Adoption of E-Commerce by Zimbabwean Hotels: An Empirical Study

Nyasha Caroline Moyo
Women's University in Africa
Harare, Zimbabwe
nycamoyo@gmail.com

Sam Takavarasha Jr
Women's University in Africa
Harare, Zimbabwe
stjnr1@gmail.com , stakavarasha@wua.ac.zw

Abstract

This paper uses Technology Organisation Environment framework to investigate the adoption of e-commerce by Zimbabwe's hotel industry. Adoption of e-commerce in the hospitality industry has been found by other studies to vary in different locations and to be influenced by factors that also tend to vary by location. This makes it difficult for findings to be generalised across different domains. To enable informed investment and policymaking decision it is necessary to conduct a country-specific enquiry into the factors that influence e-commerce adoption in a sector. This paper explores e-commerce adoption in the wider context of e-readiness in Zimbabwe's travel and hospitality sector. A qualitative methodology under an interpretivist philosophy was used for this research and findings show that the inhibitors to e-commerce adoption were mainly at organisational level because of the lack of management support, organisational structure, organisational support and organisational readiness. On the other hand, the highest number of enablers were environmental factors that were due to customer and supplier expectation as well as competitive pressure from other hotels.

Keywords
E-commerce adoption, Hospitality industry, Developing country, Zimbabwe, Tourism, Technology Organisation Environment

1. Introduction
The internet has disrupted and revolutionised the way that business is conducted and how people socialise. This has also happened across industries and countries, disrupting processes, practices, systems and procedures across the business value chain (Sulvankov, 2010). Adoption e-commerce in the hospitality industry is expected to take the lead ahead of other sectors in the developing world because international visitors remain its key target market. Other empirical works show that target market influences e-commerce adoption. The need to reach such distant markets naturally demands the use of a cheap and efficient marketing platform as the internet (Sahadev and Islam, 2005). As a result, a growing body of literature on the adoption of e-commerce in developing countries is exploring this phenomenon (Nwakanma, Ubani, Asiegbu and Nwokonkwo, 2014; Obonyo, Kabona, and Okeyo, 2016; Chevers, and Spencer, 2017).

While internet use has increased in the travel and tourism industry, empirical evidence shows that business models of current EC adopters in DCs have not been redesigned to adapt to e-commerce strategy. There is a tendency among enterprises to use the internet to automate their traditional ways of doing business instead of business process re-engineering (Bhaskar, 2017). Zimbabwe Tourism Authority (2018) states that the hospitality sector provided 1.386 billion to the economy and 7.2 % of jobs. The internet-enabled e-commerce is a fast, convenient channel to sell the

6483 rooms available for sale in Zimbabwe on a daily basis and ultimately can have an effect on room occupancy percentages, which stood at 53% for 2018.

This study explores the adoption of e-commerce as a business and decision-making tool within the hospitality sector of Zimbabwe. It is premised on the assumption that e-commerce represents a channel by which the hospitality sector may market their services and conduct business. The Zimbabwean case was selected as a domain of study because its diversity of challenges and opportunities typify developing countries. It has Africa's highest literacy level (Dardley, 2003), clement weather, large wildlife population and one of the world's seven natural wonders. However, challenges like cyclic droughts, sanctions, high inflation and lack of foreign currency reserves affect enterprises' ability to adopt technology. This happens against the government's intention to build an upper middle-income economy by 2030 (Agenda 2030).

While it is often claimed that business in such depressed economies are more preoccupied with survival than innovation, it must also be argued that economic hardship may inspire the need for innovation. These conflicting views only save to make Zimbabwe an interesting domain for this study. In the literature on e-commerce in the hotel industry, we find no studies on Zimbabwe.

1.1 Objectives and research Questions: The objective of this study is to investigate how the technological, organisational and environmental factors affect the adoption of e-commerce by Zimbabwean hotels. This is achieved by answering two research questions. Firstly, What factors influence the adoption of e-commerce by Zimbabwean hotels? Secondly: How does the advent of e-commerce influence business strategy in Zimbabwe's hospitality industry?

2. Literature Review

Various studies show that the adoption of ICTs contribute to the growth of organisations (Duffy, 2010; Sirirak, Islam, and Khang,2011; Eze, 2013; Mihalič and Buhalis, 2013;). This is mainly due to the ability of ICTs to foster automation, efficiency and reduce inaccuracy. The hospitality industry has mainly benefited from the ability to conduct e-commerce with clients in distant countries. The utility of ICTs to business has increased with developments in technologies. This includes the use of AI, social media and big data analytics, for services like checking in and out and delivery robots (Setha, Tripathib, and Yadavc, 2020). The hospitality industry has harnessed the utility of internet-based applications like price comparison engines, Shop BOTs and Online Behavioral Advertising for sell-side supply chain activities.

The logic behind the adoption of ICTs in organisations like hotels has been studied by the use of several adoption models. These have assisted the Information Systems (IS) scholars and to practitioners to propose the models that best fit their situations.

