

The Effects of Digital Marketing and Market Orientation on Innovation and Firms' Performance

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The role of digital marketing is crucial to the interactive consumer market, specifically to service-based businesses such as the hotel industry. Moreover, innovation has become crucial for service businesses in terms of creating value for customers. The purpose of this study is to investigate the digital marketing that may have an impact on market orientation, innovation and firms' performance. Subjects are key persons of the small hotels operated in Thailand. The questionnaire was designed from a review of the studies on service businesses. In addition, it includes information from discussion with an expert for designing specifically to the subjects — who are key personnel of the small hotels in Thailand. The Structural Equation Model was applied to clarify the empirical result from the conceptual model. The results indicate the significant effect of digital marketing on innovation and market orientation. Consequently, it has a direct effect on the performance of the small hotels.

Key words: *Digital marketing, Market orientation, Innovation.*

Introduction

The crucial function of the supply chain is the dynamic of marketing and how it effects firms' performance (Jermstittiparsert, Wattanapongphasuk, & Phonwattana, 2019; Ploenhad, Laoprawatchai, Thongrawd, & Jermstittiparsert, 2019; Saengchai & Jermstittiparsert, 2019). It is in fact, the basic activity of any business and is part of the core values that comprise firms' operations. Marketing is important no matter a firm's size and what industry it operates in. Currently, the emphasis is on innovation and aligning marketing activities to digital marketing strategies. Research in digital marketing has been conducted as part of the

development of digital technology for the last decade and will continue well into the future. The purpose is to ensure that the marketing processes and strategies that are inherent in digital technology have a significant and positive effect on business outcomes. Today, ubiquitous digital media, such as mobile devices, social networks, virtual reality and online communication, have great impacts on consumers' behaviours and expectations. Customer segmentation regarding digital media, such as social media and mobile marketing, has now replaced more traditional customer segmentation. It is important to use digital technology for creating value to firms' marketing activities, in order to get an advantage over those that do not apply digital marketing strategies. Marketing activities of firms are linked to other functions such as production and management. We can consider the overall operations in terms of interfunctional coordination; not only marketing, but all aspects of management and production are now virtually all digital processes (Hess, Matt, Benlian, & Wiesböck, 2016; Singh & Hess, 2017). However, digital marketing is still in the early stages of development when it comes to marketing functions.

All business organisations must apply digital tools such as mobile phones, social media platforms, dedicated software and others, to implement effective marketing activities. Marketing tools are now more efficient, cost less and can better communicate with customers when compared to older marketing tools such as mass media (newspapers, radio, etc.). To be competitive, innovation is now a major factor that all firms must engage in, in order to beat their competitors and keep their customers. The effectiveness of new marketing technology, such as digital marketing, depends on what the purpose of an innovation is, and whether it serves the business's needs. Thus, firms' abilities to operate while responding to continuous developments of both technology and marketing strategies is one of the most interesting areas of analysis (Di Stefano, Peteraf, & Verona, 2014). Many studies have concentrated on products such as electronics and automobiles, however, only a few have looked at the service industry. The service industry includes hotels, vacation spots and accommodation centres, which are very important to the Thai economy due to the great reliance on international and domestic tourism. For more than a decade, Thailand's share of the number of international tourists was approximately 24.82%; ranked second in Asian countries and inferior to Malaysia which had a share of 32.13% (Tinakhat, 2015). Moreover, Thailand has become a destination for medical tourist visits, generating USD 180 million (Noree, Hanefeld, & Smith, 2014). This situation also has an impact on the hotel industry surrounding the hospital. For this reason, this study investigates the effects of digital marketing on innovation, market orientation and performance of small firms operating in the hotel industry.

Theoretical Overview and Prior Studies

This study examines small firms that operate as hotel services. We concentrate on how digital marketing supports innovation and market orientation, which in turn influences the performance of these kinds of firms. Definitions of small hotel businesses, digital marketing, innovation, and market orientation, are provided in the subsections that follow.

Small Hotels

Small hotels can be defined in various dimensions such as the number of rooms, number of employees, number of customers, how many are operated by one owner, location and other factors. Different locations and situations can affect how a small hotel is defined. This study contends that a small hotel has up to 50 rooms in its operations (Morrison & Teixeira, 2004).

