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The nexus between innovativeness and knowledge management: A focus on firm performance in the hospitality sector

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ABSTRACT

While the importance of knowledge management is increasingly acknowledged, many firms do not fully understand the significance of innovativeness in relation to knowledge management and firm performance. Consequently, the objective of this article is to investigate innovativeness and its relationship with knowledge management and organizational performance in an under-examined industry sector and country context. The study methodology was survey-based and took place in the hospitality industry sector in Lesotho, Africa. Findings highlight the importance of knowledge management practices as an important driver of firm performance, where the results emphasize the positive mediating effect of innovativeness on the relationship between knowledge management and firm performance. The study has important practitioner and policy implications, where it is recommended that knowledge management be utilized in conjunction with innovativeness so as to positively influence firm performance. The article delivers a novel contribution to the literature in terms of establishing empirical associations between knowledge management, innovativeness and firm performance in an emerging country context.

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1. Introduction

There is an extensive body of existing literature on innovation which highlights its relevance and importance to economic growth, by demonstrating that innovation is a multifaceted socio-cultural development influencing varied stakeholders and different sources of knowledge (Alaie, 2020; Chen et al., 2018; Edwards-Schachter, 2018; Liu and Wang, 2022). Additionally, emerging studies show that the changes brought about by the digital economy require innovation and agility by firms in the form of harnessing internal capabilities, such as knowledge management, to improve performance particularly in resource scarce environments (Ngoasong, 2018; Urban and Van der Putten, 2021). Several studies show how technological changes are compelling firms to strengthen their knowledge assets, as a means of fostering innovativeness (Chen et al., 2010; Urban and Joubert, 2018). In recognising the value of innovation, insofar the ‘innovation highway’ is largely dependent on the degree to which firms can transform knowledge resources into innovative outcomes (Alegre et al., 2013; Kugler, 2019), many firms are

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now initiating general knowledge management practices and activities to try and improve performance (Alegre et al., 2013; Ciasullo et al., 2020). While prior studies highlight associations between knowledge management and firm performance, very little is known of the nature of the influence that innovativeness may have on performance in the context of knowledge management (Kugler, 2019; Ozkan-Canbolat and Beraha, 2019). Moreover, there have been research calls to deepen understanding of the interrelationship between “technological and non-technological factors” that may impact the creation and transmission of innovations (Edwards-Schachter, 2018; Nieves and Segarra-Ciprés, 2015).

The objective of this article is to create empirical links between knowledge management and firm performance, and to understand how this relationship is positively mediated by innovativeness in the hospitality sector. Knowledge-management is highly relevant in the 21st century as business environments are increasingly becoming knowledge-intensive and benefit through the channel of knowledge spillovers from technological innovation (Aldieri et al., 2021; Urban, 2012). Existing theoretical and empirical studies reveal that knowledge management is a critical asset in many different industries that enables firms to discover innovations and exploit new opportunities; including the production of smart tourism knowledge in the hospitality sector (Alavi and Leindner, 2001; Gold and Malhotra, 2001; Hoskisson et al., 2013; Johnson and Samakovlis, 2019). Research reveals the multifaceted aspects of service innovation practices which rely on emerging technologies and highlight the role of knowledge management in hospitality and tourism service innovations (An et al., 2018). Knowledge management can positively impact various components of tourism and hospitality businesses, from “marketing, making reservations, checking-in, catering for customer preferences and checking-out to gathering feedback, it does not always result in a positive impact, where it has been noted that the industry has adopted technology when its benefits clearly exceed the expense” (Law et al. 2013). This article fills an important literature gap and contextual understanding by empirically examining knowledge management and its relationship to innovativeness and firm performance in an under-examined context, namely the hospitality service sector in an under-researched country, namely Lesotho, a small kingdom in the southern part of Africa.

Accordingly the article research question is framed in two separate parts as follows: (1) *what is the relationship between knowledge management, innovativeness, and firm performance*; and (2) *to what extent is the relationship between knowledge management and firm performance positively mediated by innovativeness*.

