



## 5 INNOVATIVE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN HOTELS: PERSPECTIVES OF MANAGERS OF STAR-RATED HOTELS IN THE KUMASI METROPOLITAN AREA

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### Abstract

Even though information and communication technology provide an important role in hotel service and aid service efficacy in customer satisfaction, little literature exists on it in the study area. The study assessed managers' perception of innovative utilization of ICT in star-rated hotels in the Kumasi metropolitan area. Emphasis was laid on the relevance and reasons for the innovative use of ICT in hotels. A qualitative approach was adopted for the study and 50 hotel managers were sampled. Thematic analysis was used to analyze the data solicited. Results of the study established that managers were of the view that the innovative use of ICT in hotel service was relevant and reasons for which the hotels have innovatively used ICT in their service delivery were achieved. However, the innovative use of ICT in hotels may create problems such as high cost of initial investment, cost of training employees and poor employer-employee relations. The study discovered that the hotels have made good use of ICT innovatively to sustain their business. The study unearthed that hotels must be abreast with ICT use as it has become a tool for attracting guests to hotels.

**Keywords:** innovative, utilisation, ICT, hotel manager, star-rated hotels, Kumasi.

### INTRODUCTION

Information and communication technology (ICT) according to Adebisi and Adekola (2016), is perceived as a term that encompasses all communication devices such as mobile phones, televisions, satellite systems, radio, computer software and hardware. Agboh, (2015) was of the view that ICT is a term that encompasses all communication devices such as mobile phones, televisions, radio, computer software and hardware, satellite systems, handheld devices as well as wired or wireless internet. In the view of Deo and Farik, (2016), ICT constitutes software such as enterprise software, spreadsheet, data and security as well as network security.

The influx of ICT has turned the world into a global community. The use of ICT has become a great global imperative due to its contribution to human development and enhanced socio-economic

development (Mokaya, 2012). ICT has emerged as one of the most important instruments that influence businesses in various sectors for which hotels are not exceptional (Alotaibi & Khan, 2022; Gulbahar & Yildirim, 2015). This notwithstanding, hotels have adopted different forms of ICTs that include; Wi-Fi, digital conference facilities, mobile communication, fax machines and voice mail (Akaba, 2015; Adebayoo, Balogun & Kareem, 2013; Kiveu & Ofafa, 2013). Others include in-room modems, robots, interactive websites and Automated Teller Machines (ATM) Claridades, (2020). The innovative utilization of ICT has gained success in the hotel industry since ICT is used to manage human resources which includes organizing databases, communication, training, developing reward programs and getting customers informed of services rendered by hotels (Law, et.al, 2014; Chahal & Kumar, 2014; Kim, et. al., 2008). The various forms of ICT innovated by hotels

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Doi: 10.47963/ajhtm.v4i1.1262.



facilitate competitive advantage, improved productivity, enhanced financial performance, and guest service expansion (Collins & Cobanoglu, 2008).

In Ghana, the intense competition among hotels has compelled managers to use ICT innovatively since the success of a hotel's business depends on its ability to acquire and utilise current and updated information to assist its management and marketing processes (Asabere, et al., 2014). ICT has become a strategic tool for business development in the hotel industry (Ansah, et al., 2012; Petre, et al., 2012). Globally, hotel managers have become expectant of ICT for enhanced customer service and operations (Law, et al., 2014). Notable studies on the innovative use of ICT in the hospitality industry in Sub-Sahara Africa include: (Mwai, 2016; Nkosana, et al., 2016; Mupfiga, 2015; Salim, et al., 2013). Some studies carried out in Ghana include Akaba (2015), Asabere, et al. (2014), Quarshie (2013), Quarshie and Amenumey (2018) and Ansah et al. (2012). However, all these studies paid little attention to managers' perceptions of the innovative use of ICT in hotels. Meanwhile, managers are the major stakeholders that influence the innovative use of ICT in hotels. This study therefore sought to assess managers' perceptions of the innovative use of ICT in hotels. Specifically, the study analyzes managers' perceptions of the relevance of ICTs in hotel service delivery and assesses their reasons for the use of ICT in hotel service delivery.