2.1 The Zimbabwean Case

Zimbabwe is a Subsaharan Africa country which is endowed with a clement climate and natural resources that support a thriving primary tourism sector. To cater for the primary tourism sector of wildlife, heritage sites and a natural wonder of the world, a secondary tourism sector that includes hotel industry. Zimbabwe has an internet penetration of 57% and a mobile penetration of 87.8 % (Potraz, 2019). While the mobile penetration is ideal, internet penetration is less encouraging to businesses that wish to rely on local clientele. This does not affect the use of ICTs for conducting business with international clients. To facilitate the adoption the government of Zimbabwe has introduced a raft of measures that include e-Readiness Survey(2005), Information and Communication Technology (ICT) National Policy of 2015, National ICT policy framework (2006) and the Cyber Security and Data Protection (2019). The sets the scene for the adoption of ICT based technologies by Zimbabwe's hospitality sector.

Extent literature shows that there at least about six models that dominate hotel adoption research. These include Azjen & Fishbein's (1980) Theory of Reasoned Action (TRA), Azjen's (1991) Theory of Planned Behaviour, Davis' (1989) Technology Acceptance Model (TAM), as well as Venkatesh, Morris and Davis' (2003) Unified Theory of Acceptance and Use of Technology (UTAUT). Although the contributions of these models to e-commerce adoption are appreciated, TAM as conceptualised by Davis in 1989, describes how users adopt to new technology innovation. The theory underpins that the perception mainly of perceived usefulness and ease of use determine the adoption of technology. Turner at el (2008) used TAM in Algeria tourism sector. The major short-comings according to Nistor et.

al., (2014) is that it considers the perceived usefulness as the indictor without considering the actual use of the technology. Building on Parker and Cattleman (2009), Abdulhakem and Edwards (2017) argue that the problem is that they do not consider the contextual factors that affect adoption. They further posit that developing countries have complex issues such as infrastructural issues that have a greater significance to the adoption of e-commerce than acceptance from an individualistic point of view (Abdulhakem and Edwards, 2017).

Tornatzky and Fletcher's (1990) TOE is believed to be the theoretical framework that models how users come to a decision to adopt new technology. Wazzan at el (2017) purports the model suggests that adoption is characterised by variables within technological, organisational and environmental realms. Technological imperatives include the internal and external technologies that are relevant to the firm while the organisational variables include the firm-specific characteristics and the resources that determine its capacity to explore and exploit ICT innovations. Environmental imperatives conceptualise the external factors that influence the organisation's effectiveness. This includes, macroeconomic environment, competition, suppliers as well as government legislation.
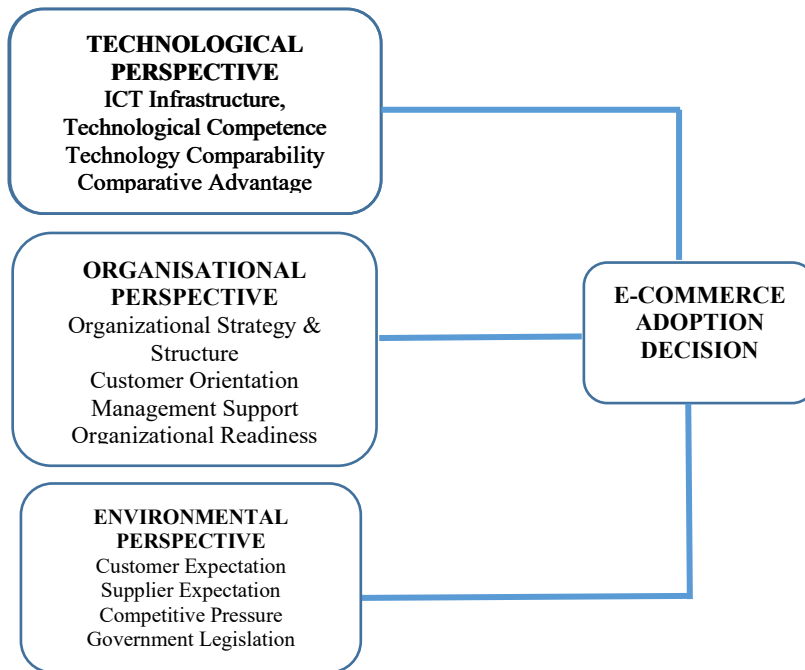

Figure 1. T.O.E Framework. Adapted from Tornatzky & Fletcher (1990)

