



# Key Management Practices that Influence Actual ICT Application among Three to Five Star Hotels in Kenya

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## Abstract

ICTs are considered strategic tool for business management worldwide and fast finding wider application within the hotel industry. However, their use has not always been fruitful due to poor application of the ICTs. This study therefore sought to determine management practices that influence actual ICT application among three to five star hotels in Kenya. The study adopted multiple case study approach to data collection where face-to-face interviews were conducted with 36 hotel managers drawn purposefully from hotels 36 hotels in Nairobi and Coast regions in Kenya. The data was thematically analysed and two themes namely operational management practices and human resource management practices identified as influencing actual ICT application among three to five star hotels in Kenya. The study provide insights to hotel managers on management practices they should focus on concerning ICT use in hotels.

**Keywords:** Management practice, Hotel, actual ICT application, Kenya

## Introduction

Throughout the globe, there has been a paradigm shift where organizations have recognized the importance of information and communication technology (ICT) as a potent strategic tool for bettering their functioning. ICT usage within the tourism industry dates back to the early 1960s when the first computer reservation system (CRS) was created by the American Airline (International Federation for IT and Travel & Tourism [IFITT], 2013). Since then, the tourism industry has matured and is regarded as one of the largest and fastest developing industry globally. While technology is largely considered a key factor towards the expansion and growth of the tourism industry (Ansah, Blankson, & Kontoh, 2012; Corigliano & Baggio, 2006; Hospitality Technology, 2002; Petre, Stegorean, & Gavrea, 2012), its major impacts have for a long time been quite uneven in the hotel sector (Hoontrakul & Sahadev, 2008) predominantly in developing countries. Nevertheless, a number of hotels today, particularly in economically developed world, proactively employ ICTs given the benefits attributed to ICT use (Magnini, Honeycutt, & Hodge, 2003). While a number of authors, e.g. (Eze, 2013; International Labour Organization (ILO), 2010; Mihalic & Buhalis, 2013; Mutua & Wasike, 2009; Sahadev & Islam, 2005; Sirirak, Islam, & Khang, 2011; Zelenka, 2009; Petre, Stegorean, & Gavrea, 2012) have indicated that adoption and application of ICTs by business firms leads to improved efficiencies in operations and customer service levels, its resulting effects has not always been positive (David, Grabski, & Kasavana, 1996) for hotels due to poor implementation.

Just the way technology keeps on changing, the hospitality industry environment is constantly changing. For instance, the way hotels conducts their transactions today

is fast changing due to pressure from trading partners as well as customers. The hospitality industry today deals with a new generation of technology-savvy clients (Schoeve, 2012) both customers and suppliers, who bring in continuous competition for the market share (Baggio, 2004). This changing business operation environment has put tremendous pressure on hotel operators to keep up with the high peak of progressive technology in order to remain competitive and raise their performance. As a consequence, a number of hotels spend huge amounts of money attempting to integrate ICTs in their organization with an objective of enhancing their performance. Yet, this has never been the case for most hotels, especially in economically underdeveloped states. Evidence indicates that the functional potential of ICTs is often underutilized, with users using only a circumscribed number of available ICT features that are seldom applied to relevant task-related operations (Hsieh & Wang, 2007). This has been attributed to inappropriate, poor ICT implementation strategies at both organizational and individual levels. This study, therefore sought to establish key management practices that can influence actual ICT application in three to five star hotels in Kenya.

