

# Innovation and Performance of Firms in the Tourism Industry in Zimbabwe: The Mediating Role of Service Quality

Lawrence Poperwi<sup>1</sup>, Rowen Magwaza<sup>2</sup>, Steven Tsakatsa<sup>3</sup>

<sup>1</sup>Lecturer in the Management Sciences Department, Faculty of Business Sciences at Midlands State University, Harare Campus, Zimbabwe

<sup>2</sup>Lecturer in the Tourism and Hospitality Department, Faculty of Business Sciences at Midlands State University, Harare Campus, Zimbabwe

<sup>3</sup>Master of Commerce in Strategic Management & Corporate Governance Student at Midlands State University

Email Address: tsakatsasteven@gmail.com

Email Address: lawrencepoperwi@yahoo.com, poperwil@staff.msu.ac.zw

Email Address: magwazar@staff.msu.ac.zw

**Abstract**— The study sought to assess innovation in the tourism industry in Zimbabwe. More specifically the study was guided by two key objectives. First, to determine antecedents to innovative behaviours in the tourism industry in Zimbabwe and second, to establish the impact of innovation on the performance of firms in the tourism industry. The quantitative method was used and generation of knowledge was guided by the positivist philosophy. The dynamic capabilities theory constituted the theoretical framework of the study. The study population was 2 068 hotel workers. Stratified random sampling was used to create the research sample. A sample size of 327 people was used in keeping with Krejcie & Morgan (1970) tables. The study followed the explanatory research design as it sought to address cause - effect issues. Data was collected electronically through a structured questionnaire with closed ended items. Reliability of the data was measured through Cronbach Alpha index which was found to be 0.88. Prior to the administration of the questionnaire to the respondents, a pilot study was conducted with 10 people from the hotel industry to validate the research instrument. Data was analysed through Stata software to test hypotheses and execute structural equation modelling. The study found out that the antecedents of innovative behaviour in the tourism industry were employee engagement, innovation networks, information technologies, innovation management and customer participation. It was also found that service innovation influences firm performance either directly or through service quality. Recommendations arising from the study are that firms in the tourism industry should promote innovation through: employee engagement; customer participation; innovation management; innovation networks and information technology adoption and that firms in the tourism industry should promote firm performance through service innovation direct or through service quality.

**Keywords**— Innovation, tourism, and dynamic capabilities theory.

## I. INTRODUCTION

The dynamic, volatile, uncertain, complex, ambiguous and disruptive (DVUCAD) world coupled with hyper competition continues to erode sustainable competitive advantages in contemporary tourism firms. In other words, the competitive advantages that firms used to enjoy for a long time have become ephemeral. Tourism is crucial in any economy as it sustains employment and brings in foreign currency (Alsos, Eide and

Madsen, 2014). According to Heraclitus, a Greek philosopher from antiquity, the only thing that stays the same is change. Firms in the tourism industry are not immune to the changes that are inevitably taking place in the business environment. Consumer tastes are changing, consumer preferences are changing, demographics are changing and so is the competitive landscape. Alsos et al., (2014) aver that firms in the tourism industry operate in a very competitive market marked by high turbulence and rapid changes. Hence, the sustainability of firms in the tourism industry is anchored on their innovative capabilities. Innovation may be considered as the sine qua non of business sustainability in the DVUCAD world. Yet there is a gradual increasing interest in innovation in tourism globally (Pantano and Stylidis, 2021). In Zimbabwe, there is dearth of literature and empirical studies on innovation in tourism. The limited studies that are now accessible concentrate on branding, tourism issues, tourist development, and the role of the government in tourism development, tourism marketing, and policy implications on tourism. Therefore, the purpose of this article is to make the case for the reality of the notion of innovation in the tourism industry in Zimbabwe.

## Background to the study

In the past, the majority of managers associated innovation primarily with the creation of novel products and technologies (Cherrett, 2011; Alsos et al., 2014). However, innovation is widely understood to refer to the creation of novel service offerings, business models, pricing strategies, management techniques and distribution channels (Pantano & Stylidis, 2021). Innovation is known to contribute to competitive advantage for firms and as a result many researchers globally are seeking to strengthen the ability of companies to innovate to make them more competitive and achieve enhanced financial performance (Silva & Cirani, 2020; Puertas Medina, Martín Martín, Guaita Martínez, & Serdeira Azevedo, 2022).

In the African continent few empirical studies have been conducted to determine the influence of innovation on the performance of firms in the tourism industry. A recent study by Nyagadza, Chuchu & Chigora (2022) focused on the use of

technology in tourism events. This study did not address how technological advancements can promote innovation in the tourism industry. In a study conducted in Nigeria which was aimed at assessing if hotel managers in that country perceived innovation as important (Babalola, 2017), it came out that managers regarded innovation an important aspect for the attainment of competitive advantage. Moreover, while COVID-19 pandemic caused serious losses in Africa in terms of revenues (Monnier, 2021), employment opportunities in the tourism industry (Statistica, 2020) and business operations resulting from downsizing at times total shutdown of operations (Richardson, 2020), it is important to point out that the COVID-19 pandemic brought the impetus upon the tourism industry to embrace and adopt digital transformation (Bama, Sunday & Makuzva, 2022).

The SADC region has been seen to be lagging behind when it comes to innovation in the tourism industry (Bama et al., 2022). This view appears to endorse the observation by Omerzel (2015) that the capability of entrepreneurs in the tourism industry to think and innovate is modesty. The study by Booyens (2014) found that there was widespread incremental innovation among tourism firms in the Western Cape. Booyens (2014) opines that creativity and innovation in creative product development affords consumers an opportunity to co-create their experiences thereby increasing authentic cultural experiences. Creative tourism in Cape Town is a typical example of innovation in tourism. Creative experience based tourism is an example of novel product innovation in tourism. Locally it appears no research has been carried to determine the antecedents of innovative behaviour as well as the effect of innovation on the performance of firms in the tourism industry in Zimbabwe. A couple of studies were done in Zimbabwe but did not cover the main requestion of this study. One study focused on strategies for the development of tourism in Zimbabwe (Muzapu and Sibanda, 2016) while another study looked at the effect of information technology on tourism (Tsokota et al., 2019). USAID (2013) instituted a study which sought to look at ways of setting the Zimbabwe tourism industry for growth. However, acquired knowledge has it that some players in the tourism industry in Zimbabwe are implementing various types of innovations such as product, process and organisation management innovations. For instance, Rainbow Tourism Group (RTG) has a touring arm called Heritage Expeditions which deals with transfers, game drivers, high adrenalin activities and tours across the country. As part of the process innovation RTG has installed solar system at its Kadoma Rainbow Hotel in 2022. Installation of solar system at the hotel has resulted in a significant reduction in the use of hydro or thermal electricity, hence the development of such an eco-friendly technology at the hotel constitutes sustainable innovation. Interestingly also, both African Sun and RTG have revolutionised the checking in processes as customers are now able to process and pay for bookings online. In terms of organisation management innovation, RTG has introduced live cooking restaurants such as Kombahari where live cooking can be done while the customer is waiting. Customers choose the food they want cooked. The RTG Kombahari experience gives consumers an

