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# THE EFFECT OF REWARD SYSTEMS ON THE IMPLEMENTATION OF COST SAVINGS STRATEGIES IN LOCAL AUTHORITIES

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#### ABSTRACT

This paper investigates the effect of reward systems on the relationship between cost saving strategies and cost saving performance. Three cost saving strategies under the practice of quality management were investigated, namely customer focus, continuous improvement, and teamwork. Cost saving performance was selected as a criterion variable to justify the successful implementation of these strategies. This approach is in line with the strategic objective of implementing these strategies, which is saving on the cost of operation. Data of this study were collected from 205 middle level managers of local authorities using a questionnaire as the research instrument. The findings of this study revealed that the reward systems have failed to provide significant support to the successful implementation of cost savings strategies. Therefore, this finding signifies the unsuitability of the criteria used to reward employees in local authorities with the requirements needed for these strategies to be successful. The implications of this finding are narrated in this paper.

Keywords: Reward, System, Cost, Saving

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# Introduction

The Quality Award is an award to recognise employees who have contributed to ensure the success of strategies implemented under the quality management (QM) concept. Awarding employees for their significant contribution is believed to be a motivational factor for them to consistently support the implementation of these strategies (Tari & Sabater, 2006). The award constitutes part of the reward systems in an organisation. Although many organisations have been awarding the Quality Award to their staff, the practice of the whole reward systems in certain organisations seems incompatible with the requirements of QM. As found by Chang (2006), the integration of reward systems into the practice of QM-related strategy in his studied samples was invisible. The incompatibility between the reward systems and the requirements of these strategies would hinder the achievement of their objectives (Yanadori & Marler, 2006), where employees might be focusing toward the criteria that they would be rewarded instead of the criteria critical for the success of the implemented strategies.

Therefore, this study had investigated the effect of reward systems on the implementation of cost savings strategies associated with the practice of QM. This investigation was motivated by the conflicting results that were reported in the literature. On one hand, a group of researchers (Tari & Sabater, 2006) had advocated QM as a significant determinant for cost savings. One the other hand, another group of researchers (Zhang, 2000) had reported the insignificant relationship between QM and cost savings. However, the concerning issue of why do some OM organisations fail to reap significant results is still unconfirmed. Therefore, researchers have started to integrate the literature of QM and control systems as an effort to shed some light on the role of organisational control systems in enhancing the possibility of QM to be successful. Reward systems are one of the core elements of organisational control systems. According to the strategic management literature (Sitkin, Sutcliffe, & Schroeder, 1994), rewards systems play a critical role in assuring the successful implementation of organisational strategy. However, studies that specifically focused on the effect of reward systems on the implementation of cost saving strategies under OM have received little attention, thus leaving gaps in the literature for research to be performed.

# Problem Statement

The literature has acknowledged employees of an organisation as the key for the successful implementation of organisational strategies (Tari & Sabater, 2006). As a meaningful symbol of appreciation, an effective reward system used to reward employees plays a crucial role toward the attainment of objectives of the strategy implemented (Yanadori & Marler, 2006). The criteria used to reward the employees should be consistent with the elements that are critical to the implementation of these strategies. This assertion is in line with the literature, where researchers had argued that the reward systems of an organisation would facilitate or hinder the successful implementation of organisational strategies (Wei & Atuahene-Gima, 2009). In previous studies on strategy implementation, they have proven that the successful implementation of strategy is contingent upon the contingency variables such as external environmental and internal organisational factors (Das et al., 2000; Sitkin et al., 1994; Zhao, Yeung, & Lee, 2004) However, a study on the effect of reward systems on the implementation of cost saving strategies is still scarce, thus warranting further investigations. Having said that, this

study had intended to explore the following issue: "Do reward systems have an effect on the implementation of cost saving strategies?"

#### Research Objectives

In line with the background of the study and problem statement as narrated above, this study had aimed to achieve the following objectives:

- 1. to examine the relationship between cost saving strategies and cost saving performance, and
- 2. to test the effect of reward systems on the relationship between cost saving strategies and cost saving performance.

### **Theoretical Development**

This section shall review the development of related cost saving strategy literature. It begins with a review of the literature regarding the relationship between cost saving strategies under QM and cost saving performance. Then, this is followed by the evident inconsistency of results regarding the said relationship. These conflicting findings have motivated researchers (e.g.: Hendricks & Singhal, 2001; Victor, 2002) to revisit the issue by testing the effect of contingency factors on the relationship between cost saving strategies and cost saving performance. Among the contingency factors that may have influence on the successful rate of cost saving strategies is the practice of reward systems. However, this issue has not been fully explored, thus providing another research path that requires attention from the scholars.

