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Innovation strategies and performance: are they truly linked?

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Abstract

Purpose – The purpose of this paper is to test the linkage between innovation strategies (process innovation and service innovation) and organizational performance in the context of Malaysia hotel industry.

Design/methodology/approach – A total of 475 sets of questionnaires administrated through mail to all three star and above rating hotel managers in Malaysia, and only 24 percent of it, which is 114 were usable. Regression was utilized to test the link of innovation strategies and performance.

Findings – The results showed that hotels in Malaysia used process innovation and service innovation as their functional-level strategy. Specifically, both process innovation and service innovation strategies positively linked with performance. But, the paired sample *t*-test result indicated that process innovation has slightly greater effect on performance than service innovation. In addition, this study found that hotel size significantly affected the performance.

Research limitations/implications – This study is one of the limited number of studies which has empirically addressed the effect of innovation strategies on performance in hotel industry. Additional researches are needed to address effect of potential mediators or even moderators in innovation strategies and performance linkage.

Practical implications – This study found that implementation of process innovation and service innovation as their functional strategy could assist to attain better performance in Malaysia hotel industry. Entirely the findings provided new insight to the hotel management in understanding the role of innovation strategies in generating enhanced performance.

Originality/value – Process innovation and service innovation in the service industry have received very limited empirical attention in current innovation literature. This study extended the body of knowledge in innovation literature, particularly in hospitality sector in Malaysia.

Keywords Performance, Innovation strategies

Paper type Research paper

1. Introduction

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The escalating rivalry in the domestic and global market, strong guests' demands, fast progression of technologies and government procedures made the hospitality business transformed extremely in the past several years and is becoming more unsettled (Kaliappen and Hilman, 2014; Wang *et al.*, 2012; Okumus *et al.*, 2010; Tavitiyaman *et al.*, 2011; Olsen and Connolly, 2000). Failure to implement suitable strategies to deal with this tough rivalry could lead to poorer performance (Mia, 1996). In the context of shifting customer anticipations, technological discontinuities, growing environmental uncertainties, hotel management has a big challenge of creating the accurate strategic choice and setting their strategic priorities for business success (Hilman and Kaliappen, 2014). Therefore, to deal with the modern encounters, the service businesses must have more unique and decisive innovation strategies and they should be excellently

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executed (McDermott and Prajogo, 2012). Innovation is a major strategy in creating new product/service development, establishment of new methods of production. supply and distribution, changes in management processes and provides concepts and processes for gaining competitive advantage and superior performance (Wang and Ahmed, 2004). For instance, product/service innovation, market innovation, process innovation, technology innovation, open innovation, behavior innovation and strategic innovation were among some popular innovation strategies in the current period and it has helped to improve the overall performance (Wang and Ahmed, 2004). Therefore, innovation strategies have been regarded as having a pivotal role in enhancing performance, market advantage, sales growth and profitability (Sandvik et al., 2014). Due to the increasing significance of innovation strategies toward the superior performance attainment and competitive advantage, numerous empirical researches were conducted to test the connection between innovation strategy and organizational performance from various business fields (Rosli and Sidek, 2013; Rheea et al., 2010; Hilmi et al., 2010; Prajogo and Ahmed, 2006). However, empirical studies that highlight the association of innovation strategies and performance are still limited within the context of the service industry (Prajogo, 2006) particularly in Malaysia hotel industry. To extend the body of knowledge, this research assessed the influence of innovation strategies, mainly process innovation and service innovation on the performance of hotels in Malaysia. The results of this research would be beneficial for hotel managers in making right strategic decisions concerning their hotels' innovation strategies that could lead to attain strategic direction goals.

Hotel industry is a vital component of Malaysia's economic development (Awang et al., 2008; Razalli, 2008). The government of Malaysia through the Ministry of Tourism and Culture continuously derives various policies, plans and agendas in sustaining the performance and quality of the hotel industry. As a result, RM 1.2 billion has been allocated by the government for operating and development expenditure in the year 2013 and 2014 to implement Visit Malaysia Year 2014 programs (Hotel Yearbook, 2014). Furthermore, the government introduced an investment tax allowance and pioneer status for new hotel with four and five star rating. Consequently, there are several foreign brand hotels newly built, expanded and some under construction such as Marriot, Shangri-La, Hilton, Amari, Mercune, Four seasons, Four Points (Sheraton), Ritz Carlton, Banyan Tree, The Ru Ma, W and St Regis (Hotel Yearbook, 2014). Currently, there are 475 registered three to five star rating hotels in Malaysia. The Ministry is expecting to achieve RM 168 billion revenue growth and 36 million tourist arrivals in the year 2020 (Aruna, 2013). Hotels that operate in Kuala Lumpur, Johor, Penang and Langkawi are targeting to gain more yield in upcoming years.

This research intended to test the relation of innovation strategies and performance in the context of Malaysia hotel industry. Therefore, the subsequent exploratory research questions are used to achieve the research objective:

- H1. What type of innovation strategies being employed by hotels in Malaysia?
- H2. Do innovation strategies contribute to better performance?