This paper utilised TOE, which explores the effects of the three group characteristics namely technology, organisation and environment in the adoption of e-commerce in the hotel industry in Zimbabwe by using data collected from six hotels in Harare. Our reason for adopting TOE is that we expect the factors that determine the adoption of e-commerce to be within TOE tripod framework. Humphrey at el (2003) alludes to the importance of technical, financial and organisational structures (which are the main components of this framework) as key issues that must be considered by developing countries e-readiness studies.
Secondly, the reason for choosing TOE was based on the ability to enable environmental analysis in the decision making process. Chau and Tam (1997) expound that TOE framework is useful as it looks at the context of e-commerce adoption process. The management process is cornered on the ability to make decisions in a fluid macro and microenvironment where customer's preferences and tastes are also constantly changing. TOE enables technological, organisational and environmental factors to be considered in adoption decision making. Thus adoption decisions will be different by organisation, by sector and by country. As inhibitors in one context can be an enabler in another context.
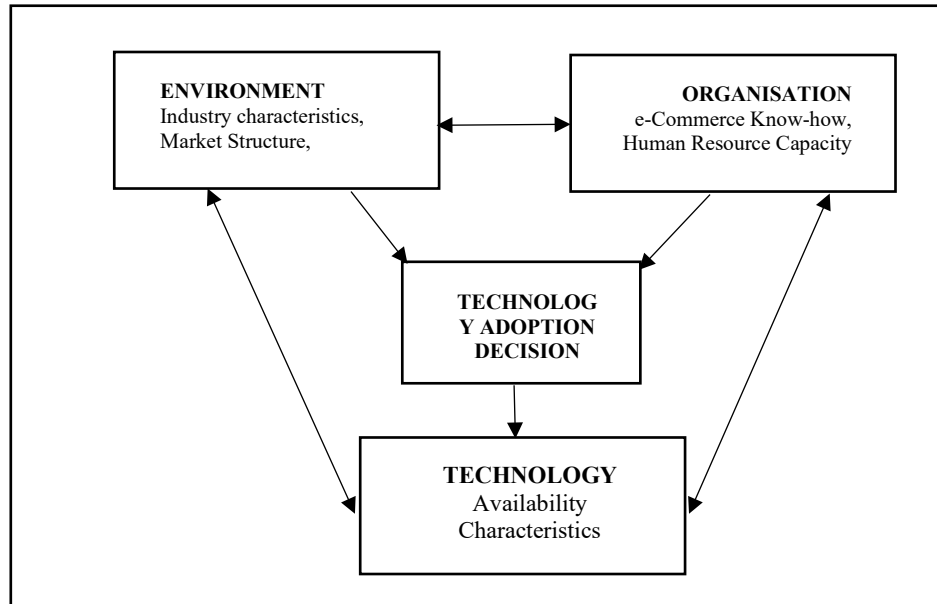
Figure 2. T.O.E Framework. Source Tornatzky & Fletcher (1990)

2.2   Technology- Organisation-Environment Framework

Tornatzky and Fleischer's (1990) TOE framework comprised three separate contexts that influence the process by which an individual business adopts and implements technological innovations, namely technological context, organizational context and environmental context. Technological context looks into the internal and external technologies that are relevant to the organization. Organizational factors include organizational attributes such as its size, centralization, formalization and quality of its human resources. Resources available internally and the complexity of the organization's managerial structure. External environment includes the industry, an organization is in, its competitors, and accessibility to the resources supplied by others (Shen et al., 2004).

Sahadev and Islam (2005) operationalized the T-O-E by producing a set of variables that are peculiar to the tourism industry as follows

Table 1. TOE Individual elements

Technology	Organisation	Environment
ICT infrastructure	Organisation strategy / structure	Customer expectation
Technology competence	Management support	Supplier/partner expectation
Technology compatibility	Customer orientation	Competitive pressure
Comparative Advantage	Organisational e-readiness	Government support

2.3 Technology context

A key variable of TOE is the technological context. It describes the internal and the external technologies that are considered relevant to the organisation (Tornatzky and Fleischer,1990). The internal technologies are the ones (technologies and practices) that the firm has already embraced while the external technologies that are available to it on the market at large. The technological context is therefore meant to unpack how the technological characteristics may influence the adoption of technology.

Potraz (2018) reports that the Zimbabwe internet penetration level was 58.9% which is 7% higher than the southern African average penetration rates. World stat report (2018) places Europe as the leader with 93% penetration and generally the European region having the highest penetration rate. Globally the world penetration rates are 65%.
Internet penetration is lower in developing countries mainly due to the high infrastructural costs. With many developing countries like Zimbabwe suffering from economic problems and lack of foreign currency thus internet infrastructure is also poor. The good news for hospitality is that the local penetration rates are not as important as international penetration rates as hospitality thrives with access to international markets. For this paper under technology context, we studied the following elements ICT infrastructure, technology competence e-commerce know-how.

2.4 ICT infrastructure
If we can go to our digital TV example again. Infrastructure is what gives us access to certain e-commerce privileges. On the digital TV a subscriber has to have smartphones, computers, multiple televisions, decoder, Wi-Fi connection to be able to fully enjoy a full bouquet of Multichoice DSTv. For hotels to enjoy e-commerce they must have internet access 24/7, hardware and software, there must be bots (artificial intelligence) to respond to clients requests for accommodation at 12 midnight, there must be adequate stock of inventories to sell (so a hotel with 5 rooms might not enjoy all the benefits as much a hotel with 30+ rooms).