A study by Flynn, Schroeder, and Sakakibara (1995) at the factories in the U.S. is among the earliest attempts to empirically test the relationship between OM and cost savings. In their study, they reported that QM is a significant strategy for cost savings. The said conclusion was reached based on a strong relationship between QM and the percentage of item meeting the expected standard without redoing the process. In Pakistan, Fatima and Ahmed (2006) studied the relationship between OM and level of defect products and level of rework in the textile industry. They reported that QM is a significant practice to reduce the level of defect output, which in turn would reduce the cost of production. They also revealed that the level of rework needed was lower in companies with extensive practice of QM. In the U.K., Longo and Cox (2000) studied the effect of QM as a cost saving strategy on the level of defect and level of cost efficiency. Based on the data compiled from 49 managers of financial institutions, they found that QM is an effective cost saving strategy. However in another study, Zhang (2000) conducted structured interviews with 10 managers in Europe and reported that there were managers who did report that QM does not contribute to cost savings. A similar conclusion was derived based on a study conducted in Canada by Kumar, Choisne, Grosbois, and Kumar (2009). According to their report, 41.7% of respondents felt that QM fails to help their organisations in achieving the objective of cost savings.

As prescribed in the preceding paragraph, the issue of the relationship between cost saving strategies and cost saving performance remains inconclusive, thus deserve attention from future researchers. In order to discuss the factors that may influence the said relationship, the following paragraph discusses the role of reward systems in the implementation of cost saving strategies under QM. Reward systems consist of a reward to harmonise the effort of different individuals and departments toward achieving the Zulnaidi, Y.

stipulated objectives (Gomez-Mejia & Balkin, 1987).

Reward systems as part of the organisational control systems play a determinant role to motivate employees so that they can consistently give high commitment toward the implementation of a planned strategy (Goold & Quinn, 1993) such as QM. This practice is a prerequisite for the organisation to successfully execute QM, since in certain cases, the individual goals and organisational objectives are incongruent (Merchant, 1982) and thus may contribute to the failure of QM implementation. As such, under the practice of QM, employees should not be rewarded based on financial related criteria per se but also non-financial related criteria as well; for instance, employees should be rewarded for any innovation introduced or for implementing faster work processes. Deming (1986) promoted that under the practice of OM, an organisation should abolish the numerical goals and quotas for employees. In other words, employees should not be rewarded based on the achievement of numbers (quantity) that is stated in the budget without considering the quality of output done. Cost savings during the production process due to lower price of supplies made from lower quality input may lead the organisation to bear a higher total cost if the low quality products reach the market. In many cases, external quality failure cost brings more harm to the organisation rather than internal quality failure cost. Therefore, the practice of reward systems should be consistent with the requirements of QM objectives. Otherwise, the employees would be blurred on what to focus on.

The reward systems in an organisation that implement QM related strategies should adhere to the environment of QM as follows:

- i. QM is a continuous process and the achievement of objectives of QM is hard to be precisely measured in a yearly budget (Juran, 1988).
- ii. Employees should not be rewarded based on the ability of seeking suppliers with the lowest price without considering other criteria such as time of delivery, quality of material, practising quality systems, and the like (Deming, 1986).
- iii. Employees under QM should be encouraged to be more participative and flexible in performing their task (Gatchalian, 1997).
- iv. Employees should be recognised for their ideals, commitment, and effort toward the implementation of QM (Muhamad, Kamis, & Jantan, 2003).
- v. QM requires employees to work collectively as a team (Cooney & Sohal, 2004).

The environment of QM as prescribed above requires the organisation to have reward systems that would accommodate it, among others the reward systems must focus on qualitative and quantitative criteria, and the evaluation should also consider the achievement of each individual as well as their performance at in teams.

Based on the discussion in the previous paragraphs, this study developed the following research model for investigation. Figure 1 shows the three cost saving strategies under study as independent variables, namely customer focus, continuous improvement, and teamwork. The variable of reward systems is visualised as a moderator. The criterion variable of this study refers to cost savings.



Figure 1: Research Model

#### Hypotheses Development

The following paragraphs discuss the four hypotheses under study which were developed according to the model of this study.

