

## **Customer Oriented Service and Cost Effectiveness: A Trade-off Relationship?**

Zulnaidi Yaacob  
Management Section, School of Distance Education  
Universiti Sains Malaysia, Malaysia  
Email: zulnaidi@usm.my

### **Abstract**

This paper describes the effect of customer oriented service (COS) on cost effectiveness of local authorities. Although a plethora of evidence had been unearthed regarding the usefulness of COS, particularly in achieving customer satisfaction, the effect of COS on cost effectiveness is relatively less explored. While most previous studies were conducted in business firms, this present study tested the applicability of COS in achieving the objective of cost effectiveness by local authorities. As a public firm, they face great financial challenges due to the shrinking funds available. Instead of looking for new external funding, local authorities have to find alternative ways in managing their limited existing funds effectively and COS is one possible approach to alleviate this situation. In the execution of this study, data were collected using a questionnaire completed by 205 local authority managers. The findings of this study testified that COS was not a trade-off practice with the objective of cost effectiveness. This study also revealed that intensified COS would lead local authorities to benefit from higher cost effectiveness. The managerial implication of this study is that although COS is generally meant for use in customer satisfaction, it could also bring benefits for achieving better cost effectiveness.

**Keywords:** customer oriented service; cost effectiveness; local authorities.

### **1. Introduction**

How a public firm manages public money has always been a subject of interest of many people. For business firms, they may only have financial responsibility toward their debtors, financiers, employees, shareholders, and owners, in other words the immediate stakeholders. However for public firms, they are responsible toward the entire public, particularly taxpayers and voters. This issue becomes more crucial due to the fact that funding is becoming a scarce resource for both private and public firms which would require managers to seek out best possible ways to manage organizations with cost minimization, but without compromising on the objectives of its existence. Being among the key economic players in the world in 2013, the partial shutdown of the US Government could be a precursor to the financial problem that may hit all other governments around the globe. Therefore, the cost effectiveness has always been viewed to cement strategic position in the literature, which makes studying cost effectiveness continuously relevant. Although many predictors of cost effectiveness were identified by

previous authors such as TQM (Sajjad and Amjad, 2012), ISO 9001:2000 (Magd, 2008), and Flexible Manufacturing Technology (Dolage and Sade, 2012), most of these studies were performed on profit seeking firms, where the matching between cost and revenue determines the survival of a business. However for public firms, cost effectiveness is not necessarily being compared with the return attained, where certain public firms are not profit oriented. Agus *et al.* (2007) reported that most previous studies investigated customer oriented services (COS) in business industries, thus leaving the study on COS in public firms seemingly receiving less attention. COS is one of the practices under TQM. This unattended literature gap is likely because customer management is being investigated by marketing scholars who are mostly directing their focus toward marketing issues in business sectors. As a consequence, the usefulness of COS as a possible significant solution for cost effectiveness (CE) in public firms generally remains tentative. Although public institutions worldwide adopt quality management practices such as COS to improve their performance (Di Petro, 2013), Matei and Savulescu (2011) reported that part of these public institutions had failed to reap good benefits of implementing it due to several limitations. Among other characteristics, the nature of public service is associated with the characteristics of intangibility and heterogeneity (Slack *et al.*, 2007). In addition, public firms are also reported as having financial constraints (Di Petro, 2013), thus possibly having negative consequences on their commitment toward long-term focus activities like quality management. However, public firms have to improve service quality and customer satisfaction without compromising the targets of cost and waste reduction (Di Petro *et al.*, 2013). However management strategies like COS, which seems critical but less visible in terms of short-term financial result, may be neglected. The conflict between COS as a costly strategy and firm's objective of cost minimization has created tension among managers (Dendup, 2011).