2. Literature review and hypotheses development

2.1 Theoretical underpinnings – dynamic capabilities (DC) and innovation strategy Numerous scholars emphasis organizations need to develop various forms of capabilities to efficiently handle the growing turbulent business and economic

environment (D'Aveni, 1994; Wiggins and Ruefli, 2005; Kunc and Bhandari, 2011; Singh et al., 2013). Many scholars and researchers are discussing about the DC. Teece et al. (1997) stated that DC is a capability to create the integration for the adaptation to transform the organization in present swiftly changing external environment. Eisenhardt and Martin (2000) stated that DC is a precise procedure which involves product improvement, strategic choice creation and alliance. Singh et al. (2013) mentioned that capability must be the convention that could be made repeatedly, which mostly used by top management to organize the resources in proper mode. Wang and Ahmed (2007) identified adaptive capability, absorptive capability and innovative capability. Olsson et al. (2010) said innovative capability is assisting to nurture innovation constantly to respond effectively toward fluctuating environment. So, the organization's capability to generate innovations has been recognized as a pivotal matter for its overall success. Therefore, innovation can be specified as an organizational capability since it arranges the resources with a different ability to build added value to strive in modern business (Yang et al., 2006; Saenz et al., 2009). Based on the DC perspective, innovation strategies are considered as organizational capabilities that are used as a basis for competitive advantage and superior performance attainment. This perspective addressed organizational capabilities as fundamental factors of good performance, so the DC were found to be suitable perspective to explain this study that highlighted innovation strategies and performance link.

There is another viewpoint to point out the innovation strategy. Based on strategic management literatures, innovation strategy is considered as a functional-level strategy that focusses on the maximization of resource productivity within each specific function (Nandakumar *et al.*, 2011). Therefore, innovation strategy emphasizes to make the best use of the resources efficiency in process, product/service, networking, entrepreneurial and R&D (Forsman, 2009; Wang and Ahmed, 2004). So, this study also investigated the innovation strategy as a functional-level strategy that could lead to better performance.

2.2 Defining innovation strategy

The prior literatures show various definitions of innovation. Schumpter (1934) as cited in Wang and Ahmed (2004) defined innovation as developing new product/service, new methods of production, new market, new source of supply and new organizational forms. Miller and Friesen (1983) stated innovation as new product/service innovation, method of production, risk taking by key executives and seeking rare and unique innovativeness. Drucker (1985) stated innovation as the process of providing new and enriched competencies. Hult et al. (2004) stated innovation as the firm's capacity to engage in innovation. Kuratko and Hodgetts (2004) stated new formation of idea and development of remaining resources to create wealth. Thornhill (2006) stated as a process of idea creation, improvement of invention and introducing new product/ service/process to the market. Verma et al. (2008) mentioned innovation often understands efforts for continuous improvement. O'Sullivan and Dooley (2009) stated innovation is about helping organizations grow. Innovation is the practice of creating modifications to something reputable by presenting something novel that increases value to customers. Hilmi et al. (2010) defined innovation as ability to create something new or bring out renewal and acting in a way that utilizes this ability. Bakar and Ahmad (2010) said innovation as the ability of a firm to use new chances to advance competitiveness. Innovation is designed due to developing technologies, rival activities,

different idea from stakeholders and fluctuations in external environment. Shah and Chattopadhyay (2014) stated innovation is a replicable process where the organizations not necessarily reinvent the whole process/product, but they just requisite to grow innovative ways out to satisfy the customers' obligation that is neglected by the rivals. The literatures show various forms of innovation strategies, but this study merely focussed on implementation of process innovation and service innovation in hotel industry to boost the performance.

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2.3 Organizational performance measurement

Different organizations are consuming different methods to evaluate their performance. Performance can be evaluated in financial and non-financial indicators (Darroch, 2005: Bagorogoza and Waal, 2010; Bakar and Ahmad, 2010). Utmost organizations select financial indicators to evaluate their performance, such as return on assets, average annual occupancy rate, net profit and return on investment (ROI). There were some flaws in financial measures; limited precision, neutrality, summarized and irrelevant because of accounting period delay (Wadongo et al., 2010). Furthermore, it emphasizes only on a short period basis, unbalanced and also failed to reflect the strategic issues and performance (Wadongo et al., 2010; Harris and Mongiello, 2001; Kaplan and Norton, 1992, 1996). Therefore, numerous investigators tend to calculate the performance using both financial and non-financial performance indicators (Saunila et al., 2014; Wadongo et al., 2010; Grawe et al., 2009; Hilman, 2009; Razalli, 2008; Jusoh and Parnell, 2008; Evans, 2005). Thus, balanced scorecard (BSC) was produced to offer balanced performance measures for financial and non-financial perspectives in evaluating the organizational performance. As a result, BSC retained the financial and added three non-financial views; customer, internal process and learning and growth (Kaplan and Norton, 1992, 1996).

2.4 Innovation strategy and performance linkage

The significance of innovation strategy is explained by several researchers such as Lopez and Sanchez (2013), Al-Ansari *et al.* (2013), Tajeddi and Trueman (2012), Jiménez-Jiménez and Sanz-Valle (2011) that could lead to attain superior performance and competitive advantage. As discovered in various empirical researches, innovation strategies and organizational performance have a positive and significant association (Cainelli *et al.*, 2006; Keskin, 2006; Mansury and Love, 2008; Grawe *et al.*, 2009; Bowen *et al.*, 2010; Sdiri *et al.*, 2010; Hilmi *et al.*, 2010; Rheea *et al.*, 2010; Gunday *et al.*, 2011). Innovation classified as product/service, process, market, behavior, open and strategic (Wang and Ahmed, 2004), but this study focussed more on process innovation and service innovation impact on performance (Hilmi *et al.*, 2010; Grawe *et al.*, 2009).