## REVIEW OF LITERATURE

### Theoretical Review

#### Technology acceptance model (TAM)

The TAM measures individuals' and organizations' behavioural intentions to adopt and use any form of ICT. Venkatesh and Davis (2000) unveiled that measuring the actual system is difficult hence, behavioural intentions emphasize the prediction of the actual use of an ICT. It could be

deduced that behavioural intention is influenced by perceived ease of use and perceived usefulness (Luarns & Lin, 2005) Again, Venkatesh & Davis (2000) opined that perceived usefulness contributes to how ICT increases the efficiency of a person's work process whereas perceived ease of use describes the extent to which an ICT is used with less effort by an individual. These variables are linked by external variables like system design features, user characteristics, task characteristics and training and demonstration (Mun & Hwang, 2003).

The study adopted the Theoretical Extension of TAM 2 propounded by Venkatesh and Davis (2000) due to the fact that it took into consideration the three domains of learning. These domains comprise the cognitive, affective and psychomotor skills. A cognitive domain talks about how an individual thinks, understands, analyses, synthesizes and evaluates an adopted information technology (Greenhalgh et al., 2017). Also, the individual can critique and give a conclusion on how well an adopted ICT can aid the execution of functions within an organization (Fitzgerald, et al., 2014). These variables can be equated to objective one of the study. The affective embraces attitudes, motivation, intentions and in general terms, willingness to accept a behaviour (Yazdanpanah, & Forouzani, 2015). These variables when related to the use of ICT focus on the individuals' attitude and intention to adopt and use an ICT and these ICTs are used to achieve the purpose for which they have been adopted. This can well be equated to the second objective of the study. Lastly, the psychomotor domain talks about the individual's ability to manipulate the ICT system with his or her skills (Hoque, 2016). It focuses on performing a sequence of activities by different means of using ICT in an organization and this is related to usage behaviour (Ramalingam, et al., 2014).

TAM 2 has been adopted in many studies which continuously focus on substantial aspects of the



variance in usage intentions and a variety of ICT (Sharifzadeh, et al., 2017). More so, the direct effect of subjective norms and behavioural intention yielded mixed results in the past (Venkatesh & Davis, 2000).

The study is also based on the technology, Organization and Environment (TOE) Framework propounded by Tornatzky et al. (1990). The theoretical framework emphasizes three aspects of an organizations perspective that influence its adoption of ICT. These main aspects are the technological factors, Organizational factors and environmental factors. Technological factors comprise system quality, availability of infrastructure, types of technology, power supply, and internet connectivity. Organizational factors on the other hand include type of hotel, size of hotel, organizational structure, category of employees, stakeholders and management support whilst environmental factors involve competitors, suppliers, and government regulations such as taxes, interest rate, change in government, change in government policies and inflation. (Farmaki, 2019; Viscusi et al., 2018)

### **Forms of ICT Used by Hotels**

Hotels use different forms of ICT in their service delivery. The choice of these ICTs depends on the hotel policy and the kind of services rendered to customers. The literature revealed that automated teller machines, smart cards, information processing systems and the internet are some forms of ICT used by hotels (Leung, 2019; Sharma, & Gupta, 2021). Bayram (2020). Postulated that the commonest forms of ICT used by hotels include, software application, computers, internet, e-mail, printers and websites. Neuhofer, et. al. (2015) in their study indicated that property management systems were used purposely for financial modelling. Akaba (2015) in a related study opined that hotels use e-mail, websites and social media.

Ayeh et al. (2012) on the other hand established from their study that hotels used telephone lines, fax machines, scanners, printers, photocopiers and computers. Others include websites, internet and software applications. Issahaku (2012) wrote on the adoption of e-business and stipulated that only 23 hotels adopted and used active websites in Ghana.

### **Managers' Perception of the Relevance of the Innovative Use of ICT in Hotel Service Delivery**

The relevance of ICT is the significant role it plays in the execution of tasks within the hotel sector. Studies have revealed that ICT adds to the guest experience (Buhalis et al, 2017). Also, Nwakanna et al. (2014) argued that innovative use of ICT by hotels must enable the delivery of enjoyable and stress-free experiences as this to an extent will be the most relevant aspect of a business guest's experience in the innovative use of ICT while lodging in a hotel. In addition, using ICT innovatively influences the hotel guest's overall satisfaction and perceived quality of service experience (Lemy et. al., 2019). One study found that ICT gives both employees and guests real-life world experience hence the possibility of revisiting (Goh & Sigala, 2020). ICT fundamentally affects the management of hotels and the overall guest experience (Mandi & Garbin Praniccevi, 2019) especially when it is used innovatively.

