

# Impact of Information Technology Capability in the Tourism State Corporations in Kenya: The Mediating Role of Strategy Implementation

<sup>1</sup>Miriam Muthoka, <sup>2</sup>Dr. Margaret Oloko, <sup>3</sup>Prof. Martin Ogutu, <sup>4</sup>Dr. George Orwa

<sup>1</sup>School of Business, Jomo Kenyatta University of Agriculture and Technology P. O. Box 62000, 00200 Nairobi, Kenya.

<sup>2</sup>School of Business, Jomo Kenyatta University of Agriculture and Technology

<sup>3</sup>School of Business, University of Nairobi

<sup>4</sup>School of Business, Jomo Kenyatta University of Agriculture and Technology

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**Abstract:** Tourism and travel is one of the world's largest sectors, supporting over 266 million jobs and generating 9.5% globally. The viability of the industry is however under threat in the recent past. It has experienced declining revenue contribution especially to the Kenyan GDP. The main driver of performance of any sector is its capability to transform their strategies into deliverable results. It is however clear from literature that organization's capabilities have failed hence poor performance due to incapacity to implement their strategies. This is because strategy implementation is critical than strategy formulation. This study sought to provide an opportunity to empirically test the drivers of performance and the mediating role of strategy implementation by looking at information technology capabilities. The study employed descriptive and cross-sectional research designs. The target population was all the Tourism state corporations in Kenya with the management of these firms being the respondents. A census was carried out due to small nature of the target population. Data collection involved the use of questionnaires which attracted quantitative responses. The data was analyzed using regression analysis. ANOVA test was carried out to test the significance of the model. The findings of the study indicated that automated systems affect profitability of most of the organizations. Automated systems were found to contribute above 51% to performance of most organizations in Kenya. Further results indicated that majority of organizations in tourism sector use E-ticketing in their operations. The findings further indicated that using IT to keep customers informed, using IT to provide information to frequently asked questions, using IT for customer and organization interaction on IT platform and acquiring new IT systems regularly were efficient to a great extent. The regression results indicated that using IT to provide information to frequently asked questions, Customer and Organization interaction on IT platforms and acquiring new IT systems regularly were positively and significantly related to performance of tourism organizations. The regression results also indicated that information technology capability was positively and significantly related to performance of tourism state corporations in Kenya. The study concluded that automated systems affect profitability of most Tourism state corporations in Kenya. The study also concluded that Information Technology capability has a significant effect on performance of tourism state corporations in Kenya. The study recommended that those Tourism state corporations in Kenya that have not adopted E-ticketing should adopt it as it positively influences performance. Furthermore, the use of IT to keep customers informed, to provide information to frequently asked questions, for customer and organization interaction on IT platform and acquiring new IT systems regularly should be embraced as they are efficient and improves performance.

**Keywords:** Performance drivers, strategy implementation, information technology capability, tourism state corporations, Kenya.

## 1. INTRODUCTION

### Background and Research Gap:

Tourism demand depends above all strongly on the economic conditions in major generating markets. When economies grow, levels of disposable income will usually also rise. A relatively large part of discretionary income will typically be spent on tourism, in particular in the case of emerging economies. Tourism is the fastest changing industry in the world because of technological changes. It also has the highest multiplier effect. Rowe, Smith and Borein (2002) highlight the multiplier effect from the tourism industry as being caused by the direct and indirect economic impact, where the direct includes benefit to the tourism industry players like tour and travel operators, transporters, accommodation, attraction sites and other tourist attractions. Indirectly, tourism promotes the economy through goods and services like laundry supplier, food supplier, shops and banks used by tourists during their visits. This in return creates employment thus eradicating poverty and hunger in the society (Ragui, 2013).

Tourism and travel is one of the world's largest sectors, supporting over 266 million jobs and generating 9.5% of global GDP in 2013 (WTTC, 2014). International tourist arrivals worldwide are expected to increase by 3.3% a year from 2010 to 2030 to reach 1.8 billion by 2030, according to UNWTO's long term forecast Tourism towards 2030. Between 2010 and 2030, arrivals in emerging destinations (+4.4% a year) are expected to increase at twice the rate of those in advanced economies (+2.2% a year). The market share of emerging economies increased from 30% in 1980 to 47% in 2013, and is expected to reach 57% by 2030, equivalent to over 1 billion international tourist arrivals (UNWTO, 2014).