The article makes an important empirical contribution to the innovation literature, as it examines the interrelationship between, knowledge management, innovativeness and firm performance, which as strategic resources and if properly managed may enhance firm performance, specifically in an emerging country context (OECD, 2005; Shree and Urban 2012; Urban and Joubert, 2018). An analytical review of the literature indicates that the effects of knowledge management on firm performance may not necessarily be direct because of the possibly multifaceted exchanges between innovativeness and performance (Ferraresi et al., 2012; Kalotra, 2014). Recognising these shortcomings and the absence of consistent terminology with the use of innovation and innovativeness (Urban, 2012), the role of innovativeness is probed in terms of the firm’s ability to support emergent new products, services or processes in relation to its ability to convert knowledge into value. Subsequently, instead of merely testing the direct relationship between knowledge management and firm performance, a fine-grained approach is employed in this article to show how knowledge management and innovativeness interact through different pathways to increase overall firm performance.

Another contribution is the study context Lesotho in the southern part of Africa, which exemplifies an under-researched African developing market context. Scholars have made research calls for more empirically thorough understandings of emergent matters in the African market context (Jones et al., 2018). Governments in Africa need to develop the tourism sector to open new opportunities and grow this important sector (Urban and Van der Putten, 2021). In Lesotho despite government efforts to stimulate tourism in furthering national development (UNCTAD, 2012) the hospitality sector is confronted with many challenges and demonstrates a deficiency of innovativeness in its products and services (Karar, 2019). This situation has been exacerbated by the COVID-19 pandemic which is threatening the global economy and the survival of many industries across the globe. Dealing with this epidemic requires degrees of responsiveness, flexibility and innovation that are generally not required during the everyday (Urban and Van der Putten, 2021). Subsequently by concentrating on the tourism and hospitality industry, where the relevance of knowledge management, principally in terms of digitalised reservation systems is clear (DeFranco et al., 2017), the study findings may prove valuable to multiple stakeholders during this crisis. Moreover, researchers note that by concentrating sampling on a single industry sector, a better similarity of setting is obtained for future replicative studies (Davidsson, 2004). It is also anticipated that the article findings may have valuable policy and professional implications as it can provide guidance on the importance of knowledge management in fostering innovativeness throughout the hospitality value chain in order to enhance overall firm performance.

The study is structured to provide a brief theoretical overview upon which hypotheses are framed. The research design section describes and details sampling and measurements used to collect data. The empirical investigations include instrument testing and hypotheses are tested based on regression analyses. Study results are then discussed. The article ends with conclusions, recommendations, limitations and future research suggestions.

2. Innovativeness and links to knowledge management

Extant theory shows that innovation is best conceptualised as a wide-ranging construct which incorporates the behaviors and interfaces of employees at all levels in the organization (Alaie, 2020; Pérez-Luño et al., 2011). Primarily two major models have been identified for the examination of innovation, namely: (1) “The industrial organization model”, is based on a “linear

analysis of technology” with robust links considered to exist between science and innovation, and where innovativeness is contingent on external influences to the organization; (2) “The evolutionary model” views the development of innovation in terms of its diversity, dynamism and cumulative effects, and the principal component in this model is knowledge (Galende, 2006). Moreover, scholars note that the absence of consistent terminology often results in the interchangeable use of constructs of innovation and innovativeness (Urban, 2012). A firm is considered innovative when it adopts innovation, which is relative to the number of innovations adopted and the timing of the adoption. In this regard, innovation is concerned with the adoption or/and implementation of something ‘new’ which is defined in a subjective manner, whereas innovativeness incorporates some kind of measurement conditional on a firm’s propensity towards innovation (Lumpkin and Dess, 1996; Urban, 2012). A firm’s “tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services, or technological processes” is illuminated by the firm’s innovativeness (Lumpkin & Dess, 1996). Innovativeness as used in the present study is theorized in terms of “uniqueness and emergent new products, services or processes as the ability to convert knowledge into value through the implementation of new or improved products, processes and systems” (Kalotra, 2014, p. 81).

A review of the innovation literature highlights that there are various sources for the adoption of innovations (Akbari et al., 2021; Liu and Wang, 2022; Ozkan-Canbolat and Beraha, 2019), such as the employment of dynamic capabilities and complementary assets which lead to knowledge-based management activities, as well as the use of external resources to drive innovations. Gupta and Maltz (2015), for instance, show that firms need knowledge networks to improve their innovation capabilities, which is achieved by interactional, networked, and systemic occurrences (Ozkan-Canbolat and Beraha, 2019). Furthermore, strategy formulation and implementation among Chinese firms underscores the association between innovativeness and firm performance which depends largely on various contingency factors pertinent to a transition economy (Liu and Wang, 2022).