### **Reasons for Innovative Use of ICT in Hotel Service Delivery**

Some studies have investigated the reasons why hotels adopt ICT tools in their service delivery and came out with varying views. Law et al. (2014) stated that ICTs are adopted in hotels to enhance strategic management, communication, collaboration and access to information. They further opined that hotels innovatively use ICTs to facilitate decision-



making, data management as well as knowledge management. Teferi (2021) also posits that hotels use ICT because it serves as a powerful strategic and tactical tool which aids in the promotion and strengthening of competitive advantage. In contrast, Lee et al. (2021) argued that most hotels innovatively use ICT purposely to enhance service quality, as ICTs enable hotels to cut costs and increase capabilities by assisting them in shaping inter-organizational coordination.

Hotels innovatively use ICT to replace paper (manual) work, to improve customer service and to ensure other functions within the hotel are executed effectively (Lee & Singh, 2016; Li et al., 2019). In addition, Nwakanma et al. (2014) revealed that hotels innovatively use ICT tools to protect guests. Buick (2003) in his study stated that cameras assist in improving security measures in hotels. Further, the findings of Nwakanma (2014) put across that, hotels use ICT tools innovatively to push slower activities which do not move very fast thereby providing better service, improved decision making and increased revenue.

In the Ghanaian context, the results of a study by Akaba (2015), pointed out that, hotels innovatively use ICTs for marketing strategies, enhanced efficiency and effectiveness, customized service and effective competition with their competitors. Mokhtarian, et.al. (2017) discovered from their study that hotels adopt ICTs for information gathering, handling correspondence, storage, communication, advertisement as well as buying and selling. Also, Chevers and Spencer (2017)

emphasized that hotels have used ICT innovatively to improve operation efficiency and enhance customer satisfaction. The study established that hotels use the Internet specifically to market their goods and services, receive reservations, and evaluate customer complaints and suggestions. Ansah, et al. (2012) in a related study found that hotels use ICT innovatively as a means of sharing information across chain hotels. They further put across that, computers were used by hotels purposely for typing documents, keeping and retrieving information as well as sending and receiving information.

## **METHODOLOGY**

### **Study Area**

The study area for this research was Kumasi Metropolitan area in Ghana. Kumasi is located in the Ashanti Region of Ghana (Saliu, 2016). The Metropolitan area shares boundaries with Atwima District, Kwabre East District and Ejisu-Juaben Municipality (Rufai, 2014).

An imaginary triangle of the Kumasi, Cape Coast and Accra which are the three points of intersection is described as the Tourism Triangle in Ghana (Boakye, 2010). Kumasi is one of the most industrialized cities with many tourist attractions. It is a hub of heritage and culture some of which are; the Kumasi Zoological Gardens, Komfo Anokye Sword Site, Manhyia Palace, Kejetia Market, Centre for National Cultural and Armed Forces Museum (Adam, 2012). The Kumasi Metropolis has 57 star-rated hotels (Ghana Tourism Authority, 2015). The number of star-rated hotels is depicted in Table 1.