2.5 Process innovation

The literatures indicate that process innovation as a method of re-engineering and refining internal business operation which involves many aspects such as technical design, R&D, methods of service creation, managing and commercial actions (Freeman, 1982; Cumming, 1998). Furthermore, process innovation emphasizes on creating improvement in techniques, knowledge, process, system, procedure and skill in transforming service creation process (Oke *et al.*, 2007; Wan *et al.*, 2005; Langley *et al.*, 2005; Zhuang *et al.*, 1999; Gopalakrishnan and Damanpour, 1997). Wang and Ahmed (2004) stated process innovation as a new production method, management

approach and technology to enhance the production and management process. O'Sullivan and Dooley (2009) defined process innovation as creating beneficial modifications in the process of producing the offerings. Process innovation is involved with all functional and operational activities that assist to reduce the production cost, enhance the quality, delivery method, gain market share, attaining superior performance and competitive advantage (Gunday *et al.*, 2011; O'Sullivan and Dooley, 2009; Qin, 2007). Specifically, hotels can perform the process innovation activities in the management process, core process and support process (Drljača, 2006). Previous studies found that process innovation has a significant association with performance in various business fields (Rosli and Sidek, 2013; Gunday *et al.*, 2011; Ar and Baki, 2011; Varis and Littunen's, 2010; Hilmi *et al.*, 2010). Therefore, this study has proposed following hypothesis:

H1. Process innovation is positively related to organizational performance.

2.6 Service innovation

Service innovation is defined as creation of valuable alterations in the service that the customers use (O'Sullivan and Dooley, 2009). Precisely, service innovation happened because of a greater degree of interaction and vigorous request from guests (Victorino et al., 2005). Therefore, hoteliers requisite constantly execute innovation in service to raise the service features to satisfy the customers' requirement (O'Sullivan and Dooley, 2009). Remarkably, Damanpour and Gopalakrishnan (2001) stated that service innovation has also been identified as product innovation. Chen (2011) mentioned service innovation is considered as the expansion of valuable ideas to advance the service efficiently. So, it is useful to execute service innovation in the hospitality industry because guests can simply find compatible service deals in hospitality industry (Victorino et al., 2005). Thus, to evade this challenge the hoteliers should provide innovative service deals to the guests based on their inclinations to attain superior performance and competitive advantage (Victorino et al., 2005; Kumar et al., 2011). For example, hoteliers could offer various and delightful menus, WI-Fi, customize room beautification, exclusive room amenities, creative design and architecture (Victorino et al., 2005). Several studies found that service innovation assist to attain better performance (Grawe et al., 2009; Mansury and Love, 2008; Prajogo and Ahmed, 2006; Frohwein and Hansjurgens, 2005). Therefore, this study has proposed following hypothesis:

H2. Service Innovation is positively linked to organizational performance.

3. Research methodology

The framework illustrated in Figure 1 has been shaped to display the link of innovation strategies and performance. Precisely, this study designated the structure as functional-level strategies (Innovation strategies) and organizational performance association.

3.1 Variables and measurements

This study used innovation strategy; process innovation and service innovation as independent variables and organizational performance as a dependent variable. Likert-type scale items were utilized for all scale items. Process innovation was measured using items adapted from Hilmi *et al.* (2010). The Likert-type items were fixed at 1 = strongly disagree and 7 = strongly agree. The range of means for the four measurement items of

process innovation was 4.31-4.37. Service innovation was evaluated using items adapted from Grawe *et al.* (2009). Respondents were requested to specify their current functional strategy implementation regarding the service innovation. The mean for five items ranged from 4.29-4.39 (1 = strongly disagree to 7 = strongly agree). Organizational performance was evaluated using items adapted from Hilman (2009) and Kaplan and Norton (1996). Respondents were requested to specify the performance of their hotels in the past three years compared to the performance of their key rivals in the industry (1 = significantly decrease to 7 = significantly increase). The mean values for the six items ranged from 5.98 to 6.47. The means and standard deviations for each item are presented in Table I.

To recognize the accurate link of innovation strategy and organizational performance, it is vital to control other possible variables that could influence the organizational performance. The control variables in this study are; hotel size, age and location. The size of hotel is represented by the number of rooms (Ros and Sintes, 2009; Baum and Haveman, 1997; Damanpour, 1996) which is considered as one of the most relevant productive resource that may influence the decision of executing innovation strategies and determine profitability. The age of hotel is represented by the years of operation (Baum and Mezias, 1992) which is considered as an organizational resource that highlighted the hotels' experience and reputation as well as potential to influence the innovation decision. The location is represented by city, island and hill (Baum and Haveman, 1997) which is considered as a key competitive variable in the

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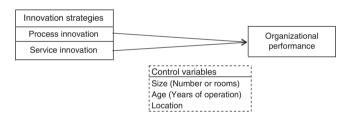


Figure 1. Research framework

Construct and items	Mean	SD	
Process innovation			
Constantly improving business process	4.36	1.34	
During 5 years, has developed many new management approaches	4.37	1.41	
If cannot solve a problem using conventional methods, we improve on new methods	4.31	1.38	
Change service creation methods at great speed	4.36	1.39	
Service innovation			
Accept service innovation in project management	4.36	1.36	
Give special emphasis on service innovation	4.32	1.45	
Always seeking innovative features	4.29	1.45	
Change the existing services to meet exclusive requirement	4.39	1.32	
Come up with new service offerings	4.33	1.39	
Organizational performance			
Return on investment (ROI)	5.98	0.66	
Market share	6.26	0.62	
Sales growth	6.31	0.65	Ta
Customer perspective	6.22	0.65	Measurement
Internal process perspective	6.35	0.73	and descr
Learning and growth perspective	6.47	0.60	sta

hotel industry and the location where the hotel operates may affect the decisions of innovatzion and performance. All these three factors have potential to influence the innovation decisions (Ros and Sintes, 2009). So, these variables were controlled in the data analyses.