opportunity to co-create their experiences thereby enhancing learning and ensuring genuine cultural cooking experiences. Despite the critical role of innovation in the tourism industry, historically this concept has been given little attention. Therefore, the paucity of information on the effect of innovation in the tourism industry in Zimbabwe is what has inspired this study.

#### *Research Objectives*

The study was guided by two clear objectives namely: to determine antecedents of innovative behaviours in the tourism industry in Zimbabwe and to establish the impact of innovation on the performance of firms in the tourism industry in Zimbabwe.

#### *Theoretical Framework*

This study used the dynamic capabilities theory lens to unpack the antecedents of innovative behaviours in the tourism industry and the impact of service innovation on firm performance.

#### *Dynamic Capability Theory*

This theory was proposed by Teece and Pisano and as already alluded to is an extension of the RBV theory (Samsudin and Ishmail, 2019) in an attempt to explain the challenge of attaining superior fit with an ever-changing business environment. The concept of dynamic capabilities has been defined by Teece, Pisano and Shuen (1997) as the firm's ability to combine, develop and reconfigure internal and external expertise in order to enable the firm to respond swiftly to the changing environment. Given that global businesses are facing dynamic and unpredictable environment, firms should be proactive towards the changing environment in order for them to sustain, be competitive and remain relevant in the market (Efrat, Hughes, Nemkova, & Souchon, 2018). In order for firms to remain competitive in the marketplace, firms need to develop specific capabilities and continuous learning (Samsudin and Ishmail, 2019). Lack of dynamic capabilities will prevent a firm from maintaining its competitive advantage particularly in the changing environment (Gnizy, Baker, Grinstein, 2014). Drawing on the categorisation proposed by (Jantunen et al., 2018; Suwannapiron & Pranee, 2023), three types of dynamic capabilities namely: adaptation capability, absorption capability and innovation capability become clear. Innovation capability is the organisation's ability to develop new products and services through effective transformation of a firm's stock of knowledge (Elzek, Gaafa, & Abdulsamie, 2020).

Dynamic capabilities include sensing, seizing and transforming capabilities (Teece, 2018). Organisations should be in a position to continuously sense and seize opportunities and to occasionally transform aspects of the organisational culture in order to be able to proactively reposition to deal with emerging threats and opportunities (Teece, 2018). According to Teece (2018), dynamic capabilities are difficult for rivals to replicate as they are built on peculiar characteristics of entrepreneurial managers and the history-honed routines and culture of the organisation. The difficulty of replicating dynamic capabilities buttresses the rarity and inimitability criteria which are key in attaining sustainable competitive

advantage according to the RBV theory. Moreover, the uncertain imitability of a complex system tends to lock out potential rivals. Thus, strong dynamic capabilities can serve as a firm foundation for sustainable competitive advantage. It is critical to note that for strong dynamic capabilities to serve as a firm foundation for sustainable competitive advantage the dynamic capabilities must be more deeply embedded in the organisation than in the top management (Teece, 2018).

Innovation has been defined as a pattern of thinking and action which allows an organisation to regularly review the manner it operates in order to enhance its effectiveness (Stronen, Hoholm, Kvaerner, & Stome, 2017). This implies that innovation is a dynamic capability, hence the dynamic capability theory is very relevant and applicable to this study. Figure 1.0 shows a simplified schema of dynamic capabilities, business models and strategy.