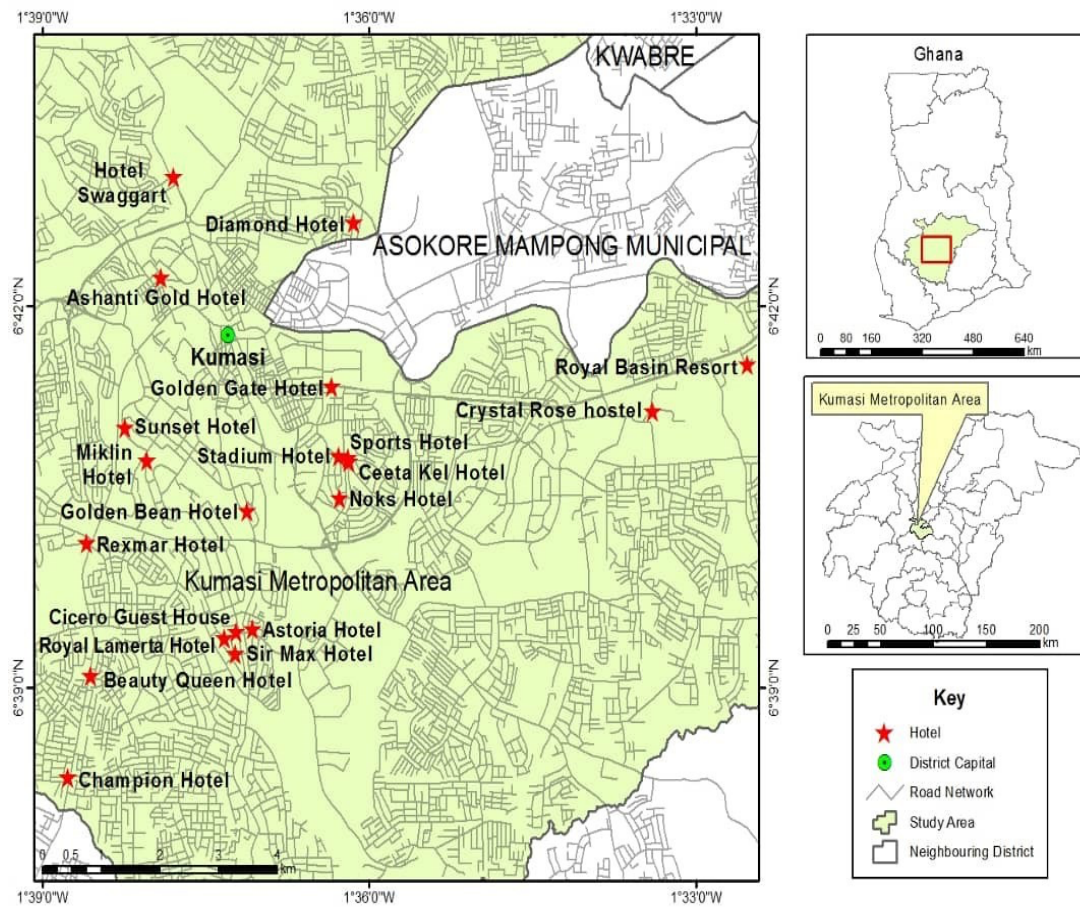


Figure 1: Map Showing Star-rated Hotels in the Kumasi Metropolis.

Source: Cartographic Unit of University of Cape Coast, (2019).

Table 1: Number of Star-Rated Hotels within Kumasi Metropolis

Star-Rating	Number of Hotels
Four	1
Three	7
Two	26
One	23
Total	57

Source: Ghana Tourism Authority, (2020).

**Study Design**

The study adopted a cross-sectional design which enabled the researcher to collect data on a one-time basis. The qualitative approach which aims at

bringing out the meaning and perceptions of respondents in relation to a phenomenon under study was employed for the study (Berger, 2015). The qualitative approach was deemed appropriate for the study since it helped the researcher to interview managers concerning their informed decision-making about the use of various forms of ICTs in hotels within the study area. Qualitative research helps to explain complex issues, within the natural settings of the research phenomenon and is also the best in the representation of views and perceptions of respondents in a study (Opoku et.al., 2016).

**Study Population and Sample**

The study targeted 57 hotel managers. Managers were targeted because they are in charge of



operations and also have an influence on the use of ICT and can therefore give valid information concerning the topic under study. Purposive and convenient sampling approaches were used to select the hotel managers for the study. Out of the 57 hotel managers, 50 were used for the study. This was because they were the only managers who availed themselves to be interviewed.

### Research Instrument

A semi-structured interview guide was used to collect data from respondents. Items in the interview guide were grouped into four namely, the forms of ICTs used by the hotels, managers' perceptions of the relevance of innovative use of ICT and reasons for which the hotels use ICT innovatively. The last section was on sociodemographic characteristics of respondents.

### Data and Analysis

Consent was sought from managers and the intention for the data collection was explained to each of them. Interviews were scheduled at times that were convenient to the managers. The maximum number of interviews conducted in a day was three and the minimum was two. The average duration for an interview was between 40-50 minutes. In all, interviews were conducted within three weeks.

Data from the study was analyzed using thematic analysis. Raw data from indepth interviews were transcribed, coded manually and grouped under two themes taking into consideration the objectives of the study. Data derived from interviews in relation to the main themes were further classified into sub-themes as indicated in the analysis. The researcher read through the extracts interconnected to the codes to certify that they were in line with the themes. In order to establish the validity and reliability of the coding, the peer briefing technique was used.

According to Nowell et al. (2017), data within themes should fit together meaningfully. Some tutors of one of the Colleges of Education, with masters degrees read through the transcripts and also listened to the audio record of the interview and compared the codes to the themes. It was established that the codes collaborate with themes.