3.2 Data collection and sample characteristics

Data were collected in Malaysia using self-administrated questionnaire based on census method. The census method attempts to collect data from every hotel of the whole population being studied rather than choosing a sample (Jupp, 2006). This method gives more reliable, accurate and unbiased results through extensive information (Aggarwal and Khurana, 2009). An initial survey draft was revised by two hotel managers and two university lecturers in order to provide strong content validity. The three to five star ratings hotels were carefully chosen for investigation. Restraining the samples to a single industry increases the internal validity of the research (Grawe et al., 2009). Hotels' top and middle managers or executives were selected by assuming that they have enough information of their hotels' innovation strategies and performance level. All the information regarding the potential respondents were generated using directory of Ministry of Tourism and Culture, Malaysia. Survey were sent to all 475 three to five star rated hotels through mail and continuation letters were prepared to possible respondents after two weeks. For the period of four months, a total of 144 completed surveys were returned. Of the completed survey, 114 were usable, resulting in a response rate of 24 percentages. Totally, 20 responses were discarded due to too much of missing data. Although, the survey response rate is low but the distribution of hotel ratings seems appropriate to reflect the research objectives. The Table II shows the respondents demographic profiles.

4. Analysis results

4.1 Validity and reliability

The validity of the constructs was inspected prior to hypothesis testing. Albeit, the components of process innovation, service innovation and organizational performance were well known, but still exploratory factor analysis (EFA) was conducted. Principal component analysis was utilized to evaluate the variables. All the items were remained due to strong loadings, > 0.50 (Hair *et al.*, 2010). The outcomes of EFA are displayed in Table III. To confirm the reliability of the data, Cronbach's α was calculated. The α values of these factors were more than 0.80 as presented in Table III. As a result, this specified strong validity and reliability has been attained.

This study used variance inflated factor (VIF) and tolerance value to identify the multicollinearity problem. The general rule of cutoff point for VIF is the value should not exceed 10 while the tolerance value should be not < 0.10 (Pallant, 2005). In this study, all the values of VIF did not exceed 10 and all the tolerance values were > 0.10. Thus, no multicollinearity problem exists in this study.

In this study, non-response bias was accessed by comparing early and late respondents. There were 67 early respondents and 47 late respondents who responded after receiving reminder letter. The *t*-test analyses revealed no significant differences at the 0.05 level between the two groups, indicating that non-response bias is not a major problem and does not influence the study findings (Skarmeas *et al.*, 2002). Furthermore, all items were answered by a single respondent so there are possibilities for common method variance (CMV) problem (Podsakoff and Organ, 1986). This study

Category	Frequency	0/0	Innovation strategies and
Position			
Top management	61	53.5	performance
Middle management	53	46.5	
Total	114	100.0	
Ratings			
Three star	50	43.9	55
Four star	41	36.0	
Five star	23	20.2	
Total	114	100.0	
Number of rooms		100.0	
> 100	16	14.0	
101-200	35	30.7	
201-300	36	31.6	
301-400	10	8.8	
> 401	17	14.9	
Total	114	100.0	
Location	114	100.0	
City	95	83.3	
Island	93 17	14.9	
Hill	2	1.8	
Total	114	100.0	
	114	100.0	
Years of operation	00	17.5	
< 5 years	20	17.5	
5-9 years	29	25.4	m
10-15 years	35	30.7	Table II.
> 15 years	30	26.3	Respondent
Total	114	100.0	demographics

Variables	No. of items	Factor loadings	α	
Process innovation	4	0.814-0.884	0.87	Table III. Results of validity and reliability
Service innovation	5	0.784-0.859	0.89	
Organizational performance	6	0.645-0.824	0.84	

used the Harman's single factor test for CMV (Wang *et al.*, 2012). All factors were extracted, with the first factor explaining 0.4598 of the total variance. It is lower than 0.50 (Peng *et al.*, 2006), suggesting no CMV occurred.

4.2 Regression analysis

Hierarchical regression was run to test the association of process innovation and service innovation on organizational performance. Table IV shows that the dimension of control variables was significantly associated with organizational performance ($R^2 = 0.516$, p < 0.01). Nonetheless, only hotel size found positively and significantly related to performance ($\beta = 0.023$ and 0.236, p < 0.01). The hotel size indicated higher performance of implementing innovation strategies due to economies of scale (Ros and Sintes, 2009). The R^2 -value was 0.784 which shows 78 percent of variation in performance explained by process innovation and service innovation. The result shows

process innovation and service innovation have a positive link on performance with $\beta = 0.348$, p < 0.01 and $\beta = 0.441$, p < 0.01, respectively. In addition, the *F*-test outcomes give a measure of absolute fit of the model. The *F*-test outcomes show 78.780 which is highly significant, so the model does fit the data.

Based on the regression analysis, both process innovation and service innovation are significantly related to organizational performance. In addition, to indicate which type of innovation strategies is more likely to impact performance, a paired-samples t-test was carried out. The result shows statistical differences in the scores of both predictors; process innovation (M = 4.350, SD = 1.17) and service innovation (M = 4.338, SD = 1.16); t-value (113) = 14.546, p < 0.01. These findings indicate that process innovation attained slightly better outcomes than service innovation. Refer to Table V.

5. Discussion of findings

The results of this research ratified the significance of innovation strategy to Malaysia's hotel industry. The outcomes also supported with earlier studies which recognized innovation as an important strategic concern in the current hypercompetitive environment. This research recognized that hotels in Malaysia exercise the process innovation and service innovation almost equally. The findings indicated that process innovation attain slightly better results than service innovation. Overall, hotels in Malaysia pursuing process innovation and service innovation, believed that these strategies would enhance their overall performance.