In terms of internal resources studies indicate that individuals have a key role to play in the transfer of knowledge which leads to increased productivity and capabilities (Bilgihan and Nejad, 2015). These transfers are affected by the source’s willingness and attractiveness to transfer, as well as learning intentions and absorptive capacity of the individual (Li et al., 2019; Liu and Wang, 2022; Nieves et al., 2016). Scholars highlight the role of knowledge spillovers on productivity returns, where Aldieri et al. (2020) demonstrate the innovative capacity of firms which support the effectiveness of knowledge transfer.

2.1. Knowledge management as a key resource

Research shows that innovation in service sectors can differ considerably from typical innovations in manufacturing-based businesses, as it usually involves “intangible combinations of processes, people skills, and materials, which lead to heterogeneity, inseparability, and perishability” (Chen et al., 2018; Edwards-Schachter, 2018). The increased degree of uncertainty of this new ‘service and knowledge economy’ amplifies the complexity of choosing the appropriate inputs and consequent outputs (Audretsch and Thurik, 2000). Paul Krugman (1994) terms this as “The Age of Uncertainty”, where it is more prudent to target inputs involved in the formation and commercialization of knowledge.

Knowledge relates to information that corresponds to a particular context, where “knowledge transfer has predominantly been understood as the movement of existing technology or management practice, into organizational settings for which such transfer represents a new knowledge input” (Burton et al., 2006, p. 92). In this regard, Hong et al. (2019) demonstrate how absorptive capacity can positively impact innovation speed and innovation frequency. A valuable theoretical structure to investigate knowledge management within a firm context is the Resource-Based View (RBV), where the firm is a “unique bundle of distinctive resources and capabilities which are used to maximize value” (Gold and Malhotra, 2001; Grant, 1996). Knowledge plays a major role in creating and sustaining the long-term capabilities and performance of the firm (Alavi and Leidner, 2001; Chen et al., 2018; Nieves et al., 2016), and industries which face shortened life cycles and have limited competitive advantages need to foster innovations to remain sustainable overtime (Atalay et al., 2013; Steffens et al., 2009).

Additionally, the RBV informs the Knowledge-Based View (KBV) where knowledge is considered a key resource useful for obtaining a sustained advantage (Carneiro, 2000; Cohen and Olsen, 2015). Firms are increasingly dependent on knowledge resources, where products and services made possible through knowledge resources depend on how they are applied and implemented (Alavi and Leidner, 2001; Alegre et al., 2013). Prior study results show that knowledge management has a positive impact on the firm’s performance, where there is a complementary relationship between tacit and codified knowledge insofar they mutually reinforce and improve customer service (Cohen and Olsen, 2015; Gold and Malhotra, 2001).

2.2. Knowledge management and performance

Research highlights that the supplementary innovative provision provided by knowledge management, such as “e-commerce systems” (Walker et al., 2016) and “Enterprise Resource Planning Systems (ERPs)” are pivotal tools which have the capacity to offer strategic and operational benefits. These advantages allow systems to provide precise and dependable information networks if appropriately applied at firms (Chauhan and Singh, 2020; Whittaker and Beswick, 2008). Knowledge management is especially pertinent to the hospitality sector, which over the past decades has seen increasing pressure to respond to and create customer value through Information Technology (IT) and knowledge management practices (Johnson and Samakovlis, 2019). Competition in the hospitality sector is related to increasing operational efficiency and customer value

through technology or new processes. Most firms face increased competition and shortened products' life cycles, which means that their ability to develop innovations is more important than ever in maintaining a competitive advantage (Atalay et al., 2013; Law et al., 2013). Following this line of research, the relationship between knowledge management, innovativeness and performance is articulated in the following hypotheses as:

Hypothesis 1. Knowledge management will positively enhance the levels of firm performance in the hospitality industry

Hypothesis 2. Innovativeness will positively enhance the levels of firm performance in the hospitality industry