## Management Practices and ICT Application

Management in its simplicity means the body process of ensuring that the available organization resources are effectively and efficiently applied to accomplish organizational goals. The aim of all managers, according to (Olum, 2004) is to be productive, where by productivity implies effectiveness and efficiency in individual and organizational performance. Today's hospitality managers are faced with a myriad of challenges that emanate from both within and outside the organization. For example, today hospitality manager is dealing with techno



savvy clients who are perpetually looking for connectivity and other technology related requirements while in the hotel (Collins, Cobanoglu & Bilgihan, 2013). Furthermore, competition in the market has become so fierce that only those organizations that can command bigger market share can actualize their goals. In this line, technology is viewed as one of the strategic tools that managers can rely on to surmount some of the challenges (Eze, 2013; Mihalic and Buhalis, 2013; Buhalis and Law, 2008). As such, there is consensus in literature that ICTs play a vital function in determining management practices in most organizations in developed nations. A number of researchers (e.g. Buhalis and Costa, 2006; Buhalis and Law, 2008; Eze, 2013; Mihalič and Buhalis, 2013; Praničević, Alfrević, and Štemberger, 2011; Biagi and Parisi, 2012) have considered technology as a strategic tool for hospitality and tourism business. Biagi and Parisi (2012) considered ICT as an enabler of organizational change in that it goes to a redefinition of strategies, processes and practices with clear results on the operation and innovation capacities of firms (Biagi & Parisi, 2012). In addition, Buhalis and Law (2008) found that ICTs significantly influence management strategies and practices applied by an establishment. A similar sentiment is shared by (Eze, 2013) who believe that organizations should inculcate ICTs as part of management strategy and moral philosophy in order to be successful in their operations. Moreover, other recent studies (Adeosun, Adeosun, & Adetunde, 2009; McLeod, 2010) have considered technology as one of the important contingency factors that influence strategic management in hospitality and tourism organizations. Although technologies are reported to shape the way organizations are managed today, the role of management practices on the actual ICT application cannot be overlooked.

### **Role of Management Practices**

Resource based view theorist argue that having resources in an organization by itself is not a key to success and that the capabilities of management utilizing these resources through management practices is quite more important (Drohan et al., 2009; Gouthier and Schmid, 2003). It's argued that managers play a critical role in determining how resources in an organization are utilized (Lee and Lee, 2010; Wang and Qualls, 2007), which in turn impacts on performance (Drohan et al., 2009; Bloom and Van Reneen, 2010). Drohan et al. (2009) for instance argue that managers should establish good practices by integrating resources of people, process and technology in order to increase customer satisfaction and maximize profit. Nair (2006) shares a similar school of thought and using their meta-analysis in manufacturing, they found that management practices in managing employee and process do affect performance and quality results. Similarly, Tari, Molina and Castejon (2007) studied firms in Spain and found that manage-

ment practices focusing on people and process significantly affects organization performance and customer satisfaction. The implication drawn from these particular studies (Lee & Lee, 2010; Wang & Qualls, 2007; Drohan et al., 2009; Nair, 2006; Tari et al., 2007) is that managing operational process of the organization as well as the people involved in the operational process has an impact on the organization performance whether its quality attributes, customer satisfaction or performance related attributes. According to (Buhalis & O'Connor, 2005), successful ICT application calls for innovative management to constantly review developments and adopt suitable technological solutions in order to maximize organizational competitiveness. In agreement, (Crystal, Leung, & Law, 2011), propose that hospitality managers in the current business environment should understand the potential advantages of ICT applications, and devote their time and effort to taking advantage of new technologies. While the role of management practices and ICT use in determining organization performance cannot be disputed in the literature, there is limited literature on management practices and its role in the actual ICT application.

### **Methodology**

In order to bridge the gap in literature, this study adopted a multiple qualitative case study design (Yin, 2009) for collecting and analyzing data. A case study was chosen for a number of causes. First, such a scheme is suited to research into adoption, implementation of IT related components as it enables researchers to study factors and their interrelationships (Oates, 2005). Secondly, through case studies, researchers can reach a fuller apprehension of the nature and complexities of the issues occurring in organizations (Benbasat, Goldstein & Mead, 1987). Ultimately, this strategy not allowing for generalizability of findings to a large population, it can be used to generalize to theoretical propositions (Yin, 2009) that can be tested further quantitatively.