Digitalisation is purported by Ristova and Dimtrov (2019) to refer to changes associated with the application of digital technology in all aspects of human society. A general principle as stated by Dimitrov et al (2019) is that the bigger the hotel the more the services that can use technologies. Whilst the technologies can be either to assist management and operations the client-orientated technologies are to improve satisfaction, performance and functionality of hotel staff. The room oriented technologies are to improve safety, comfort and convenience of the guest. Keyless room entry such as that is applied at the Hiltons, Hyatt, Intercontinental and Starwood hotels from 2014 (Dimititrov et al, 2019). Infrastructure costs are always expensive and might be bought over more than one financial year. High costs of investment in terms of the technology required and the equipment was stated as one of the challenges facing the hospitality industry. Fortunately for Zimbabwe, the budget for 2020 has given a rebate to the hospitality industry for capital expenditure to enable growth within this section.
In Egypt, Abou-Shouk, Lim, & Megicks (2013) pointed to the barriers included poor infrastructure and a lack of computer literacy as an inhibitor to e-commerce adoption.

2.5 Technological competence
Technological competences cover the question of where the current technology is being adequately being utilised. ICT resources of an enterprise could impact on the intensity of e-commerce usage. Sahadev and Islam, (2005) technological competence influences e-commerce adoption by enterprise Zhu et al, (2002). The ability to keep an eye on new technological development, to understand how they could benefit them and to assimilate them is an adoption driver known as organisational learning ability.It is also an explorative radical innovation (Heeks, 2006) and Alghamdi (2018).

2.6 Technology compatibility
Technological resources is not a snapshot of current status but rather is an evolving factor that is determined by its relationship to labour skill and business model of an enterprise. Both of these do not reach maturity the day that new technology is commissioned. Matopoulos et al. (2009) found that operational compatibility was of higher significance than cost. We assess what ICT they have, what have they just acquired, what they acquired before that and what are they planning in the short and in the long term. That way the researcher hopes to establish a valid relationship between ICT resource and e-commerce usage without being oblivious of the evolution of its use and learning curve associated with it. Hence, the assurance of cross-technology compatibility should play a crucial role in determining ICT initial and continued adoption decisions. Matopolous (2009) further states that e-commerce requires both technical and organisational compatibility. Technical compatibility refers to the integration with existing systems and this requires careful planning Leunga at el (2015) cross-technology, means if one type of technology or gadget is compatible with another one, both have a higher chance to be chosen and installed.

2.7 Comparative Advantage

In the hospitality context, the major benefits of technology have been increased employee functionality, performance, enabling business coordination and communication with business partners and suppliers enhancing customer's satisfaction and increasing market share Karadagi, Cobanoglu and Dickson (2009). They further acknowledge the indirect and direct benefits that enable greater adoption of e-commerce. Stating in cases where e-commerce can be integrated into the daily business and systems results in increased e-commerce adoption resulting in cross-technology efficiencies.

2.8 Organisational context
The organisational context describes the resources that are at the organisation's disposal in its endeavour to realise the the adoption and operationalisation of novel technologies. According to Leung(2015), the benefits of technology can only be realised in the firm has the capacity to foster the adoption process. These characteristics of the organisation include organisational readiness, management support, customer orientation and organisational strategy.

NcNulin (2004) sates that the new market spaces require not only changes in how we communicate with the market but different organising principles, management and compensation schemes and organisational structures.

2.8.1 Management support
Cope and Wadell (2001) present management support into four categories which influence the e-commerce capabilities of an organisation. These include the collaborative, consultative, directive and coercive. The collaborative category referes to the general involvement of workers in the formulation of the strategies and techniques to achieve change. Consultative category, however refers to the extent to which employee input influences management's final decision. The directive refers to a situation where the management makes decisions while employees trust their decisions and are generally informed. Finally, the coercive form which represents a situation where management make decision with little or no consultation with employees. Management support is therefore key to the implementation of e-commerce strategy and business model.We contend that an organisation's innovative skills are continuously horned by the staff's involvement in e-commerce strategy formulation.

2.8.2 Organisational e-readiness
Leung (2017) states organisational readiness into two financial and technological. Individual hotels have limited financial resources at their disposal normally the net profit after the expenses and repartition to the holding company. Other empirical work on organisational issues found that scope of a hotel's activities encourages adoption due to the need to integrate the activities (Hoontrakul and Sahadev, 2005). Customer expectation, referred to in other literature as customer readiness was found to be a motivator for hotels which wish to access customer in markets of high internet penetration. Hotel size is positively related to its intent to adopt this is because the size of a hotel is proportional to its resources and ability to invest in technology. Hotel age was found to be related to its ability to adopt e-commerce some researchers claim that older hotels are less physically able to accommodate infrastructure for new technology than newer ones. Enterprises that are competition orientated were found to be more inclined to adopt e-commerce this may be a tool to gain competitive urge or to ward off competition
To assess whether hotels acknowledge e-commerce potential to enable access to the global market we explore their organisational strategy, how long they have been pursuing it and whether they have any plans to adopt e-commerce business model. That way we hope to establish if their belief in EC potential is influencing organisational business strategy.