2.3. Intermediating effect of innovativeness on knowledge management and performance

Acknowledging the improvement of knowledge heterogeneity as a firm resource, firms can integrate knowledge from different sources and combine different types of knowledge in multiple new ways that entail new opportunities for innovative growth and development (Li et al., 2019; Wu and Shanley, 2009). Studies highlight that knowledge management and resources are crucial in the phase of initial adoption of knowledge management practices. In the tourism and hospitality industry research findings show that in the last two decades, there has been a dramatic shift in travel-related bookings, with a specific regard to accommodations, where online presence has become increasingly important (An et al., 2018; Bilgihan and Nejad, 2015; Kabir and Musibau, 2018). Furthermore, research indicates that knowledge plays an important supporting function in the innovation-performance relationship by providing an important organizing means to improve the transformation of resources (such as knowledge) into competencies (An et al., 2018; Chen et al., 2018; Darroch, 2005). Such conversion of knowledge resources is suitably explained by mediational analysis where the connection between knowledge management and firm performance is influenced by innovativeness, and is assumed to have a positive mediating effect on this relationship. In other words in order to verify the intermediate process that clearly guides the association from knowledge management to firm performance, innovativeness is assumed to instigate knowledge management, and in turn knowledge management affects firm performance. This line of reasoning fits with recent research results which indicate that firms that foster innovativeness are involved in new opportunity identification and exploitation, while also facing knowledge restraints (Boone et al., 2019), and which in turn may or may not lead to increased performance. Correspondingly, that is why a “mediation effect is best identified as an indirect effect, intermediating effect or intervening effect” according to MacKinnon et al. (2002). Based on such arguments and the stream of emerging research on knowledge management and performance, which are not only positively related but innovativeness may mediate this relationship to increase overall performance, it is hypothesised that:

Hypothesis 3. Innovativeness has a positive mediating effect on the relationship between knowledge management and firm performance in the hospitality industry

3. Methodology

The study context – Lesotho has total area of 30 355 square kilometres and is entirely landlocked by South Africa. Economic growth, notwithstanding the devastating effects of the COVID-19 pandemic, in Lesotho has been hampered over the years by a lack of public investment where the spill-over effects from slower growth in the South African economy exacerbates this situation (OECD, 2020). However there is huge potential to grow the tourism industry, where hospitality is a major component, to uplift the economy and in this regard the government of Lesotho has introduced several tourism development policies and strategies (LTDC, 2016; UNCTAD, 2012), and hence the rationale for selecting this sector as the study context.

3.1. Sampling and data collection

Relying on a cross-sectional design, the unit of analysis was the individual situated at firms in the hospitality industry value chain in Lesotho. Sampling was based on membership lists from the “Lesotho Tourism Development Corporation” (LTDC, 2016). The sampling frame included both senior and middle managers of hotels, inns, guest houses, lodges, bed and breakfasts, and travel agents. Based on this comparative heterogeneity of the diverse hospitality sectors sampled, a greater generalizability was obtained. After several e-mailing invitations 110 complete responses were collected which represented the study sample, rendering a response rate of 17.8 percent - deemed satisfactory for surveys of this type (Cooper and Emory, 1995)? Checking for potential “non-response bias” (Cooper and Emory, 1995), firm size and firm age were compared with other firms, and results of t-tests exposed no significant differences ($P > 0.10$), suggesting that the sample appears to be justly representative of the population from which it is taken (Cooper and Emory, 1995).

In terms of the final sample it was revealed that just over half (55.1%) of the respondents were employed in “firms with 50–100 employees”, while 20.1% had “more than 100 employees”. In terms of firm age, the most of the sample (47.7%) “worked in firms in existence between 11 and 15 years”, while 24.9% “worked in firms older than 20 years”.

3.2. Measures

The instrument (three sections) was adapted to suit the study hypotheses. Section one related to “knowledge management (KM) as the independent variable (IV)”, and was measured in terms of questions relating to both tacit and codified knowledge insofar they mutually reinforce and improve customer service (Cohen and Olsen, 2015; Chen et al., 2010; Gold and Malhotra, 2001). Items relating to “knowledge rooted in relationships with customers, suppliers, industry associations and other stakeholders” were included in the KM measure, and included questions such as “willingness and ability of the company to retain the staff, ways to acquire information about other players in the sector, and ways to exchange information with other players in the sector” (Gold and Malhotra, 2001).

Section two related to “innovativeness (INN) as the mediating variable (MV) and was measured by examining the firm’s openness to innovative ideas, and new service, products and processes innovation relative to competitors in terms of: (1) new products and services introduced in the past three years, (2) new processes introduced in the past three years, and (3) proportion of sales from new products and services accrued in past three years” (Ferraresi et al., 2012; Nieves et al., 2016).