The result of the *H1* pointed out that the process innovation has a positive impact on organizational performance. This outcome highlighted that hoteliers prefer process innovation because they wanted to make cost reduction, acquire a larger market share, increase internal efficiencies, attain economies of scale and monitor potential rivals (Prajogo and Sohal, 2006; Frohwein and Hansjurgens, 2005; Porter, 1980, 1985). This finding is consistent with prior findings that found a positive link between process

Variables	Organizationa	al performance
	Std. β step 1	Std. β step 2
Predictor		
Process innovation		0.348*
Service innovation		0.441*
R^2	0.516	0.784
Adjusted R^2	0.503	0.775
F change	39.154	78.780
Control variables		
Age	-0.573	-0.195
Hotel size	0.023*	0.236*
Location	0.040	0.028
Note: * $b < 0.01$		

Table IV.Regression analysis of process innovation, service innovation and performance

Variables	Mean	SD	<i>t</i> -value	df	Sig.
Process innovation Service innovation	4.350 4.338	1.173 1.160	14.546	113	0.000
Note: $n = 114$					

Table V. Results of paired-sample *t*-test

innovation and performance (Rosli and Sidek, 2013; Gunday *et al.*, 2011; Hilmi *et al.*, 2010; Qin, 2007; Verbess and Meulenberg, 2004). While, the result of the *H2* also showed the service innovation is positively linked with performance, which is consistent with prior findings of Lin (2013) and Grawe *et al.* (2009). Hoteliers are pursuing service innovation to create unique service creation, alter business design and quickly respond to customers' requirements as well as attain better performance (Grawe *et al.*, 2009; Frohwein and Hansjurgens, 2005). Thus, both hypotheses findings confirmed that process innovation and service innovation are important strategies for hoteliers to strive in current turbulent business environment (Rosli and Sidek, 2013; Hilmi *et al.*, 2010; Prajogo and Sohal, 2006). But, the paired sample *t*-test result confirmed that process innovation has slightly greater effect on performance than service innovation. In short, innovation strategies are truly linked to organizational performance.

5.1 Implications

The research addressed the link of process innovation and service innovation on performance in an empirically verified theoretical framework that significantly fill the research gap of implementation of innovation strategies in hotels in Malaysia. This study found the effectiveness of specific innovation strategy in determining better performance in Malaysia hotel industry. Present research offered valid information for the hotel top- and middle-level managers in making accurate decisions to attain their strategic direction goal, profitability and performance.

5.2 Limitations and future recommendations

This study has several limitations. It only focussed on hotels with three star rated and above. So, future studies should investigate this issue on hotels with one to five star rating. Furthermore, this study examined the direct linkage of innovation strategies and performance, so further studies could consider other variables as a potential mediator or even moderator to expand the theoretical relationship. This research only investigates the influence of age, size and location as control variables on innovation and performance nexus. Future studies could focus on hospitality branding as a control variable that could influence the innovation strategy execution and better performance attainment. It used single source of information from each hotel, the same study that involves different levels of management will be more beneficial and maybe reduce the self-reporting bias. Future research could use various data collection method to increase the response rate. This investigation only focussed on innovation strategy issues and its effect on performance. Indisputably, other factors may affect the performance, if such situation exists, it is considered as limitations too. However, it is believed that present study has helped to resolve some discrepancies in innovation strategy literature and to the nature of the relationship between innovation strategy and performance.

5.3 Conclusion

This study investigated the linkage of innovation strategy and performance of hotels in Malaysia. It empirically showed that hotels in Malaysia implement process innovation and service innovation as their functional-level strategy. The findings empirically showed that both process innovation and service innovation significantly impact the performance. Specifically, this study indicated that process innovation

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slightly edge over than service innovation in securing better performance. This has been proven by many previous studies, both in local and abroad as cited before. Thus, hoteliers should nurture the innovation strategy or capability to advance their overall management, knowledge of market, innovative process and service creation (Vila *et al.*, 2012). From this finding, it can be concluded that innovation strategies truly linked with organizational performance in context of Malaysia hotel industry.

References

- Aggarwal, S.C. and Khurana, S.K. (2009), Research Methodology and Statistical Analysis (for M. Com), V. K. Enterprise, New Delhi.
- Al-Ansari, Y., Pervan, S. and Xu, J. (2013), "Innovation and business performance of SMEs: the case of Dubai", Education, Business and Society: Contemporary Middle Eastern Issues, Vol. 6 Nos 3/4, pp. 162-180.
- Ar, I.M. and Baki, B. (2011), "Antecedents and performance impacts of product versus process innovation: empirical evidence from SMEs located in Turkish science and technology parks", European Journal of Innovation Management, Vol. 14 No. 2, pp. 172-206.
- Aruna, P. (2013), "Giving the tourism sectors a boost", available at: www.thestar.com.my/News/Nation/2013/08/15/Giving-the-tourism-sector-a-boost.aspx (accessed August 15, 2013).
- Awang, K., Ishak, N., Radzi, S. and Taha, A. (2008), "Environmental variables and performances: evidence from hotel industry from Malaysia", *International Journal of Economic and Management*, Vol. 2 No. 1, pp. 59-79.
- Bagorogoza, J. and Waal, A.D. (2010), "The role of knowledge management in creating and sustaining high performance organisations the case of financial institutions in Uganda", World Journal of Entrepreneurship Management and Sustainable Development, Vol. 6 No. 4, pp. 307-323.
- Bakar, L.J. and Ahmad, H. (2010), "Assessing the relationship between firm resources and product innovation performance", Business Process Management Journal, Vol. 16 No. 3, pp. 420-435.
- Baum, J.A.C. and Haveman, H.A. (1997), "Love thy neighbour? Differentiation and agglomeration in the Manahattan hotel industry", *Administrative Science Quarterly*, Vol. 42 No. 2, pp. 304-338.
- Baum, J.A.C. and Mezias, J.S. (1992), "Localized competition and organizational failure in the Manhattan hotel industry", Administrative Science Quarterly, Vol. 37 No. 4, pp. 564-580.
- Bowen, F.E., Rostami, M. and Steel, P. (2010), "Timing is everything: a meta-analysis of the relationships between organisational performance and innovation", *Journal of Business Research*, Vol. 63 No. 11, pp. 1179-1185.
- Cainelli, G., Evangelista, R. and Savona, M. (2006), "Innovation and economic performance in services: a firm-level analysis", Cambridge Journal of Economics, Vol. 30 No. 4, pp. 435-458.
- Chen, W.J. (2011), "Innovation in hotel services: culture and personality", *International Journal of Hospitality Management*, Vol. 30 No. 1, pp. 64-72.
- Cumming, B.S. (1998), "Innovation overview and future challenges", *European Journal of Innovation Management*, Vol. 1 No. 1, pp. 21-29.
- D'Aveni, R.A. (1994), Hypercompetition: Managing the Dynamics of Strategic Maneuvering, Free Press, New York, NY.
- Damanpour, F. (1996), "Organizational complexity and innovation: developing and testing multiple contingency models", Management Science, Vol. 42 No. 5, pp. 693-716.

