A Post Hoc Analysis of Learning Orientation–Innovation–Performance in the Hospitality Industry

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This paper focuses on issues related to learning orientation (commitment to learning, shared vision, open-mindedness), its effect on innovation, and how innovation can lead to performance in the hospitality industry, particularly hotels. Purposive sampling was used to gather data. Data was gathered from employees of different hotel departments located in Unguja, Zanzibar. The structural equation modelling analysis was based on 228 responses. Three hypotheses formed from the learning orientation construct had a positive effect on innovation while innovation had a strong influence on business performance. Specifically, Hypothesis One (H1): commitment to learning positively (+) affects innovation ($\beta = 0.30$; $p < 0.01$); Hypothesis Two (H2): shared vision had a positive (+) effect on innovation ($\beta = 0.28$; $p < 0.01$); Hypothesis Three (H3): open-mindedness had a positive (+) effect on innovation ($\beta = 0.12$; $p < 0.05$). Finally, Hypothesis Four (H4): innovativeness had a positive (+) and strong influence on performance ($\beta = 0.55$; $p < 0.001$). To obtain more details on the findings presented based on the overall model, a post hoc analysis was conducted. In that analysis, two subgroups were entered in the overall model. The findings indicated that each subgroup had a different effect as it was entered in the overall model. The subgroups included age and experiences. These are grouped as follows: age (below 35 years and above 35 years), and experience (below 10 years and above 10 years). Post hoc findings were interesting and address logical contributions to the design of this study. The findings are considered to be valuable for managers in understanding the implications of encouraging learning as a solid foundation for forming new ideas that can be commercialized. Furthermore, managers should understand the implication of choosing learning orientation over other variables in order to engineer innovation and performance at the end.

Keywords: learning orientation, innovation, performance, hospitality industry, Zanzibar
https://doi.org/10.26493/2335-4194.10.27-41

Introduction

For companies to survive on the long-term and to compete in the unstable environment of the globalized market, hotel managers need to use different strategies. These strategies can be innovative organizational learning, branding, qualified human resources, social responsibility, proactive managerial orientation towards the customer, and implementation of information and communication technology (Roxana et al., 2014). To maintain a competitive advantage, hospital-

ity businesses, hotels in this context, have to exploit these opportunities. This paper focuses on innovation which is always risky, and its implementation never guarantees expected and successful results.

Innovation is defined as the process of developing a new product or the adoption of a new product, which also can be investigated at various levels, such as industry, the project, region (Christensen, 1997) or societal (Miller & O'Leary, 1987). Innovation can be defined as 'the successful implementation of creative ideas' (Amabile, 1996), which can result in solutions for problems, which can have a potential influence on the effectiveness of an industry, revenues of a firm and the prosperity of nations (Harrison & Huntington, 2000). Innovation has been viewed as vital in ensuring competitive advantage by organization and long-term loyalty. Without innovation, organizations are unable to cope with stiff competition, but the need for change and the need for well-organized processes, built upon years of practice should be balanced. Innovation enhances the organization's ability to face the uncertainty that characterizes the current competing fields (Leal-Rodríguez & Albort-Morant, 2016). In the hospitality industry, this practice means understanding and addressing customer needs as well as providing a unique 'innovative' experience (Chen, 2011). Innovation in this context allows hotel managers to introduce new services that improve quality. Doing so, they will meet the changing requirements of potential customers and increase their sale, market share, and profits (Chen, Shih, & Yang, 2009).

Little knowledge exists regarding the effect of learning orientation on innovation to companies that provide services to the customer (Tajeddini & Trueman, 2012) such as hotels. Due to constant change and increasing competitive pressures on today's hotel industry, hotel managers struggle to maximize business results through growth and increased profit margins. As a result, they face more demanding customers, new regulations, globalization, and the destabilizing effects of technological advancement. All these essential factors change the hotel setting drastically and introduce new challenges and requirements for managers to perform. Thus, companies need to be innovative and develop a highly learning-oriented service for their employees in order to improve and extend their skills and knowledge.

Specifically, the focus of this paper is on learning orientation (commitment to learning, open-mindedness, shared vision), its effect on innovation and, further, how these affect performance. Over time, destinations and organizations have failed to succeed due to non-competitive environments. This is true particularly for developing countries such as Zanzibar, where many destinations and organizations are still in their infancy, thus lacking the ability to exploit technologies, competencies, knowledge and skills. Innovation is a risky task, and many innovations fail at a high cost. More knowledge on innovations and tasks associated with innovation will make it more likely that activities are developed successfully. Therefore, this study looks at innovations as a focal construct. Its effect preceded by learning orientation and how these affect performance is also studied. To give more insights on the proposed model a post-hoc analysis is conducted that focusses on the age of employees and experiences in which these two variables are deemed meaningful in determining innovation projects. The research question is, therefore: how and under what conditions does learning orientation affect performance through innovation?

The rest of the paper is organized as follows. In the next section, the theoretical background and hypothesis development is presented. Later, research methods including questionnaire development, measurements, and data collection techniques are presented. Results from structural equation modelling are then reported followed by discussion and implications. Finally, the conclusions including limitations of the study and recommendations for future research are presented.

