Hypotheses

The literature suggests that customer service, price, network quality, and diversity of products (independent variables) are among the key influencing factors determining customer satisfaction (dependent variable) with the services offered by China Mobile and China Telecom. As such, the following hypotheses are constructed:

H1: Customer service is a significant factor influencing customer satisfaction.

H2: Price is a significant factor influencing customer satisfaction.

H3: Network quality is a significant factor influencing customer satisfaction.

H4: Diversity of products is a significant factor influencing customer satisfaction.

METHODOLOGY

Sampling

This study employs the judgement sampling method which, according to Sekaran & Bougie (2010), is limited to specific people who can provide the desired information since the respondents are confined to customers who subscribed to the services of either China Mobile or China Telecom.

Roscoe (1975) proposes that as a rule of thumb, sample size larger than 30 and lesser than 500 are appropriate for most social science research. Taking the cue, questionnaires were distributed to 500 respondents, in which 472 completed copies were returned.

Table 2 shows the demographic profiles of respondents. The number of male and female respondents is almost equal due to the sampling design adopted. Likewise, the sampling method adopted also explains the equal number of respondents subscribing to the services of China Mobile and China Telecom. Besides gender and telecommunications operators, the other characteristics are not controlled. The respondents are fairly distributed across the different age ranges, with most of them fall within the age cohort of between 21 and 30 years old. In addition, most of the respondents are earning a monthly salary of between RMB1,001 and RMB2,000, followed by those in the brackets of RMB2,001 to RMB3,000 and between RMB3,001 and RMB4,000, respectively. Most of them have been using the service of their current providers for between 5 and 9 years.

TABLE 2. DEMOGRAPHIC PROFILES OF RESPONDENTS

	Variables	Frequency	
		N	%
Gender	Male	235	49.8
	Female	237	50.2
	Total	472	100.0
Age	20 or less	48	10.2
	21-25	87	18.4
	26-30	88	18.6
	31-35	70	14.8
	36-40	50	10.6
	41-45	44	9.3
	46-50	47	10.0
	50 or more	38	8.1
Salary	RMB1,000or less	42	8.9
	RMB1,001-RMB2,000	136	28.8
	RMB2,001-RMB3,000	110	23.3
	RMB3,001-RMB4,000	108	22.9
	RMB4,001-RMB5,000	60	12.7
	RMB5,000or more	16	3.4
	Total	472	100.0
Operator currently used	China Mobile	236	50.0
	China Telecom	236	50.0
	Total	472	100.0
Time of using the current operator	3 years or less	125	26.5
	3-5 years	127	26.9
	5-9 years	140	29.7
	10 years or more	80	16.9
	Total	472	100.0

Instrument

According to Malhorta & Birks (2003), the survey approach is the most commonly used method of primary data collection in marketing research and the advantages include data consistency and simple administration. The questionnaire is divided into 5 sections. Section 1 contains 5 questions on the demographic profile of respondents (see Table 2). In addition, there is an item to measure how satisfied the respondents are with the current telecommunications provider, using a 5-point Likert scale ranging from 1 = not satisfied at all to 5 = very satisfied. Section 2 comprises 4 items that measure the perception of respondents on customer service, while Section 3 consists of 4 items on pricing. Section 4 solicits information on network quality and Section 5

on product diversity. Both the sections also consist of 4 items each. Likewise, the 5-point Likert scale is used for all the items from Section 2 to Section 5. Depending on the nature of the items, the scaling used include 1 = not satisfied at all to 5 = very satisfied, 1 = not influential at all to 5 = very influential, and 1 = strongly disagree to 5 = strongly agree.

The initial instrument, which was designed in English, was translated to Chinese in order to obtain accurate findings as well as cooperation from respondents. To ensure minimal differences between both the versions, back translation was used and the translated construct was subjected to another pilot exercise.

Validity and Reliability

In order to test construct validity using factor analysis, the precondition needs to be satisfied, namely the stronger correlation between items which is reflected in two text indexes: (1) Kaiser-Meyer-Olkin (KMO) value; and (2) Bartlett spherical test value. KMO value is used to compare simple correlative and partially correlative indexes with values ranging from 0 to 1. The standard of analyzing the factors are 0.9 (very suitable), 0.7-0.9 (suitable), 0.6-0.7 (not very suitable), and less than 0.6 (not suitable). The Bartlett spherical test is used to determine whether it is suitable to test correlative indexes among the items where the significant ones (sig. <0.05) can be used to analyse the factors. Table 3 shows that the KMO value is 0.765, and as such, the data is fit for factor analysis. In addition, the results of Bartlett spherical test indicates that the approximate chi-square value is large (2936.137) and significant (sig.=0.00). Therefore, the zero assumption of Bartlett spherical test is rejected and that the data is fit for factor analysis.

