SME Customer Service Excellence: A Singaporean Case Study

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ABSTRACT: In Singapore, service sectors are dominated by SMEs. This study set out to investigate customer satisfaction as a critical factor in SME survival and indeed in helping to maintain the overall health of the economy. In this study, data were collected from a Singaporean SME which supplies and installs glass for construction projects. Departments involved were Sales & Marketing, Administration, and Installation. A questionnaire survey was administered to every customer of the company in 2013 in order to evaluate the services provided by the three departments. Customers were categorized into five groups: main contractors, designers/sub-contractors, property managers, home owners and commercial owners. Data were analyzed in terms of thirteen customer service variables identified from the literature. Statistical methods were applied to data analysis and findings were arrived at. Findings were found to be sufficiently significant to permit the formulation of a Total Customer Service Excellence Model for SMEs in Singapore.

Keywords: Customer services; Total customer services; SME; CRM; Customer-centric

JEL code: L83
1. Introduction

The initiative to carry out this research on customer satisfaction with Small and Medium Enterprises (SMEs) derives from the need to investigate one of the major challenges faced by SMEs: the need to deliver quality services. Customer services may be viewed as processes or experiences, just as it is equally possible to argue that most physical goods are simply there to provide a service, and that glass or washing powder are as much processes as are installing glass windows or washing clothes. Services are intangible, integrated and perishable, and so cannot be inventoried. The fact that customers’ needs are varied and that customer service consumption involves interaction between customers and producers, tends to lead to a much greater potential for variability in quality than is the case with physical goods (Ennew & Waite, 2007). Research has shown that superior service leads to greater customer loyalty and ultimately, better financial performance (Heskett, 1994 & 1997; Reichheld & Sasser, 1990). In this way, business strategies become customer- rather than product-centric (Chen & Su, 2006; Kotler, 2003), and customer satisfaction is crucial to this customer-centric paradigm shift. The aim of the research is to develop a Total Customer Service Excellence Model (TCSEM) for SMEs in Singapore to improve their products, operations and services, and so make Singapore the world leader in this field.

2. Literature review

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 the provider and carry out future transactions. In details, three dimensions of quality: system, information and hence services have positive and significant impact on customer satisfaction leading to the effect of customer loyalty (Aghdaie, Karimi, & Abasaltian, 2015). 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). Total Customer Service (TCS) is the central theme for this study, and is defined as serving customers, particularly loyalists and potential buyers, with the intention of gaining tangible and intangible profits from exchanges (Zainordin, 2013).

Karna’s (2009) study on construction projects concluded that co-operation and good workmanship are critical factors in customer satisfaction. Verma (2003) studied 150 executives to gather information about incidents of delight and outrage. Delight is triggered by courtesy, responsiveness, willingness to genuinely help and understanding customer needs. Factors giving rise to customer outrage were service failure, poor reliability, staff rudeness and uncaring or apathetic staff attitudes. Verma’s study also discussed three types of service encounters: the remote encounter where human interaction does not take place, such as a transaction through an automatic teller, phone encounters, and face to face encounters. Customer satisfaction can be viewed in two aspects: one takes the process view and the other looks at the end-state, which is
the customer’s fulfillment response; a judgment as to how a product or service delivers on expectations.

Product knowledge is also a factor relevant to satisfaction (Daniel, 2000). In fact, customer satisfaction with sales interaction (Treytl, 2002), employee behavior (Seidman, 2001) and product knowledge (Lee, 2014) are closely related. Parasuraman, Zeithami and Berry (1985) found that customer satisfaction is dependent on ten dimensions of service quality which resulted in customer satisfaction based on a model of: availability of support, reliability, responsiveness, assurance and empathy (Alarcon & Salvador, 2003). Babbar and Suntill (2008) expressed the view that services are intangible and involve customer contact; therefore how a service is delivered becomes an important determinant of service quality.

Interestingly, Ku’s (2013) study of 3 progressive levels of service show that moderately excessive service is acceptable to most participants; unexpectedly however over-attentive service affected satisfaction negatively. Ho and Olsen (2012) report findings on certainty, risk and knowledge in satisfaction with regard to product purchase intention, where the consumers’ positive perceptions of the product directly influence purchase intention. Changes to product risk and knowledge affects the degree of purchase intention. Gruber’s (2009) study argued that customer satisfaction will be improved by handling customer complaints effectively. Companies should treat complaints from an unsatisfied customer as a challenge to strengthen the threatened customer-provider relationship and rebuild customer confidence. The research suggested that identifying differences between men and women’s complaining behavior could prove useful in terms of formulating appropriate gender-differentiated resolution strategies (Luong, 2007).