Theoretical Framework and Hypothesis Development

Figure 1 provides the conceptual framework for this work and shows the empirical links between different constructs as proposed in the hospitality industry. Scholars (Huber, 1991; Kandemir & Hult, 2005; Slater & Narver, 1995) argue that it is possible to develop insights that are likely to influence its behaviour and develop an innovation culture in service development
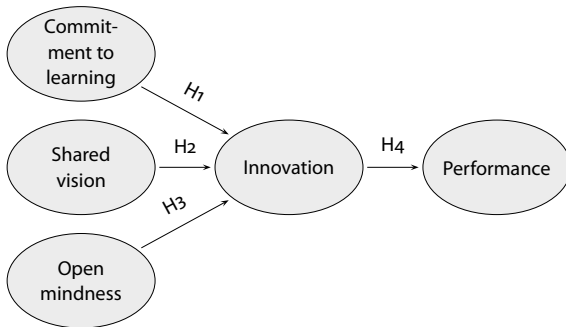
Figure 1   A Proposed Model of the Study

such as hospitality industry. Based on the theoretical background, this study proposes and tests a model of how learning orientation concepts affect innovation and later affect performance in the hotel sector.

Learning Orientation and Innovation

Learning orientation is defined as the development of new knowledge or insights that have the potential to influence behaviour through its values and beliefs within the culture of an organization (Huber, 1991). Baker and Sinkula (1999) define learning orientation as one of the organizational dimensions that influences the organization's propensity to value generative and double-loop learning, and encourages its members to think outside a metaphorical box. Calantone, Cavusgil, and Zhao (2002) define learning orientation as the activities of the organization to add and use knowledge to enhance competitiveness. Nyback, Crespell, Hansen, and Lunnan (2009) define learning orientation as activities of creating and using knowledge to enhance competitive advantage. This study adapts the definition by Hennig-Thurau (2004) that learning orientation in the service industry is seen in an employee's continual desire to improve and extend his or her skills and knowledge. This learning orientation is echoed in increased employee efforts to aggressively expand their existing range of technical and social skills, and thus learn new and better ways of interacting with customers aiming to improve performance in hotels. Boulding, Staelin, Ehret, and Johnston (2005) argue that learning orientation enhances relationships with customers as it helps orga-

nizations in establishing good information processing processes and capabilities that are needed to understand customer needs. As a result, it's argued that learning orientation is one of the most valuable resources, allowing hotels to address issues of globalization and economic uncertainty. This study adopts studies by Sinkula, Baker, and Noordewier (1997) and Nasution, Mavondo, Matanda, and Ndubisi (2011) that conceptualize and operationalize learning orientation as consisting of a commitment to learning, a shared vision, and open-mindedness.

Literature shows that learning produces new knowledge, which is used by employees on the development of innovations, and that, if it is promoted within the organization, high levels of innovation will be developed Martínez et al., 2016. In fact, many studies indicate that there is a strong relationship between learning orientation and innovation (Alegre & Chiva, 2008; Calantone et al., 2002; Chenuos & Maru, 2015; Eshlaghy & Maatofi, 2011; Hult, Hurley & Knight, 2004; Jimenéz-Jimenéz, Martínez-Costa, & Sanz-Valle, 2014; Martínez, Vega, & Vega, 2016). As a result, this article proposes that learning orientation through its components has effect on innovation and these are discussed below.

Commitment to Learning and Innovation

Commitment to learning refers to the organization's devotion to acquire new knowledge through its employees. It shows the degree to which an organization values and promotes learning (Sinkula et al., 1997) that is related to a long-term strategic orientation, where short-term investments will yield long-term gains (Calantone et al., 2002). According to Shaw and Perkins (1991) commitment to learning shows how a company promotes their learning culture and makes the company reflective to the necessary changes. For instance, employees in committed organizations are expected to utilize company time to pursue knowledge outside the immediate scope of their work (Calantone et al., 2002). Commitment to learning improves the effectiveness of managers' innovation. Companies that are service oriented such as the hotel industry perceive their environment as constant changing thus tend to pursue continuous service innovations. Not only can

innovation be difficult, time consuming and expensive (Arnold & Artz, 2015), it can also result in failure. Therefore, managers require building commitment to learning in order to cope with environmental changes as a result of successful innovations. If an organization does not encourage the development of knowledge, employees will not be motivated to pursue learning activities (Calantone et al., 2002) and will perceive innovation as a difficult activity. The more an organization values learning, the more likely learning will occur (Sinkula et al., 1997), and attempts to innovate will increase.

Several authors (i.e. Eshlaghy & Maatofi, 2011; Hult et al., 2004; Tajeddini, 2009) have confirmed the relationship between commitment to learning and innovation. Based on the literature above, this article proposes the following hypothesis in the hospitality industry.