2.9 Environmental context
Environmental context represents the arena in which an organization conducts its business Leung (2017). In this paper under environment, we will look at the following customer expectation, competitive pressure, suppliers/ partner's expectation and governmental legislation. Generally the environmental elements have a way of pushing for e-commerce adoption more than the technological and organisational.

2.9.1 Customer expectation
Customer expectations is a potent adoption driver given the information age's power shift from seller to buyer Strauss and Frost (2001); Kotler, Jain and Maesincee, (2002), he states that the buyer roles are divided into five: the initiator, influencer, decider, purchaser and user. E-commerce dismantles this line of thinking by giving one person enough information, security, trust, ease and speed to undertake all the functions of the buyer into one person with the click of a button.

A customer-centric approach motivates a firm's propensity to adopt e-commerce. This is because they need to meet the customers' nee for prompt, accurate and personalised responses (Seybold et al. 1998; Alford, 2000; Yang et al. 2001). This is also because a third of travel industry is expected to be on the internet (Nelson survey, 2016). As a result a customer-centric firm is expected to comply with customer requirements.

2.9.2 Competitive pressure
The internet has nearly destroyed and threatened the existence of many industries Laudon and Laudon (2012). explain that in the second phase of internet existence it is placing pressure on hotels which are now facing transformational pressure. E-commerce remains a medium by which the hospitality sector in Zimbabwe can gain a competitive advantage. The breath of e-commerce offerings grows especially in travel Leunga (2017) states that competition orientation pressures organisations to jump on the e-commerce bandwagon to catch up with competitors. The first diagram below will utilise porter five forces to analyse the impact of the internet on the competitive forces and industry.

3. Methods
This study adopted a qualitative research method which consists of interviews and that follow an interview guide which was designed to investigate the factors of TOE. This was chosen for this study because it allows an explorative study on the adoption of e-commerce by Zimbabwean hotels.   Qualitative Study of Hotels in Harare - Zimbabwe. Qualitative research methodology was found to be appropriate for this situation because it enables the study to acquire an in-depth understanding of the subject behaviour, perception, values and experiences. Qualitative research was conducted under an interpretative approach which enabled us to study the players in the hotel industry in their natural settings to achieve a deeper understating. It also enabled us to interpret the adoption of e-commerce in terms of the meanings that the participants for the hospitality sector reported.

A total of 13 managers from six hotels were interviewed. Only hotels with active websites were the target population for this study. Harare area has ten such hotels, from which seven hotels that were visited by the researcher are the population of the study.
According to Valenzuela (2012)an active website is a website through which information can be exchanged and business transactions can be conducted. This includes the exchange of information through mail-back, online chats and answers customer concerns online. In view of time and resource limitations, this research investigated six hotels within the greater Harare catchment area.

Purposive sampling is a non-probability sampling technique where knowledge and professional standing are important elements. It was therefore used for selecting appropriate candidates from the hotels that have active websites. The need to reduce the number of participants in the study was meant to manage the cost and workload. It also made it possible to get high-quality information through in-depth interviewing. Taherdoost (2016) suggests that it is important for a researcher to strike a balance between expedience and a sample size that possess enough power to detect an association. Purposive (judgemental) sampling of hotel managers from seven hotels which were Africa Sun Limited-Monomatapa and Holiday Inn, Meikles, Bronte, Cresta-Oasis, Rainbow Group-Rainbow towers and Ambassador Hotel. The use of purposive sampling is supported by Aaker et al (2011), as they state that it enables the establishment from the sample, relevant characteristics which accurately reflect and are representatives of the group thus also insuring information has a probability of being accurate.
Purposive sampling technique was deemed relevant for reaching the participants who are using or are adopting e-commerce. The need to interview users that are conversant with the subject of e-commerce adoption This also includes the front office managers and information technology supervisors of the hotels.