The groupings of customers in this study are apparently supported by Ubeja’s (2013) works according to customer satisfaction’s definition as the number of customers or percentage of better than satisfactory levels. Furthermore, firms provide their products and services with right promotion at the right time for their right customers which are relevant to customer satisfaction (Sanjuq, 2014).

3. Methodology

This study is based on data collected from a Singaporean SME which supplies and installs glass for construction projects. Departments involved were Sales & Marketing, Administration, and Installation. The major approach to gathering data was a questionnaire survey administered to every customer in 2013 in order to evaluate the services provided by the three departments. 224 completed questionnaires were received and analyzed. Customers were categorized into five groups: main contractors (N=14), designers/sub-contractors (60), property managers, (60), home owners (110) and commercial owners (34).
Formulation of the questionnaire involved using the results of the literature review, exploratory surveys and information obtained from industry. Multiple/Triangular methods (Hoque & Hopper 1997) were used to analyze the data, including one sample t-test, correlation analysis, independent sample t-test, one-way ANOVA analysis and multiple regression analysis. Thirteen independent variables (IVs) were identified: 5 for Sales and Marketing and 4 for each of Administration and Installation. The 13 variables are: ‘Courtesy and Friendliness’, ‘Knowledge of Product’, ‘Speed of Response to Requests & Queries’, ‘Explain Clearly/Provide adequate Information about Products & Sales Agreements’, ‘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 dependent variable is Total Satisfaction, consisting of ‘Finished Product Satisfaction’ and ‘Overall Purchase Experience’.

4. Data analysis and findings

Data reliability analysis
The results of the study should be reliable since Cronbach’s Alpha was set at 0.986.

One sample t-test analysis
The one-sample t-test is used on factors of a model. If the value is set at < 0.05, then factors of variables are significant. With < 0.05 significant, the results show that all customers are highly satisfied with the services provided by all three departments: Sales and Marketing, Administration and Installation.

Correlation analysis
This procedure is 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 linear fashion. A Pearson product-moment correlation coefficient describes the relationship between two variables and is available through the analysis and correlate mean. Correlation in this study is used to measure the interrelationships among factors (which are shown below): the higher the correlation, the stronger the relationship between variables (Keller & Warrack, 2003):
1. Sales and Marketing staff mostly fulfill expected commitments, indicating that sales staff has good courtesy and a friendly attitude;
2. Sales and Marketing staff possess knowledge of their products, which allows them to respond faster to customer requests and queries;
3. Sales and Marketing staff’s possession of product knowledge leads to clearer and more adequate product information being provided to the customer;
4. Administrative staff with better telephone etiquette and manners possess better overall communication skills;
5. Administrative staff with better communication skills provide more precise documentation;
6. Installation staff with better courtesy and a friendly attitude are more-operative and helpful;
7. Better workmanship makes the satisfaction with the finished product higher; and
8. A high level of satisfaction with the finished product indicates the best overall purchase experience.
Independent sample t-test analysis

Assumptions underlying the t-test are: data are at the interval level of measurement, sampling is random, there is independence of groups, and also homogeneity of variance. In this study, Levene’s test was significant (for sig. 2 tailed < 0.05) and equal variances cannot be assumed. Therefore, the most significant factor in each variable/dimension of all samples will be identified for two major groups of customers: those with self-owned property and those who manage public property. The significant 2-tailed value = 0.04 < 0.05 indicates that fast response to customer requests and queries is the major factor in gaining customer satisfaction.

One way ANOVA Analysis

The assumptions for ANOVA are: population normality and homogeneity of variance using 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 H₀: \( \mu_1 = \mu_2 = \ldots = \mu_c \)

Against the alternative H₁: not all \( \mu_j \) are equal (where \( j = 1, 2, \ldots, c \))

Leading to H₁ is valid: that is, the null hypothesis will be rejected and accept the alternative hypothesis, therefore by the Tukey HSD test, different customers have different levels of 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/managers.
2. The installation department service performance is the most important factor affecting the main contractor satisfaction level.

These findings are significant, and are important for sub-contractors in the study. Since the findings are significant, they can be generalized to other populations of sub-contractors in the building trade.