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performance

- Damanpour, F. and Gopalakrishnan, S. (2001), "The dynamics of the adoption of product and process innovation in organizations", *Journal of Management Studies*, Vol. 38 No. 1, pp. 45-65.
- Darroch, J. (2005), "Knowledge management, innovation and firm performance", Journal of Knowledge and Management, Vol. 9 No. 3, pp. 101-115.
- Drljača, M. (2006), "Methodology of business process development in a hotel industry", 18th Biennial International Congress Tourism & Hospitality Industry 2006, New Trends in Tourism and Hospitality Management, Faculty of Tourism and Hospitality Management, Opatija, pp. 752-763.
- Drucker, P.F. (1985), Innovation and Entrepreneurship, Butterworth Heinemann, Oxford.
- Eisenhardt, K.M. and Martin, J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, Vol. 21 Nos 10/11, pp. 1105-1121.
- Evans, N. (2005), "Assessing the BSC as a management tool for hotel", *International Journal of Contemporary Hospitality*, Vol. 17 No. 5, pp. 376-390.
- Forsman, H. (2009), "Improving innovation capabilities of small enterprises: cluster strategy as a tool", *International Journal of Innovation Management*, Vol. 13 No. 2, pp. 221-243.
- Freeman, C. (1982), The Economics of Industrial Innovation, 2nd ed., Frances Printer, London.
- Frohwein, T. and Hansjurgens, B. (2005), "Chemicals regulation and the porter hypothesis: a critical review of the new European chemical regulation", *Journal of Business Chemistry*, Vol. 2 No. 1, pp. 19-36.
- Gopalakrishnan, S. and Damanpour, F. (1997), "A review economics of innovation research in sociology and technology management", *Omega*, Vol. 25 No. 1, pp. 15-28.
- Grawe, S., Chen, H. and Daugherty, P. (2009), "The relationship between strategic orientation, service innovation on performance", *International Journal of Physical Distribution and Logistics Management*, Vol. 39 No. 4, pp. 282-300.
- Gunday, G., Ulusoy, G., Kilic, K. and Alpkan, L. (2011), "Effects of innovation types on firm performance", International Journal of Production Economics, Vol. 133 No. 2, pp. 662-676.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), Multivariate Data Analysis, 7th ed., Prentice Hall, Upper Saddle River, NJ.
- Harris, P. and Mongiello, M. (2001), "Key performance indicators in European hotel property: general manager's choice and company profiles", *International Journal of Contemporary Hospitality Management*, Vol. 13 No. 3, pp. 120-128.
- Hilman, H. (2009), "Relationship of competitive strategy, strategic flexibility and sourcing strategy on organizational performance", unpublished PhD dissertation, Universiti Putra Malaysia, Selangor.
- Hilman, H. and Kaliappen, N. (2014), "Construct validation on organizational strategies and performance dimensions using confirmatory factor analysis", Asian Journal of Management Research, Vol. 4 No. 3, pp. 550-560.
- Hilmi, M.F., Ramayah, T., Mustapha, Y. and Pawanchik, S. (2010), "Product and process innovatiness: evidence from Malaysian SMEs", European Journal of Social Science, Vol. 16 No. 4, pp. 556-565.
- Hotel Yearbook (2014), "Foresight and innovation in the global hotel industry", available at: www.hotel-yearbook.com (accessed January 2, 2014).
- Hult, G.T.M., Hurley, R.F. and Knight, G.A. (2004), "Innovativeness: its antecedents and impact on business performance", *Industrial Marketing Management*, Vol. 33 No. 5, pp. 429-438.
- Jiménez-Jiménez, D. and Sanz-Valle, R. (2011), "Innovation, organizational learning, and performance", Journal of Business Research, Vol. 64 No. 4, pp. 408-417.