## RESULTS AND DISCUSSION

### Socio-Demographic Characteristics of Respondents (n=50)

Table 2 shows that the majority of the respondents were male. This may be because hotel work is tedious and involving hence most women shy away from it as they may not have adequate time to cater for their family. With regards to the age of respondents, half were between the ages of 20-30. It could be deduced that these categories of employees are at their youthful age.

**Table 3: Socio-Demographic Characteristics of Respondents (n=50)**

Characteristics	Number of respondents
<i>Gender</i>	
Male	30
Female	20
<i>Age of respondent</i>	
20-30	25
30-40	15
40-50	10
<i>Educational level</i>	
Higher National Diploma	12
Vocational Training	18
University Degree	20
<i>Nationality</i>	
Ghanaian	50
<i>Employment tenure</i>	
Below 5 years	13
6-10years	20
Above 10 years	17

In terms of educational level, those with university degrees were in the majority. Concerning,



employment tenure, the majority of the respondents had been at their post for between six to ten years.

### **Relevance of Innovative Use of ICT in Hotel**

#### **Service Delivery**

The main idea behind this objective was to assess managers' opinions as to whether the innovative use of ICT is relevant in hotel service delivery. All the hotel managers interviewed confirmed that the innovative use of ICT in hotel service delivery is indeed very relevant. The themes emanating from the responses were accessibility of information, improvement of communication, making work easier and improving productivity.

#### **Accessibility of information**

Managers were of the view that access to information in the hotel business is an important aspect of service provided by hotels to satisfy and sustain customers (Martínez, et al., 2019). Further, managers based their understanding of access to information not only on the benefit to hotel guests but also on other important roles to the hotel establishment (Sørensen, & Jensen, 2015).

One of the managers noted that:

*Gone are the days when guests just walk into hotels based on word of mouth or experience as a result of repeat visits. With the latest development of ICT, guests get access to information about hotels on their websites. Since our services are intangible, it is necessary we keep in touch with our guests, and get them informed about things they should know so that they are not turned away from us and snatched by our competitors (41-year-old manager of a 3- star hotel).*

Another respondent observed that:

*In the past, customers of hotels had to order catalogues or travel to physical facilities before they could compare prices,*

*services and attributes. Today, the innovative use of ICT has enabled our hotel to introduce electronic catalogues and web pages for guests with updated information in relation to services and prices. Our guests are always pleased to retrieve information from our website wherever they want and request for clarification (38 -year-old manageress of a 3- star hotel).*

One manager remarked that

*White men lodged in our hotel a lot until somewhere last two years when a white man who came to lodge in the hotel saw a cockroach in his room. All of a sudden, the number of whites visiting the hotel reduced drastically. But thank God I was browsing on my phone when I came across this information on the net that our rooms are full of cockroaches hence, even access to our website was blocked. I will say, had it not been for ICT I wouldn't have come across such information so easily. Then after, employees have been educated to always be cautious of carrying out their daily activities especially when it comes to cleaning of our rooms and other surrounding areas (36 - year-old manager of a 2- star hotel).*

In the hotel industry, information services like websites and the internet, for example, aid in sharing and disseminating information to guests as well as staff of the hotel. This relates to the study of Law, et al., (2015) whose findings established that internet technology in the distribution of tourism products of utmost importance. Information helps these guests or customers at least to have a fair idea about services available at the hotels. Guests are, therefore, able to make choices to suit their standards and do not become disappointed upon reaching hotel premises to reduce the risk involved in the



intangibility of service. This affirms the study of Berezina, et al., (2016), where it was revealed that satisfied hotel customers willingly recommend hotels to others based on the hotel's intangibility. Further, it is of utmost importance that guests have a fair idea of the services provided by a hotel since services in hotels are intangible. This aligns with the studies of (Issahaku, 2012; Mupfiga, 2015), who postulated that individuals and organizations use ICT as an informative channel to create the awareness of products and services they provide. Nonetheless, hotel staff are well informed in advance of emergencies and other activities aside their normal work schedules which are affirmed in the Technology, Organization and Environmental Framework (Balsiger, et. al., 2023). Similarly, as revealed in the literature, management of hotels can get feedback from either guests directly or from the website, internet or any other form of ICT concerning their (guests) satisfaction and dissatisfaction towards services provided as stated in the works of (Ansah et.al, 2012; Mokhtarian, et.al., 2017).

### **Improves communication**

Interactions with managers revealed further that good communication is one of the cardinal reasons hotels innovatively use ICT in service delivery. They were also of the view that innovative use of ICT is an effective channel of communication with suppliers and guests, and thus enhances efficiency and effectiveness, unlike the manual system that delays communication so much.