Africa has continued to enjoy sustained growth, attracting 5% more international tourist arrivals in 2013, corresponding to an increase of 3 million. The region welcomed a total of 56 million tourists (5% of the world) last year after surpassing the 50 million mark in 2012. International tourism receipts remained at US\$ 34 billion. The region maintained a 5% share in worldwide arrivals and a 3% share in receipts. North Africa (+6%) had another year of robust growth. Morocco (+7%) is the first African destination to have surpassed the mark of 10 million international arrivals, while Tunisia (+5%) recovered further. Arrivals growth in sub-saharan Africa is estimated at 5%, though individual destinations with data available show a mixed picture. South Africa, the largest destination in the subregion, reported 4% growth. Seychelles (+11%) and Gambia (+9%) reported strong growth, while Mauritius (+3%), Zimbabwe (+2%) and Uganda (+1%) posted more modest increases (UNWTO, 2014).

With the facts that tourism is a contributor to world economy, Policy makers should propel tourism destination toward resilience against short-term shocks and prepare for long-term stability by focusing on certain areas where leading countries stand out over their underperforming peers. Best-practice policies and sector-development strategies from highly competitive tourism destinations have proven successful in weathering the economic downturn and preparing for more volatility going forward. Each country should identify its specific key areas of tourism opportunities and align its policy focus around these core capabilities. These differentiators are diverse reflecting a mixture of international travel needs and experiences—and range from reestablishing the trust of visitors after periods of instability and maintaining price competitiveness in uncertain market surroundings to making sustainability a winning factor and turning an affinity for tourism into successful destination development (WEF, Boaz & Company, 2013). This study seeks to establish the impact of performance drivers in the Tourism state corporation. This is because performance of an organization in an environment translates to its output and contribution to growth of the environment and the economy in general.

### Problem Statement:

The greatest challenge as stated in the background of the study is the poor performance of the tourism industry (Economic survey of Kenya, 2014). It is also notable that the tourism industry has not emerged very strong in Poverty Alleviation (Kareithi, 2003). Kenyan vision 2030, regional stability and security, and a stable global economic environment, together with the effectiveness and efficiency of State Corporation however can be a platform of the Tourism sector revival (KIPPRA, 2013). The Group of Twenty (also known as the G-20) an international forum for the governments and central bank governors from 20 major economies, has identified Tourism as one of the sectors that can spur the global economic recovery (WTO, 2012).

The tourism state corporations capability is therefore critical in improving the industry performance. The drivers that are involved in the translation of business strategies into deliverable results in the State Corporations are of concern with the mediating role of strategy implementation in order to maximize organizational performance (Miriam & Wario, 2014).

Literature shows that management decisions in organizations are driven by the organizations capabilities and drivers which have an effect on the performance of those organizations. Fwaya *et al*, (2012) stated that there is a relationship between drivers and results of performance. If organizations do not depict performance capabilities, the strategies they adopt may not be achievable (Uzel, 2012). An organizations performance is informed by its capability to translate the strategies at hand to deliverable results. This study therefore sought to establish the influence of drivers of performance, by filling the gap that is exists on how firms execute their strategies and the mediating role of strategy implementation in the Tourism State Corporations in Kenya.

### Study Objectives:

The general objective of the study was to ascertain the effect of performance drivers and the mediating role of strategy implementation in the Tourism State Corporations in Kenya. The study specifically sought to establish the effect of information technology capability on performance in the Tourism state corporations in Kenya.

## 2. RESEARCH METHODOLOGY

This study adopted a mixed research design of cross-sectional research design and descriptive survey design. The study used cross-sectional design to obtain research data over the same period of time. Descriptive research design was also used to establish the cause and effect relationship between the dependent variable (Tourism state corporations performance) and the independent variable (Information technology capability). The Tourism industry comprise of 9 state corporations (Ministry of Tourism, 2015). These corporations represented the total population of this study. The target respondents were management of the state corporations. Because of the small nature of the population, that is 9 Tourism State corporations, the study adopted a census enquiry approach. The study used primary data which was collected through administration of a questionnaire to the managers to provide a complete picture of the respondent feelings and attitudes and perceptions on the drivers of performance and the mediating role of strategy implementation. The data was analyzed using descriptive, regression and correlation analysis. The analysis of variance (ANOVA) also referred to as F-test was used to test the significance of the overall model below. Regression analysis was carried out to find out the rate of change of variables in relation to changes in one another.

