An Empirical Study of Singaporean SME Customer Service Model

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ABSTRACT
In Singapore, service sectors are dominated by SMEs. Customer Satisfaction is important since Customer Service is a critical issue for SME Survival and economy of the country. Further, Customer service is apparently multi-dimension. In this paper, three perspectives of customer services: Sales and Marketing, Administration and Installation which are thirteen determinant factors for customer satisfaction. These thirteen factors take charge by three departments of a local SME of Glass Supply and Installation. 224 sets of completed questionnaires provided by five types of customers where slightly less than fifty percent is home owner clients opinions. Statistical methods are applied to analyze data collected. Detail Findings include significant factors for total satisfaction and its component satisfaction of all customers.

Keywords: Customer Services, Total Customer Services, SME, CRM, Customer Centric

1.   Introduction

The initiative to perform this piece of research on customer satisfaction of Small and Medium Enterprises (SME) is due to one of the major challenges faces by SMEs in their business journey to deliver quality services. Customer services are process or experience. It is equally possible to argue that most physical goods are simply there to provide a service, and that glass or washing powder is as much as a process as is installing a glass windows or cleansing, is as much of a process as using glass or washing powder. Services are intangible, inseparability and perishable. They cannot be inventoried. The fact that customers' needs are different and that customer service consumption involves interaction between customers and producers, it also tends to lead to a much greater potential for variability in quality (which is another characteristic of service – heterogeneity) than in the case with physical goods (Ennew & Waite, 2007). Researches have shown that superior service leads to higher customer loyalty and ultimately, better financial performance (Heskett, 1994 & 1997, Reichheld and Sasser (1990). Therefore, they are transferring business strategies from product-centric to customer centric (Chen & Su, 2006, Kotler, 2003) leading to customer satisfaction is crucial to the customer-centric paradigm shift. The study will based on data collected from a Singaporean SME, starting from literature review, research methodology, analysis and findings with concluding all have been performed including recommendation.

2.   Literature Reviews

The successful management of relationships with customers depends on ensuring that customers have good experiences when they consume a service, they then evaluate that service experience positively and thus have a reason to maintain a relationship with a provider and make future purchase. Quality is generally recognized as an antecedent to customer satisfaction. Satisfaction is an evaluation of a service experience, and is commonly conceptualized as a comparison of expectations and perceptions (Ennew & Waite 2007). The Total Customer Service (TCS) is the central theme for this study which is defined as to service by serving the customers, particularly loyalists, consumers, and potential buyers, with the intention to gain tangible and intangible profits from the exchanges of the offerings (Zainordin 2013) .
This literature reviews will focus on the factors within the framework of sales and marketing, administration and installation influence customer satisfactions:

Karna's (2009) study on construction projects concluded that co-operation and good workmanship are critical factors for satisfaction. Verma's (2003) studied 150 executives gathering information about

incidents of delight and outrage. Courtesy, responsiveness, willingness to genuinely help, understanding the customer needs are factors positive to customer satisfaction, however, factors caused customer outrage were service failure, reliability failure, staff rudeness, uncaring and apathetic attitude of staff. This study has also discussed the three types of service encounters: the remote encounters where human interaction does not take place; like a transaction through an automatic teller; phone encounters and face to face encounters are the most complex of the three. The customer satisfaction can also be viewed in two aspects, one takes the process view and the other looks at as an end state, which follows the process. It is customer's fulfillment response. It is a judgment as to how a product or service feature or service itself delivers; pleasurable level of consumption related fulfillment, including the level of under or over fulfillment. Further, Daniel (2000) mentioned product knowledge as a factor relevant to satisfaction. Customer satisfaction with sales interaction (Treytl 2002), employee behavior (Seidman 2001), product knowledge (Lee 2014) are closely related. Parasuraman, Zeithami and Berry (1985) summarized that customer satisfaction is dependent on ten dimensions of service quality which led to customers' satisfaction based on a model of: availability of support, reliability, responsiveness, assurance and empathy (Alarcon, Salvador, 2003). Babbar and Suntil (2008) expressed that services are intangible and involve relatively customer contact, therefore how a service is delivered becomes an important determinant of service quality.