Therefore, implication on performance of cost effectiveness is a valid measure to evaluate the performance of a strategy (Kucerova, *et al.*, 2011), including COS. In other words, identifying the relationship between COS and CE would enable the firm to determine the efficiency of COS in place. In addition, an organization that implements customer focus service must take into account both customer expectation and cost minimization (Cosmin and Ana-Maria, 2013). Achieving the objective of cost effectiveness for a public firm is a continuing focus of governments worldwide, including Malaysia. As such, the Malaysian government has implemented the National Blue Ocean Strategy in 2013 as a transformation strategy to explore and create new initiatives for public benefits without having to bear high costs of implementation. In addition, the government has introduced many initiatives that promote effectiveness and efficiency of the public service. As such, they have introduced the agenda of Total Quality Management in 1989 with the launching of Excellent Work Culture Movement, outcome based budget in 2012, and People First Performance in 2012. All these initiatives acknowledge the importance of satisfying customers of the public service in every service delivered to the public. Customers of public service can be divided into two categories, namely the direct users who have direct dealings with the public firms and indirect users, who are not users of the public service but a stakeholder of the public firms, such as business investors. The performance of public service is said to be an important player in providing a supportive and convenient atmosphere for the betterment of the peoples' lives as well as a business opportunity. Therefore, the public service is consistently seeking ways to improve the level of customer satisfaction by implementing COS. However, the

huge cost involved in implementing COS is likely to distract a public firm to proceed with the implementation even though the literature has convinced the usefulness of said strategy. Therefore, it is convincing enough to justify the need for a study on the relationship between COS and CE to be performed.

In line with the background of study as discussed in the preceding paragraphs, this study aimed to identify the relationship between customer oriented services (COS) and cost effectiveness (CE) of local authorities in Malaysia.

## **2. Literature Review**

Customer Oriented Service (COS) has received considerable attention in the literature. In this study, the term COS refers to a bulk of activities institutionalized within a firm that aim to achieve to objectives of customer satisfaction. Consistent with this premise, most of previous authors had reported the relationship between COS and customer satisfaction (Singh and Kaur, 2011). By collecting data from respondents of banks, the authors revealed that customer satisfaction is significantly influenced by COS, which consists of elements related to employees' responsiveness, the appearance of tangibles, social responsibility, service innovation, positive word-of-mouth, competence, and reliability. However these activities are also likely to bring positive effects beyond customer satisfaction.

For a public firm like the local authority, COS would bring a positive effect in terms of achieving a good reputation among the tax payers (Agus *et al.*, 2007). To implement COS, customers are a rich source of input and feedback. As such, the development of a new product would start with a customer survey. Through this survey, a firm can understand the current demand and expectation of the market before any product be developed, which in turn could lessen the possibility of launching a product with low market demand. The cost and scope of development of a particular new product would be considerably huge, since it covers the market survey, staff training, technology licensing, and research. Therefore, product failure due to mismatch between what is offered and what is demanded would result in a huge financial burden to a firm. For local authorities in Malaysia, the development of community projects that are not consistent with the needs and demands of the community has been consistently revealed by the annual Auditor-General Report. It was reported that these white elephant facilities were a huge waste of public funds, which should be put to better use for other purposes that would benefit the community. In other words, a public project, which is not in line with public demand, would result in unnecessary financial burden to the local authorities. This scenario clearly portrays the close association between customer oriented product and cost effectiveness of public firms.

Institutionalizing COS into public firms involves a huge amount of resources in the form of funds, human resource, time, and knowledge starting with planning, implementation, and evaluation stages. As such, it provides a platform for collecting information related to customer needs, expectations, and perceptions (Di Petro *et al.*, 2013). However, the return on investment (ROI) of the executed management strategy in the public sector is difficult to be precisely measured, due to various, diverse, and conflicting stakeholders attached to the public service (Harris, 2005; Lindstrom and Vanhala, 2013). Monetary return is not the performance expected for certain public agencies, such as the police, and the fire and rescue squad because their strategic role is not to generate income. Instead,

the public service aims to provide services that are able to satisfy the general public although the funds available are limited (Dewhirst *et al.*, 1999). Therefore, management practices that are not able to contribute to the cost effectiveness of a public firm are likely to be scrapped first when the government needs to choose the most viable alternative activities due to financial tension. Although COS is reported as a significant practice to improve the level of customer satisfaction, its implementation should not be a financial burden to the government. In other words, there must be financial benefits of implementing COS, either in the form of revenue generation or expense savings, or a combination of both. Under the scenario where fund is very tight, decision and evaluation of the activities is difficult to be free from association with fund matters.