The implementation of QM deals with the issues of internal and external costs of quality (Rosenfeld, 2009). The internal cost of quality refers to costs incurred due to the failure of producing products that satisfies the specified standard before the product is delivered to the market. The examples of internal cost of quality are rework, scrap, material replacement, and others. The external cost of quality refers to costs incurred due to low quality products after delivering products to the customers. The examples of external cost of quality are costs, compensation, warranty, and others. Therefore, the practice of QM provides solution for minimising the related cost. There are strategies under the practice of QM that are believed to be useful in achieving cost saving objectives, namely customer focus, continuous improvement, and teamwork. The next paragraphs explain the link between each of these strategies and cost saving performance.

The practice of customer focus aims to produce products or deliver services that meet the expectations of customers. This practice requires organisations to have good customer management systems (Elmuti, Jia, & Gray, 2009). As such, an organisation has to set up effective customer databases, complaint systems, customer survey systems, and responses systems. All these systems benefit an organisation by consistently monitoring the changes in the habits, expectations, interests, profile, and behaviour of the customers. By doing so, an organisation would be able to offer products or deliver services that are consistent with the customer preferences.

The practice of customer focus is also intended to bring cost saving benefits to the organisations (Elmuti, Jia, & Gray, 2009). An organisation can achieve this objective if they able to deliver products that are in line with the expectation of customers. By doing so, the organisation may not need to redo the product where repeating the production process would cause extra costs to become unavoidable. These extra costs may not only involve material costs, labour costs, and overhead manufacturing costs, but also may involve legal costs. In extreme cases, the failure of an organisation to produce quality products or deliver quality services may harm the lives of the customers. If this happens, an organisation may be trapped in an unimaginable financial crisis. Therefore, the

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practice of customer focus can be said as a preventive action to prevent the organisation from having to bear high failure costs.

Continuous improvement aims to help organisations climb up the corporate ladder for betterment without delay. In doing so, an organisation has to consistently improve their systems, products, employee skills, the ambient of space, management style, etc. In other words, all aspects of an organisation need to be continuously improved. The bottom line of these practices is to provide services or products that meet the customer expectations at the most cost effective level (Kim & Nakhai, 2008). Among others, an organisation needs to continuously retrain the employees with the latest technologies, so that they can perform their jobs effectively. The process involved in completing a task must also be consistently examined, so that steps that do not add value to the operations may be omitted. This practice would positively contribute to a lower cost of operation. In other words, continuous improvement means doing a job with a safer cost, quicker production, higher standard achievement, and all aspects would be better than before. It is a never ending journey (Abas, 2006).

An organisation consists of more than one individual where at least two people work together toward achieving the agreed objectives. Therefore, working in an organisation requires the members to work as a team. In an organisation, there are departments with several different objectives that work together, complement each other to move the organisation to the next higher level. For the QM organisations, previous study had proven that the successful implementation of QM requires a concerted effort from all members of the organisation across all departments (Cooney & Sohal, 2004). The responsibilities of assuring QM to be effectively implemented are not only placed on the shoulders of the quality department (Cooney & Sohal, 2004). Working as a team would improve the synergistic qualities among the members and also reduce the possibility of facilitating negative conflicts among members. In other words, all efforts are focused toward the achievement of organisational objectives and harmony.

Therefore, the discussion forwarded above has led to the development of the first, second, and third hypotheses of the study, as follows:

*H1:* There is a positive significant relationship between customer focus and cost savings

*H2:* There is a positive significant relationship between continuous improvement and cost savings

H3: There is a positive significant relationship between teamwork and cost savings

The *H1*, *H2*, and *H3* of this study deal with the direct link between the cost saving strategies and cost savings performance. A previous study (Haar & Spell, 2008) had reported that employees play a critical role in assuring the successful implementation of QM related strategies. Therefore, the implementers of QM would normally organise a quality-day for the purpose of appreciating employees who have contributed to the success of pursued strategies under QM. The gist of this practice is to reward the employees. However, the quality-day or any one-off incentive seems to, perhaps, not have long-lasting benefits and would be inadequate to promote the culture of quality at all times. Therefore, rewards for employees under the QM organisation should go beyond the one-day celebration, to become systems that are linked to the requirements of QM (Tari & Sabater, 2006). Under this practice, employees would be clear on what needs to be done, what needs to be focused on, and how they will be evaluated and

rewarded. As a consequence, their actions will be consistent with the expectation placed on them in relation to how they should perform their job to help the organisation secure the objectives of the implemented strategy. The above discussion had led this study to suggest the following hypothesis:

- *H4*: The relationship between customer focus and cost savings is affected by reward systems
- *H5:* The relationship between continuous improvement and cost savings is affected by reward systems
- *H6: The relationship between teamwork and cost savings is affected by reward systems*

#### **Research Methodology**

#### Development of Research Instrument

Data for this study were collected using a questionnaire as the research instrument. The items developed to represent each of the constructs under study were based on previous studies. This step is to assure the content validity of the constructs developed. The constructs under study, the items used to represent it, and the sources they are retrieved from are tabulated in Table 1. All items were measured using five-point Likert scales ranging from one (very low) to five (very high). The score for each construct was calculated by averaging the score of all associated items. The higher the score for each construct indicates the higher the level of practice or performance as indicated by the respondents.

Constructs (Sources Referred)	Items in the Questionnaire
Customer Focus	Customer feedback is used effectively
(Mady, 2009; Zu, 2009)	Actively seeks ways to improve quality of service
	• Customer complaints are examined by higher level managers
Continuous Improvement	Quality programme is an ongoing process
(Kim & Nakhai, 2008; Mady,	• Continuous improvement is practised in all operations
2009; Zu, 2009)	Continuous improvement overrides short term results
Team Work	• Working as a team is internalised as a work culture
(Hoegl & Gemunden, 2001)	• Training is given to employees for developing effective
	work teams
	• Operational workers are involved in decision-making
	team
Cost Savings	Operation cost savings
(Zu, 2009)	Decrease in work defect
	<ul> <li>Reduced unit cost of service delivered</li> </ul>
Reward Systems	• Employees are recognised for significant contribution
(Black & Porter, 1996; Sinclair &	toward accomplishment of objectives of quality
Zairi, 2001)	activities
	• Criteria used for evaluating annual employee
	performance reflects the criteria needed to secure the objective of quality activities
	• Top management gives more weight on employee
	achievement related to quality activities

 Table 1: Development of Research Instrument

# Pilot Test

A pilot test was done to assure the suitability of the instrument to the target respondents. The test involved 31 respondents from four local authorities. Results from the pilot test indicated that no substantial changes on the instrument were required. Respondents of the pilot study stated that the questions asked were clear, understandable, and precise, and the format of the questionnaire was appropriate.

# Sampling Frame, Sampling Technique, and Sample of the Study

Table 2 tabulates the sampling frame, sample of the study, number of questionnaires returned, and percentage of responses. The sampling frame of the study consisted of 342 departments attached to seven city halls/councils and 29 municipal councils. Of these, all 31 departments involved in the pilot study were excluded.

Furthermore, the samples of the study were selected using the technique of stratified random sampling. This sampling technique was appropriate taking into consideration the nature of local authorities in Malaysia, in that there is homogeneity between groups and heterogeneity within the group. Local authorities in Malaysia are governed under the same statutory Act, have the same purposes, and perform the same activities. However, within each local authority, there are departments with functions that vary between them.

The samples of the study were selected according to the following three phases: Phase 1: the local authorities were grouped accordingly to their status

Phase 2: all seven city halls/councils were selected as samples of this study due to the small number involved

Phase 3: out of 25 municipal councils, 18 municipal councils were randomly selected

Therefore, 25 local authorities (seven city halls/councils plus 18 municipal councils) were selected as samples of this study. The number of departments attached to these 25 local authorities is 250 departments. Questionnaires were sent out to each of them, and about 82% or 205 questionnaires were returned and deemed usable for further analysis.

# Data Analysis

# Goodness of Data

The goodness of data was tested on their reliability and construct validity. Therefore, the test results for Cronbach's alpha, construct-item correlations, and exploratory factor analysis were examined. The results of these tests are reported in the succeeding paragraphs.

The results of construct-item correlations indicated that each item of each construct has been rightly assigned to their respective constructs. This conclusion was derived based on the procedure used by Nunnally and Bernstein (1994). According to them, an item could be considered as having been correctly assigned when the correlation coefficient of the item and their respective construct are higher as compared to the correlation coefficient of the item with the other constructs under study. Based on the statistical analysis as tabulated in Table 3, all items under study can be concluded to be correctly assigned to their respective construct.