Digital Marketing

Currently, the rapid growth of digital technology has improved firms' operations, and this has coincided with the development of modern business models (Fitzgerald, Kruschwitz, Bonnet, & Welch, 2014). Digital technology has created an era of 'disruption' that continually changes firms' value and workplace practices (Pache & Santos, 2013). Digital technology is essential, but every organisation must implement it according to their needs, type of business and operational parameters. To understand this more clearly, the relevant terminology of digital marketing needs to be clarified. Digital innovations, such as computer software, shape firms' intranet and internet whereby internal operations are linked to external users. In recent decades, this has dramatically changed how firms work. In considering digital innovation from an institutional perspective, digital technology supports firms in terms of offering more efficiency (Hinings, Gegenhuber, & Greenwood, 2018). Regarding marketing activities, digital marketing components comprise digital devices that help people communicate online, and on a variety of platforms that link people with common interests, from any place and any time, all over the world. Digital technology enables businesses to interact with people from around the world effectively 24/7 (Chaffey & Ellis-Chadwick, 2019). The internet, and how it links global consumers, is now crucial for firms of B2B and B2C in creating their marketing competitive advantage (Leeflang, Verhoef, Dahlström, & Freundt, 2014). Firms — no matter what size they are — keep extending online applications for their marketing operations. Social media supports interactions with customers, but also helps businesses deliver specific goods and services more efficiently to their customers worldwide, thereby creating value (Bouwman, Nikou, & de Reuver, 2019). Moreover, marketing activities that use the 'cloud' and big data, can help small firms manage and/or reduce costs so that their operations are much more cost-effective (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013; Lucas Jr, Agarwal, Clemons, El Sawy, & Weber, 2013) and consequently create better performance

(Rouse, 2005). Furthermore, digital marketing is enabling small and medium-sized firms to operate better and much more efficiently. Even small service industry firms can use digital marketing technologies for their operations with less employees. Social media platforms and related networks can help small firms communicate effectively with customers and support customisation of products and services. Then, owners/managers spend their time on other value-enhancing activities, such as innovation and differentiation of their products and goods/services (Loebbecke & Picot, 2015). The use of digital marketing can attract a customer result in the performance of the firm (Syazali, Putra, Rinaldi, Utami, Widayanti, Umam, & Jermisittiparsert, 2019). Since digital marketing can provide prompt market information, it can also support information on how firms should conduct their innovation appropriately to the needs of their customers. In addition, the information from big data can help firms in managing strategy to overcome their competitors and interfunctional coordination.

Market Orientation

In managing the marketing function of a particular firm, management has to determine both internal and external factors. From within the firm, internal functions such as manufacturing, procurement and supply, human resources, marketing, and other functions need to be well coordinated. External factors, such as dealing with competitors and customers, are important for ensuring marketing activities work well. The three dimensions of marketing strategy are customer orientation, competitor orientation and interfunctional coordination; combined, these are known as market orientation (Narver & Slater, 1990; Narver, Slater, & MacLachlan, 2004). Focusing on customer value by applying a marketing strategy means increasing and understanding the value of customers and what their orientations are (Hillebrand, Kemp, & Nijssen, 2011). In this scenario, managers in charge of marketing have to provide products and services that generate greater outcomes and are better than what customers expect (Guenzi & Troilo, 2007). Marketing managers should concentrate on competing in response to market conditions and how to develop competitive advantage in a particular industry. This concept can be simplified as, satisfy the customers' needs. The current mix of online and offline marketing creates latent needs in customers who can rely on various sources of information to get what they want. Thus, firms have to be proactive and focus on customers' latent needs (Chuang, 2018). Customer orientation and innovation management have been widely accepted as enhancing hotels' business performance (Griseemann, Plank, & Brunner-Sperdin, 2013). Innovation means offering a product or service to customers that is better than what the competing business can do. Moreover, in this modern period of ever-changing information technology that supports the business intelligence of most firms, market orientation is important in terms of the right information given to customers, and it is combined with internal work processes that respond effectively to the external environment (Kohli & Jaworski, 1990). This is because it enables firms to realise customers' needs and do

better than the competitor by using limited resources efficiently and effectively in responding to external marketing conditions, which are always dynamic (Morgan, Vorhies, & Mason, 2009). Research into the hotel industry found a relationship between market orientation and firms' outcomes, and suggests that organisational culture will influence the extent of a positive business result (Vega-Vázquez, Cossío-Silva, & Revilla-Camacho, 2016). In addition, market orientation as a mediator of Total Quality Management (TQM) creates a relationship with customers and results in good hotel performance (C.-H. Wang, Chen, & Chen, 2012). Furthermore, numerous research also found the effect of market orientation on firm performance in various industries (Olavarrieta & Friedmann, 2008; Reid & Brady, 2012; Wei, Zhao, & Zhang, 2014). Therefore, market orientation plays a key mediating role, connected to firm performance in our study.