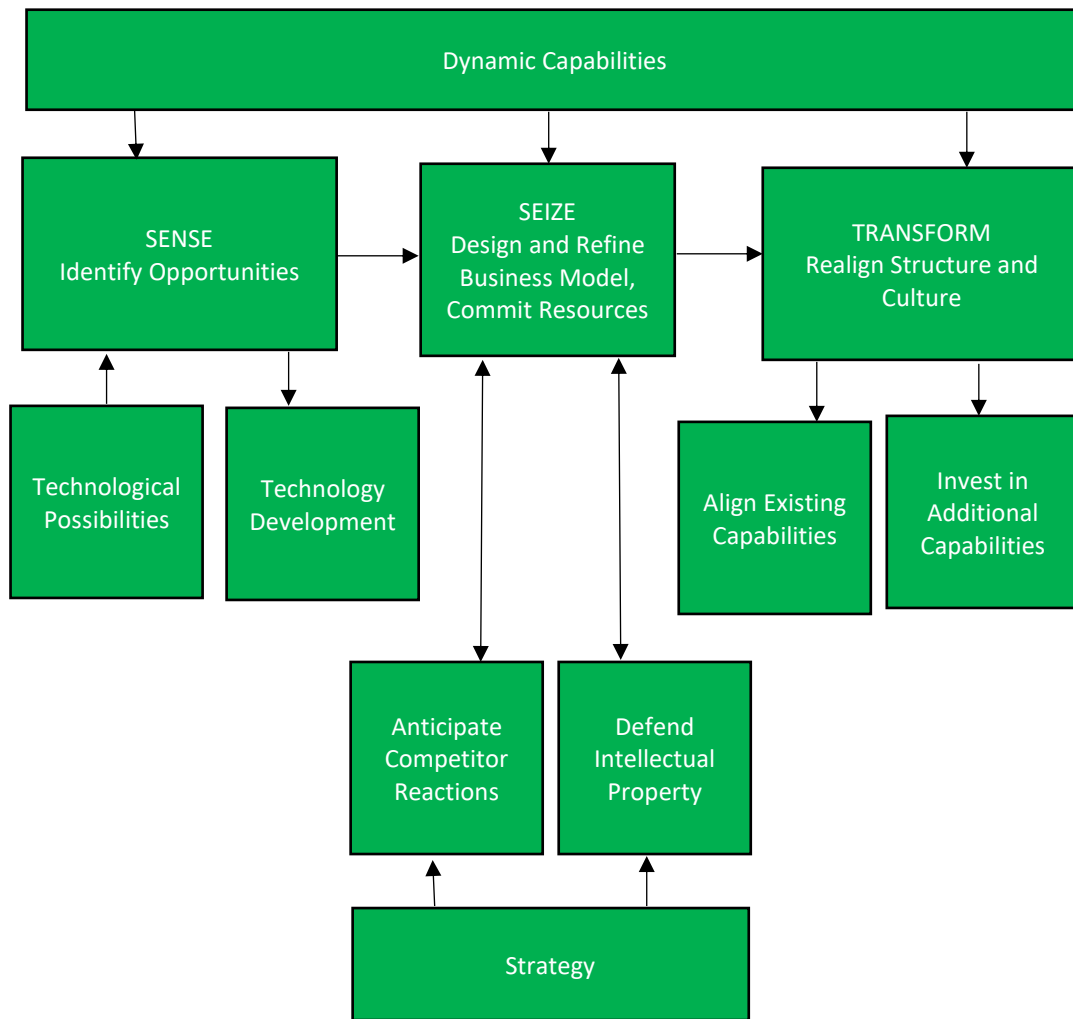


Figure 1.0 Simplified schema of dynamic capabilities, business models and strategy (Adapted from Teece, 2018:5)

As alluded to earlier on a firm’s resources and capabilities can generate sustainable competitive advantage if they meet the VRIO criteria according to the RBV theory. Thus, the adoption of innovation practices in the tourism industry seeks to create products (services), processes and business models that are valuable, rare, inimitable and organised, with the ultimate goal of securing sustainable competitive advantage. Suffice to say this works in a stable business environment where there is no intense competition. However, as highlighted already, businesses are operating in a dynamic, volatile, uncertain, complex, ambiguous and disruptive (DVUCAD) environment

thereby necessitating the Dynamic Capabilities Theory to come on-board and complement the RBV theory. Put simply, the dynamic capability theory creates capacity within organisations to continuously generate products, processes and business models that are aligned to the shifting business landscape.

*Conceptual Framework*

Figure 2.0 below is the conceptual framework for the study. It has been developed following the review of literature.

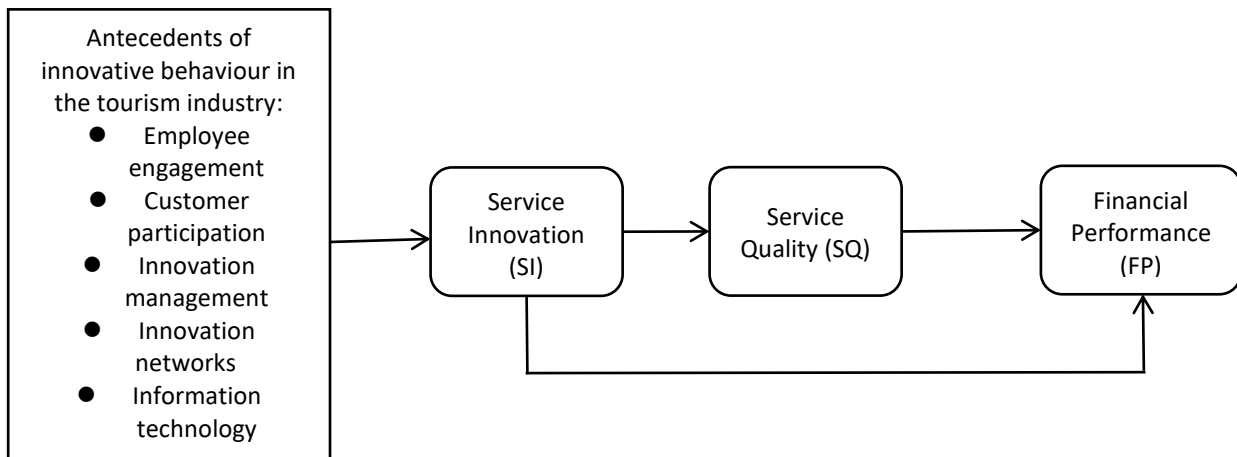


Figure 2.0 Conceptual Framework for the study

*Conceptualisation of Innovation*

Schumpeter (1934) discussed five areas where entrepreneurs have the chance to innovate: creating new products or services, new production processes, new markets, new suppliers, and changing organization or management systems.

*Empirical Framework*

The review of literature was guided by the research objectives for this paper. Thus, literature on the antecedents of innovative behaviours in the tourism industry and the impact of service innovation on the performance of firms in the tourism industry was reviewed.

*Antecedents of innovative behaviours in the tourism industry*

In many service sectors, it is widely acknowledged that consumers' perceptions of a firm are frequently connected to their judgments of the performance quality of service staff. Due to the critical importance of frontline employees in service businesses, managers should view them as the heart of management responsibilities. Managers must recognize the facets of service personnel's jobs that can enhance organizational performance. When it comes to increasing hotels' capability to acquire a competitive edge, the ability of staff to be innovative and creative is critical. Innovative work behaviour is required by constantly producing unique ideas in work procedures, strategies, services, or new goods, to create the best results in the hospitality industry (Eliyana & Christiananta, 2020; Toros, Maslakci & Surucu, 2021). Employees' innovative work behaviours or creativity are viewed as the foundation of corporate innovation (Muñoz-Pascual & Galende, 2017). Hence, the majority of researchers have concentrated on finding variables that encourage inventive behaviours (Bani-Melhem et al., 2018).