Section three related to “performance (PERF) as the dependent variable (DV) and was measured by taking into consideration the multidimensional nature of performance” (Steffens et al., 2009). Research evidence confirms there is a “high level of consistency between perception and actual objective firm performance measures” (Shree and Urban, 2012). Both “financial and non-financial indicators were used and included items such as sales growth, occupancy rate, customers’ feedback, the number of returning customers, as well as profitability”. Data on each of these indicators was collected for the past three years, since “performance over three years is a wide-ranging enough to account for seasonal and cyclical variations in tourism and hospitality business practices” (Nieves et al., 2016).

All responses were measured on a “five-point Likert-type scale (1 = strongly agree, and 5 = strongly disagree). The average scores of all items were used as aggregate scores to reflect each construct separately”.

3.3. Data analysis techniques and checks

To counter any common-method bias (CMB), all the “questions were required to be answered anonymously, thus reducing any need for respondents’ social desirability bias” (Cooper and Emory, 1995). Statistically, to check for any incidence of CMB a single principal component analysis (PCA), using Harman’s one-factor test was used on all measurement items”, producing “eigenvalues greater than 1.0 for three different components, which accounted for only 17% of variance, which means that no single factor accounted for the majority of the variance. Consequently no evidence of CMB was evident (Podsakoff et al., 2012).

4. Results

4.1. Validity and reliability testing

To test for construct validity, the “Kaiser-Meyer-Olkin (KMO) measure was used to verify the sampling adequacy required for using factor analysis” (Cooper and Emory, 1995). KMO values between 0.808 and 0.825 (which is better the threshold of 0.6), and the “Bartlett’s test of sphericity” was significant ($P \leq 0.001$) and hence provide support for factorization of the variables (Cooper and Emory, 1995). “Exploratory Factor Analysis (EFA) using the principal axis factoring method with Harris Kaiser Case II rotation was used where factors with eigenvalues >1 were retained and factor loadings ranged between 0.69 and 0.91. After four iterations a three factor model emerged which accurately reflects the study constructs. For scale reliability testing Cronbach’s alpha were calculated on each separate factor (Nunnally, 1978), which showed satisfactory results (>0.70). See Table 1 for a summary of the validity and reliability results.

4.2. Descriptive statistics and correlation matrix

Descriptives in terms of mean scores, standard deviations and inter-correlations are displayed in Table 2. All the factors had above mid-point scale (1–5) scores, with the “highest mean score observed for KM ($M = 3.823$, $SD = 0.986$), INN ($M = 3.710$, $SD = 0.906$) and PERF ($M = 3.414$, $SD = 0.932$) respectively”. Additionally as the correlation matrix (Table 2), the Pearson’s coefficients suggest relatively high levels of interrelationships between the study factors. Furthermore, “collinearity diagnostics were calculated and show relatively low variance proportions across the factors. These diagnostics in combination with collinearity statistics reveal variable inflation factor (VIF) values of >1 , which are estimated as acceptable and can be interpreted as no incidence of multicollinearity amongst study variables” (Cooper and Emory, 1995).

Table 1
Factor analysis (EFA) results and reliability scores on study constructs.

Factor/construct and item description	KMO and Bartlett’s test	Percentage variance explained	Cronbach’s alpha
Knowledge Management	0.808 ($P < 0.000$)	69.532	0.733
Innovativeness	0.825 ($P < 0.000$)	70.109	0.827
Performance	0.824 ($P < 0.000$)	75.465	0.859

Table 2
Descriptives and correlations.

Constructs	Mean	Std. Dev.	1	2	3	4	5
1. KM	3.823	0.986	1				
2. Innovativeness	3.710	0.906	0.493**	1			
3. Performance	3.414	0.932	0.304	0.418**	1		
4. Business size	1.791	1.944	0.198	0.180	0.111	1	
5. Business age	3.532	1.927	0.159	0.027	0.192	0.011	1

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

To ascertain the effect of the control variables on the proposed relationships as per the study hypotheses, “comparisons of means tests were carried out to evaluate the effects of single control variables (firm age and size) on the DV in separation to other control variables”. *T*-tests showed no significant relationship with each of the control variables, and an individual one-way ANOVA test did not find any statistical differences in firm performance. Hence, control variables were not included in any further statistical analysis.

4.3. Tests for the study hypotheses

To test H1 where a “positive relationship between KM and firm performance in the hospitality industry” was expected, **Table 3** shows a statistically significant result ($t = 3.313$; $P < 0.00$), accompanied by the beta weight of 0.304, and a R^2 of 0.31, providing support for H1.