Innovation

In considering the hotel industry, innovation has a large influence on smaller hotels rather than mid-range to luxurious or '5 star' hotels (van Riel, Victorino, Verma, Plaschka, & Dev, 2005). What makes a good innovation in the service industry, is of much interest to research on innovation and its link to marketing. The innovation capability of firms can be determined from how they devise new products or services to create their market value and industry sustainability (Hogan, Soutar, McColl-Kennedy, & Sweeney, 2011; Laforet, 2011). Innovation in manufacturing firms has been determined in terms of both products and goods/services available in the market, and the process of producing them; the goal is to reduce complexity and time used (Greve & Salaff, 2001; Matear, Osborne, Garrett, & Gray, 2002; Jermsttiparsert, Sutduean, & Sriyakul, 2019; Sutduean, Harakan, & Jermsttiparsert, 2019). Innovation in manufacturing firms is related to their organisational culture which consequently affects employees' procedures, behaviours and productivity, which in turn has implications for customer service (Bratianu & Orzea, 2010; Cohen & Levinthal, 1990; Rivera-Vazquez, Ortiz-Fournier, & Rogelio Flores, 2009; C. L. Wang, 2008).

Innovation was classified as: service-related businesses into technological innovation, organisational innovation, and human capital innovation (Tseng, Kuo, & Chou, 2008). Analyses of small and medium-sized hotels suggest that these three components should be analysed as methods of organising employment positions, workplace practices, and management of external relationships (Montalvan-Burbano, Plaza-Ubeda, Perez-Valls, & Sabando-Vera, 2019). Small and medium-sized firms have to prepare innovation strategies appropriately so that the internal and external operations work well together (Ates & Bititci, 2011; Westrenius & Barnes, 2015). Particularly in the tourism industry, the important factor is how management can use internal capability to create better understanding of external tourist business environments, that can change according to political and economic circumstances. The management of small hotels using traditional sources of information

cannot compete with firms using digital marketing tools that provide updated information. Digital marketing tools such as social media, interactive marketing, and other rapid sources of information, will help small hotels better understand their customers' needs at a specific time or at any time. Two types of antecedents of innovation concerning management in the hospitality industry are: firstly, the influence of employees' knowledge and skills with the external factors; and secondly, the establishment of relationships with tourism industry agents (Nieves & Segarra-Ciprés, 2015). Moreover, innovation is summarised as a mediating role to performance in the service firm (Anning-Dorson, 2018). In addition, it encourage sustainable business performance of firms (Haseeb, Hussain, Ślusarczyk, & Jermisittiparsert, 2019). On this assumption, the relationship between innovation with internal and external factors will influence how the hotel industry is managed.

Research design

Data collection and sample

The research sample for this study comprises 380 small hotels in Thailand. Questionnaires were developed based on a review of the literature with the questions linked to the recognised variables.

Analysis

Demographics

Regarding the small hotels in Thailand, the majority of respondents are registered as earning capital of 5–20 million TBH, comprise a business size of 6–10 employees, possess 41–50 rooms and have operated for 6–10 years.

Table 1: Firm Demographics

	Sizes	Percentage
Registered Capital		
< 5,000,000	55	14.5
5,000,001-20,000,000	166	43.7
20,000,001-40,000,000	102	26.8
40,000,001-60,000,000	33	8.7
60,000,001-80,000,000	24	6.3
Number of employees		
1-5	34	8.9
6-10	132	34.7
11-15	70	18.4
16-20	45	11.8
21-25	45	11.8
>25	54	14.2
Number of rooms		
1-10	23	6.1
11-20	77	20.3
21-30	57	15.0
31-40	33	8.7
41-50	111	29.2
Years in operation		
< 2	34	8.9
2-5	123	32.4
6-10	155	40.8
11-15	46	12.1
16-20	22	5.8
Total	380	100

Measurement

According to the mediators introduced into our model, and for testing the interaction effect, Structural Equation Modeling is used to investigate and explain the complex data gathered for this study. Digital marketing is the independent variable, while the two mediators are innovation and market orientation, and the dependent variable is firm performance.

Table 2: Mean, Percentage and Standard Deviation of Digital Marketing

Digital marketing	\bar{X}	S.D.
DM1 Your firm has provided knowledge to customers.	3.67	.677
DM2 Your hotel has good knowledge of specific functions.	3.77	.687
DM3 You firm has applied information systems in managing customers.	4.21	.719
DM4 Your employees are trained in using computer systems.	4.08	.792
Total	3.93	.718
Innovation	\bar{X}	S.D.
IN1 Your firm has continuously developed new services.	3.86	.845
IN2 Your firm has focused on research.	3.94	.768
IN3 Your firm has continuously invested in creating new products, goods/services.	3.73	.820
Total	84	.811
Market orientation	\bar{X}	S.D.
MO1 Your firm tries to understand customers' needs.	4.15	.734
MO2 Your firm is always aware of what competitors are doing.	3.97	.671
MO3 There is efficient coordination in using internal resources.	4.06	.767
MO4 Your hotel closely coordinates activities whereby each department creates value for the customers' benefit.	4.14	.739
Total	4.08	.727
Firm performance	\bar{X}	S.D.
FP1 You firm can generate income from various sources.	68	.679
FP2 Your firm has better quality of service than its competitors.	86	.694
FP3 Your firm has a better reputation than its competitors.	83	.670
Total	3.79	.681

Reliability Testing

This study applied Cronbach's alpha to all the items, specifically to investigate the variables. The results are summarised in Table 3 and they indicate Cronbach's alpha was between 0.826 and 0.941. This means that they are reliable.