Interestingly, Ku's (2013) study three forms of experiments by progressive level of services in which the findings shown that moderately excessive service to be acceptable to most participants, unexpectedly over-attentive service to affect satisfaction negatively. Ho & Olsen (2012) finding on certainty, risk and knowledge in satisfaction with regards to purchase intention relationship in a new product experience where the consumers' satisfaction, perceived certainty of the product will directly influence the purchase intention. Manipulate on the product risk and knowledge will also affected the purchase intention level. Gruber's (2009) study urged that customer satisfaction will be improved by handling customer complaints effectively. Companies should tread the complaints from an unsatisfied customer as a challenge to strengthen the endangered customer-provider relationship and rebuild customer confidence, which has positive effects on customer retention and loyalty. The research suggested that identifying differences between men and women's complaining behavior could prove useful in terms of identifying the right person to deal with male and female complainants and pursuing the most appropriate resolution strategy, Luong's (2007)

3.   Research Methodology

The major approach is Questionnaire Survey. A Singaporean SME supplying glass and its installation for construction project is chosen for this study. Data of 224 customer feedbacks within the year of 2013 are being used. Customers are categorized into five groups from the total of 224 customers: Main contractors; 14, Designer/Sub-contractors: 60, Property managers: 60, Home owners: 110 and Commercial owner: 34. Forming of the questionnaire involves using the results of literature review, exploratory surveys and information obtained from the industry. Multiple/Triangular methods (Hoque & Hopper 1997) are used to analyze the data which include one sample t test, correlation analysis, independent sample t test, one way ANOVA analysis and multiple regression. There are thirteen independent variables (IV) grouped under Sales and Marketing (with five IV), Administration (with four IV) and Installation (with four IV). For details, there are 13 factors: 'Courtesy and Friendliness', 'knowledge of Product', 'Speed of Response to your Request & Queries', 'Explain Clearly/Provide adequate Information about Product & Sales Agreement', 'Fulfillment of Commitments Made During Sales', 'Telephone Etiquette and Manners', 'Communication skills', 'Responsiveness and Resourcefulness', 'Correctness and Clearness of Documents', 'Courtesy and Friendliness', 'Co-operation and Helpfulness', 'Workmanship' and 'Housekeeping and Cleanliness'. There is a dependent variable: Total Satisfaction consisting of 'The Finished Product Satisfaction' and 'The Overall Purchase Experience'.

4.   Analysis and Findings

The analysis consists of five sections as follows:

4.1   Data reliability analysis
The collected data is highly reliable since the Cronbah's Alpha is 0.986

4.2   One Sample t test Analysis

The one-sample t-test is used when the one sample t test is performed on factors of the model. If the value is less than 0.05, then factors of variables are significance.

With <0.05 significant, the result shown that all customers are highly satisfied with the services provided by all the three departments: Sales and Marketing, Administration and Installation.

4.3   Correlation Analysis

For finding the most significant pairs of independent variables in each of dimensions of the relationships, Correlation looks at the relationship between variables in a liner fashion. A Pearson product-moment correlation coefficient describes the relationship between two variables and is available through the analysis and correlate mean. In the correlation test, the higher the correlation then there is the stronger the relationship between variables (Keller and Warrack, 2003). Correlation in this research is used to measure the interrelationship among factors.

4.3.1   The Sales and Marketing staff are mostly more fulfillment of commitment indicating sales staff has better courtesy and friendliness attitude

4.3.2   The Sales and Marketing staff with knowledge of product which facilitate them faster response to customer request and queries.

4.3.3   The Sales and Marketing staff with knowledge of product which leads to clearer and adequate product information providing to the customer.

4.3.4   The Administrative staff with better telephone etiquette and manners has better communication skills.

4.3.5   The Administrative staff with better communication skills provides more precise documentation.

4.3.6   The Installation staff with better courtesy and friendliness attitude is more-operative and helpful.

4.3.7   The better workmanship makes the finished product satisfaction higher.

4.3.8   The higher the finished product satisfaction indicates the best overall purchase experience.

4.4   Independent Sample t-test Analysis

Assumptions underlying t-test are: data are at the interval level of measurement, Radom sampling and Normally with Independent of groups and homogeneity of variance.

In this research Levene's test was significant (for sig. 2 tailed <0.05) and that equal variances not assume. Therefore, the most significant factor in each variable/dimension of all samples will be identified for two major groups of customers: with self-owned property and worked/managed on public property.

The significant 2-tailed value=0.04 <0.05. It concludes that the fast response to customer request and queries is the major factor to gain customer satisfaction.

4.5   One way ANOVA Analysis

The assumptions for ANOVA are: Population normality and Homogeneity of variance by Levene's test. Using F-statistics, given p,0.05, significance can be determined.