To test H2, where a “positive relationship between innovativeness and firm performance in the hospitality industry”, was expected multiple regression analysis was conducted. **Table 4** shows a statistically significant result ($t = 4.789$; $P < 0.00$) accompanied by beta weight of 0.418, and a R^2 of 0.33, providing support for H2.

To test H3, where the “relationship between KM and firm performance is influenced by innovativeness which has a positive mediating effect on the relationship between KM and firm performance in the hospitality industry”, **Table 5** shows an overall statistically significant ($t = 3.815$; $P < 0.00$) result for this model. A R^2 of 0.33 explaining 33 percent variation in performance, where innovativeness ($t = 3.546$; $P < 0.00$), and a beta weight of 0.355 was significant but not for KM ($t = 1.287$; $P < 2.01$), with a beta weight of 0.129. This means that H3 can only be partially supported.

To ascertain if the “regression analyses rejects KM from the model because of the mediating effect, linear regression analysis was performed between KM and innovativeness. Overall a statistically significant ($t = 6.161$; $P < 0.00$) result was obtained for this model where KM ($t = 5.884$; $P < 0.00$), with an associated beta weight of 0.493 which was significant, suggesting partial mediation since innovativeness does not account for all the change that occurs between KM and performance. However, it accounts for a significant change and therefore it can be concluded that innovativeness has a mediating effect between KM and organizational performance”.

Additionally, in terms of the “mediating effect, as per [Baron and Kenny's \(1986\)](#) suggestions, the indirect and direct paths were calculated using the Sobel method, see [Fig. 1](#), where path (KM - performance) = 0.304, path (KM - innovativeness) = 0.493, and path (KM - Innovativeness - performance) = 0.418. As a result of these values there is evidence of a significant mediating effect of innovativeness in the relationship between KM and firm performance which provides further support for H3”.

5. Discussion and conclusions

This article contributes to the global business literature by analyzing the relationship between knowledge management, innovativeness, and firm performance in a unique African market setting. Based on the empirical findings emanating from this study, each of the study hypotheses are discussed in relation to theory and prior studies.

The positive findings obtained for H1, H2 and H3 highlight that knowledge is increasingly important intangible asset used by firms to help them build new capacities and develop higher levels of innovativeness, which ultimately affects their performance ([Nieves et al., 2016](#)). These findings are significant for firms in the hospitality industry as innovativeness allows them to take advantage of new opportunities which may arise from technological changes and changing customer preferences ([Ferraresi et al., 2012](#)).

Table 3
Results for H1: KM and performance.

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.927	0.632		6.212	0.000
	KM	0.302	0.091	0.304	3.313	0.001

Dependent variable: Performance.

Table 4
Results for H2: Innovativeness and performance.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.072	0.624		4.922	0.000
	Innovativeness	0.310	0.065	0.418	4.789	0.000

Dependent variable: Performance.

Considering the positive results for the association between knowledge management and innovativeness, prior research is affirmed insofar at the level of the firm, the progression of “knowledge conversion” generates useful intangible assets that positively influence higher levels of innovativeness (Cabrita and Vaz, 2005). In this regard, the current study findings resonate with prior studies which indicate that knowledge acquisition should be focused on the requirements of the firm as determined by the ability to recognise, obtain and understand the value, of external knowledge (Cohen and Olsen, 2015). At the same time the capacity of a firm to obtain external information and utilise this information or ideas to generate innovations is pivotal. In the context of digitalization and ‘big data’ it is imperative that firms not only to consume external data assets but also obtain external knowledge through the process of deep understanding, thereby leveraging this knowledge to enhance their organizational innovativeness (Xie et al., 2018).

Additionally, the importance of the relationship between KM and innovativeness is revealed in terms of the mediating effects as hypothesised in the present study for H3. H3 predicted that innovativeness plays a significant role towards mediating KM and performance in the service-based hospitality industry. In hospitality and tourism, process innovations which characteristically involve major enhancements to the delivery approach to customers are recognised as pivotal and subsequently increased marketing and organizational innovativeness have a significant impact on firm performance (An et al., 2018). An organizational design where the process of KM produces relevant and useful information may be regarded as a driving force for innovation (Darroch, 2005), as such KM influences the firm’s ability to identify, analyse and capitalize on

Table 5
Results for H3: KM, innovativeness and performance.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.664	0.698		3.815	0.000
	Innovativeness	0.263	0.074	0.355	3.546	0.001
	KM	0.128	0.100	0.129	1.287	0.201

Dependent Variable: Performance.