### 3. Hypothesis Development

To implement customer oriented service (COS), a firm needs to be in close relationship with their customers (Singh and Kaur, 2011), where customers provide useful input for further improvement of services and products offered. A long list of benefits can be extracted from COS because effective customer management of a business firm has been found to contribute significantly to customer retention, customer loyalty, and customer reputation (Bolton and Drew, 1991; Mittal and Kamakura, 2001). Its impact on financial performance was also reported positive (Anderson and Mittal, 2000). However, Anderson and Mittal (2000) conducted a study to investigate the impact of customer management on return and not on cost effectiveness. Therefore, a study to test the relationship between COS and CE is able to enrich the existing literature. This premise is because better financial result can be achieved either by increasing revenue, decreasing cost, or both. It is conceptually correct to conclude that higher customer retention, loyalty, and better customer reputation would also mirror the cost benefits of COS, because a firm does not need to allocate a huge amount of funds to retain existing customers and attract new customers. This is due to high quality service that can be potentially achieved through the practice of COS.

However, for a public firm, the issue of customer retention is less relevant because not all public service is facing competition with business firms due to the uniqueness of a certain service that can only be offered by that particular public service unit. For a service that is competing between public service and private service, the higher cost charged by the commercial firm is always the reason for a customer not to switch from public service to commercial service; for example medical services. However, the issue of cost effectiveness is also related to the cost of handling customer complaints as well as the cost to market, which hinges on the good reputation among customers. A service delivered that fails to meet the expectation of customers is open to criticism and complaints. Extra operational cost is needed by a firm to handle these critics. However, COS is likely to function as a feedback control system where feedback received from customers is used for continuous betterment of the service rendered. Therefore, it was postulated that COS as a feedback control system for managing customers would likely be able to bring benefits of cost effectiveness to the public firm. COS which extensively involves employees in planning and designing products and services to the customers, would also able to reduce cost significantly (Khan, 2003) by detecting defects at early stages of the process. Given that, the following hypothetical statement was suggested for further investigation:

*H<sub>1</sub>: There is a relationship between COS and cost effectiveness.*

#### 4. Methodology

This section reports the instrument development and data collection for the research. Data for this study are collected using a closed-ended questionnaire, where the items represent constructs that were adapted from the literature.

##### 4.1 Instrument Development

All items are measured using a theoretical score of five points, from one to five. The score for each construct is determined by averaging the score of their associated items, thus making the theoretical score for each construct also being between the values of one to five. A higher score indicates a higher practice of COS and a better CE.

*Customer Oriented Services (COS)* is measured using five items derived from the literature. These items are as follows:

- *COS1*- Customer feedback is used effectively (Ahire, *et al.*, 1996),
- *COS2*- Aware of the results of customer surveys (Black and Porter, 1996),
- *COS3*- Courteous behavior toward customers is widely practiced (Black and Porter, 1996), and
- *COS4*- Customer complaints are discussed at top management level (Sureschandar *et al.*, 2002).

*Cost Effectiveness (CE)* is measured using three items based on previous researcher (Zu, 2009). These items are as follows:

- *CE1*- Having good collection,
- *CE2*- Operation cost saving, and
- *CE3*- Lower cost per unit.

##### 4.2 Data Collection

This study was done at the departmental level rather than an organizational-wide level. This approach was deemed appropriate due to the nature of local authorities in Malaysia, where there are various departments in each local authority with very diverse activities among them. In other words, the respondents may not be knowledgeable enough to provide response if the study was conducted at an organizational-wide level. There are 32 local authorities in Peninsular Malaysia with a total number of 305 departments in all these local authorities.

To select the sample, two stages of sampling are used. Stratified cluster sampling technique is implemented since it is appropriate for sample groups with intragroup heterogeneity and intergroup homogeneity, thus local authorities under study are deemed fit for this method. In the first stage, local authorities are stratified into two groups based on their status of being either city council (CC) or municipal council (MC). In the second stage, local authorities are randomly selected and all departments attached to selected local authorities are considered a unit of analysis for this study. For city councils, all city councils were selected due to the small numbers involved; there are only 85 departments

attached to seven city councils. However, out of 220 departments attached to MCs, a total of 165 departments are randomly selected. Thus, in total, 250 departments are selected for this study. Out of 250 questionnaires distributed, only 205 (82%) were returned. These 205 questionnaires are appropriately completed, and thus used for further analysis.