One-way between groups with post-hoc comparisons where

Thus, to test the null Ho: $\mu 1 = \mu 2 = \ldots = \mu c$

Against the alternative H1: not all μj are equal (where j=1,2,…c)

Leading to H1 is valid. That is null hypothesis will be rejected and accept the alternative hypothesis, therefore by Tukey HSD test, Different customers will have customer satisfaction.

Under multiple comparisons among different types of customers with respect of sig <0.05, the finding is concluded as:

1. Main Contractors and Property Management clients expected better customer services than Designers/Sub-contractors, home owners and commercial owners.

2. The installation department service performance is the most important factor to affect the main contractor satisfactory level.

4.6 Multiple Regressions

The multiple regression model is: $Y = a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + \ldots$

Where Y is a dependent variable – Overall satisfaction consists of the finished product satisfaction including overall purchase experience. and X_n is an independent variable such as three groups: sales and marketing, Administration and Installation, or factors of the 'Courtesy and Friendliness', 'knowledge of Product', 'Speed of Response to your Request & Queries', 'Explain Clearly/Provide adequate Information about Product & Sales Agreement', 'Fulfillment of Commitments Made During Sales', 'Telephone Etiquette and Manners', 'Communication skills', 'Responsiveness and Resourcefulness', 'Correctness and Clearness of Documents', 'Courtesy and Friendliness', 'Co-operation and Helpfulness', 'Workmanship' and 'Housekeeping and Cleanliness'.

The findings are summarized as follows:

1.In Table1, for all types of customers and all dependent variables (Finish Product satisfaction and overall purchase experience), Sales & marketing, Administration and Installation are all significance except customers did not find sales & marketing significant for finished product satisfaction. All models are with R2> 0.73 and significant F.

Table 1:.*All types of customers, groups (Sales, Administration & Installation, SAI) of Independent Variables & All Dependent Variables*

1.	Total Satisfaction F1&F2	Vs Sales, Adm & Installation	Significance
	R2=0.783	F=264	Sig=0.000
		T	Sig
	Sales & Marketing	2.489	0.014
	Administration	3.512	0.001
	Installation	14.73	0.000
2.	Finished Product Satisfaction F1	Vs SAI	
	R2=0.758	F=230	Sig=0.000
		T	Sig
	Administration	3.644	0.000
	Installation	13.809	0.000
3.	Over Purchase Experience F2	Vs SAI	
	R2=0.736	F=204	Sig=0.000
		T	Sig
	Sales & Marketing	2.622	0.000
	Administration	2.717	0.007
	Installation	12.889	0.000

2.In Table 2, for all types of customers, all factors of Independent Variables & All types Dependent Variables(Total satisfaction, Finished Product Satisfaction and Over purchase experience), Significant factors from the models formed with Dependents: Finished Products Satisfaction and Purchase experience integrated into the model with total satisfaction. Other factors do not included in the previous two models which are insignificance.

Table 2*. All types of customers, all factors of Independent Variables & All types Dependent Variables*

4.	Total Satisfaction F1 + F2	Vs All factors	Significance
	R2=0.847	F=88.535	Sig=0.000
		T	Sig
	Courtesy & Friendliness C1	-4.068	0.000
	Fulfillment of Commitments made during sales C5	5.210	0.000
	Courtesy & Friendliness E1	3.337	0.001
	Workmanship E3	3.524	0.001
5.	Finished Product Satisfaction F1	Vs All factors	
	R2=0.824	F=74.969	Sig=0.000

5.   Conclusion

SME Service businesses remain important to Singapore employment and economics. The general findings are summarized in section 4.0: For all (224) customers, sales and marketing, administration and installation affect total and purchase experience satisfaction whereas in details, courtesy and friendliness (for sales and installation), fulfillment of commitments made during sales and workmanship are significant factors which affect total satisfaction. Others influencing factors for different customers and types of satisfaction are also listed under regression.   The findings are practicable and relevant to understand sustainability growth or survival of Service SMEs in Singapore. The limitation of this study include the data is gathered from one Singaporean SME and one year data. Several years' data are collected from more SMEs which will further improve the findings for Singapore social phenomena. Additionally, introducing techniques such as Customer Relationship Management (CRM), integrate technology, process and all business activities around the customer to improve acquisition and retention of customer, and with the help of internet technology, the features of CRM related to customer satisfaction can be delivered online to further improve the customer services. Customer Centric Initiative (CCI) is Capability Development Grant of Singapore government aims to encourage companies especially SMEs to be committed to service excellence and to take the lead in raising service standards in their industry. With the aid of the grant SMEs can develop a new service standards and improvement plan to further enhance their customer services and hence improve the total customer satisfaction.

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