H1 *Commitment to learning of the employees in the hotel sector has effect on innovation.*

Shared Vision and Innovation

A shared vision involves an organization-wide focus on learning (Sinkula et al., 1997); it is all about what the company's expectations are in this learning process. Verona (1999) emphasizes that without a shared vision, learning by members of an organization is likely not meaningful. At times, even if employees are motivated to learn, it is difficult to know what to learn (Calantone et al., 2002). A common problem in organizations is that many creative ideas are never implemented for lack of a common direction (Calantone et al., 2002). Great ideas fail to be translated into action because of diverse interests in the organization (Calantone et al., 2002). With a common vision in the organization, learning becomes meaningful, which affect innovation processes. In addition, even though individuals are stimulated for learning, their problem is that they do not know what to learn unless they have a shared vision (Eshlaghy & Maatofi, 2011). Every organization learns and has a set of leading ideas. The ideas may be more or less intentionally created and more or less visible, and may symbolize good or bad interpretations of what has led to success or failure, but they are always there. Hence, a positive learning environment

necessitates an organizational focus when new knowledge is implemented. A clear direction for learning is likely to form an organizational strength or even a core competence (Calantone et al., 2002).

A number of authors (i.e. Eshlaghy & Maatofi, 2011; Chenuos & Maru, 2015; Tajeddini, 2009; Liao, Chang, Hu, & Yueh, 2012) have confirmed the existence of the connection between commitment to learning and innovation. Therefore, the following hypothesis is proposed in the hospitality industry.

H2 *Shared vision of the employees in the hotel sector affects innovation.*

Open-Mindedness and Innovation

Open-mindedness is the capability of analysing out-of-date processes, questioning them, and making the necessary corrections (Day, 1994). Open-mindedness is the willingness to critically evaluate the organization's operational routine and to accept new ideas (Sinkula et al., 1997). It is also associated with the continuous proactive questioning of the firm's long-held routines, assumptions, and beliefs (Sinkula, 1994). Paparoidamis (2005) argues that at the heart of organizational change, firms unlearn long-held beliefs and routines associated with operational practices, provided that managers are sufficiently open-minded to question them. Firms must have the ability to cope with fast changing technology and turbulent markets, all of which require an ability to manage change. Furthermore, the rate of knowledge obsolescence is high in most sectors, so that lessons learned in the past may be informative if the organization has the open-mindedness to question them (Sinkula, 1994). In other words, it is a process through which an organization starts deleting the existing knowledge or the repetitive assumptions and habits (Eshlaghy & Maatofi, 2011).

Many researchers (i.e. Chenuos & Maru, 2015; Eshlaghy & Maatofi, 2011; Lin, McDonough, Lin, & Lin, 2013) have confirmed the link between open-mindedness and innovation. Based on the literature above, the following hypothesis is proposed in the hospitality industry.

H3 *Open-mindedness of the employees in hotel sector influence innovation.*

Innovation and Performance

Performance in any organization can be defined as the organization's ability to achieve its goals by using resources in an efficient and effective manner (Daft, 2000). Ricardo and Wade (2001) define performance in an organization as the organization's ability to achieve its goals and objectives. Performance can be reviewed based on information obtaining through primary or secondary resources. Generally, performance measures can be grouped into two fundamental types (Gunasekaran, Williams, & McGaughey, 2005). These include performance related to results (outputs or outcomes such as competitiveness or financial performance) and those related to determinants of the results (inputs such as quality, flexibility, resource utilization, and innovation). In this study, the focus on performance measurement is built around the concepts of results and determinants.

Many scholars confirmed the existing relation between innovation and performance to be a significant one (Rosenbusch, Brinckmann, & Bausch, 2011; Stock & Zacharias, 2011; Rubera & Kirca, 2012; Leal-Rodríguez & Albort-Morant, 2016, Martínez et al., 2016). In the hospitality industry, and particularly in the hotel sector, research on studied variables is limited. The increasing popularity concerning ideas and strategies of innovativeness in different hotels can be explained by the fact that managers seek ways of improving performance, especially in the long run. Therefore, the following hypothesis is proposed:

H4   *Innovation in the hotel sector influences performance.*

Methods

This study employed a self-administered questionnaire method of data collection. This process involved respondents filling in the interview form by themselves. The data for this study was gathered from different tourist hotels located in Unguja, Zanzibar. The target population was employees from different departments in different tourist hotels. The data collection process took 40 working days. Of 300 distributed questionnaires, 228 responses were used for analysis, which is a 76% response rate. Structural equation

modelling was used to analyse data. Purposive sampling was used in this study. This sampling was selected from different departments including Housekeeping, Food and Beverages, Accounting, Engineering, and Sales and Marketing.

Study Area

This study was conducted from hotels located in Unguja, Zanzibar. Unguja is the island of the Zanzibar Archipelago that has the most developed tourism industry. This accounts for a substantial part of Unguja's economy. It has a rich history, it is the capital of Zanzibar, with many crystalline sandy beaches, and it is close to the mainland of Tanzania and easily accessible by both sea and air. It houses the seat of the government and the narrow vivid streets of the picturesque Stone Town boost the lively history of Zanzibar. All this explains why Unguja attracts thousands of visitors every year. Agriculture (including the production of spices, such as cloves) and fishing are other relevant activities. All along the east coast, most villages also rely on seaweed farming.

Unguja Island is surrounded by more than 20 islands, most of them uninhabited and located on the western side within the Zanzibar Channel. The study area was selected because of the importance of tourism industry in the country. Thus, tourists service expectation, especially from the hotel sector, need to be met so that the destination remains competitive.