The response rate of 82% for a survey study is considered high and this favorable response rate can be achieved because the questionnaire is distributed and collected by personal visit by the researcher. A cover letter explaining the purpose of study as well as a guarantee of anonymity of the respondent is given.

## 5. Data Analysis

This section reports the analysis of goodness of measures and hypothesis testing.

### 5.1 Goodness of Data Measures

The first test in testing the goodness of measures is the unidimensionality test. It was examined by checking the item-construct correlation, based on a procedure, which was previously developed by Nunally (1978). The item is said to have been correctly assigned to their parent construct if the coefficient between the items and its represented construct is higher than the coefficient between the said items and other constructs. As tabulated in Table 1, all items (indicated in bold) have the highest correlation with the construct they represent. The findings indicated that all items had been appropriately assigned to their parent construct. Therefore, the construct is said to have an acceptable level of unidimensionality.

**Table 1: Reliability and Validity Tests**

Unidimensionality Test						Reliability Test
Item-Construct Correlations					Factor Analysis	
Constructs	Nos	Items	COS	CE		
COS	4	COS1	<b>.799</b>	.392	.793 .825 .739 .789 <sup>a</sup>	0.7926
		COS2	<b>.827</b>	.310	.920 <sup>b</sup>	
		COS3	<b>.753</b>	.283	2.479 <sup>c</sup>	
		COS4	<b>.766</b>	.389	61.967 <sup>d</sup>	
CE	3	CE1	.342	<b>.868</b>	.882 .812 .799 <sup>a</sup>	0.7690
		CE2	.317	<b>.844</b>	.667 <sup>b</sup>	
		CE3	.438	<b>.777</b>	2.074 <sup>c</sup> 69.142 <sup>d</sup>	

Nos = number of items, a = factor loading for each items; b = KMO, c = eigenvalue, d = % of variance,  $\alpha$  = Cronbach's alpha

Based on the 0.7 cut off level (Nunally and Bernstein, 1994), the Cronbach's coefficient for both constructs under study indicated that the instrument had a good level of internal consistency, thus considered a reliable measure. In addition, the validity of measure was examined by using factor analysis. Table 1 tabulates the KMO value ranging between 0.667 and 0.920. Based on the threshold KMO (Kaise-Meyer-Olkin) value of 0.50, the analysis of KMO indicates the appropriateness. Additionally, the results also indicated all items have a high factor loading of above 0.30 (Hair *et al.*, 1998) on their first order factor. This high factor loading implies that the items are critical to their represented construct. The first factor of both constructs has an Eigenvalue greater than one.

5.2 Hypothesis Testing

The hypothesis under study was tested using a Pearson correlation test. Table 2.0 indicates that the correlation between the two variables was significant at  $p < 0.05$ . In other words, the hypothesis under study is supported. A detailed discussion of this finding is offered in the next section.

**Table 2 : Pearson Correlation**

	COS1	COS2	COS3	COS4	COS
CE1	0.287	0.205	0.230	0.374	
CE2	0.314	0.210	0.181	0.302	
CE3	0.385	0.378	0.311	0.296	
CE	0.392	0.310	0.283	0.389	0.434

# all correlations are significant at  $p=0.01$

In order to further investigate the trade-off between Customer Oriented Service (COS) and Cost Effectiveness (CE), the sample was grouped into two categories—high level implementation and low level implementation. High level implementation refers to the sample with scores of at least 4.0 out of the maximum 5.0. Samples with scores of less than 4.0 are considered to have low level implementation. The benchmark was crude but reasonable to divide the samples into two groups. A total of 139 samples fell into high level implementation and a total of 66 fell into the low level implementation. The Independent Sample T-Test was conducted to verify the significant difference that may exist for the cost effectiveness benefits achieved by high level implementation and low level implementation groups. Table 3 indicates that there is no significant difference between these two groups. In other words, this finding testified that COS is not a trade-off for CE. The high level implementation group achieved higher cost effectiveness with a mean score of 3.82 as compared to the mean score of 3.34 for the low level implementation group.