In this vein, one respondent highlighted that:

*Initially, the hotel relied on a manual system where we used only the telephone and sent documents by posting which caused a lot of delays. In order to prevent this occurrence, the hotel now uses a website and e-mail.*

*Presently we communicate with our suppliers and guests online and we are aware of when new stock will be brought so we make necessary arrangements to receive them (26 -year- old manageress of a 2- star hotel).*

Similarly, this view is captured in the following text from one of the managers:

*We have purposefully used ICT to aid easy communication across departments within the hotel and, reach out to sister hotels. ICT actually facilitates easy access to our guests. We send wish well messages to our loyal guests as a way of building cordial relationships so they don't switch to sister hotels (36- year-old manager of a 3- star hotel).*

Effective communication in hotel management attracts guests and the public to the services rendered in hotels. On the other hand, communication with sister hotels is easier and awareness is created towards the future. This result relates to the literature of Abraham et al. (2015) which established using ICTs to facilitate two-way communication between the hotel and its stakeholders so, they influence hotel promotions and sales. Also, Law et al. (2019) and Mokhtarian, et.al. (2017) argue in their study that, improvement in communication aids fruitful discussion during reservation thereby eliminating reservation errors that can create a negative guest experience.

### **Makes work easier**

Another relevance of the innovative use of ICT that the interviews revealed relates to how innovative use of ICT makes hotel service delivery easier. It was revealed that the innovative utilization of ICT in hotel service delivery has significantly replaced works that were done manually.

In this vein, a manager remarked that:





*Using ICT innovatively is very relevant in the hotel business because it helps employees carry out their duties easily. For instance, preparing vouchers, check-in and check-out of guests as well as billing with the computers is very easy, unlike the manual system where employees had to be extra careful as the process is difficult. The manual system takes a lot of time and energy to accomplish. Even the process sometimes is full of mistakes. With the use of computers, some mistakes are underlined which draws the attention of the operator (27 –years-old manager of a 1-star hotel).*

Yet another respondent added that:

*ICT helps us to manage the hotel's operation easily. Without ICT, work is very difficult. For instance, if the hotel has to run photocopies for guests during conferences, it is easier since the hotel owns a photocopier. The hotel does not go through stress and uses other resources like time, energy and money for photocopies outside its premises. We are also sure we keep such information confidential for our customers (30-year- old manageress of a 2- star hotel).*

Hotel reservation activities such as billing, payment, and check-in and check-out become easy to deal with using ICT innovatively. This confirms the study of Han, et al., (2021) who were of the view that the hospitality industry's core value of service delivery has been significantly influenced by smart technologies. Moreover, Buhalis, & Moldavska, (2022) unearth that the more employees make use of ICT innovatively, the more it becomes user-friendly. In addition, Bayram, (2020), stated that employees accept devices that

make their work easier as errors are reduced during the process of task execution.

### **Improves productivity**

Interviews held with managers further revealed maximizing productivity is what the hotel industry strives for. They were of the view that the innovative use of ICT serves as a major catalyst for improving hotel productivity (Schaufeli, 2017). Companies, including hotels, that use advanced ICT innovatively increase productivity and profitability compared to non-ICT users. These were confirmed in the statement of one respondent who remarked that:

*The integration of ICT in the work we do as service providers increases employees' productivity. I have realized that subordinates work better with ICT tools. They are able to cater for quite a number of guests when our computers are in good condition. With ICT tools and power available, the volume of work and customer turnout is great. (27 -year- old- manager of a 1-star hotel).*

Managers explained that in the absence of ICT tools, customer turnout and productivity are relatively low. One manager lamented that:

*Because of the inconsistent power supply nowadays, we cannot use our computers throughout working hours. As a result, our hotel has not made any progress in the work we do. Employees who need a source of electricity to perform their duties come to work and sit idle as if they have nothing to do. Hmmm my sister, customers also do not turn out but we hope things will turn around for better productivity. (28- year- old manager of 1star hotel).*



As stated by Schaufeli, (2017), companies, including hotels, that use advanced ICT innovatively increase productivity and profitability compared to non-ICT users. Another school of thought, Abd Rahman et al., (2021), confirms that using ICT innovatively enhances productivity since employees only feed machine systems with information and the processing is done by the machine being used. Moreso, the procedure of executing tasks is accelerated thereby increasing productivity. This is affirmed in the work of Daria (2016), who opines that ICT has a quantifiable influence on hotel productivity since it enhances employees' performance and facilitates management procedures. Likewise, the organizational factors of a hotel such as management support as cited in the organization, technology and environmental framework by showing the interaction between their subordinates boosts the morale of employees whereby they put in their best which in effect increases productivity (Kaydos, 2020).