Today, services are among the most important economic drivers worldwide but still approaches to service innovation are in an early phase of research development. Being part of the service sector, tourism is confronted with developments in new technologies and refreshed by organisational and structural innovations (Stamboulis & Skayannis, 2003). Competitiveness

of tourism firms is driven by their innovativeness and by achieving lower costs and higher quality offerings that meet the expectations of potential customers (Sundbo, Orfi la-Sintes & Sorensen, 2007; Nijssen, Hillebrand, Vermeulen & Kemp, 2006). The tourism sector recognizes increasing competition worldwide, not only between destinations but also between firms within the destinations (Dwyer, Edwards, Mistilis, Roman & Scott, 2009; Tseng, Kuo & Chou, 2008). It is acknowledged that innovative hotels are more successful in outperforming their non-innovative competitors owing to their ability of providing differentiated products and services. The tourism product incorporates various services provided by different segments of suppliers, such as accommodation, transportation, catering and entertainment (Hjalager, 2002). The following are the critical antecedents of innovative behaviours in the tourism industry.

*Employee engagement*

As stressed by Ottenbacher, Shaw and Lockwood (2006) hospitality services depend heavily on the skills and experiences of the employees that deliver them (Nebojsa, Katija and Nikola, 2019). This notion has been reinforced by (Grissemann, Pikkemaat & Weger, 2013; De Brentani, 2001; Divisekera & Nguyen, 2018) who posit that service employees are a key source of innovation activities in two important ways namely: they directly impact customer satisfaction and they are primary creators of positive word-of-mouth. Further, empirical evidence shows that having highly trained employees, who have a great understanding of the product and the customer is instrumental when aiming for successful new services (De Brentani, 2001; Divisekera & Nguyen, 2018) and that innovative firms have a higher proportion of qualified technical staff (Avermaete, Viane, Morgan, Pitts, Crawford, & Mahon, 2004). This empirical literature underscores the importance of employee training as it fosters innovative efforts within firms. Moreover, past studies have revealed that employee empowerment is a critical antecedent of service innovation (Ottenbacher & Gnoth, 2005; Grissemann et al., 2013). The term employee empowerment has been defined variously but (Ottenbacher & Gnoth, 2005) define it as the act by which

managers give employees the autonomy and control over job-related decisions and to work independently (De Jong et al., 2003). Since the tourism industry is generally considered to be labour intensive, special emphasis has to be put in employee engagement in the innovation process. It can therefore be proposed that employee engagement promotes innovation activities in the hotel sector.

*H<sub>1</sub>: Employee engagement positively influences the innovation behavior of hotels.*

#### *Customer participation*

Based on the new service innovation perspective, a considerable number of authors support the notion that customers play a crucial role in new service development (Grissemann et al., 2013; Vargo, Maglio & Akaka, 2008; De Jong et al., 2003). The participation of customers in the conceptualisation of innovation is a critical factor of success (Orfi la-Sintes and Mattson, 2009) and the encouragement of customer participation in the new service development process and implementation of knowledge about the customer at certain stages is known to increase the potential for successful innovative results (Tseng et al., 2008; 2010; Grissemann et al., 2013). Customer participation entails co-creation, that is, customers will be engaged in the creation of a service which they are consuming as well. This fosters innovative behaviours. Bearing in mind that this study seeks to determine antecedents of innovation in tourism, we propose the following hypothesis:  
*H<sub>2</sub>: Customer participation positively influences the innovation behaviour of hotels.*

#### *Innovation Management*

The role of management support in innovation processes is key. Moreover, communication of rules and procedures (Amabile, 1998) and management style (De Brentani, 2001) affects innovation and project viability. The importance of the hotel director's management skills and openness to change for all types of innovation cannot be downplayed (Orfi la-Sintes and Mattson, 2009). Also entrepreneurship in tourism has been a topical issue (Kokkranikal & Morrison, 2002) and is widely recognised as a primary source of the development of innovation. Recalling that this study aims to establish antecedents of innovation in the tourism industry, we propose the following hypothesis:

*H<sub>3</sub>: Innovation management positively influences the innovation behavior of hotels*

#### *Innovation networks*

Innovation can easily be imitated in the services sector. Consequently, firms in the services sector keep their knowledge secret and are less willing to participate in networks. In spite of this, the formation of networks increases as many firms need external actors and knowledge exchange to foster the innovation process (Grissemann et al., 2013). Competitors and collaborators have been identified as an essential source of information for innovative activities especially in the tourism sector (Chen, Tsou & Huang, 2009; Grissemann et al., 2013; Omerzel, 2015). Bearing in mind that the study aims to determine the antecedents of innovative behaviour in the

tourism industry in Zimbabwe, the following hypothesis is proposed:

*H<sub>4</sub>: The formation of innovation networks positively influences the innovation behaviour of hotels.*

#### *Information Technologies*

Information technology is vital in a company as it increases opportunities for growth and innovation (Sundbo et al., 2007; Divisekera & Nguyen, 2018). This view is further supported by Chen et al., (2009) who argue that IT influences a firm's ability to create value and alters the way customers interact with a service offering. Moreover, in their study of innovation orientation in financial service firms, Chen et al., (2009) found that IT capabilities of a firm have positive effects on service delivery innovation. The idea that technological progress has a positive impact on innovation in services is widely supported (Tseng et al., 2008; Omerzel, 2015). For example, mobile solutions and the web have tremendously changed the whole industry. Online booking possibilities are today standard of the industry. The use of information technology is therefore proposed to significantly influence the innovation behaviour of hotels:

*H<sub>5</sub>: A positive attitude towards information technologies positively influences the innovation behaviour of hotels*

#### *Impact of innovation on the performance of firms in the tourism industry*

Chen et al., (2009) examined the innovation in service delivery and its antecedents and consequences (firm performance), finding that service delivery innovation had a positive and significant influence on both financial performance and non-financial performance, which indicated that service delivery innovation had strong predictive ability for firm performance. Numerous studies have investigated the relationship, and an agreement has been reached that innovation is a powerful factor which can differentiate firm performance (Hall & Williams, 2019). With the growth of service industries, efforts have increasingly been made to push the service sector and its peculiarities concerning innovation into the centre of economic policy research during the past years. The need to uncover sources of competitive advantage in service sectors, especially innovation as a source to gain competitive advantage and its performance implication, has increasingly drawn the attention of researchers (Hall & Williams, 2019). Tourism innovation is very beneficial to the economy, local community, tourists and destination levels as shown as follows:

*The economy level:* On the economic level, innovation in tourism is an integral part of the economic performance and competitiveness of both tourism organisations and destinations (Hoarau & Kline, 2014; Boycheva, 2017). According to Hall and Williams (2008), innovations have a significant impact on economic performance, encourage entrepreneurship, and boost the efficacy of the state's role. In addition, tourism innovations contribute to increased efficiency and productivity of tourist companies and organisations and facilitate connectivity among them (Hjalager, 2013).