Geographically, the study was conducted in Zimbabwe using Harare hotels. The study focused on the 2019 financial year. The reason for nominating Harare Hotels is that this area, according to ZTA holds 37% of the room inventory for 2019. Harare is the only geographic sector with occupancy of above 40% for the first half of 2019 ZTA (2019).
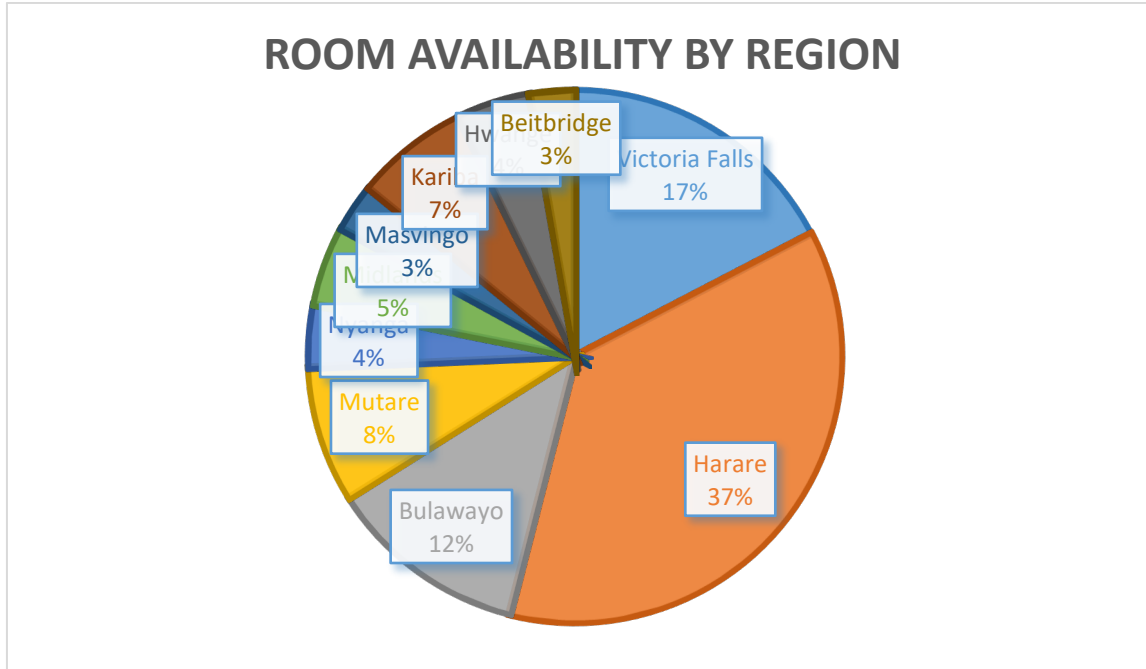
Fig 3. Room Availability by region in Zimbabwe ZTA Stats Report (2019)

The second reason is that Harare has the most diverse customer mix with 50% foreign tourists, 32.5% African and 17% local. Victoria Falls follows having 17% of the total room available but its clientele is mostly holiday tourists. Bulawayo's 12% has a customer mix of mostly transiting African customers and local and small proportion of international business. According to ZTA (2018), other regions are mostly local clients who opted for the Airbnb platform which is cheaper and negotiable.

4. Data Collection

A qualitative data collection using in-depth interviews was adopted because it allowed an explorative approach to the study. An explorative approach was deemed necessary because there was a need to ensure an indepth and holistic understanding of the determinants of e-commerce adoption by Zimbabwean hotels. The study also employed observation and secondary data analysis.

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representatives of the group thus also insuring information has a probability of being accurate.

Emails and phone calls requesting for interviews with the front office managers and the Information and Technology managers where sent out on the 2ⁿᵈ February, 2020. The structured interviews were held between 18ᵗʰ and 27ᵗʰ of February, 2020. The interviews were recorded using a smartphone voice recorder application and transcribed. The interviewees were supplied with the interview guide in advance in order to allow them to familiarise with the interview focus ahead of the interview sessions. This also provided an opportunity for them to consult with colleagues before the interview. We also found that the people that are authorised to communicate with researchers were not always familiar with every issue of concern to this researcher.

The data analysis approach followed Braun and Clarke's (2006) six principles and guidelines of thematic analysis. See Table 2 below.

Table 2. Stages of thematic analysis (Braun and Clarke, 2006)

Stages	Action	Description of the process

1	Familiarizing with data	The researcher became acquainted with the data by going through the whole data collection process, verbatim transcription of the interviews, field notes and developing theoretical memos (Braun and Clarke, 2006).
2	Generating initial codes	The researcher selected the relevant word, phrases, and sentences as basic themes to the probing questions.
3	Searching for themes	We collated codes and gathered them into relevant and potential themes
4	Reviewing themes	We revised all the themes in detail to make sure they are relevant to the research questions posed. This includes checking the themes concerning the coded extracts and the overall data set
5	Defining and naming themes	At this stage, we stated the essence of each theme and determine the relevant aspect of the data each theme captures.
6	Producing report	All data extracts relating to the analysis of the research question and literature are presented

At least 12 sub-themes were coded from three major themes of TOE framework. See Table 3 below. The coding was conducted after the transcription of the the interviews. The interview guides were formulated from TOE framework variables as articulated by Creswell (2013). Such variables are used for theory formulation. They can also be measured or observed and their variation between the subjects that are being studied are useful for theory building since these are the constructs of theory.