### **Reasons for Innovative Utilization of ICT in Hotel Services Delivery**

This aspect of the study also sought to examine the reasons why hotels in the Kumasi Metropolis innovatively use ICT in their service delivery. Marketing, competitive advantage and quality of service were the themes that emerged from the responses.

#### **Marketing**

Hotel managers revealed that marketing hotel products was one main reason for the innovative use of ICT in service delivery. They argued that marketing enables hotels to achieve their target of advertising and promoting services offered to their clients.

For instance, one manager stated:

*ICT serves as an essential marketing tool in the hotel business. With the use of ICT tools like the television, the website and radio, our hotel has been able to market our products by creating avenues for customers on our website to value our services. As we market our services, guests send us their complaints which we are able to handle by providing services that satisfy them (guests) (22-year-old manager of a 1-star hotel).*

Similarly, another respondent indicated that:

*ICT is a fundamental tool used to market hospitality services. Specifically, our hotel uses radio and television stations to market our products and services. Formerly, guests walk to the hotel without knowing much about the hotel hence, some turn away when they are not satisfied with our facilities and services. Now due to the marketing strategies and innovative use of ICT, we are able to educate our clients before their visit to the hotel. (34-year-old manager of a 2-star hotel).*

Marketing is the means by which business entities strive to find strategies to sell out their products to potential customers (Armstrong, et al.,2014). The hotel industry is not exceptional in this phenomenon. With the modern trend of adoption and use of ICT, hotels are able to attract customers to their establishments. ICTs such as online reservation systems, teleconferencing facilities, automated teller machines, Skype MySpace, websites, e-mail and the internet used by hotels, create an avenue for customers to become aware of products and services hotels have on sale. Gupta, (2019), and this helps to eliminate disappointments of guests. Mupfiga (2015) asserted



that ICT is used by organizations to promote their products and services to potential customers.

### Competitive advantage

Managers opine that the emergence of ICT has made the world a global village and further explained that, new hotels all over the metropolis have developed strategies to stand at a competitive advantage. The managers argued that hotels which do not make good use of ICT to the expectation of guests lose even their loyal customers to hotels with sophisticated ICT facilities.

A respondent observed:

*ICT has made the world and the hotel industry look like a small village where members of the village know each other very well. The same applies to hotels that use ICT to get into contact with their guests. These guests become part of such hotels and will hardly lodge in any other hotel. So, it is important that all hotels use ICT if the hotels want to be able to compete with sister hotels. In fact, work in the hotel industry has become very competitive here in Kumasi since hotels are many in the city. If you do not adapt to the current trend you will be left behind. (32 –year-old manager of a 2-star hotel).*

Again, another interviewee added her voice that:

*Due to the latest developments in ICT worldwide, every hotel must endeavour to adopt and use ICT in order not to be left behind. Some years back, we had only telephones and televisions in our hotels. This caused us a lot because our sister hotels always had more guests on their premises than we had. This prompted us to also adopt new forms of ICT which has*

*enabled our business to boost. (29-year-old- manageress of a 1-star hotel).*

It is established in the literature that extensive management of ICTs helps to build a competitive advantage by maintaining price leadership in a market and differentiating products and services (Akaba, 2015). In effect, most hotels have switched to innovative use of ICT to compete with growing competition in the hotel sector (Khan, & Hossain, 2018).

### Quality service

Further discussion with managers revealed that quality of service is of utmost importance in the hotel business. Besides, hotels encounter high demand from guests since the requirement for quality grows with an increased use of hotels' services.