The main statistical model that was used for this study was the multiple linear regression model.

$$Y = \alpha + \beta_1 X_1 + \mu$$

Where: Y = Performance of Tourism State Corporations

$\alpha$  = the Y intercept;

$X_1$  = Information technology capability

$\mu$  = error term which is assumed to be normal in distribution with mean zero and variance ( $\sigma$ )

The strength of the associations between the variables was measured using correlation coefficients.

## 3. FINDINGS AND DISCUSSION

### Response Rate:

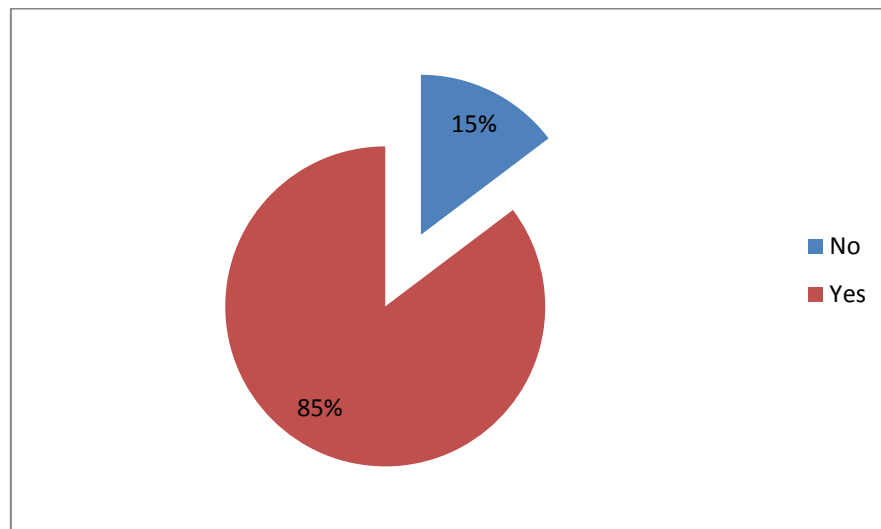
The number of questionnaires that were administered was 144. A total of 102 questionnaires were properly filled and returned. This represented an overall successful response rate of 71% as shown on Table 1. This concurred with Kothari (2004) that a response rate of 50% or more is adequate for a descriptive study. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on these assertions from renowned scholars 71% response rate is adequate for the study.

**Table 1: Response Rate**

Response Rate	Frequency	Percent
Returned	102	71%
Unreturned	42	29%
Total	144	100%

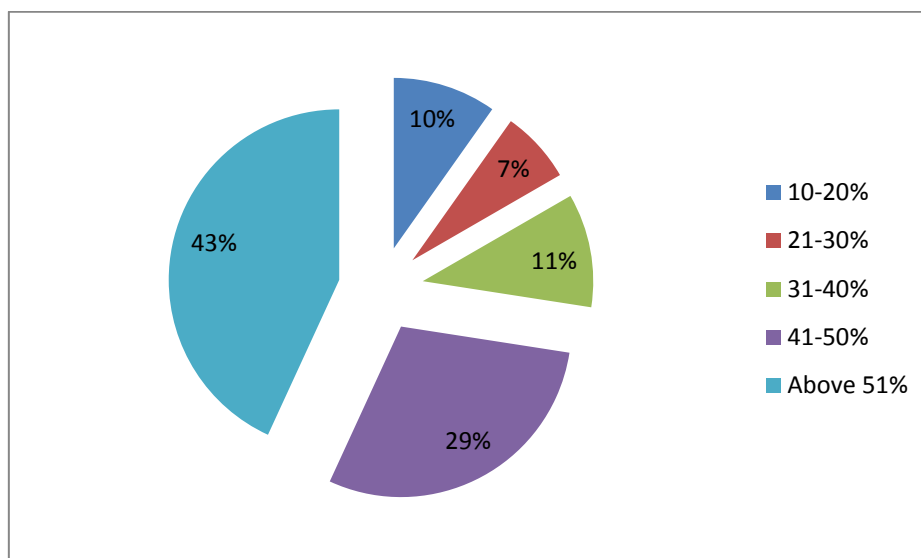
**Information Technology Capability:**

The study sought to establish the effect of information technology capability on performance in the Tourism state corporations in Kenya. The respondents were asked to indicate whether automated systems affect profitability of their organizations. Results in figure 1 indicate that majority of the respondents, 85%, agreed that automated systems affects profitability. These findings are consistent with findings of a study by Kiprutto, Kigio & Riungu (2011) which established that adopting technology effectively results to modes of passing the information; gathering, processing and communication of information becomes instant.