Table 2. Coding of constructs and their attributes and their effects on e-commerce adoption

TOE Construct	Code	Element /variable	Effect on e-commerce adoption
Technology	TF01	ICT infrastructure	Inhibit / enable
	TF02	Technology competence	Inhibit/enable
	TF03	Technology compatibility	Inhibit/enable
	TF04	Comparative Advantage	Inhibit/ enable
Organisation	OF01	Organisation structure	Inhibit/ enable
	OF02	Management Support	Inhibit /enable
	OF03	Customer orientation	Inhibit/ enable
	OF04	Organisational e readiness	Inhibit/ enable
Environment	EF01	Customer expectation	Inhibit/ enable
	EF02	Suppliers / partners expectation	Inhibit/ enable
	EF03	Competitive pressure	Inhibit/ enable
	EF04	Government support	Inhibit/ enable

5. Results and Discussion

As can be seen in Table 4., from the sample of 13 participants, 9 participants were successfully interviewed. This means that there was a response rate of 69.23%. The response rate was acceptable because it was above the minimum 50% rate proposed by Saunders et. al (2012).

5.1 Technology

5.1.1 ICT infrastructure: The infrastructure of the Internet is considered to be a crucial element in the successful adoption of e-commerce. Hotel manager 5 stated that there is an inadequate infrastructure for many hotels in Zimbabwe. Recommendations from respondents, were that government should pay more attention to infrastructure and improve its quality to enhance the electronic service and e-commerce use and adoption amongst Zimbabweans hotel users. The better the infrastructure, the greater the enabling of e-commerce within a community. The respondents went further to state that some technologies are too expensive to be installed in environments like Zimbabwean hotels,

due to the required capital expenditure for such things as key-less room entry, facial recognition or fingerprint recognition and smart mirror technology (which enable clients to watch television through the mirror). Thus ICT infrastructure, because of the cost, has a negative impact on e-commerce adoption.

5.1.2 Technology competence: Organisations are sometimes not technologically competent to adopt some e-commerce technologies. This normally requires the company to undertake the training of its employees. It was noted from the respondents that a lack of technological competence was an inhibitor of e-commerce adoption. Asked to explain, respondent 2 said, '*Again, this is due to the required capital to train employees to adequately use some of these technologies.*'

5.1.3 Technology compatibility: In simple terms, the respondents stated that the more easily compatible the technology is with other systems, the greater the chances for its adoption. Respondent 1 said, '*Yes it is true, when new e-commerce systems are not compatible with the systems we are using, this normally results in the technology not being easily adopted by the hotel.*' Where compatibility brings about increased costs in terms of replacement purchases and training there is a tendency for the hotel not to undertake installation of the new technology.

5.1.4 Comparative advantage: The respondents noted that any technology that gave their firm an added comparative advantage would be adopted faster by the organisation. This is primarily because any comparative advantage has the benefit of reducing costs, which enables greater visibility in the market and has the effect of enabling e-commerce adoption.

5.2.0   Organisation

5.2.1 Organisation Structure: It was found that the matrix organisational structure seemed to enable e-commerce adoption more than product or geographic organisational structures. In smaller hotel groups where there is a matrix structure, the managers are more accepting of e-commerce adoption than in the tall, narrow organisational structures.

5.2.2 Management Support: Where the management of an organisation supports the adoption of e-commerce; there is wider adoption of e-commerce by the hotel. For instance, participant one from hotel 1 said '*where management support on the adoption of e-commerce through the supply of training resources, the hotel can be quicker to adopt e-commerce*' In situations where there was no or little management support e-commerce was not quickly adopted. In this study, it was noted that the majority of respondents stated that the lack of management support was an inhibitor for e-commerce adoption.

5.2.3 Customer Orientation- Customers with relational approaches to their travelling itinerary tend to only travel to places that they have been. Some clients will not change hotels and thus they stick with only one hotel that they have visited in the past. E-commerce adoption is inhibited by such type clients.

5.2.4 Organisational E-readiness- Ndou (2004) considers the employee's resistance to change as the biggest barrier to a successful transition. Generally, employees fear change and ICT applications in particular, because they believe that ICT might replace them and thus cause job losses. In addition, it is usually very hard, in a short period, to stop using traditional methods of processing and to start learning new ones. To successfully address resistance it is necessary to make sure that there is a stimulus for employees to be trained, and that there are well-organized plans that encompass employee participation through every stage of the process. In this study, it was recognised that organisational e-readiness was an inhibitor to e-commerce adoption.

5.3.0   Environment

Customer Expectation: Customers in the hospitality sectors come to expect certain levels of e-commerce adoption. In the hospitality sector there is high expectation of e-commerce adoption by the hotelier. This was found to compel

hotels to adopt e-commerce to meet this customer expectation. For instance, respondent one from hotel 1 said that hotel clients from the West are more persuaded to transact on e-commerce platforms than clients from within Africa. Western clients have greater acceptance and expectation of e-commerce than their African counterparts.

5.3.1 Supplier/partner expectations: International partners that have a wider global reach within the hospitality sector put pressure on local hotels to adopt e-commerce. This is because they may want all their value chain players to adopt certain e-commerce technologies and models for them to collaborate with them fully. Suppliers, therefore, become enablers of e-commerce adoption because hotels are compelled to adopt them. This was typically explained by participant 3 who stated that global partners such as Galileo, Hotel bed, Trivago etc force hotels to adopt certain e-commerce strategies. In his own words he said, '*for you to be on Galileo, Hotelbeds etc., and other such supplier platforms the hotel is required to adopt certain e-commerce tools*.'