- Jupp, V. (2006), The SAGE Dictionary of Social Research Methods, SAGE Publications Ltd, London.
- Jusoh, R. and Parnell, J.A. (2008), "Competitive strategy and performance measurement in the Malaysian context", Management Decision, Vol. 46 No. 1, pp. 5-31.
- Kaliappen, N. and Hilman, H. (2014), "Building strategic business model through underpinning theories", *International Journal of Management Research and Review*, Vol. 4 No. 3, pp. 327-333.
- Kaplan, R.S. and Norton, D.P. (1992), "The balanced scorecard: measures that drive performance", Harvard Business Review, Vol. 70 No. 1, pp. 71-79.
- Kaplan, R.S. and Norton, D.P. (1996), *The Balanced Scorecard: Translating Strategy into Action*, HBS Press, Boston, MA.
- Keskin, H. (2006), "Market orientation, learning orientation, and innovation capabilities in SMEs – an extended model", European Journal of Innovation Management, Vol. 9 No. 4, pp. 396-417.
- Kumar, V., Jones, E., Venkatesan, R. and Leone, R.P. (2011), "Is market orientation a source of sustainable competitive advantage or simply the cost of competing?", *Journal of Marketing*, Vol. 75 No. 1, pp. 16-30.
- Kunc, M. and Bhandari, R. (2011), "Strategic development processes during economic and financial crisis", Management Decision, Vol. 49 No. 8, pp. 1343-1353.
- Kuratko, D.F. and Hodgetts, R.M. (2004), Entrepreneurship: Theory, Process and Practices, 6th ed., Smith Western, South Western, OH.
- Langley, D.J., Pals, N. and Ort, J.R. (2005), "Adoption of behaviour: predicting success for major innovations", European Journal of Innovation Management, Vol. 8 No. 1, pp. 56-78.
- Lin, L. (2013), "The impact of service innovation on firm performance", The Service Industries Journal, Vol. 33 Nos 15/16, pp. 1599-1632.
- Lopez, A.M.M. and Sanchez, A.A.V. (2013), "The strategic management process and the innovative capacity of the Spanish hotel industry", *Journal of Hospitality Marketing & Management*, Vol. 22 No. 6, pp. 596-618.
- McDermott, C.M. and Prajogo, D.I. (2012), "Service innovation and performance in SMEs", International Journal of Operations & Production Management, Vol. 32 No. 2, pp. 216-237.
- Mansury, M. and Love, J. (2008), "Innovation, productivity and growth in US business services: a firm-level analysis", *Technovation*, Vol. 28 Nos 1/2, pp. 52-62.
- Mia, L. (1996), "Intensity of market competition, use of strategic management accounting and business unit performance", paper presented at a Research Seminar Held at School of Accounting, The University of New South Wales and supported by KPMG, 26 April.
- Miller, D. and Friesen, P.H. (1983), "Strategy-making and environment: the third link", Strategic Management Journal, Vol. 4 No. 3, pp. 221-235.
- Nandakumar, M.K., Ghobadian, A. and Regan, N. (2011), "Generic strategies and performance evidence from manufacturing firm", *International Journal of Productivity and Performance Management*, Vol. 60 No. 3, pp. 222-251.
- O'Sullivan, D. and Dooley, L. (2009), *Applying Innovation*, SAGE Publications Inc., Thousand Oaks, CA.
- Oke, A., Burke, G. and Myers, A. (2007), "Innovation types and performance in growing UK SMEs", *International Journal of Operations and Production Management*, Vol. 27 No. 7, pp. 735-753.
- Okumus, F., Altinay, L. and Chathoth, P.K. (2010), Strategic Management for Hospitality and Tourism, Butterworth-Heinemann, Oxford.

strategies and

performance

- Olsen, M.D. and Connolly, D.J. (2000), "Experience-based travel", Cornell Hotel and Restaurant Administration Quarterly, Vol. 41 No. 1, pp. 30-40.
- Olsson, A., Wadell, C., Odenrick, P. and Bergendahl, M.N. (2010), "An action learning method for increased innovation capability in organizations", Action Learning: Research & Practice, Vol. 7 No. 2, pp. 167-179.
- Pallant, J. (2005), SPSS: Survival Manual, 2nd ed., Allen & Unwin, Crows Nest.
- Peng, T.K., Kao, Y.T. and Lin, C.C. (2006), "Common method variation in management study: question essence, influence, test and remedy", *Journal of Management*, Vol. 23 No. 1, pp. 77-98.
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-reports in organizational research: problems and prospects", *Journal of Management*, Vol. 12 No. 2, pp. 531-544.
- Porter, M.E. (1980), Competitive Strategy, Free Press, New York, NY.
- Porter, M.E. (1985), Competitive Advantage: Creating and Sustaining Superior Performance, Free Press, New York, NY.
- Prajogo, D.I. (2006), "The relationship between innovation and business performance a comparative study between manufacturing and service firms", *Knowledge and Process Management*, Vol. 13 No. 3, pp. 218-225.
- Prajogo, D.I. and Ahmed, P.K. (2006), "Relationships between innovation stimulus, innovation capacity, and innovation performance", R&D Management, Vol. 36 No. 5, pp. 499-515.
- Prajogo, D.I. and Sohal, A.S. (2006), "The relationship between organizational strategy, total quality management and organizational performance: mediating role of TQM", *European Journal of Operational Research*, Vol. 168 No. 1, pp. 35-50.
- Qin, Z. (2007), "Process innovation, cost leadership and market power analysis based on electronic information industry", Research Project of Zhejiang Philosophy and Social Science, Vol. 1 No. 1, pp. 358-363.
- Razalli, M.R. (2008), "The consequences of service operations practice and service responsiveness on hotel performance: examining hotels in Malaysia", unpublished PhD dissertation, UniversitiSains Malaysia, Penang.
- Rheea, J., Parkb, T. and Lee, D.H. (2010), "Drivers of innovativeness and performance for innovative SMEs in South Korea: mediation of learning orientation", *Technovation*, Vol. 30 No. 1, pp. 65-75.
- Ros, E.M. and Sintes, F.O. (2009), "Innovation activity in the hotel industry", *Technovation*, Vol. 29, pp. 632-641.
- Rosli, M.M. and Sidek, S. (2013), "The impact of innovation on the small and medium enterprises: evidence from Malaysia", *Journal of Innovation Management in Small & Medium Enterprise*, Vol. 2013, pp. 1-16.
- Saenz, J., Aramburu, N. and Rivera, O. (2009), "Knowledge sharing and innovation performance-a comparison between high-tech and low-tech companies", *Journal of Intellectual Capital*, Vol. 10 No. 1, pp. 22-36.
- Sandvik, I.L., Duhan, D.F. and Sandvik, K. (2014), "Innovativeness and profitability: an empirical investigation in the Norwegian hotel industry", *Cornell Hospitality Quarterly*, Vol. 55 No. 2, pp. 165-185.
- Saunila, M., Pekkola, S. and Ukko, J. (2014), "The relationship between innovation capability and performance: the moderating effect of measurement", *International Journal of Productivity and Performance Management*, Vol. 63 No. 2, pp. 234-249.
- Sdiri, H., Ayadi, M. and Elj, M. (2010), "Innovation and performance: an empirical study of Tunisian service firms", Journal of Innovation and Business Best Practices, Vol. 9 No. 3.