### **Case Selection**

Face - to - face structured interviews were conducted with thirty six (36) managers purposefully drawn from five hotels in Nairobi and Coast region, in Kenya. This approach allowed the interviewee to provide in-depth information pertaining to participants' experiences and viewpoints of a particular topic (McNamara, 2009; Turner, 2010). It also offered room for interaction so as to achieve fullness and profundity of understanding the topic of discussion (Rubin & Rubin, 1995).

### **Data Collection**

Before the interview, the targeted respondents were identified and contacted prior the impending interview. In order to have favourable response, an approach recommended by Healey and Rawlinson (1993) in the research



method literature was followed. Healey and Rawlinson suggest a twofold approach: where a telephone call ‘fishing’ for a named person, who is more likely to be appropriate for the interview, is made and then follow the phone call with an introductory letter. Before the interview, informed consents were obtained through letters that indicated the researcher intention to conduct research in the targeted hotels, with the managers as the targeted respondents. The letter defined the nature of the inquiry, the routines in which participants were expected to take part, a description of the means by which confidentiality was to be protected, contacts of persons to whom inquiries and complaints about the research can be conducted, and a description of the risks and benefits of the research. Two weeks later, phone calls were made to establish contact with the targeted respondents requesting them to take part in the interview. All the interviews were organized to take part in the afternoon since this was presumed to be when most hotel managers are not busy.

All the interviews were directed by the lead researcher within the confines of the managers’ offices as this was believed would make the interviewee feel more comfortable and encourage him or her to speak expansively on a topic (Creswell, 2007; Turner, 2010). Each interview lasted between 40-50 minutes. In order to answer to establish management practices and their influence on actual ICT application at the hotel, respondents were required to provide in-depth insight to the questions (1) “*What roles do you play as a manager in ensuring that adopted ICTs at the hotel are put into actual use?*” and (2) “*What unique thing is the organization through its management doing to improve performance through application of ICT?*” In order to capture their responses for analysis, interview notes were taken while at the same time recording the entire interview session using digital voice recorder after agreement with the respondents. Before the researchers left the interview venue, each interviewee was asked to review researcher’s synthesis of interviews for accuracy of representation. The interview transcripts were shared with the informants to see if the interview itself was accurately portrayed. According to (Brenner, 2006), this is a useful strategy to confirm the researcher’s interpretation of meaning with informants’ perceptions by checking with them once more. It can provide a researcher with corrections to the transcript or even further elaborations and refinements as an informant reflects on what was said during the interview. At the conclusion of each interview, the researchers reflected on the interview session, compared notes and made modifications where necessary. These helped enhance validity of the data collected (Bashir, Afzal, & Azeem, 2008; McMillan & Schumacher, 2006).

### **Validity**

Although *construct validity* is challenging to establish in qualitative case studies, it can be accomplished by use of multiple sources of evidence (data triangulation), establishing a range of evidence, and having key informants review draft case study reports (Yin, 2009). This study achieved data triangulation by interviewing two managers from each of the hotels and even conducting interviews with managers drawn from different hotel grades located in two separate regions i.e. Nairobi and Coast region. Interview transcripts were also mailed to respondents as already mentioned and according to (Bashir, Afzal, & Azeem, 2008; McMillan & Schumacher, 2006), it enhances the validity of the data gathered.

### **Data Analysis**

In order to analyse qualitative data collected through the interview, a three step process consisting of data condensation, data display and data conclusion-drawing/verifying (Miles, Huberman & Saldana, 2014) was applied to each interview as it came in.