5.3.2 Competitive Pressure: As more competitors in a sector use the e-commerce platforms there is a marked increase in the need for e-commerce adoption. To enable visibility with the hotels' potential customers, hoteliers are forced to adopt e-commerce tools so that they are competing on the same platforms as their immediate competition. For instance, participant 3 from hotel 4 said '*e-commerce had an impact of increasing competitive advantage*.' This shows that pressures within a sector, are forcing the hotels to adopt some e-commerce to ensure that they remain as visible to the potential customers as competitors may be.

5.3.3 E-Government Support: While the government regulation of e-commerce play field is critical for e-commerce adoption, it was found to be developing though still inadequate in the Zimbabwean context. The unavailability of a legal framework governing e-commerce is a factor affecting the success of e-commerce to take root in Zimbabwe. The Ministry of ICT is yet to make the e-transaction and e-commerce bill. Having been submitted to the Attorney General's office, this bill forms part of the Computer Crimes and Cyber Bill that the ministry has been working on for a while now.

It goes without saying that unambiguous legislation is vital for the regulation of the systems and the protection of the rights of all parties involved in any commercial transactions and activities, and its absence will almost certainly lead to a chaotic situation (AlGhamdi et al., 2011). In this study, it was highlighted that the unavailability of government support was an inhibitor to e-commerce adoption because hotels needed to be protected from e-transaction based fraud.

5.4 Graphical Results
5.4.1   The extent to which Zimbabwean Hoteliers are using e-commerce

The research participants were asked what e-commerce mediums and services they offered in their e-commerce platforms. Table 4 shows that the standard mediums of e-commerce marketing tools were used by Zimbabwean hotels i.e. 71% to 100% Instagram and Virtual Adverts were least used at 57%.

Table 3. e-commerce marketing tools used by Zimbabwean hotels

Medium	Possible response	Actual response	Percentage of responses
Email	7	7	100%
Website	7	7	100%
Facebook	7	7	100%
Twitter	7	7	100%
YouTube	7	2	28.5%

Instagram	7	4	57%
Virtual Adverts	7	4	57%
Blog	7	6	85%
Goggle plus	7	5	71%
Online partner/suppliers	7	7	100%

5.4.2 E-commerce enablers and inhibitors

Table 5 below shows organisational imperatives are the main inhibitors while environmental imperatives were found to be the main enablers of e-commerce adoption

Table 4. The enablers and inhibitors of e-commerce adoption categorised by the TOE codes.

TOE Construct	Code	Element /variable	Effect on e-commerce adoption
Technology	TF01	ICT infrastructure	Inhibitor
	TF02	Technology competence	Inhibitor
	TF03	Technology compatibility	Enabler
	TF04	Comparative Advantage	Enabler
Organisation	OF01	Organisation structure	Inhibitor
	OF02	Management Support	Inhibitor
	OF03	Customer orientation	Inhibitor
	OF04	Organisational e readiness	Inhibitor
Environment	EF01	Customer expectation	Enabler
	EF02	Suppliers/partners expectation	Enabler
	EF03	Competitive pressure	Enabler
	EF04	Government support	Inhibitor

The most of the inhibitors to e-commerce adoption by Zimbabwean hotels were at organisational level because of the lack of management support, organisational structure, support and readiness. On the other hand, the highest number of enablers were environmental factors that were due to customer and supplier expectation as well as competitive pressure.

6. Conclusion

Due to the finding of this study, it must be concluded that there are a number of challenges to the adoption of e-commerce by the Zimbabwean Hoteliers. These were found to be mainly at organisational level. This includes the lack of management support, organisational structure, organisational support and organisational readiness. On the other hand, the highest number of enablers were environmental factors that were due to customer and supplier expectation as well as competitive pressure from other hotels which were weaponising e-commerce adoption.

The other factors that militate against the adoption of e-commerce include low internet infrastructure, low technological competence, security challenges and inadequate regulatory framework. Zimbabwe's high level of illiteracy in an enabler because it increases the customer and hotelier to learn new technological skills

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Biography

Nyasha C. Moyo is an MBA graduate at Women's University in Africa. Her research interests include adoption of e-commerce in the hospitality industry.

Sam Takavarasha Jr is the Dean of the Faculty of Management and Entrepreneurial Sciences and is senior lecturer of Information Systems Women's University of Africa. He did his post doctoral research fellowship at University of Fort Hare department of Information Systems after acquiring his PhD in Information Systems at University of Zimbabwe and BSc hons in Computer and Information Systems at University of Portsmouth, UK. Sam's research interests include Information Systems in Developing Countries, ICT for Development, Capability Approach, Activity Theory. He is the author of a book and several IS research articles and editor of two special issues as well as a track chair of ECIS 2017, ECIS 2018 and program committee member for IFIP HCC13, ICTAS2018 among other conferences.