The principal component factor analysis is used with factor rotation performed through varimax to extract factors with eigenvalues of above 1.00. Consequently, four common factors are identified. With 63.127% of the variance explained, all items load above 0.50 and therefore, none of the items are dropped. As expected, all the items are clustered into four factors, consistent with the literature.

Table 3 shows the Cronbach's alpha scores of all the variables. The scores are higher than 0.70 (Sekaran & Bougie 2010). As such, the inner consistency of the scales is confirmed.

TABLE 3. RESULTS OF RELIABILITY ANALYSIS

Variables	Cronbach's Alpha	Number of Entries
Customer satisfaction	0.780	16
Customer service	0.785	4
Price	0.781	4
Network quality	0.791	4
Product diversity	0.772	4

RESULTS

Mean and Standard Deviation Scores

Table 4 shows the mean and standard deviation scores of all of the factors. Overall, product diversity records the highest mean, followed by customer service, price, and network quality. It could be seen that the responses are somewhat neutral and consistent, except for customer satisfaction in which the standard deviation score is more than 1.0. The same trend is also observed in China Telecom. For China Mobile, the mean scores are rather neutral albeit more consistent in terms of overall satisfaction. Customer service and price scored the same mean, followed by product diversity, and network quality. However, respondents who use the services of China Mobile tend to be more satisfied than those who subscribe to China Telecom. However, respondents of China Telecom scored significantly higher means on customer service than those who use China Mobile, which scored significantly higher means on product diversity.

This is confirmed by the t-test results which show that respondents using China Mobile perceive that their service provider offers more diversified products. On the other hand, respondents using China Telecom think that they receive better customer service than those who are using China Mobile. The differences are significant (p-value less than 0.05). However, price and network quality are not found to be significantly different between the two telecommunications providers.

TABLE 4. MEAN, STANDARD DEVIATION SCORES AND T-TEST RESULTS OF THE FACTORS

Factors	Overall		China Mobile		China Telecom		T	P
	Mean	S.D.	Mean	S.D.	Mean	S.D.		
Customer Satisfaction	3.44	1.08	3.57	0.99	3.32	1.16	2.517	0.012*
Customer Service	3.47	0.77	3.40	0.76	3.54	0.76	-1.976	0.049*
Price	3.39	0.79	3.40	0.78	3.38	0.81	0.362	0.717
Network Quality	3.21	0.84	3.16	0.81	3.26	0.86	-1.253	0.211
Product Diversity	3.66	0.75	3.73	0.74	3.59	0.75	2.055	0.040*

* *P-value less than 0.05*

Hypotheses Testing

Table 5 shows the Pearson correlation coefficient results between the independent and dependent variables. All of the factors (customer service, price, network quality and product diversity) are significantly and positively correlated with overall satisfaction (p-values smaller than 0.05). The strongest correlation is recorded in product diversity, followed by price, customer service, and network quality. Thus, H1, H2, H3, and H4 are accepted.

TABLE 5. PEARSON CORRELATION COEFFICIENT RESULTS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES

Factors	Customer Satisfaction		
	Overall	China Mobile	China Telecom
Customer Service	.353**	.358**	.378**
Price	.371**	.387**	.360**
Network Quality	.142**	.194**	.114
Product Diversity	.420**	.564**	.290**

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

Taking a closer look, Table 5 also shows the specific correlation coefficient results between the independent and dependent variables specific to the responses on China Mobile and China Telecom's services. All the factors (customer service, price, network quality and product diversity) are significantly and positively correlated with overall satisfaction (p-values smaller than 0.05) of China Mobile customers. Although the customers of China Telecom seem to suggest similar results, network quality is the only factor that does not correlate significantly with the satisfaction of customers of China Telecom. As such, H3 is partially accepted.

DISCUSSION

The results of Pearson correlation coefficient analysis indicates that all of the four factors (network quality, price, product diversity, and customer service) are significant in influencing overall customer satisfaction of the two telecommunications service providers. Overall, the results also reflect the literature (Ahn et al. 2006; Al-Refaie et al. 2012; Cardozo 1965; Chen et al. 2011; Hermann et al. 2007; Kim et al. 2004; Kukar-Kinney et al. 2007; Lien & Kao 2008; Lommeruda & Sjørgard 2003; Malina Hanum et al. 2012; Martin-Consuegra et al. 2007; Soderlund & Rosengren 2008; Storbacka et al. 1994; Turel & Sorenko 2006; Wang, 2007; Wang & Lo 2002).