Questionnaire Development

The focus of this paper is on learning orientation (commitment to learning, open-mindedness, shared vision), its effect on innovation and further, how these affect performance. The five constructs in the proposed model are latent variables that cannot be observed directly. Therefore, a questionnaire was developed as a survey instrument. It had four sections which included learning orientation (commitment to learning, open-mindedness, shared vision), innovation, performance and biographical background information. The first three sections included major constructs of the study, which had closed questions. Respondents were asked to select the response to each question or statement that best agrees with their own

opinion. The scale ranges from 1 = Strongly agree to 5 = Strongly disagree.

Measurement of Commitment to Learning

The scales were adopted from the work of Sinkula et al. (1997). Three dimensions included commitment to learning, shared vision, and open-mindedness.

Operationalization of Learning Orientation

Reflecting upon commitment *to learning,* I would say most employees agree that our hotel/company . . .

- offers adequate learning to perform what is required on one's workplace,
- has potential to learn which is fundamental to the hotel's/company's competitive advantage,
- learning is a part of the company's basic values,
- learning is seen as a key to improvement,
- learning is seen as an investment,
- learning is seen as being necessary to guarantee the hotel's survival.

Operationalization of Shared Vision

Reflecting upon *shared vision,* I would say all employees . . .

- share the vision as one of the key purposes of the hotel,
- demonstrate a total agreement on the hotel's/company's vision,
- demonstrate commitment to the goals of the hotel in your work,
- view themselves as partner in steering the direction of the company's future.

Operationalization of Open-Mindedness

Reflecting upon *open-mindedness,* I would say all employees . . .

- are confident to reflect objectively based on the shared assumption about our customers,
- realize that our perception of the market place must be continually reviewed,
- collectively review the opinions we have about the way we view customer information.

Measurement of Innovation (Prajogo & Ahmed, 2006)
Operationalization of Innovation

I would say the hotel I work with in Zanzibar . . .

- is active in utilizing the most adequate equipment,
- has introduced new methods and techniques of doing things,
- has introduced new administrative techniques,
- has introduced many new services,
- has latest technological innovations,
- places a strong emphasis on providing tried and proven services.

Measurement of Performance (Calantone et al., 2002, Pesämaa, Shoham, Wincent, &, Ruvio 2013)
Operationalization of Performance

Reflecting upon *performance,* during the time I have been with this hotel, I would say I have more than average contributed to . . .

- increase sales of services and goods,
- identification of potential customers,
- improved quality of service (time to serve),
- improved customer satisfaction,
- increased amount of served clients,
- improving social climate at work.

Results

Table 1 reports the relevant characteristics of the collected cross-sectional sample. The variables include gender, age, education level, department, marital status, nationality, and experience.

Measurement and Construct Loading

The first construct, called 'commitment to learning' (Table 2), is defined as the organization's devotion to acquiring new knowledge through its employees. It shows the degree to which an organization values and promotes learning (Sinkula et al., 1997) that is related to a long-term strategic orientation, where short-term investments will yield long-term gains (Calantone et al., 2002). Hair, Black, Babin, and Anderson (2010) suggest so-called loadings to exceed 0.5. Four items

Table 1   Characteristics of Respondents (%)

Gender	Male	52.0
	Female	48.0
Age (years)	≤20	15.7
	21–30	45.5
	31–40	25.4
	41–50	11.3
	51–60	2.1
Education level	Primary school	9.7
	Secondary school	22.6
	Certificate level (1 year)	40.2
	Diploma level (2 years)	20.3
	Above diploma level (3–4 years)	7.2
Department	Housekeeping	20.2
	Human Resource	6.5
	Marketing & Sales	5.9
	Front desk	2.13
	Food and Beverage	28.0
	Accounting	4.7
	Engineering	4.9
	Security	7.3
Experience working with this hotel (years)	≤5	6.5
	6–10	18.9
	11–15	45.1
	16–20	21.3
	>20	9.3
Experience working in this sector (years)	≤5	7.9
	6–10	21.0
	11–15	29.3
	16–20	22.5
	20–25	11.2
	26–30	5.2
	>30	3.0

Notes $N = 228$.

(Q1–Q4) of the first construct commitment to learning measures exceeded 0.5. Therefore, they were included in further analysis. Two items were deleted on the basis of weak loadings exploratory factor analysis (EFA).

The second construct, called 'shared vision' (Table 2), refers to an organization-wide focus on learning (Sinkula et al., 1997). Shared vision is all about what the company's expectations are in this learning process. All four items (Q5–Q8) of the second construct shared vision measures exceeded 0.5. Thus, they were included in further analysis.

The third tested construct is open-mindedness. Open-mindedness is the willingness to critically evaluate the organization's operational routine and to accept new ideas (Sinkula et al., 1997). All three items (Q9–Q11) of the third construct open-mindedness measures exceeded 0.5. Thus, they were included in further analysis.

Innovation as the fourth tested theoretical measure had six variables (Questions). Innovation is a key factor to improve productivity, competitive positioning and, thus, profits (Nicolau & Santa Maria, 2013). Five items (Q12–Q16) of the fourth construct innovation measures exceeded 0.5; as a result, they were included in further analysis. One item was deleted on the basis of weak loading EFA.