**Table 3 : Independent Sample T-Test (Levene’s Test)**

Variables	Levene’s Test for Equality of Variance		
	F	Sig	
Customer Oriented Service	0.000	0.987	Insignificant difference

**6. Discussion**

The findings of this study supported the hypothesis of the relationship between COS and CE. Therefore, it can be concluded that the implementation of COS would bring cost minimization benefits to the public firm. In other words, the findings of this study suggest that the financial result is not an offset of customer satisfaction target, under the management strategy of customer first. It also indicates that the transformation currently occurring in the public service from production orientation to customer orientation (Barzelay, 1992), does not mean that the public service requires bearing extra unproductive expenses. Although a skeptical view may associate COS with an extra cost burden to a firm, this study has provided contrast evidence that the value of COS goes beyond satisfying customers, but it is also capable of bringing financial value to a firm as

well. This empirical evidence is in line with the findings by Aslanertik and Tabak (2006), where the authors reported that improving services that meet customer expectations is not a trade-off for the objective of decreasing cost. In the situation of public financial stress, managers of local authorities are also pressured to reevaluate their existing method of doing business, where no or less value added activities are to be discontinued. However, these activities that may be eliminated should not compromise the main functions of their establishment in delivering good service to the public (Chougule and Kallurkar, 2012). The findings of this study indicated that activities related to customer first culture are value for money activities for the local authority. Removing or reducing activities related to customer under the pressure of tight financial resource is not a wise decision because the literature reported that the local authorities in Malaysia as a whole is still receiving a high number of public complaints due to unsatisfactory service rendered (Zakaria *et al.*, 2011).

### **7. Limitations**

This study is not without limitations, which is mainly associated with the approach used for collecting data. Data for this study were collected using a questionnaire, which is generally known as less dynamic in terms of getting new insights regarding the topic under study and issues surrounding it. As a consequence, potential issues not captured by the developed questionnaire remain unknown. As a form of deductive study, this method less appreciates the emerging of new issues within the research setting. In addition, the tested relationship between COS and CE is a very simple direct relationship that perhaps fail to appreciate a robust model of determinants of cost effectiveness, which is likely to be represented by many more independent variables. Therefore future studies may consider developing a more comprehensive model to describe the link between COS and CE. Thus, the application of partial least square model may also be an option for consideration to further improve this line of investigation.

### **8. Implications**

A few managerial implications can be tapped from the revealed findings. For many managers, cost rationalization is always a top priority in making decisions to implement management strategies, including customer focus, because every single cent spent should contribute to generating revenue and saving costs. Although the bottom line of customer oriented services is to lead to higher customer satisfaction, the ultimate factor for implementation or otherwise must still be in the form of cents and dollars. This step, which is taken due to having an adequate financial resource, is a prerequisite for a firm to continually exist, both for commercial firms as well as public firms. Therefore, this study has documented evidence about the effectiveness of COS as a source of achieving greater cost effectiveness. In other words, although the implementation of COS may require a firm to allocate extra funds, the funds invested will gain return in the form of cost effectiveness, as an addition to the generally agreed benefit of customer satisfaction.

### **9. Conclusion**

The findings of this study supported the hypothesis of the relationship between COS and CE. In other words, implementing COS is another option for managers who are looking for an effective management strategy for achieving the objective of cost effectiveness. However, institutionalization of COS requires a firm to be well prepared either in the form of monetary capital or human capital. As a consequence, initial stage of its

implementation requires a firm to allocate a considerable amount of resource for staff training and infrastructure development. In the beginning, the incurred cost may outweigh the cost benefit received because COS is a continuous strategy with a long term focus. The positive effect in the short run may possibly too subtle, and thus may diminish the commitment of managers. Therefore, firm managers that implement COS must be a manager with long-term vision and should not expect COS to bring benefit in the short-term. Pressure to deliver public service at the best quality and the lowest cost will continue to be a challenge for managers of public organizations.