The findings suggest that it is imperative for the telecommunication service providers to provide customer-oriented services, including pleasant attitude and quality of company personnel at the front desk. In addition, charging what customers perceived as fair price is also a paramount factor in view of the fact that telecommunications services are undifferentiated products (Lommeruda & Sjørgard 2003). Good network quality is another important aspect, without which subscribers' requirements cannot be fully met in spite of reasonable price and superior service. The last significant factor is diversity of products where the results imply that customers, particularly the younger ones, appreciate more products and services offered by the telecommunications service providers although they may not be using all of them.

Although the mean scores are rather neutral which reinforce the fact that telecommunications services are rather undifferentiated products, the findings show that network quality and customer service are among the most significant ones in influencing satisfaction. In contrast, price and diversity show weak influences. Interestingly, China Mobile scores significantly higher than China Telecom in terms of overall satisfaction and product diversity but China Telecom offers better customer service, implying the unique strengths of both the service providers.

Theoretical Implications

This study has advanced knowledge for it has identified and empirically examined the key influencing factors affecting customer satisfaction with the services offered by the two major telecommunications service providers in the PRC, overcoming the limitations of studies in such a setting. The outcomes provide a clear understanding of the strategies adopted by China Mobile and China Telecom. This research can also be used as a base document for future research either in the PRC or different economies.

Managerial Implications

The findings suggest that the telecommunications service providers should develop appropriate strategies based on their strengths in satisfying their customers as well as overcoming their weaknesses by learning from each other. With network quality and customer service identified as the major factors influencing satisfaction of customers, strategies should be formulated along these two areas. Accordingly, China Mobile should set up corresponding strategy to further improve the quality of its customer service, while China Telecom is to improve its network quality through increasing the number of base stations and extending its service time. Since China Telecom is acknowledged as having better customer service, it is imperative to develop strategies to retain it. China Mobile could learn from China Telecom in this case. Likewise, since network quality is an advantage possessed by China Mobile, China Telecom should consider benchmarking its rival so that its network quality can be further improved although network quality is not perceived to be its competitive edge. One way is to work with China Mobile or with other telecommunications service providers to share its network infrastructure so that its customers can enjoy the same level of service as enjoyed by the customers of China Telecom. This will enable customers to achieve greater satisfaction which can result in brand loyalty and competitive advantage. To do so, it is necessary to define the standards of service quality that the customer service centers should achieve and provide a basis for service flow design and implementation as well as to increase the functions of products and to introduce new businesses regularly.

Having said so, both the telecommunications service providers cannot ignore the importance of product diversity and pricing as these factors scored strong correlations with customer satisfaction. China Mobile, which seems to possess the advantage of product diversity, can further enhance its offerings particularly to attract the younger users. China Telecom, on the other hand, can take the opportunity to determine what it needs to offer to be on par with China Mobile as it is evident that customers are more satisfied with China Mobile. In contrast, China Telecom wins customer satisfaction in terms of pricing policy. In that the case, it provides avenue for China Mobile to formulate different pricing strategies to meet the needs of its customers of different characteristics and backgrounds.

CONCLUSION AND FUTURE RESEARCH DIRECTION

This paper offers a new perspective to the field of customer satisfaction with China Mobile and China Telecom. Specifically, it has contributed to knowledge for it has addressed the scarcity of research in the context of customer satisfaction by comparing the two telecommunications service providers. Such a research is imperative in light of the stiff competition that the telecommunication service providers face either now or in the future. It is hoped that the findings shed some lights to both the telecommunications service providers on the marketing strategies to be implemented in order to achieve greater customer satisfaction. Further, it is also hoped that the study will motivate more research to be conducted in the future by taking into account the suggestions provided.

There are several limitations which warrant careful interpretation of the results obtained. First of all, the small sample size and coverage raise concern on the generalizability of the findings. Secondly, this study focuses on the outcome approach (Oliver 1993; Parker & Mathews 2001) in contrast to the process approach which does not permit the use of the robust SERVQUAL model. Adding to this is the time and cost constraints which do not permit the research to be conducted in a larger scale.

Notwithstanding the limitations, this research can serve as a base for further research and study on the factors affecting customer satisfaction in the PRC's telecommunications industry. Future studies should be conducted with larger sample size across different telecommunications service providers. In addition, it is also possible to investigate factors that affect loyalty and satisfaction (such as word of mouth, usage pattern of customers, switching barriers, and the like) as well as to correlate the findings with the demographic profiles of customers. It is interesting, particularly to determine the responses of various age groups with regards to their satisfaction with the various influencing factors investigated. Such a larger scale study is possible through appropriate research funding and support provided by the telecommunications service providers, government agencies, or institutions of higher learning. There is also a need for studies to combine both the process and outcome approach in order to arrive at a more precise and comprehensive finding.

Having said so, this study only reports on the quantitative findings. The mixed-methodology used, including information collected from the managers of both China Mobile and China Telecom, can enrich the study findings which will be reported in subsequent paper.

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