*The local community level:* Tourism innovation contributes to maintaining the cohesion of the tourism industry and its association with the community. Tourism development can't be

imagined in any tourist destination without considering the local community (Korres, 2008). Furthermore, tourism innovation improves productivity and thus contributes to the high level of income for the local community and their welfare (Boycheva, 2017).

*The tourists level:* Tourism innovation is one of the most important factors that contribute to meet the needs and desires of tourists, provide tourists comfort, increase tourism experience value, and enhance their loyalty to the tourist destination (Hall & Williams, 2008; Hjalager, 2013; Souza et al. 2017). Innovation in tourism has an impact on travellers' decisions and post-visit assessments. It also increases the ability of tourists to collect benefits by helping them to exploit goods and services that satisfy their desires (Hjalager, 2010; Hjalager, 2013).

*The destination level:* Innovation is considered also an important factor for the competitiveness of destinations and performing the main role in destination management (Carvalho and Costa, 2011; Souza et al. 2017). The production and collaboration of knowledge, the sustainable management of resources, the connectedness of global destinations in governance, marketing, and management of destinations and organizations engaged in tourism activities are all impacted by tourism innovation (Hall and Williams, 2008). One of the elements influencing sustainable development and the creation of new destinations is innovation in tourism.

Several researches on the relationship between innovation and firm performance have been carried but these tended to focus on product related innovations while neglecting innovations related to service innovations (Lee, Lim & Pathak, 2011). From the resource based view (RBV) management perspective, innovation - related resources would affect the overall operational process of service firms and therefore affect the firm performance (Lei, 2013). According to Gronroos (1990), quality maybe classified as technical quality and functional quality. Technical quality entails the evaluation of the core service concept and the technological dimension whereas functional quality involves the evaluation of the service delivery and other ancillary aspects. Resultantly, based on the lens of gap theory in quality management, innovation in different dimensions like the introduction of new technology, development of the new service concept, implementation of new delivery system, improvement of customer-firm interface, enhancement of response rate would affect the efficiency and effectiveness of the service offered thereby reducing the gaps between customer expectations and their actual perceptions on the services offered by firms. As a result, service innovation would ideally transform the state of the customers, particularly their perceptions on the services offered leading to customer satisfaction and loyalty (Lei, 2013). Hence, service innovation can be treated as an antecedent variable to create service-related competitive advantage, that is, service quality. In light of the above discussion, the following hypothesis ( $H_1$ ) relating service innovation to service quality is presented.

$H_1$ : Service innovation has a direct and positive impact on service quality.

It is crucial to note that the performance of any business be it in terms of revenue, profits, return on investment or market

share is driven by by the customer's perception on service quality. Thus, we set the following hypothesis about the relationship between service quality and firm performance:

$H_2$ : Service quality is positively associated with firm performance.

Several empirical studies have shown a positive relationship between innovation and business performance (Baldwin & Johnson, 1996; Lei, 2013) and found that innovation is positively related to organisational performance on a wide range of performance measures such as relative profitability, size, market share gain, return on investment, and growth rate (Baldwin & Johnson, 1996). In light of the factors raised above, we set out the following hypothesis:

$H_3$ : Service innovation has a direct and positive influence on firm performance.

## II. RESEARCH METHODOLOGY

Empirical data was collected using a questionnaire with closed ended items. From a population of 2 068 people, a sample of 327 people was selected through stratified random sampling to ensure equity in representation of the different strata of the hotel sector staff. Prior to the administration of the questionnaire validity of the research instrument was done by conducting a pilot study with randomly selected 10 people in the hotel sector. The feedback from the pilot study allowed the researchers to refine the questionnaire items. Reliability of the research instrument was assessed using Cronbach Alpha index. The Cronbach Alpha index for the items was found to be 0.88 which indicated that the instrument was reliable since it was above 0.7 which is considered the minimum acceptable figure in academic research (Lei, 2013). Three hundred and twenty-seven questionnaires were distributed electronically and 285 were returned usable, representing a response rate of 87.2%. According to Baruch (1999) a response rate of 50% is considered adequate for an analysis, 60% is considered good while a 70% response rate is considered excellent. Since the response rate for this study was 87.2% it was considered very good for the analysis of the data.

### Data Analysis

The data was analysed using the Stata software to test five hypotheses for the first objective, and test three hypotheses for the second objective and performing the structural equation modelling (SEM).

### Factorability

To check whether the input matrix is suitable for conducting factor analysis the Bartlett's test of sphericity and the Kaiser Meyer-Olkin measure of sampling adequacy (KMO) were calculated. The following results were obtained, the overall KMO = 0.948 was obtained which is marvelous, Bartlett's test of sphericity (chi-square 2864.019,  $p < 0.001$ ) which shows that the input matrix was suitable for conducting factor analysis.

### Factor selection

Selection of factors was guided by the three standard criteria, the Kaiser- Guttman rule, the scree plot, the cumulative and unique percentage of explained variance findings. Using the scree plot and percentage of variance explained a three-

factor solution was supported. Using the Kaiser- Guttman rule, a one factor solution would be supported, since there is only one eigenvalue greater than one. However, when the principal components analysis is not the extraction method used, the Kaiser – Guttman rule should be used with caution, since it can underestimate or overestimate the correct number of factors.

**Exploratory Factor Analysis**

All the five variables for financial performance (FP) loaded on one factor, and all the 3 variables for service innovation (SI) loaded on one factor and for service quality (SQ) six variables loaded on one factor.

**III. FINDINGS AND DISCUSSION**

Findings and discussion presented here pertain to the two key research objectives namely to: 1. Determine the antecedents of innovative behaviours in the tourism industry in Zimbabwe and 2. Establish the impact of innovation on the performance of firms in the tourism industry in Zimbabwe.