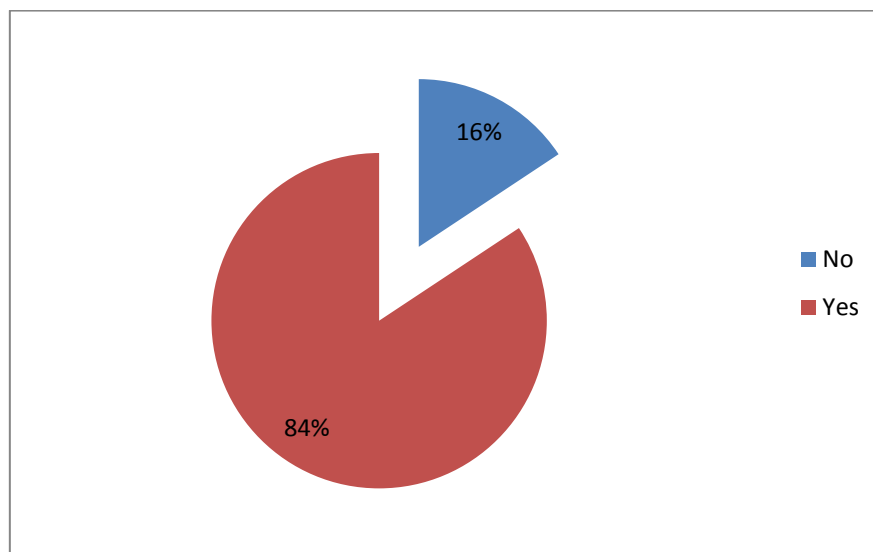
**Figure 1: Effect of automated systems on profitability**

The respondents were further asked to indicate the percentage which automated systems contributed to profitability of the organizations. The results in Figure 2 indicate that majority of the respondents, 43%, stated that automated systems contributed above 51% of the profitability of the organizations while those who indicated that it contributes between 41 and 51% were 29%.



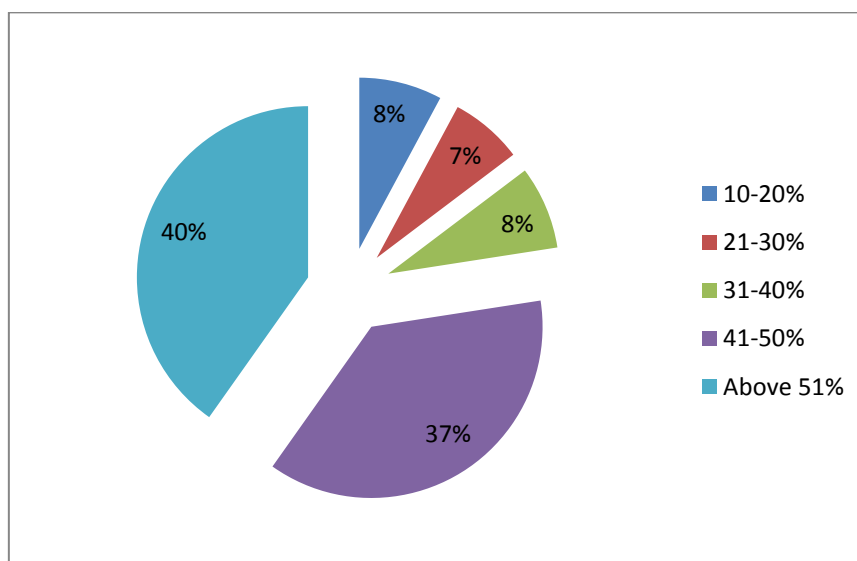
**Figure 2: Contribution of automated systems to profitability**

The study also sought to establish whether the organizations in tourism sector use E-ticketing in their operations. 84% of the respondents indicated that their organizations in tourism sector use E-ticketing in its operations. The results are indicated in Figure 3. The findings of the study are consistent with the findings of a study by Chaston et al., (2002) which identified IT-based competencies that ensure value-creation and competitiveness in e-commerce, e.g. strategic e-market competencies, financial resource competencies and operational competencies.