- Shah, M. and Chattopadhyay, N. (2014), "Innovation in procurement from rural India using enterprise mobility strategy: a case study", World Journal of Entrepreneurship, Management and Sustainable Development, Vol. 10 No. 2, pp. 143-153.
- Singh, D., Oberoi, J.S. and Ahuja, I.S. (2013), "An empirical investigation of dynamic capabilities in managing strategic flexibility in manufacturing organizations", *Management Decision*, Vol. 51 No. 7, pp. 1442-1461.
- Skarmeas, D., Katsikeas, C.K. and Schlegelmilch, B. (2002), "Drivers of commitment and its impact on performance in cross-cultural buyer-seller relationship: the importer's perspective", *Journal of International Business Studies*, Vol. 33 No. 4, pp. 757-783.
- Tajeddi, K. and Trueman, M. (2012), "Managing Swiss hospitality: how cultural antecedents of innovation and customer oriented value system can influence performance in hotel industry", *International Journal of Hospitality Management*, Vol. 31 No. 4, pp. 1119-1129.
- Tavitiyaman, P., Qu, H. and Zhang, H.Q. (2011), "The impact of industry force factors on resource competitive strategies and hotel performance", *International Journal of Hospitality Management*, Vol. 30 No. 5, pp. 648-657.
- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", Strategic Management Journal, Vol. 18 No. 7, pp. 509-533.
- Thornhill, S. (2006), "Knowledge, innovation and firm performance in high-and low-technology regimes", *Journal of Business Venturing*, Vol. 21, pp. 687-703.
- Varis, M. and Littunen, H. (2010), "Types of innovation, sources of information and performance in entrepreneurial SMEs", European Journal of Innovation Management, Vol. 13 No. 2, pp. 128-154.
- Verbess, F. and Meulenberg, M. (2004), "Market orientation, innovativeness, product innovation and performance in small firms", Journal of Small Business Management, Vol. 42, pp. 134-154.
- Verma, R., Anderson, C., Dixon, M., Enz, C., Thompson, G. and Victorino, L. (2008), "Key elements in service innovation: insights for hospitality industry", Cornell Hospitality Roundtable Proceedings No. 1 (November) Ithaca, Center for Hospitality Research, Cornell University, School of Hotel Administration, NY, pp. 6-12.
- Victorino, L., Verma, R., Plaschka, G. and Dev, C. (2005), "Service innovation and customer choices in the hospitality industry", *Managing Service Quality*, Vol. 15 No. 6, pp. 555-576.
- Vila, M., Enz, C. and Costa, G. (2012), "Innovative practices in the Spanish hotel industry", *Cornell Hospitality Quarterly*, Vol. 53 No. 1, pp. 75-85.
- Wadongo, B., Odhuno, E., Kambona, O. and Othuan, L. (2010), "Key performance indicators in the Kenyan hospitality industry: a managerial perspective", *Benchmarking:* An International Journal, Vol. 17 No. 6, pp. 858-875.
- Wan, D., Ong, C.H. and Lee, F. (2005), "Determinants of firm innovation in Singapore", Technovation, Vol. 25 No. 3, pp. 261-280.
- Wang, C.H., Chen, K.Y. and Chen, S.C. (2012), "Total quality management, market orientation and hotel performance: the moderating effects of external environmental factors", *International Journal of Hospitality Management*, Vol. 31 No. 1, pp. 119-129.
- Wang, C.L. and Ahmed, P.K. (2004), "The development and validation of the organisational innovativeness construct using confirmatory factor analysis", *European Journal of Innovation Management*, Vol. 7 No. 4, pp. 303-313.
- Wang, C.L. and Ahmed, P.K. (2007), "Dynamic capabilities: a review and research agenda", International Journal of Management Reviews, Vol. 9 No. 1, pp. 31-51.
- Wiggins, R.R. and Ruefli, T.W. (2005), "Schumpter's ghost: is hypercompetition making the best of times shorter?", *Strategic Management Journal*, Vol. 26 No. 10, pp. 887-911.

strategies and

performance

Yang, J., Rui, M. and Wang, J. (2006), "Enhancing the firm's innovation capability through knowledge management: a study of high technology firms in China", *International Journal* of Technology Management, Vol. 36 No. 4, pp. 305-317.

Zhuang, L., Williamson, D. and Carter, M. (1999), "Innovate or liquidate-are all organizations convinced? A two-phased study into the innovation process", *Management Decision*, Vol. 37 No. 1, pp. 57-71.

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