TABLE 1.0 Summary of findings for objective 1

Hypothesis	Remark
H <sub>1</sub> : Employee engagement positively influences the innovation behavior of hotels.	Supported
H <sub>2</sub> : Customer participation positively influences the innovation behaviour of hotels.	Supported
H <sub>3</sub> : Innovation management positively influences the innovation behavior of hotel	Supported
H <sub>4</sub> : The formation of innovation networks positively influences the innovation behaviour of hotels.	Supported
H <sub>5</sub> : A positive attitude towards information technologies positively influences the innovation behavior of hotels	Supported

The findings in Table 1.0 shows that the antecedents of innovative behaviours in the hotel sector are employee engagement, innovation networks, information technologies, innovation management and customer participation. These findings corroborate the results from the study conducted by Grisseman et al., (2013).

TABLE 1.1 Structural equation modelling results (SEM model showing the factor loadings for each variable and its construct) for objective 2

Service quality	Standardized factor loading	Z-value	P> z	95% CI	
SQ_1	0.75	25.62	<0.001	0.70	0.81
SQ_2	0.76	26.30	<0.001	0.70	0.82
SQ_3	0.76	26.93	<0.001	0.71	0.82
SQ_5	0.70	20.50	<0.001	0.63	0.76
SQ_6	0.74	24.40	<0.001	0.68	0.80
SQ_7	0.71	21.83	<0.001	0.65	0.78
Service innovation					
SI_1	0.76	24.06	<0.001	0.69	0.82
SI_2	0.87	35.00	<0.001	0.82	0.92
SI_3	0.76	23.57	<0.001	0.70	0.82
Firm performance					
FP_1	0.68	19.22	<0.001	0.61	0.75
FP_2	0.81	31.42	<0.001	0.76	0.86
FP_3	0.76	26.32	<0.001	0.71	0.82
FP_4	0.76	25.90	<0.001	0.70	0.82
FP_5	0.78	27.71	<0.001	0.72	0.83

All the variables are significant at five percent level, the minimum factor loading is 0.68 and the maximum factor loading is 0.81.

**Structural equation model results**

Endogenous variables	Exploratory variables	Estimate	Standardized estimates	p-value
H1: Service innovation has a direct and positive association on service quality	SI->SQ	0.141	0.59	<0.001
H2: Service quality is positively associated with firm performance	FP->SQ	0.999	0.82	<0.001
H3: Service innovation has a direct and positive influence on firm performance	FP->SI	1.023	0.68	<0.001

All the hypotheses are supported, that is, there is a positive association between service innovation and firm performance (1.023, p-value <0.001).

**Goodness of Fit Indices**

Model	χ <sup>2</sup>	df	P	CFI	TLI	RMSEA	SRMR
FP-SQ-SI (ml)	204.053	74	0.000	0.943	0.930	0.079	0.049

Root-mean-square error of approximation (RMSEA=0.079), Comparative fit index (CFI=0.943), Standardized Root Mean Square Residual (SRMR=0.049), Tucker-Lewis Index (TLI =0.930). The RMSEA was significant at 10% level and the chi-square was significant at 5% level which implies that the model fits well.

**Path diagram**

Figure 3.0 shows path diagram for the structural equation model. The path diagram depicts that service innovation (SI) has a direct and positive impact on service quality (SQ) and that service quality is positively associated with firm performance (FP). It is also clear from the path diagram that service innovation (SI) has a direct and positive influence on firm performance (FP). These findings confirm the results of a similar study conducted in China by Lei (2013).

**Limitations**

One limitation to this study is that it relied on the use of mono method, that is, quantitative method and in so doing became vulnerable to the inherent weaknesses of the quantitative method. It is also crucial to note that the tourism industry has over 20 sectors, therefore focusing on only one sector, that is, the hotel sector may not present results that can be generalised to other sectors of the industry. Despite these limitations we believe that our results are valuable to players in the tourism industry for at least two reasons: 1). they are among

the few empirical studies on innovation in the tourism industry in Zimbabwe and 2). they present antecedents to innovative behaviour in the tourism industry as well as the impact of

innovation on the performance of firms in the tourism industry in Zimbabwe. We therefore hope that our findings provide some useful insights for future surveys.

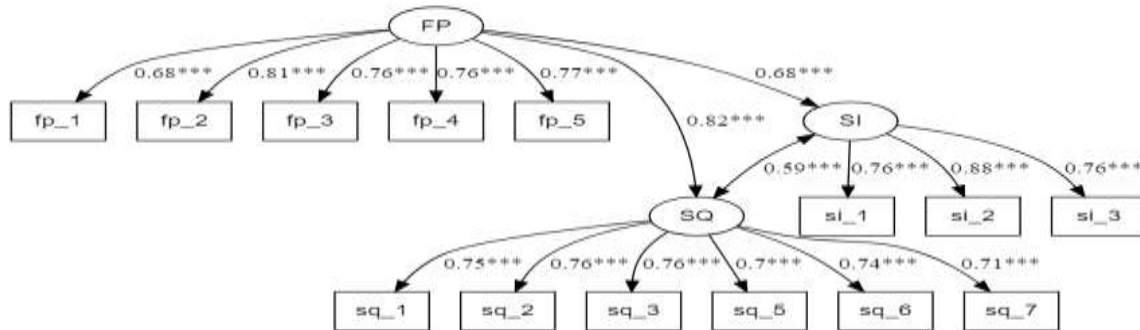


Figure 3.0 Path Diagram

Recommendations

Firms in the tourism industry should promote innovation through: employee engagement; customer participation (co-creation); innovation management; innovation networks and information technology adoption. In addition, firms in the tourism industry should promote firm performance through service innovation direct or through service quality.

REFERENCES

[1]. Alsos, G. A., Eide, D., & Madsen, E. L. (2014). Handbook of research on innovation in tourism industries.

[2]. Amabile, T. M. (1998). How to kill creativity: Keep doing what you are doing. Or, if you want to spark innovation, rethink how you motivate, reward, and assign work to people. Harvard Business Review (September-October): 77-87.

[3]. Avermaete, T., Viane J., Morgan E.J., Pitts E., Crawford N. & Mahon, D. (2004). Determinants of product and process innovation in small food manufacturing firms. Trends in Food Science and Technology, 15, 474-483.

[4]. Babalola, W. A. (2017). Evaluation of Innovations and Technology Investments in the Nigerian Hospitality Education and Tourism Industry. 4<sup>th</sup> International Conference on Science and Technology. School of Technology.