Reliability of the constructs under study was tested using the internal consistency test, and the results are given in Table 3. The result indicated that the alpha coefficient of all constructs under study surpassed the minimum threshold of 0.6, which means that the constructs are considered as reliable (Nunnaly & Bernstein, 1994).

	Sampling Frame	Randomly	Number of	Percentage of
	(Number of	Selected	Questionnaires	Response
	Departments)	Samples	Returned	(%)
City Hall /Council	Ŷ.	•		
Kuala Lumpur	22	22	14	63.64
Johor Bahru	7	7	6	85.71
Alor Setar	8	8	5	62.50
Melaka	13	13	10	76.92
Ipoh	9	9	9	100
Shah Alam	12	12	10	83.33
Petaling Jaya	14	14	12	85.71
Municipal Council				
Batu Pahat	6	6	5	83.33
Johor Bahru Tengah	9	9	8	88.89
Kluang	6	-	-	-
Muar	7	7	5	71.43
Sungai Petani	10	10	8	80.00
Kulim	10	10	8	80.00
Langkawi	8	8	7	87.50
Kota Bharu*	8	-	-	-
Alor Gajah	11	11	9	81.82
Seremban*	11	-	-	-
Nilai	6	-	-	-
Port Dickson	9	9	7	77.78
Kuantan	11	11	10	90.91
Temerloh	13	13	10	76.92
Manjung	10	-	-	_
Taiping	8	-	-	-
Kuala Kangsar	7	7	6	85.71
Teluk Intan	8	-	-	-
Kangar	8	8	7	87.50
Pulau Pinang	10	10	8	80.00
Seberang Prai	10	10	10	100
Ampang Jaya	10	10	8	80.00
Kajang*	10	-	-	-
Klang	10	10	8	80.00
Selayang	11	-	-	-
Subang Jaya	9	9	9	100
Sepang	7	-	-	-
Kuala Terengganu*#	7	-	-	-
Kemaman	7	7	6	85.71
Total	342	250	205	82.00

Table 2: Sampling Statistics of the Study

Total34225020582.0# Kuala Terengganu Municipal Council was granted the status of City Council since 1 Jan 2008.

\* These local authorities were the local authorities involved in the pilot study

Item-Construct Correlation						Reliability Test	
Constructs	Item	CF	CI	TW	RS	CS	Alpha-Coefficient
CF	CF1	0.834	0.454	0.458	0.392	0.387	0.772
	CF2	0.851	0.455	0.461	0.310	0.456	
	CF3	0.798	0.471	0.529	0.389	0.476	
CI	CI1	0.479	0.833	0.587	0.455	0.522	0.806
	CI2	0.423	0.878	0.583	0.400	0.427	
	CI3	0.505	0.835	0.570	0.324	0.541	
TW	TW1	0.512	0.536	0.857	0.393	0.670	0.636
	TW2	0.490	0.585	0.768	0.436	0.519	
	TW3	0.426	0.577	0.848	0.332	0.635	
RS	RS1	0.421	0.580	0.612	0.798	0.518	0.641
	RS2	0.530	0.443	0.371	0.596	0.439	
	RS3	0.561	0.406	0.514	0.688	0.496	
CS	CS1	0.341	0.352	0.340	0.325	0.868	0.796
	CS2	0.329	0.387	0.406	0.452	0.844	
	CS3	0.430	0.419	0.423	0.434	0.777	

*CF* = *Customer Focus, CP* = *Continuous Improvement, TW* = *Teamwork, RS* = *Reward Systems, CS* = *Cost Savings* 

The validity of the construct was tested using exploratory factor analysis. Table 4 indicates that all items assigned to each construct have factor loadings of more than 0.4, thus indicating that the items are statistically critical in representing their construct (Hair et al., 1998). The value of KMO for all constructs are higher than the value of 0.60 (Hair et al., 1998), thus indicating the appropriateness of the construct validity for further analysis.

Table 4: Factor Analysis

Con	structs Number	r Factor Loading	Eigen Value	e % Variance	КМО
Con	of Items	s ructor Louding	Ligon vulu	Explained	Value
CF	3	0.784-0.839	1.984	66.13	0.681
CI	3	0.830-0.887	2.163	72.11	0.692
TW	3	0.727-0.786	1.737	57.89	0.645
RS	3	0.712-0.835	1.752	58.41	0.610
CS	3	0.746-0.861	6.319	57.44	0.825
	$\overline{\mathbf{n}}$				D

*CF* = *Customer Focus, CP* = *Continuous Improvement, TW* = *Teamwork, RS* = *Reward Systems, CS* = *Cost Savings* 

#### Hypotheses Testing

The hypotheses under study were tested using regression analysis. However, before commencing the analysis, the data were first examined to check for the appropriateness of running regression analysis. There are five assumptions that need to be met before the results of regression analysis can be concluded with confidence. The pre-analysis procedures required and the results of these pre-analyses are tabulated in Table 5. As indicated in Table 5, all assumptions for regression analysis were met, thus suggesting that regression analysis is applicable to be used with the data.