Multiple regression analysis

The multiple regression model used in the study is: \( Y = a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + \ldots \)

where Y is a dependent variable – Overall satisfaction consisting of the finished product satisfaction including overall purchase experience, and \( X_n \) is an independent variable such as three groups: Sales & 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’,

The findings are summarized as follows:
A. In Table-1, for all types of customers and all dependent variables (finished product satisfaction and overall purchase experience), results for Sales & Marketing, Administration and Installation are all significant, except for finished product satisfaction in Sales & Marketing significant. All models are with $R^2 > 0.73$ and significant F.

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

<table>
<thead>
<tr>
<th>1.</th>
<th>Total Satisfaction F1&amp;F2 Vs Sales, Adm &amp; Installation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2 = 0.783$</td>
<td>$F = 264$</td>
<td>0.000</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>2.489</td>
<td>0.014</td>
</tr>
<tr>
<td>Administration</td>
<td>3.512</td>
<td>0.001</td>
</tr>
<tr>
<td>Installation</td>
<td>14.73</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.</th>
<th>Finished Product Satisfaction F1 Vs SAI</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2 = 0.758$</td>
<td>$F = 230$</td>
<td>0.000</td>
</tr>
<tr>
<td>Administration</td>
<td>3.644</td>
<td>0.000</td>
</tr>
<tr>
<td>Installation</td>
<td>13.809</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.</th>
<th>Over Purchase Experience F2 Vs SAI</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2 = 0.736$</td>
<td>$F = 204$</td>
<td>0.000</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>2.622</td>
<td>0.000</td>
</tr>
<tr>
<td>Administration</td>
<td>2.717</td>
<td>0.007</td>
</tr>
<tr>
<td>Installation</td>
<td>12.889</td>
<td>0.000</td>
</tr>
</tbody>
</table>

B. In Table-2 shows the results for all types of customers, all independent variables and all dependent variables (total satisfaction, finished product satisfaction and purchase experience), Significant factors from the models formed with the dependent variables finished product satisfaction and purchase experience integrated into the model totally. Other factors not included in the previous two models are insignificant.

Table-2: All types of customers, all factors of Independent Variables & All types Dependent Variables

<table>
<thead>
<tr>
<th>4.</th>
<th>Total Satisfaction F1 + F2 Vs All factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2 = 0.847$</td>
<td>$F = 88.535$</td>
<td>0.000</td>
</tr>
<tr>
<td>Courtesy &amp; Friendliness C1</td>
<td>-4.068</td>
<td>0.000</td>
</tr>
<tr>
<td>Fulfillment of Commitments made during sales C5</td>
<td>5.210</td>
<td>0.000</td>
</tr>
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<td></td>
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<td></td>
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<td>--------</td>
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</tr>
<tr>
<td>Courtesy &amp; Friendliness E1</td>
<td>3.337</td>
<td>0.001</td>
</tr>
<tr>
<td>Workmanship E3</td>
<td>3.524</td>
<td>0.001</td>
</tr>
<tr>
<td>Finished Product Satisfaction F1</td>
<td>Vs All factors</td>
<td></td>
</tr>
<tr>
<td>$R^2 = 0.824$</td>
<td>F = 74.969</td>
<td>0.000</td>
</tr>
</tbody>
</table>

5. **Conclusion**

SMEs remain important to Singapore’s employment rate and general economic health. The findings of this study show that for all (224) customers, sales and marketing, administration and installation impact total and purchase experience satisfaction. Courtesy and friendliness (for sales and installation), fulfillment of commitments made during sales and workmanship are significant factors affecting total satisfaction. Others influencing factors for different customers and types of satisfaction were discovered under regression. The validation process involved the use of formal groups who both understand and empathize with the context of the research. The whole process culminated in the formulation of the TCSE model (see Figure 1 below). The findings are practicable and relevant to understanding sustainability of growth and survival of service SMEs in Singapore.

Limitations of this study include the fact that data is gathered from one Singaporean SME over a single year. Several years’ data collected from a range of SMEs would further strengthen the findings. Additionally, introducing techniques such as Customer Relationship Management (CRM) and integrated technology processes will help to further improve the customer services. The Customer-Centric Initiative (CCI) provides Capability Development Grants from the Singapore government and 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 new service standards and improvement plans to further enhance their customer services and hence improve total customer satisfaction.
Figure 1: Total Customer Service Excellence Model for SME in Singapore

References


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