Finally, looking at performance, the fifth tested construct is defined as the increase in market share, profitability, and customer loyalty. Four items out of six items were included (Q17–Q20); performance measures exceeded 0.5; therefore, they were included in further analysis. Two items were deleted on the basis of weak loading EFA.

Structural Model

The reporting of reliability (Table 2) indicates how well each theoretical measure works when the proposed model (Figure 1) is tested. The model was analysed using AMOS 4.0. To interpret the model, it must be ensured that the model has an adequate fit (Table 3). Based on these statistics and evaluating the model using AMOS, we have the following findings.

Table 3 indicates the goodness-of-fit measures. The model was tested using AMOS. The discussion below includes the discussion of these variables. The chi-square measure was significant, suggesting poor fit; nevertheless, large samples inflate the sensitivity of the chi-square measure, making this result insignificant (Hair, Anderson, Tatham, & Black, 1992; Hatcher,

Table 2   Mean, Standard deviation, Crobanch alpha and Exploratory Factor Analysis

	Mean	SD	Factor/construct					α
			CL	SV	OM	INN	PER	
Q1	4.14	1.26	0.725					
Q2	4.23	0.97	0.681					
Q3	4.48	1.31	0.589					0.72
Q4	4.12	1.07	0.683					
Q5	4.07	0.87		0.845				
Q6	3.86	0.79		0.690				
Q7	4.15	0.93		0.687				0.80
Q8	3.86	1.11		0.599				
Q9	4.01	1.10			0.701			
Q10	3.82	1.05			0.580			0.58
Q11	4.10	0.87			0.654			
Q12	4.07	0.83				0.596		
Q13	3.71	0.96				0.682		
Q14	3.89	0.91				0.855		0.67
Q15	4.10	0.88				0.593		
Q16	3.97	0.90				6.410		
Q17	4.07	1.18					0.769	
Q18	3.81	1.02					0.677	
Q19	3.94	1.22					0.786	0.83
Q20	3.82	1.14					0.794	

Notes   SD – standard deviation, OM – open-mindedness, CL – commitment to learning, INN – innovation, SV – shared vision, PER – performance, α – Crobanch alpha.

1994). This is because chi-square is directly proportional to sample size (*N*). As suggested earlier, in order to minimize the impact of sample size on the model chi-square relative/normed chi-square (χ^2/df) can be used. Although there is no agreement on the acceptable ratio for this statistic; recommendations range from a high of 5.0 (Wheaton et al., 1977) to a low of 2.0 (Tabachnick & Fidell, 2007). At this point, other measures not sensitive to sample size were used, and these included Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA).

For overall model fit, the following indices are valid: χ^2 = 276.51, p < 0.000, CFI = 0.903; RMSEA = 0.051, SRMR = 0.048). A strong fit of the study model requires an RMSEA value less than 0.05, SRMR less than 0.05, and CFI higher than 0.9 (Bagozzi & Yi, 1988) and less than 1.00. Additionally, RMSEA values between 0.05 and 0.08 are indicative of reasonable fit (Byrne, 1998; Diamantopoulos & Siguaw, 2000). All measures used met the cut-off point. Thus, the overall model has a strong and acceptable model fit.

To start with hypothesis 1 (H1) (Commitment to Learning → Innovation), commitment to learning has a positive (+) effect on innovation (β = 0.30; p < 0.01), and this hypothesis is supported. The second hypothesis 2 (H2) (Shared Vision → Innovation), shared vision has a positive (+) effect on innovation (β = 0.28; p <

Table 3   Structural Model Results

Item	Beta (*t*-value)
H1: CL $\rightarrow$ INN	0.30 (2.112)**
H2: SV $\rightarrow$ INN	0.28 (2.530) **
H3: OM $\rightarrow$ INN	0.12 (3.071) *
H4: INN $\rightarrow$ PER	0.55 (3.433) ***
R^2 – innovation	62%
R^2 – performance	68%

Notes   Goodness-of-fit: $\chi^2 = 276.51$ ($df = 100$), normed $\chi^2 = 2.103$; *p*-value < 0.000; CFI = 0.903; RMSEA = 0.051; SRMR = 0.048.

0.01) and this hypothesis is also supported. Hypothesis 3 (H3) (Open-Mindedness $\rightarrow$ Innovation) states that open-mindedness has a positive (+) effect on innovation ($\beta = 0.12$; $p < 0.05$), and this is supported. Lastly, Hypothesis 4 (H4) (Innovation $\rightarrow$ Performance) states that innovativeness has a positive (+) effect on performance ($\beta = 0.55$; $p < 0.001$, and this is strongly supported. The model also shows that the three suggested predictors explain 62% of innovation, which also explains 68% of performance.