### **Data Condensation**

Miles, Huberman and Saldana (2013) defines data condensation as the process of choosing, focusing, simplifying, building and transforming data in the interview transcripts. Data condensation involved the researcher reading through the interview transcripts and highlighting sections from each participant’s full text transcripts that could be used to answer the research question. The data was broken down into distinct constituents and examined thoroughly to identify similar data which were then grouped into categories or codes (Strauss & Corbin, 1998). Further scrutiny saw the data being condensed further to generate main themes and sub-themes or codes. After identifying the themes, the researcher read through the content again and again to compare, contrast and search for any missing information and ensure that the full picture of the participant’s story was captured. The emerging themes including their related excerpts from the interview transcripts were then tabulated (See Table 1). Terms drawn from literature review were used in the coding process to ensure accurate representation of data. Multiple coders (2) were used in order to increase coding reliability (Miles & Huberman 1994). These coders were taken through training facilitated by pilot interviews which had a sample of two (2) hotel managers. They were then presented with copies of the interview transcripts each and were asked to use the information to generate relevant themes and their related text extracts from the transcripts. Their results were compared and since there was no much significant difference in their outputs, they were asked to combine their codebooks into one which was used for this study.



**Data Display**

As already noted, the summarised data were tabulated. Tables were used to map the relationship between the themes identified, sub-themes and their corresponding interview responses. Direct quotes are also presented to provide supportive meaning to the interpretation of some statements (Patton, 2002).

**Conclusion Drawing and Verification**

This involved assigning meanings and sense to the analysed data by finding regularities, similarities, patterns, explanations and propositions in relation to the research questions (Miles & Huberman, 1994).

**Findings and Discussions**

In order to establish hotel management practices applied among three to five star hotels in relation to ICT adoption and application, respondents were required to give their insights concerning the following interview questions: (1) “What roles do you play as a manager in ensuring that adopted ICTs at the hotel are put into actual use?” and (2) “What unique thing is the organization through its management doing to improve performance through application of ICT?” Their responses elicited various roles played by managers with two key themes, namely operational management practices and human resource management practices emerging as shown in Table 1.

Table 1: Management practices related to ICT adoption and application

Themes	Underlying Codes	Some Examples of Text excerpts relating to the theme
Operational Management Practices	Maintenance	<p>“...It is important for me as a manager to ensure that all ICTs in the organization are well maintained and serviced.” (Interview: Participant 2)</p> <p>“... My hotel has planned maintenance policies for ICT related facilities which ensure that our ICTs are in good condition before being used to perform any work” (Interview: Participant 6)</p> <p>“...poorly maintained ICT facilities will frustrate me in particular and if that is the case, what about my staff?” (Interview: Participant 7)</p>
	Workplace organization	<p>“...we determine where ICTs will be located and utilised...for instance, while we are thinking of adopting wireless and mobile based POS terminals, currently we have our POS terminals (MicroRes) strategically placed in our restaurants for ease of access by our servers” (Interview: Participant 4)</p>
	Organization and customers’ needs	<p>“...we adopt ICTs based on the organization needs, while at the same time focus on the needs of our customers, suppliers and employees...” (Interview: Participant 6)</p>
	Management Support	<p>“... I personally encourage my staff to make use of the available ICT facilities in performing their work where necessary...” (Interview: Participant 8)</p>
Investment in new technology		<p>“...ensuring that up to date ICTs are available in the hotel where relevant...can greatly impact on how my staff use a given ICTs...” (Interview: Participant 3)</p> <p>“... ICT resources requires finances to have them in place. Therefore, based on the organization needs, we do allocate sufficient funds for investing in ICTs earmarked to be relevant for our hotel operation...” (Interview: Participant 9)</p>
	Establishing standards and policies	<p>“My hotel has standard operating procedures regarding ICT use at the hotel...” (Interview: Participant 3)</p> <p>“...policy formulation concerning ICT use in the hotel is important in providing guidelines on the actual ICT application...” (Interview: Participant 5)</p>
Human Resource Management Practices	Recruiting	<p>“... We recruit then train later based on the emerging operational issues regarding ICTs adopted by the hotel” (Interview: Participant 1)</p> <p>“...during recruitment, we tend to consider those with technological know-how in hotel related ICTs, but this also depends on the position being filled...” (Interview: Participant 3)</p> <p>“...Depending on the position under consideration, ICT literacy may be considered or not during recruitment...” (Interview: Participant 10)</p>
	Training	<p>“... Training is key for successful implementation of ICTs in hotels...” (Interview: Participant 10)</p>