Assumptions	Analysis Performed	Results
Normality	Normal probability plot	Data were normally distributed
Linearity	Scatter plot	Data were linear
Homoscedacity	Scatter plot	Data met the assumption
Outliers	Mahalanobis distance value	No outlier data
Multicollinearity	VIF (variance inflation factor)	No multicollinearity exists

Table 5: Assu	mptions	of Regre	ession	Analy	vsis
		0a	0001011		~~~~

The following paragraphs discuss the results of the regression analysis for this study. The results are tabulated in Table 6.

Based on Model 1 in Table 6, the value of  $R^2 = 0.258$  indicates that 25.8% of the variance in the dependent variable is successfully explained by the model. The said model shows that the relationship between customer focus and cost savings is significant at p < 0.05with the beta coefficient of 0.00. This means that hypothesis 1 of this study is supported. Model 1 also indicates the relationship between continuous improvement and cost savings to be is also supported. However, model 1 indicates that the third hypothesis of this study is not supported. This conclusion was derived based on the insignificant relationship between teamwork and cost savings at p < 0.00 with the beta value of 0.00.

Model 2 in Table 6 indicates that the relationship between reward systems and costs savings is not statistically significant. This finding is in line with the explanation by Shield, Deng, and Kato (2000). According to these authors, the moderator variable should not have a direct significant relationship with the independent variables and dependent variable as well.

Model 3 in Table 6 indicates that 31.5% of the variance in the dependent variable is successfully explained by the model. All the interactions under study have insignificant relationships with the dependent variable at p<0.05. These results would imply that, H3, H4, and H5 of this study are not supported.

Dependent Variable: Cost savings	Model 1	Model 2	Model 3
	ß	ß	в
Independent Variables			
Customer Focus	0.206*	0.116	-0.05
Continuous Improvement	0.306*	$0.217^{*}$	-0.477
Team Work	0.076	-0.051	-0.439
Moderator			
Reward Systems		0.046	0.087
Interactions			
Customer Focus x Reward Systems			0.256
Continuous Improvement x Reward Systems			-0.433
Team Work x Reward Systems			0.652
R <sup>2</sup>	0.258	0.310	0.315
R <sup>2</sup> change	0.258	0.052	0.005
F Value	23.31	22.49	12.95
Р	0.000	0.000	0.000
* p ≤ 0.05			

Table 6: Hierarchical Regression

# **Discussion and Implication of Findings**

This study revealed the significant relationship between customer focus and cost savings. Therefore, this finding apparently shows the good effects of implementing cost saving strategies for local authorities toward lowering the cost of their operations. As such, local authorities in Malaysia, as part of the Smart Local Government Governance Agenda (SLGGA), have introduced e-complaint systems where people can lodge in complaints through the website. This approach enables local authorities to cut down the cost of processing the complaints received from the clients. Local authorities in Malaysia have also collected survey on customers. The results obtained from this survey would provide them with a clear picture on what needs to be improved and ultimately prevent them from repeating the same mistakes. This practice would help them to achieve the objective of zero defects which in turn would reduce the cost of inspection and redoing. Delivering services to customers or doing tasks correct the first time would not only decrease the cost per unit but also save time to redo, which can be used to improve the number of units produced. Thus, the findings of this study have implied that customer focus is a significant predictor for local authorities to lower the cost of their operations. Although the short term benefits are presumably indistinct, but the long term effects of this practice are undeniable.

This study also reported a significant relationship between continuous improvement and cost savings. This finding is consistent with the results reported by previous researchers such as Kim and Nakhai (2008). A local authority that continuously seeks better ways of offering their services to the public is not only focused on improving the quality of service delivered, but also the costs involved in operating the organisation. The good impact of continuous improvement is not obvious in the short term since the continuous improvement effort requires the organisation to execute the strategy in a step-by-step approach (Kim & Nakhai, 2008) and not as a one-off transformation.