Post Hoc Analysis

Literature noted the learning orientation is moderated by the organization's age (Dixon, 1992; Sinkula, 1994). This paper argues it is also related to employees' age. According to Sinkula (1994), the influence of age is explained by the effective and efficient supply of market information in older organizations. Innovative ideas may come from within the organization or from customers, suppliers, and other firms in the relationships. It takes time to establish these relationships; therefore, younger firms are at a disadvantage. Furthermore, older organizations are more experienced at selecting and employing information. As a result, the experience of individuals working with a certain organization also matters. In this study, the earlier concepts were relevant for testing the same model across different subgroups, which include age and experience. Post hoc analysis is established and suggested by Aiken and West (1991) and applied in other supplier based studies (Licata, Mowen, Harris, & Brown, 2003). Two subgroups were generated from the age of employees in

Table 4   Description for Subgroups

Age	Experience
(1a) Below 35 years of age of individuals	(2a) Below 10 years of experience in working with the hotel
(1b) Above 35 years of age of individuals	(2b) Above 10 years of experience in working with the hotel

Notes   N = 228.

Table 5   Control Groups

Group	Subgroup		*n*	%
Age	(1a)	<35 years	143	63.2
	(1b)	>35 years	85	36.8
Experience	(2a)	<10 years	98	28.9
	(2b)	>10 years	130	71.1

Notes   N = 228.

an organization and their experience working in the organization. These subsamples were held constant in order to assess or clarify the relationship between two variables.

The description of how these variables were grouped is presented in Table 4. Group 1 indicates the age of the respondents working with the organization in Unguja, Zanzibar. This group was split into two: below 35 years and above 35. Each group indicated a different effect on the hypothesized gaps. Group 2 showed respondents' experience in working with an organization. This group was also split into two groups, below 10 years and above 10 years.

Table 5 discusses each subgroup with the corresponding percentages. Sixty-three percent of respondents were below 35 years of age while thirty-seven percent were 35 years of age above. Thus, it can be argued the age of individuals in different organizations was not equally distributed. It was found that almost 29% of respondents had less than 10 years' experience while 71% had more than 10 years' experience of working with the same organization. Employees tending to stay long in the same company could be due to a lack of alternative employment.

Goodness-of-Fit Indices for Subgroups

Table 6 indicates the goodness-of-fit measures for all four subgroups. The model for the subgroups was

tested using amos. The discussion below includes the discussion of these variables.

For age, two subgroups are discussed: below 35 years of age and above 35 years of age. For below 35 years of age, the model fit indices are χ^2/df = 1.67, p < 0.000, cfi = 0.915, srmr = 0.045, rmsea = 0.072. In contrast, the goodness-of-fit measures for above 35 years of age model fit indices are χ^2/df = 2.09, p < 0.000, cfi = 0.927, srmr = 0.043, rmsea = 0.052. A strong fit of the study model requires an rmsea value less than 0.05, srmr less than 0.05, and cfi higher than 0.9 (Bagozzi & Yi, 1988) and less than 1.00. Additionally, rmsea values between 0.05 and 0.08 are indicative of reasonable fit (Byrne, 1998; Diamantopoulos & Siguaw, 2000). All measures used met the cut-off point. Thus, the overall model across below 35 years of age and above 35 years of age measures indicated an acceptable model fit.

The research went further and added a second group called 'experience of employees within the organization.' Two subgroups were identified: experience below ten years of and experience above 10 years. For experience below ten years, the model fit indices are χ^2/df = 2.23, p < 0.000, cfi = 0.908, srmr = 0.048, rmsea = 0.069. In contrast, the goodness-of-fit measures for experience above ten years, the model fit indices are χ^2/df = 1.91, p < 0.000, cfi = 0.901, srmr = 0.047, rmsea = 0.050. According to the previous discussion on the cut-off point (criterion), some measures were acceptable for experience below ten years while other measures violated the criterion. All measures were acceptable for experience above ten years. Therefore, the overall model across experience below ten years indicated a less reasonable model fit while experience above ten years indicated an acceptable strong model fit.

Testing of Hypotheses

The following is the testing of the hypotheses across the four subgroups. Tables 5 and 6 show results for each of the subgroups and the decision to either reject or support the hypothesized gaps. Hypothesis 1 (h1) proposed that commitment to learning by employees in the hotel sector has an effect on innovation. This hypothesized relationship (h1) was not similar across the

Table 6   Goodness of Fit Indices for Subgroups

Item	Subgroup			
	(1a)	(1b)	(2a)	(2b)
χ^2	80.16	100.32	107.04	91.68
df	48	48	48	48
χ^2/df	1.67	2.09	2.23	1.91
Probability	0.000	0.000	0.000	0.000
cfi	0.915	0.927	0.908	0.901
srmr	0.045	0.043	0.048	0.047
rmsea	0.072	0.052	0.069	0.050

Notes   For description of subgroups see Table 4.

subsamples (Age < 35 years: β = 0.18; p < 0.001; Age > 35 years: β = −0.135; p > 0.001; Experience < 10 years: β = 0.27; p < 0.001; Experience > 10 years: β = 0.007; p > 0.001). The h1 relationship was strong and significant for two groups (Age < 35 years; Experience < 10 years) while findings for the other two groups (except Age > 35 years; Experience > 10 years) was weak and insignificant. Therefore, h1 was partially supported.