	<p>terview: Participant 5) “... Skilled personnel is an important consideration for the hotel and therefore we often train our employees concerning the use of certain ICTs in the hotel...” (Interview: Participant 8) “...upon adoption of a particular technology, the hotel strives to ensure that vendors of the technology are brought to offer training to all the staff of the hotel on how to use the technology, whether a staff is going to use it or not in executing their daily operations...” (Interview: Participant 10)</p>
Rewards and Incentives	<p>“... I personally encourage my staff to make use of the available ICT facilities in performing their work where necessary and even at times reward those who help their colleagues in using ICT...” (Interview: Participant 7)</p>
Job design	<p>“...tasks and activities to be achieved through the use of ICTs in the hotel must be clearly defined in order for employees to understand their job responsibilities...” (Interview: Participant 2) “...Activities requiring performance through ICTs are clearly defined for our employees including how to go about performing their tasks through ICTs...” (Interview: Participant 6)</p>
Employee participation	<p>“...very often we consult our staff to give their views on ICTs to be adopted by the hotel though not every employee is involved...” (Interview: Participant 1) “... We often value our staff members’ opinions and in most cases consider them especially when it concerns anything that will involve them directly including technologies...” (Interview: Participant 9) “...depending on what is under consideration, once in a while we invite staff members in our management meetings just to get their opinions...” (Interview: Participant 10)</p>

From the study findings, the majority of the respondents believed that management has a role to play in the successful implementation of adopted ICTs at the hotel whether its operational or human resource oriented. From an operational perspectives, hoteliers must ensure that appropriate ICTs are in place and that they are properly maintained. It's their responsibility to ensure that proper ICT adoption and use policies are in place and that the various ICT facilities are strategically placed for effective and smooth business operations.

On the other hand, hotel managers must also pay attention to the human resource aspects of the organization with regard to ICT adoption and use. Areas to concentrate on include employee training, employee motivation and employee participation in decision making concerning ICT adoption and use within the hotel. This supports Lee and Lee (2010) findings that HRM practices such as employee participation, formal training and clearly defined jobs significantly predicted IT usage and management must therefore focus on these attributes of HRM. The findings further supports Wang and Qualls (2007) who argued that employees must possess the ability to apply ICTs in an efficient and useful way making components of HRM such as training an important compo-

nent management practices with regard to ICT adoption and use in hotels.

### Managerial Implications and Conclusions

The study highlights two key important considerations for hotel managers regarding actual ICT use in hotels. It points to the relevance of operational management practices in influencing how adopted ICTs are put into use at the hotel level. Operational management practices in the hotel focus more on activities that managers engages in to directly influence operational activities of the hotel. These included investment initiatives, policy formulation, establishing operational standards, maintenance, workplace organization and providing necessary management support. It suggests that without proper policies and operating standards, for instance, successful implementation of ICTs once adopted may not be realised. Besides, the hotel must be ready to invest in new technologies perceived to greatly impact hotel operations. The management must therefore be willing and ready to provide their support by ensuring that investment capital required for adopting new ICTs, servicing available ICT infrastructures and training staff on new industry trends concerning ICT use is availed.

Human resource management practices such as training, employee participation in ICT adoption decisions, clearly defined jobs, etc., are also highlighted as determinants of actual ICT application in hotels. Of particular importance in this case is training. Hotel managers who desire to guarantee successful implementation of ICTs adopted should frequently train their staff on emerging ICT skills as this would enable them make use of such ICTs once adopted. In addition, hotel managers should motivate and empower their employees concerning ICT related issues at the hotel. They should make sure that the kind of work to be performed through ICTs are well designed and that during recruitment, those work that require to be performed using ICTs are filled by ICT literate people in the area specified.

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