**Figure 3: The use of E-ticketing**

The respondents were further asked to indicate the estimated percentage by which the use of E-ticketing affected the number of tourists in Kenya. The results indicated that majority of the respondents, 40% indicated that the use of E-ticketing affected the number of tourists in Kenya by over 51% while 37% indicated that it affected the number of tourists by between 41% and 51%. The results are indicated in Figure 4. The findings of the study are consistent with the findings of a study by Chaston et al., (2002) which identified IT-based competencies that ensure value-creation and competitiveness in e-commerce, e.g. strategic e-market competencies, financial resource competencies and operational competencies.



**Figure 4: Contribution of E-ticketing to the number of tourists in Kenya**

#### **Attributes of information technology:**

The study sought to establish the efficiency of the attributes of information technology. The rating was on a five point likert scale of 1 to 5 ranging from not at all to very great extent. The results in Table 2 indicates that 42.1% of the respondents indicated that using IT to keep customers informed was efficient to a great extent, 54.9% indicated that using IT to provide information to frequently asked questions was efficient to a great extent, 62.8% of the respondents agreed that using IT for customer and organization interaction on IT platform was efficient to a great extent while 38.3% indicated that acquiring new IT systems regularly is efficient to a great extent. The findings of the study are consistent with the findings of a study by Kyobe (2004) which identified IT applications among the strategies which are critical in improving efficiency and effectiveness in organizations.

**Table 2: Information Technology Attributes**

	Not at all	Little extent	Moderate extent	Great extent	Very great extent	Mean	Std Dev
Using IT to keep customers informed	17.60%	22.50%	17.60%	19.60%	22.50%	3.07	1.43
Using IT to provide information to frequently asked questions	8.80%	18.60%	17.60%	20.60%	34.30%	3.53	1.36
Customer and Organization interaction on IT platforms	7.80%	10.80%	18.60%	42.20%	20.60%	3.57	1.16
Availability of IT experts and department	23.50%	13.70%	17.60%	20.60%	24.50%	3.09	1.51
Reliability of IT solutions to problems	18.60%	18.60%	21.60%	22.50%	18.60%	3.04	1.39
Acquiring new IT systems regularly	13.70%	6.90%	41.20%	21.60%	16.70%	3.21	1.21
<b>Average</b>						<b>3.25</b>	<b>1.34</b>

**Correlation analysis for attributes of Information Technology:**

The results in Table 3 indicate that all the attributes of information technology were positively and significantly associated with organization performance. IT1 (Using IT to keep customers informed), IT2 (Using IT to provide information to frequently asked questions), IT3 (Customer and Organization interaction on IT platforms), IT4 (availability of IT experts and department), IT5 (reliability of IT solutions to problems) and IT5 (acquiring new IT systems regularly) were correlated to performance with Pearson coefficients of 0.227, 0.308, 0.457, 0.353, 0.207 and 0.339 respectively.

**Table 3: Correlation analysis for attributes of Information Technology**

Variable		IT1	IT2	IT3	IT4	IT5	IT6	Performance
IT1	Pearson Correlation	1.00	0.04	.244*	0.09	0.10	(0.04)	.227*
	Sig. (2-tailed)		0.71	0.01	0.37	0.30	0.71	0.02
IT2	Pearson Correlation	0.04	1.00	0.10	0.14	(0.04)	0.11	.308**
	Sig. (2-tailed)	0.71		0.34	0.17	0.71	0.28	0.00
IT3	Pearson Correlation	.244*	0.10	1.00	.326**	0.12	0.19	.457**
	Sig. (2-tailed)	0.01	0.34		0.00	0.25	0.06	-
IT4	Pearson Correlation	0.09	0.14	.326**	1.00	.211*	0.08	.353**
	Sig. (2-tailed)	0.37	0.17	0.00		0.03	0.45	0.00
IT5	Pearson Correlation	0.10	(0.04)	0.12	.211*	1.00	0.02	.207*
	Sig. (2-tailed)	0.30	0.71	0.25	0.03		0.85	0.04
IT6	Pearson Correlation	(0.04)	0.11	0.19	0.08	0.02	1.00	.34**
	Sig. (2-tailed)	0.71	0.28	0.06	0.45	0.85		-
Performance	Pearson Correlation	.227*	.308**	.457**	.353**	.207*	.339**	1.00
	Sig. (2-tailed)	0.02	0.00	0.00	0.00	0.04	0.00	

\* Correlation is significant at the 0.05 level (2-tailed).