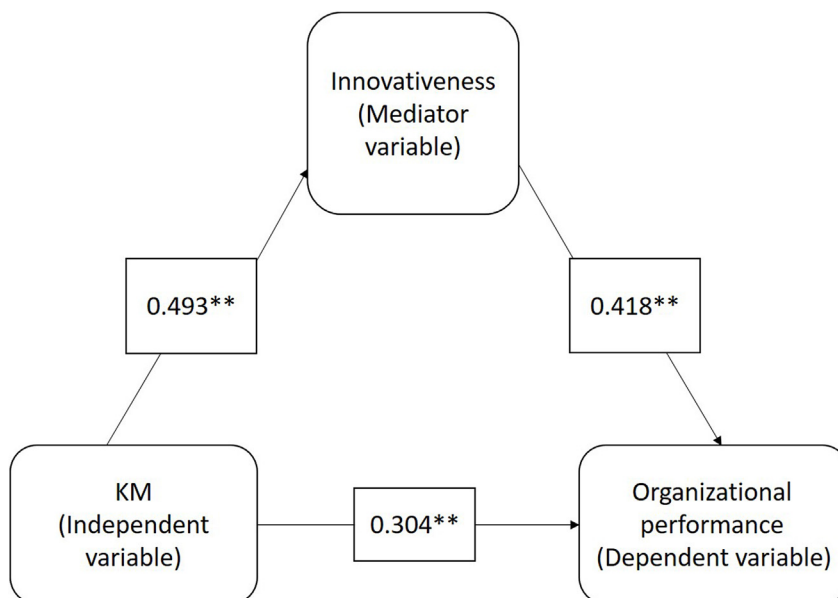


Fig. 1. Hypothesis testing showing mediation effect.

opportunities to increase levels of innovativeness (Nieves et al., 2016). Moreover studies indicate that knowledge is collectively entrenched and affected by the firm's social structures, such as organizational learning. Organizational learning is a social interactive process, where individual learning and KM provide the firm with the potential to innovate and to grow through knowledge conversion (Urban and Joubert, 2018). The ability to transform knowledge relies on the firm's capacity to add new, remove old or combine new and old knowledge, in order to promote innovation (Xie et al., 2018) and this ability to transform knowledge creates the capacity for more new knowledge to be absorbed into the firm. Given these dynamics it is essential for firms to promote value creation (Wu and Shanley, 2009).

Study findings hold several important implications for practitioners and policy makers involved in tourism and hospitality. Since the study took place in a developing African country context, Lesotho, the importance on how firms in Africa can participate in KM and develop market opportunities (Dana et al., 2018) to foster innovativeness and increase performance has now been brought to the forefront in the literature. By addressing both theoretical and practical problems in firms in Africa, a major contribution has been made when considering that many firms in Africa are inclined to be ineffectually managed (Zoogah et al., 2015). It is anticipated that KM activities and practices could boost the innovativeness levels of firms in Africa which will allow them to be effectively managed and compete on a more level-playing field with more established firms in developed countries. Lastly, the findings have relevance to policy formulation and implementation where supporting KM and innovativeness in the hospitality industry in Lesotho be implemented by developing a functioning KM enabling eco-system environment. Moreover, the influence of the COVID-19 pandemic on the hospitality sector highlights the urgency needed to implement innovativeness with knowledge management practices to relieve suffering and achieve a positive economic and social impact for firms in Lesotho (OECD, 2020). Similar to other emerging economies, the difficulties and barriers that firms in South Africa face in the global economy highlights the important role of government agencies and other stakeholders in facilitating or curbing the transfer of knowledge within a firm's international network (Ferreira et al., 2020).

Limitations of the study include its "cross-sectional nature which does not allow for causal inferences to be made" (Cooper and Emory, 1995). In this regard longitudinal studies would be instructive to highlight any significant changes in levels of KM, innovativeness and performance. Moreover the study adopted a quantitative approach so it only provides a picture of what is happening and how it is happening, but it does not capture the 'why' part of the occurrence. For future studies it is recommended that researchers examine other organizational influences such as the effect of digitization, organizational learning and leadership on the relationship between KM and innovativeness.

Declaration of competing interest

The authors declare no conflict of interest.

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