Hypothesis 2 (h2) postulated that the shared vision of employees in the hotel sector affects innovation. This hypothesized relationship was stable across all subsamples (Age < 35 years: β = 0.301; p < 0.01; Age > 35 years: β = 0.281; p < 0.01; Experience < 10 years: β = 0.458; p < 0.01; Experience > 10 years: β = 0.233; p < 0.01). The h2 relationship was significant across all subgroups; therefore, this hypothesis was fully supported.

Hypothesis 3 (h3) predicted that the open-mindedness of employees in the hotel sector influences innovation. This hypothesized relationship was supported in one subgroup based on the age of individuals working in different hotels (Age < 35 years: β = 0.113; p < 0.01). Surprisingly, there was no support for ages greater than thirty five years (Age > 35 years; β = 0.038; p > 0.01). Moreover, examining h3 and the experience of workers in different hotels, support was reported for both groups (Experience < 10 years: β = 0.130; p < 0.01; Experience > 10 years: β = 0.122; p < 0.01). The h3 relationship was relatively strong, and significant for most of the subgroups. Therefore, this hypothesis was supported for some of the subgroups.

Table 7   Test of Hypothesis, Intercorrelation and Square Multiple Correlation across Subgroups

H	P	Subgroup			
		(1a)	(1b)	(2a)	(2b)
H1	CL → INN	0.180***	−0.135	0.270***	0.007
H2	SV → INN	0.301**	0.281**	0.458**	0.233**
H3	OM → INN	0.113***	0.038	0.130***	0.122***
H4	INN → PER	0.579***	0.615***	0.698***	0.643***
R^2	INN	0.335	0.207	0.375	0.449
R^2	PER	0.408	0.337	0.587	0.610

Notes   H – hypothesis, P – path, *** $p < 0.001$, ** $p < 0.01$, $N = 228$. For description of subgroups see Table 4.

Table 8   Overall Sample Hypothesis Testing across Subgroups

H	P	Subgroup				O
		(1a)	(1b)	(2a)	(2b)	
H1	CL → INN	SU	NS	SU	NS	PS
H2	SV → INN	SU	SU	SU	SU	FS
H3	OM → INN	SU	NS	SU	SU	PS
H4	INN → PER	SU	SU	SU	SU	FS

Notes   H – hypothesis, P – path, O – overall result, SU – supported, NS – not supported, PS – partially supported, FS – fully supported, $N = 228$. For description of subgroups see Table 4.

Discussion and Implication

To start with, it was proposed that the commitment to learning on the part of employees in different hotels has an influence on innovation. The relationship between these two constructs did not exist for the overall sample ($N = 228$). This finding is in line with a study that found no support for the relationship between commitment to learning and innovation (Kosgei & Loice, 2015). Contrary to these findings, Calantone et al. (2002) note those organizations that are committed to learning have a high level of innovativeness. Furthermore, Damanpour (1991) notes that firms committed to learning to increase their ability to innovate as compared to competitors. Moreover, the findings of the overall model are surprising as a number of researchers (i.e. Eshlaghy & Maatofi, 2011; Hult et al., 2004; Tajeddini, 2009) have confirmed the relationship between commitment to learning and innovation.

One interesting finding that the post hoc analysis revealed was that hypothesis one (H1) was not similar across the subsamples. The hypothesis was strong and significant for two groups (Age < 35 years: $\beta = 0.18$; $p < 0.001$; Experience < 10 years $\beta = 0.27$; $p < 0.001$) while findings for the other two groups (Age > 35 years; $\beta = −0.135$; $p > 0.001$; Experience > 10 years: $\beta = 0.007$; $p > 0.001$) were weak and insignificant; thus, H1 was partially supported. These findings can be explained by looking at these two different age groups and the main characteristic. Petry (2003) categorized age into young adults (18–35 years), middle-aged adults (36–55 years), and older adults (older than 55). The findings of post hoc analysis can be explained by arguing that young adults (18–35 years) are flexible in committing themselves to learning while older adults (above 35 years) do not easily commit themselves to learning. The same applied to experience; more experienced employees (experience > 10 years) feel like they have enough knowledge of what they are doing; as a result, the need to commit towards learning is low compared to employees with little experience.

Secondly, hypothesis 2 (H2) postulated that the shared vision of employees in the hotel sector affects innovation. The findings from the overall model revealed that shared vision has a positive relationship towards innovation. This finding is in line with Eshlaghy and Maatofi (2011), Chenuos and Maru (2015), Liao et al. (2012), and Tajeddini (2009), which confirmed a relation between the two constructs. A post hoc relationship revealed that this hypothesized relationship was stable across all subsamples (Age < 35 years: $\beta = 0.301$; $p < 0.01$; Age > 35 years: $\beta = 0.281$; $p < 0.01$; Experience < 10 years: $\beta = 0.458$; $p < 0.01$; Experience > 10 years: $\beta = 0.233$; $p < 0.01$). This result implies that employees in an organization need to be flexible and to embrace a participative approach, that illustrating sharing their visions with other employees or even with main stakeholders is necessary to be open to new ideas that enrich innovation. This paper argues that a shared vision creates a common identity and a sense of purpose in an organization. Furthermore, it encourages new ways of thinking and acting; and fosters risk-taking and experimentation. Hoe

(2007) argues that without a shared vision, time spent on stimulating creativity is pointless and meaningless. Therefore, without a shared vision, the learning organization cannot exist even with young, energetic and keen-to-learn employees.