A respondent observed:

*We try as much as possible to maintain our guests by providing them with quality services. Since the guest might have finished payment for a service to be rendered, we ensure they (guests) are provided with the best quality of service. We do this by keeping a clean environment, our décor is of standard, and there is consistency in the supply of ICT facilities for guests' use. Also, front office employees with the aid of computers attend to guests promptly and handle guests' complaints tactfully while complaints which are above their control are referred to a higher authority. (25-year-old-manager of a 1-star hotel).*

On the contrary, an interviewee lamented:

*Oh! My sister, it is a problem having loyal customers of late. We are surrounded by hotels of higher standards who provide the*



*same services. Even though our rates are lower, some of our guests have started switching to these sister hotels as we are not able to meet their demands. I mean because we don't have the facilities those hotels have and can therefore not provide the kind of service guests demand. We are thinking of creating a website and internet so we have contact with our customers online (27-year-old-manager of a 2-star hotel).*

The loyalty of existing customers is more important. Likewise, the attraction of new customers is more crucial than retaining existing customers in any kind of business (Sharma, & Srivastava, 2018; Oliveras-Villanueva, et al., 2020; Mmutle, & Shonhe, 2017). The consequences of neglect of quality of service may impact the hotel's business objectives, and influence customers' purchasing behaviour, since customers select among hotels' service offerings like accommodation, facilities, location, and visiting season, compare and consider quality as a differentiating feature as highlighted by Rhee and Yang (2015). In a related study, it was revealed that messages sent via multimedia attract customers. Also, ICT use in hotels allows hoteliers to establish recognition for guests' profiles and these enable them to improve customised services (Chevers, 2015; & Neuhofer, et al, 2015).

Unfortunately, faster communication associated with the use of ICT in hotels can be detrimental (Gonzalez, et.al., 2020) as employees in various hotels quickly learn about the better working conditions their colleagues enjoy and ask for the same conditions. Employer-employee relations may deteriorate when employers fail to grant those demands for similar or better conditions. This may therefore cause a fall in productivity.

Skilled and experienced workers may resign, forcing the hotel to employ new and probably inexperienced people (Mohsin, Lengler, & Kumar, 2013). This leads to high labour turnover. Costs of on-the-job training may increase. Hotels may incur extra costs to acquire more ICT tools in an attempt to reduce the number of employees and to avoid higher wage and salary demands (Ivanov, & Webster, 2019). Costs of maintenance may also rise. Yet, hotels which are unable to acquire and use ICT for service delivery and maintain their employees will lag behind their competitors and eventually be out of business. The implication of findings relating to reasons for the innovative use of ICT in hotel service implies that hotels that were able to attain their target must endeavour to remain in business. To this effect, there is the need for these hotels to consistently provide services to meet guests' standards (Purohit, & Purohit, 2013).

On the other hand, hotels which were unable to meet their target must adopt the necessary ICT facilities and collaborate with their employees by giving them the required training to equip them with the requisite skills so that they will be able to provide guests with the required services. Another implication of the study relates to the fact that face-to-face interaction which is an important aspect of the hospitality service will be eliminated if every single hotel decides to adopt innovative use of ICT in all aspects of service delivery (Brandon-Jones, Lewis, Verma, & Walsman, 2016).

## **CONCLUSION AND RECOMMENDATION**

All managers who participated in the study had employed ICT innovatively in the service delivery processes in their hotels. Accessibility of information, improved communication, ease of work, improved productivity, marketing, competitive advantage and quality of service, were



some of the reasons behind hotels' innovative use of ICT in service delivery in the Kumasi Metropolis. This means that managers of hotels have noticed the important role ICT plays in service delivery in the hotel business and therefore have integrated ICT as a tool towards achieving organizational objectives. The result reinforces the assertion that perceived usefulness motivates individuals and business entities to adopt and use ICT to provide services.

It is recommended that hotels should invest in ICT since it helps to improve productivity, accessibility of information, and communication and makes work easier as well as assisting with marketing, improving competitive advantage and quality of service. The innovative use of ICT also helps to improve employer-employee relations. When employers fail, for any reason, to grant employees' demands for similar or better conditions as that provided to employees of competing hotels, that may cause a fall in productivity. Hotel managers should therefore provide their employees with the best conditions of service to boost their morale, reduce the rate of labour turnover and improve the level of productivity. Managers of hotels that were able to achieve the target of using ICT should maintain such standards and continue to motivate their employees to work with enthusiasm so that they do not lose their loyal customers to other hotels.

### Limitations and Future Research

Generalization of the results may be limited as the result pertains to only hotels in the Kumasi Metropolis. Similarly, the study did not emphasize counterfactuals as a basis for causal inference since the study was descriptive. Based on the limitations and findings of the study, a detailed study on hotels' innovative utilization of information and communication technology in a wider study area is

deemed appropriate. Further, future studies should seek to validate the results of this study in a cross-sectional survey employing a larger sample size.

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