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

### Relationship between Attributes of Information Technology Capability and performance in the Tourism state corporations in Kenya:

The study sought to establish the relationship between the attributes of information technology capability and performance in the Tourism state corporations in Kenya. To do this, the study used an Ordinary least square regression model. The results indicate that attributes of information technology combined were positively associated with performance as indicated by a correlation coefficient of 0.635. The results further indicated that information technology explains 40.3% of the changes in performance as indicated by an R-square of 0.403. The results are presented in Table 4. The results also indicate that the model fit well. This is supported by an F statistic of 10.673 which is significant at 5% level of significance.

**Table:4 Attributes of information technology capability and Performance**

		B	Std. Error	t	P-value
				R	0.635
				R2	0.403
				F	10.673
				Sig	0.000
1	(Constant)	2.281	0.157	14.519	0.000
	Using IT to keep customers informed	0.036	0.023	1.57	0.12
	Using IT to provide information to frequently asked questions	0.066	0.023	2.857	0.005
	Customer and Organization interaction on IT platforms	0.096	0.03	3.257	0.002
	Availability of IT experts and department	0.044	0.022	1.98	0.051
	Reliability of IT solutions to problems	0.037	0.023	1.581	0.117
	Acquiring new IT systems regularly	0.081	0.026	3.064	0.003

Further results indicated that using IT to provide information to frequently asked questions, Customer and Organization interaction on IT platforms and acquiring new IT systems regularly were positively related to performance of tourism organizations as indicated by coefficients of 0.066, 0.096 and 0.081 respectively. The relationship between these attributes of IT and performance was also found to be significant at 5% level of significance as indicated by P-values of 0.005, 0.002 and 0.003 respectively. The implication is that, a unit increase in the use of IT to provide information to frequently asked questions, Customer and Organization interaction on IT platforms and acquiring new IT systems regularly leads to an improvement in performance by 0.066, 0.096 and 0.081 units respectively. The results are as presented in Table 5. The findings of the study are also consistent with the findings of a study by Raymond and Bergeron (2008) which emphasized that leveraging of the internet to ensure effective e-communication, e-intelligence and e-collaboration have been found to lead to increases in the market share and customer satisfaction (Eid, 2011).

All the attributes of information technology capability were combined and an ordinary regression model established. The results indicated that information technology capability was positively correlated to organization performance (R=0.608). Information technology capability explains 36.9% of the changes in performance of the organizations.

**Table 5: Relationship between Information technology capability and performance**

		B	Std. Error	t	Sig.
				R	0.608
				R2	0.368
				F	58.526
				Sig	0.000
1	(Constant)	2.376	0.147	16.156	0.000
	Information Technology Capability	0.34	0.044	7.65	0.000

The findings further revealed that information technology is positively and significantly related to performance of tourism state corporations. A unit increase in information technology capability results to a 0.34 unit improvement in performance of tourism state corporations in Kenya.



#### 4. CONCLUSION

The study concluded that automated systems affect profitability of most Tourism state corporations in Kenya. Majority of organizations in tourism sector use E-ticketing in their operations. Furthermore, the study concluded that using IT to keep customers informed, using IT to provide information to frequently asked questions, using IT for customer and organization interaction on IT platform and acquiring new IT systems regularly is efficient and improves performance. The study also concluded that Information Technology capability has a significant effect on performance of tourism state corporations in Kenya.

#### 5. RECOMMENDATIONS

Based on the findings, the study recommended that those Tourism state corporations in Kenya that have not adopted E-ticketing should adopt it as it positively influences performance. Furthermore, the use of IT to keep customers informed, to provide information to frequently asked questions, for customer and organization interaction on IT platform and acquiring new IT systems regularly should be embraced as they are efficient and improves performance.

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