Thirdly, Hypothesis 3 (H3) predicted that the open-mindedness of employees in the hotel sector influences innovation. Based on the overall model, the findings indicated that appositive relationship indicated open-mindedness and innovation. This finding is consistent with those of Eshlaghy and Maatofi (2011), Chenuos and Maru (2015) and Lin et al. (2013) on the existence of support between open-mindedness and innovation. A post-hoc analysis indicated this hypothesized relationship was found for the subgroup aged less than thirty-five years (Age < 35 years: $\beta = 0.113$; $p < 0.01$). There was no support for those aged greater than thirty-five years (Age > 35 years; $\beta = 0.038$; $p > 0.01$). Examining H3 and the experience of workers in different hotels, support was reported for both groups (Experience < 10 years: $\beta = 0.130$; $p < 0.01$; Experience > 10 years: $\beta = 0.122$; $p < 0.01$). This finding suggests that employees that are young adults are more open-minded while older adult employees are less open-minded (a willingness to consider ideas and opinions that are new or different). However, the experience one has with the job or organization does not alter the relationship between open-mindedness and innovation. This suggests that regardless of the experience with the organization or the specific job, employees are willing to consider ideas and opinions that are new or different as a means to engineer innovation.

Hypothesis 4 (H4) proposed that innovation in the hotel sector has a positive effect on performance. Findings based on overall model indicated that innovation had a positive and strong effect on performance that can give an organization a competitive advantage. This finding is consistent with that of Rosenbusch et al., 2011; Stock and Zacharias, 2011; Rubera and Kirca, 2012; Leal-Rodríguez & Albort-Morant, 2016, Martínez et al., 2016 who that found innovation had a strong relationship with business performance. Today, with the increasing competition, uncertainty, and technological changes, organizational innovation is gaining greater strategic relevance for hotels. Inno-

vation is a key factor to improve productivity, competitive positioning and, thus, profits (Nicolau & Santa Maria, 2013). This article also argues that to maintain a competitive advantage, hospitality businesses must be innovative in a strategic manner to have successful innovation projects. Post-hoc results revealed that the hypothesized relationship was strong and significant across all subsamples (Age < 35 years: $\beta = 0.579$; $p < 0.001$; Age > 35 years: $\beta = 0.615$; $p < 0.001$; Experience < 10 years: $\beta = 0.698$; $p < 0.001$; Experience > 10 years: $\beta = 0.643$; $p < 0.001$). The findings of this research depict that innovation is crucial for business performance and the task of managers must be to propose and execute organizational culture that supports learning as a solid foundation for new ideas.

The results of this study address numerous implications for firms that want to be innovative. Specifically, the management of different hotels must understand the factors that help to improve their performance directly or indirectly through mediators and moderators. This study found that innovation is the most powerful factor, having direct effects on performance, suggesting that management should not only design technical strategies to improve performance, but should also create an accepting atmosphere among employees that helps to improve innovation. This is a learning orientation that might be required from new staff during the selection of employees to create dynamic project teams that have the potential to build successful innovative projects. With employees who have a strong, innovative attitude, the possibility of attaining greater performance is higher.

Conclusion

This article argues that innovation is an important organizational ability to achieve competitive advantage in the vibrant environment of the hotel sector as is the case for developing economies such as Zanzibar-Tanzania. In this study, the focus was on innovation and its effect on performance while, learning orientation constructs were antecedents. The research objectives were to test the effect of commitment to learning on innovation, to examine the effect of a shared vision on innovation, to assess the influence of open-mindedness on innovation, and to evaluate

the effect of innovation on performance. Our findings have a significant implication for the hotel managers in Zanzibar-Tanzania: they can increase the innovative capacity of their firms by giving more attention to learning-orientation concepts. These findings also imply that managers should have a practical approach towards the concepts of innovation and promote it to other employees. The employees should be aware of their role in the delivery of services and to be encouraged to have a positive attitude in every assigned task.

This study presents several specific limitations. First, the five chosen variables are important, but there are possibly more relevant variables that could contribute to the subject. The second limitation might be of the geographical area of the research, which was focused on hotels in Unguja, one of the islands of Zanzibar. A national study that considers all important tourist areas within Zanzibar could bring more information for practitioners or managers. The third limitation is that the respondents were drawn from different populations. It can be assumed that the types of employees in five-star hotels and three-star hotels are different. The last limitation is that the study focused only on hotels located in Unguja, Zanzibar. Generalizing the results to other industries and countries may not be appropriate, until an identical model is used for other service industries and for other countries.

The findings show a strong correspondence for our model among hotel employees in the hospitality industry. However, these findings need a follow-up study to better assess whether the observations are a temporary or permanent feature of the economy. A follow-up study could also be interesting to assess why a commitment to learning had no effect on innovation while literature has confirmed the relationship of the variables (Eshlaghy & Maatofi, 2011). Finally, future studies could add moderating factors to the model (i.e. education level, gender, department) to see whether the discovered results could be altered and to explain the basis for these findings.

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