[5]. Baldwin, J., & Johnson, J. (1996). Business strategies in more and less innovative firms in Canada. Research Policy, vol. 25, issue 5, 785-804

[6]. Bama, H. K., Sunday, T., & Makuzva, W. (2022). What innovations would enable the tourism and hospitality industry in Africa to re-build? Tourism and Hospitality Industry.

[7]. Bani-Melhem, S. J., Zeffane, R., Albaity, M. (2018). Determinants of employees' innovative behaviour. International Journal of Contemporary Hospitality Management 30(6).

[8]. Baruch, Y. and B. C. Holtom, (2008). "Survey response rate levels and trends in organizational research". Human Relations, 61:1139-1160.

[9]. Baruch, Y., (1999). "Response rate in academic studies—a comparative analysis". Human Relations, 52:421-438.

[10]. Booyens, I. (2014). Innovation and Networking in Tourism for the Competitiveness of the Western Cape Tourism Economy. PhD Thesis. University of Johannesburg. South Africa.

[11]. Boycheva, C. (2017). Innovation and Competitiveness in the Context of the Bulgarian Tourism Industry, Economic Alternatives, Issue 1, 137-148.

[12]. Carvalho, L., & Costa, T. (2011). Tourism Innovation-A literature review complemented by case study research. Book of Proceedings, Vol. 1- International Conference on Tourism & Management Studies.

[13]. Chen, J. S., Tsou, H.T., & Huang, A. Y.H. (2009). Service Delivery Innovation. Journal of Service Delivery Research 12(1): 36-55

[14]. Cherrett, N. (2011). Innovation in the tourism sector: a case study from the Commonwealth of Dominica. United Nations Publications.

[15]. de Brentani, U. (2001). Innovative versus incremental new business services: Different keys for achieving success. Journal of Product Innovation Management, Volume 18, Issue 3:169-187.

[16]. De Jong, P.J., Bruins, J. A., Dolfsm, W. & Meijaard, J. (2003). Innovation in service firms explored: what, how and why? EIM-Business & Policy Research, January

[17]. Divisekera, S., & Nguyen, V. K. (2018). Determinants of innovation in tourism evidence from Australia. Tourism Management, 67(2018), 157-167.

[18]. Dwyer, L., Edwards, D., Mistilis, N., Roman, C. and Scott, N. (2009). Destination and Enterprise Management for a Tourism Future. Tourism Management, 30, 63-74.

[19]. Efrat, K., Hughes, P., Nemkova, E., & Souchon, A. L. (2018). Leveraging of dynamic export capabilities for competitive advantage and performance consequences: Evidence from China. Journal of Business Research 84

[20]. Eliyana, A., & Christiananta, B. (2020). Enhancing innovative work behaviour in the hospitality industry: empirical research from East Java, Indonesia. International Journal of Business and Society, 21(1), 96-110

[21]. Elzek, Y., Gaafa, H., & Abdulsamie, H. (2020). Practices of Tourism Innovation in Tourism Industry: The case study of Egypt. Volume 4.

[22]. Fuller, J. & Matzler, K. (2007). Virtual product experience and customer participation – a chance for customer-centred, really new products. Technovation, 27(6-7), 378-87.

[23]. Gnizy, I., Baker, W. E., & Grinstein, A. (2014). Proactive learning culture: A dynamic capability and key success factor for SMEs entering foreign markets. International Marketing Review 31(5)

[24]. Grisseemann, U. S., Pikkemaat, B., & Weger, C. (2013). Antecedents of innovation activities in tourism: An empirical investigation of the Alpine hospitality industry. Tourism, Vol. 61/ No. 1/ 2013/ 7 - 27 UDC: 338.488.2.640.41(23:4)

[25]. Gronroos, C. (1990). Service Management: A Management Focus for Service Competition, International Journal of Service Industry Management, Vol.1 No. 1, 6-14

[26]. Hall, C. M., & Williams, A. (2019). Tourism and Innovation. Tourism and Innovation.

[27]. Hall, C. M., & Williams, A. M. (2008). Tourism and Innovation, Routledge, London, New York



[28]. Hjalager, A. (2013). 100 Innovations That Transformed Tourism, *Journal of Travel Research*, Vol.54, (1),3 –21

[29]. Hjalager, A. M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*.

[30]. Hjalager, A. M. (2010). Progress in Tourism Management. A review of innovation research in tourism. *Tourism Management*. Volume 31, Issue 1, 1-12

[31]. Hoarau, H. and Kline C. (2014). Science and Industry: Sharing Knowledge for Innovation. *Annals of Tourism Research*, (16),44–61.

[32]. Jantunen, A., Tarkiainen, A., Chari, S., & Oghazi, P. (2018). Dynamic capabilities, operational changes, and performance outcomes in the media industry. *Journal of Business Research*, 89, 251-257.

[33]. Kokkranikal, J., & Morrison, A. (2002). Entrepreneurship and Sustainable Tourism: The Houseboats of Kerala. *Tourism and Hospitality Research*, Vol. 4

[34]. Korres, G. (2008). The Role of Innovation Activities in Tourism and Regional Growth in Europe, *Tourism: An International Multidisciplinary Journal of Tourism*, Vol.3, (1),135-152.

[35]. Lee, S.M., Lim, S.B., & Pathak, R.D. (2011). Culture and entrepreneurial orientation: A multicountry study. *International Entrepreneurship and Management Journal*, 7(1), 1–15

[36]. Lei, L. (2013) The impact of service innovation on firm performance, *The Service Industries Journal*, 33:15-16, 1599-1632, DOI: 10.1080/02642069.2011.638712

[37]. Monnier, O. (2021), “A ticket to recovery: reinventing Africa’s tourism industry”, available at: [https://www.ifc.org/wps/wcm/connect/news\\_ext\\_content/ifc\\_external\\_corporate\\_site/newsand\\_events/news/reinventing-africa-tourism](https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/newsand_events/news/reinventing-africa-tourism)

[38]. Muñoz-Pascual, L.; Galende, J. (2017). The impact of knowledge and motivation management on creativity: Employees of innovative Spanish companies. *Empl. Relat.* 2017, 39, 732–752.

[39]. Muzapu, R & Sibanda, M. (2016). Tourism Development Strategies in Zimbabwe, *Management*, Vol.6 No. 3, 55-63.