## REFERENCES

- Anderson, E. & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3 (2), 107-20.
- Agus, A., Barker, S. & Kandampully, J. (2007). An exploratory study of service quality in the Malaysian public service sector. *International Journal of Quality & Reliability Management*, 24(2), 177-190.
- Aslanertik, E. & Tabak, B. (2006). Marketing and cost dimensions of ISO9001 implementation of small and medium sized manufactures: A case analysis, *Ege Academic Review*, 6(2), 47-58.
- Black, S.A. & Porter, L.J. (1996). Identification of critical factors of TQM. *Decision Sciences*, 27(1), 1-21.
- Bolton, R.N. & Drew, J.H. (1991). A longitudinal analysis of the impact of services charges on customer's attitudes. *Journal of Marketing*, 55, 1-9.
- Barzelay, M. (1992). *Breaking through Bureaucracy: A New Vision for Managing in Government*, Berkeley, University of California Press
- Chougule, M. A. & Kallurkar, S. P. (2012). Use of value analysis technique for cost reduction in productive industry, *International Journal of Engineering Science and Technology*, 4 (5), 2101 -2114.
- Cosmin, D. & Ana-Maria, S. (2013). Cost of quality and Taguchi Loss Function, *Annals of the University of Oradea: Economic Science*, 1(1), 1479-1485.
- Dendup, N. (2011). Total Quality Management – The evolution of management thinking, *Sherub Doenme: The Research Journal of Sherubtse College*, 11, 63-65.
- Dewhirst, F., Martinez-Lovente, A. R. & Dale, B. G. (1999). TQM in public organisations: an examination of the issues, *Managing Service Quality*, 9 (1), 265-73.
- Di Petro, L., Mugion, R. G. & Renzi, M. F. (2013). An integrated approach between lean and customer feedback tools: An empirical study in the public sector, *Total Quality Management*, 24(8), 899-917.
- Dolage, D. A. R. & Sade, A. B. (2012). The impact of adoption of Flexible Manufacturing Technology on price cost margin of Malaysian manufacturing industry. *Technology and Investment*, 3, 26-35.
- Hair, J.F., Anderson, R.E, Tatham, R.L. & Black. W.C. (1998). *Multivariate Data Analysis*. 5<sup>th</sup> ed, Prentice Hall: USA.

- Harris, L. (2005). UK Public sector reform and the performance agenda in UK local government: HRM challenges and dilemma, *Personnel Review*, 34(6), 681-696.
- Khan, J. H. (2003). Impact of total quality management on productivity, *The TQM Magazine*, 15(6), 374-380.
- Kucerova, M., Vanova, J. & Ruskova, D. (2011). Suggestions for improving the efficiency and effectiveness of quality management in the business practice in Slovakia. *Quality, Innovation Prosperity*, XV(2), 9-17.
- Lindstrom, S. & Vanhala, S. (2013). Performance in local government HRM: the role of external customers, *Baltic Journal of Management*, 8(3), 252-268.
- Magd, H. A. E. (2008). ISO 9001:2000 in the Egyptian manufacturing sector: perceptions and perspectives, *International Journal of Quality & Reliability Management*, 25(2), 173-200.
- Matei, A. & Savulescu, C. (2011). Convergence of the policies for promoting Total Quality Management in the public administrations of Balkan states-European Union Member States, *Theoretical and Applied Economics*, 18(3), 41-76.
- Mittal, V. & Kamakura, W.A. (2001), Satisfaction and repurchase behavior: the moderating influence of customer and market characteristics, *Journal of Marketing Research*, 38 (1), 131-42.
- Nunnally, J. C. & Bernstein, I.H. (1994). *Psychometric Theory*, New York: McGraw Hill.
- Sajjad, F. & Amjad, S. (2012). Role of benchmarking in Total Quality Management: Case of Telecom Services Sector of Pakistan, *Business Management Dynamics*, 1(8), 34-44.
- Singh, J. & Kaur, G. (2011). Customer satisfaction and universal banks: an empirical study, *International Journal of Commerce and Management*, 21 (4), 327 – 348.
- Slack, N., Chambers, S., Harland, C., Harrison, A. & Johnson, R. (2007). *Operations Management*, 5<sup>th</sup> ed, London: Pearson Education Ltd.
- Zakaria, Z., Noordin, N., Yaacob, M. A., Ngah, K., Sawal, M. Z. H. M. & Mustaffa, J. (2011). Relationship between waste disposal and public satisfaction in local authorities in Kedah, *Canadian Social Science*, 7(4), 53-57.
- Zu, X. (2009). Infrastructure and core quality management practice: How do they affect quality. *International Journal of Quality & Reliability Management*, 26(2), 129-149.

**Acknowledgement:** The author likes to thank Universiti Sains Malaysia for funding this research study.