The implication of this study is that the Malaysian local authorities should continuously seek room for improvement. Any unvalued-added activities should be removed from the operational process as they would only increase the cost of operations. Local authorities in Malaysia have to be sensitive of any of their existing problems and look forward to improving themselves. The challenges they face today are obviously different from the challenges they faced 10 or 20 years ago.

This study also revealed the practice of teamwork is not a significant determinant for cost saving. A plausible explanation for this finding is perhaps the existing culture of working as a team in local authorities does not function effectively. Effective teamwork is not restricted to the formal arrangement organised by the management, but also covers the informal arrangement that requires natural willingness of employees to work as a team (Bamford & Griffin, 2008). There are several factors that might contribute to the effectiveness of teamwork practices, namely communication, coordination, balance of member contributions, mutual support, concerted effort, as well as motivation (Hoegl & Gemunden, 2001). Without fulfilling these prerequisites, the culture of working as a team is possibly difficult to practice for reaping the benefits of its implementation. In extreme conditions, the ineffectiveness of work team culture could have the potential to harm the organisation. Therefore, the findings of this study implied that local authorities should scrutinise elements in their organisation that require improvement, or adjustments or changes before the culture of teamwork can be implanted in their organisation.

According to Elloy (2008), the effectiveness of a work team is subjected to fostering communication among the team members, the nurturing of trust among the members, as well as the exemplary leadership of team leaders.

This study also revealed that the interaction between reward systems and cost saving strategies under study, namely customer focus, continuous improvement, and teamwork had insignificant relationships with the cost saving performance. In other words, the reward systems being practised by local authorities have failed to provide significant support to the implementation of cost saving strategies. A plausible explanation that can be offered here to justify these findings is perhaps the criteria used to reward employees that are being practised by local authorities are not much weighted on the contribution of staff toward cost saving strategies. What is being practised by local authorities is implementing reward systems that are designed by the central ministry. Most of the regulations related to the reward systems are already written in the Public Administration Circulars managed by the central public administration department. The flexibility given to the local authorities in designing their own reward systems is generally limited, particularly rewards that have monetary implications. Therefore, this finding of this study implied that local authorities deserve more control or autonomy to design their reward systems.

The literature (Tari & Sabater, 2006) suggested that an effective reward system for the implementation of strategy should be in line with the strategy being pursued. This approach would make employees be clear on what needs to be focused upon and lessen the conflicts that may arise. As such, an employee should be rewarded for the extra effort performed to satisfy customers, even though these efforts may not be prescribed within their job specifications. In line with the thought of Deming (1986), an employee should be given a more flexible numerical quota where the quality of job done should be given more priority rather than the number of jobs performed.

### Limitations of the Study

Although each stage involved in this study had been completed with care, the limitations of the study are unavoidable. Firstly, this study collected data using a questionnaire as the instrument. This approach limits the study in capturing more dynamic variables that are difficult to be precisely measured and defined, such as novel issues that are specifically related to the research setting which has not yet been explained in the literature. This study has only considered city councils and municipal councils as the samples of study. Thus, the generalisability of the findings to smaller sized local authorities, such as district councils, should be of concern when evaluating the recommendations of this study.

### Suggestions for Further Research

Based on the limitations of this study, two suggestions may be fruitful for further research. Firstly, future research could probably provide other perspectives and findings if the researchers use a qualitative study method. Secondly, future researchers should consider district councils as samples for study. This step would probably provide different findings as the successful implementation of cost saving strategies had been reported to vary between different organisational sizes (Haar & Spell, 2008).

### Conclusion

The findings of this study revealed significant findings for local authorities to implement cost saving strategies. For local authorities, cost saving is among the pivotal issues related to the sustainability of its institutions due to the fact that their sources of income are limited. Most of the sources of their cash inflows are received from the public in the form of taxes, fees, charges, etc. At the same time, the expectation of the public toward local authorities may vary between the different groups within the community. Therefore, in order to accommodate all these expectations, local authorities have no choice but to have a strategy that is related to cost savings. As proven in this study, customer focus and continuous improvement are a possible strategies and solutions for achieving this. However, this paper has reported that local authorities also need to review the reward systems that are currently in place. They have to have reward systems that accommodate employee needs and they have to be clear on what needs to be performed in line with the requirements of the implemented strategy. These supportive reward systems would probably enhance the commitment of employees toward the implementation of the strategy, and ultimately securing the good benefits of implementing it.

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