[40]. Nebojsa, S., Kajita, V., & Nikola, B. (2019). Service Innovations and Firm Performance in the Hospitality Industry: Evidence from Tourism driven Economy. Conference: Tourism in Southern and Eastern Europe: Creating Innovative Tourism Experiences. The Way to Extend the Tourist Season.

[41]. Nijssen, E.J., Hillebrand, B., Vermeulen, P. A. M., & Kemp, R. G. M. (2006). Exploring Product and Service Innovation Similarities and Differences. *International Journal of Research in Marketing* 23(3):241-251

[42]. Nyagadza, B., Chuchu, T. & Chigora, F. (2022). Technology Application in Tourism Events: Case of Africa, Chapter 9 in *Digital Transformation and Innovation in Tourism Events*, Ed: Hassan, A. United Kingdom Tourism Society, Routledge, Taylor & Francis, Abingdon, United Kingdom (UK). ISBN 9781032220963. <https://www.routledge.com/Digital-Transformation-and-Innovation-in-TourismEvents/Hassan/p/book/9781032220>

[43]. Omerzel, D. G. (2015). Innovativeness in Tourism: Model Development, *Procedia Economics and Finance*, 23(2015), 750-756

[44]. Orfila-Sintes, F., & Mattsson, J. (2009). Innovation behaviour in the Hotel Industry. *Omega* 37(2):380-394

[45]. Ottenbacher, M. & Gnoth, J. (2005). How to develop successful hospitality innovation. *Cornell Hotel and Restaurant Administration Quarterly*, 46(2), 205-222.

[46]. Ottenbacher, M. C., Shaw, V., & Lockwood, A. (2006). An investigation of the Factors Affecting Innovation Performance in Chain and Independent Hotels. *Journal of Hospitality and Tourism* 6(3-4):113-128).

[47]. Pantano, E., and Stylidis, D. (2021). New technology and tourism industry innovation: Evidence from audio-visual patented technologies, *Journal of Hospitality and Tourism Technology*, Vol. 12 No 4, 658-671

[48]. Puertas Medina, R. M., Martín Martín, J. M, Guaita Martínez, J. M., Serdeira Azevedo, P. (2022) : Analysis of the role of innovation and efficiency in coastal destinations affected by tourism seasonality, *Journal of Innovation & Knowledge (JIK)*, ISSN 2444-569X, Elsevier, Amsterdam, Vol. 7, Iss. 1, pp. 1-9, <https://doi.org/10.1016/j.jik.2022.100163>

[49]. Richardson, H. (2020), “Africa’s fast-growing tourism industry could lose up to \$120 billion and millions of jobs”, available at: <https://qz.com/africa/1888306/africa-tourism-market-to-lose-up-to-120-billion-with-covid/>

[50]. Rosa María, P. M., José María, M.M., José Manuel, G. M., Paula, S. A. (2022): Analysis of the role of innovation and efficiency in coastal destinations affected by tourism seasonality, *Journal of Innovation & Knowledge (JIK)*, ISSN 2444-569X, Elsevier, Amsterdam, Vol. 7, Iss. 1, pp. 1-9, <https://doi.org/10.1016/j.jik.2022.100163>

[51]. Samsudin, Z., & Ishmail, M. D. (2019). The Concept of Dynamic Capabilities in Changing Environment, *International Journal of Academic Research in Business and Social Sciences* 9(6).

[52]. Schumpeter, J. (1934). *The Theory of Economic Development*, Harvard Unity Press, USA

[53]. Silva, J. J., & Cirani, C. B. S. (2020). The capability of organizational innovation: systematic review of literature and research proposals. *Gestão & Produção*, 27(4), e4819. <https://doi.org/10.1590/0104-530X4819-20>

[54]. Souza, L., Pena, L. and Moesch, M. (2017). Knowledge and Synergy as Drivers of Regional Innovation in Tourism: The Case of the Tourism Observatory of the Federal District, Brazil, *Brazilian Journal of Tourism Research*, Vol.11, (1),19-38.

[55]. Stamboulis, Y., & Skayannis, P. (2003). Innovation Strategies and Technology for Experience-Based, *Tourism Management* 24(1):35-43

[56]. Statistica (2020), “Selected African countries with the largest number of international tourist arrivals in 2019”, available at: <https://www.statista.com/statistics/261740/countries-in-africa-ranked-by-international-tourist-arrivals/>

[57]. Stronen, F., Hoholm, T., Kvaerner, K.J., & Stome, L. N. (2017). Dynamic capabilities and innovation capabilities: The case of the “Innovation Clinic”, Volume 13, Issue 1

[58]. Sundbo, J., Orfila-Sintes, F., & Sorensen, F. (2007). The innovative behaviour of tourism firms-Comparative studies of Denmark and Spain, *Research Policy* 36.

[59]. Suwannapirom, C., & Pranee, S. (2023). Model for Enhancing the Organizational Performance of Airports of Thailand Public Company Limited. *Procedia of Multidisciplinary Research*, 1(2), 5.

[60]. Teece, D. J. (2018). Business models and dynamic capabilities. *Institute for Business Innovation. Long Range Planning* 51 (2018), 40-49

[61]. Teece, D. J., and Pisano, G. (1994). The dynamic capabilities of firms: An Introduction. *Industrial and Corporate Change*, 3(3), 537-556

[62]. Teece, D. J., Pisano, G., and Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509-533

[63]. Toros, E., Maslakci, A., & Surucu, L. (2021). The mediating effect of psychological empowerment on inclusive leadership and innovative work behaviour: A research in hotels. In C. Cobanoglu, & V. Della Corte (Eds.), *Advances in global services and retail management* (pp. 1–10). USF M3 Publishing. <https://www.doi.org/10.5038/9781955833035>

[64]. Tseng, C.Y, Kuo, H.Y. & Chou, S.S. (2008). Configuration of innovation and performance in the service industry: evidence from the Taiwanese hotel industry. *The Service Industries Journal*, 28(7), 1015-1028.

[65]. Tsokota, T., von Solms, R., & van Greunen, D. (2019). The reticent effect of ICT on tourism: A case study of Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, Volume 8(3), 1-7.

[66]. USAID (2013). Positioning the Zimbabwe Tourism Sector for Growth

[67]. Vargo, S.L., Maglio, P.P. & Akaka, M.A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145-152

[68]. Vargo, S.L., Maglio, P.P. & Akaka, M.A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145-152.