Table 3: Reliability Statistics

Variable	Cronbach's Alpha
Digital Marketing	.881
Innovation	.941
Digital Orientation	.886
Firm Performance	.826

Multi-collinearity Testing

The issue of multi-collinearity was tested in order to meet the requirements of the Structural Equation Model based on the regression analysis. The results for tolerance and variance inflation factor (VIF) were measured, and these should be more than 0.1, while VIF should be less than 10 ($VIF = 1 / \text{tolerance}$). It is found that the variables exhibited tolerance and VIF between the desired ranges and therefore no multi-collinearity was found.

Table 4: Collinearity Statistics Testing compared with DM1

Variable	Collinearity Statistics	
	Tolerance	VIF
DM2	.282	3.547
DM3	.322	3.103
DM4	.340	2.945
IN1	.151	6.642
IN2	.209	4.784
IN3	.135	7.427
MO1	.175	5.708
MO2	.455	2.198
MO3	.194	5.149
MO4	.336	2.975
FP1	.430	2.327
FP2	.226	4.420
FP3	.335	2.985

Construct Validity

The questionnaire was also tested to assess construct validity and discriminant validity. Convergent validity was measured using the value of confirmatory factor analysis (CFA), and the outcome of factor loading should be greater than 0.6. It emerged that the average variance extracted (AVE) of all variables was above .5. Moreover, the discriminant validity was tested by examining the correlation between constructs and the correlation between observed variables should be less than 0.85. The results of AVE are presented in the following tables (Table 5 and 6).

Table 5: Factor Loading, Critical Ratio, R^2 , Composite Reliability, Average Variance Extracted

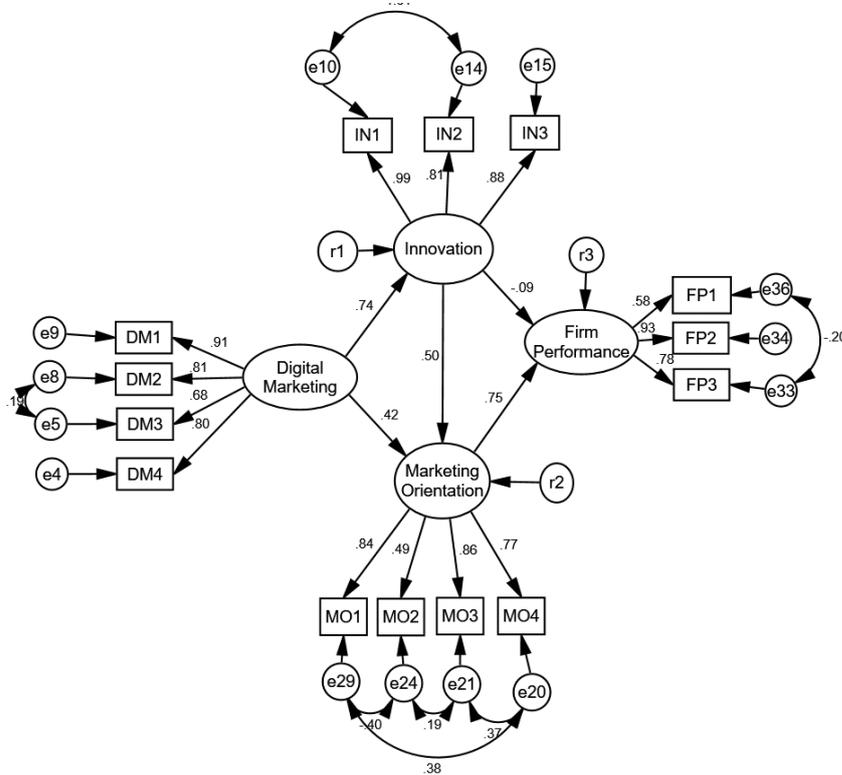
Variable	Factor Loading	R^2	Composite Reliability	Average Variance Extracted
Digital Marketing			.878	.646
DM1	.89	.78		
DM2	.83	.69		
DM3	.68	.46		
DM4	.80	.64		
Innovation			.924	.804
IN1	.99	.98		
IN2	.81	.65		
IN3	.88	.78		
Market Orientation			.819	.535
MO1	.74	.55		
MO2	.57	.33		
MO3	.84	.71		
MO4	.75	.56		
Firm Performance			.867	.686
FP1	.78	.60		
FP2	.90	.81		
FP3	.80	.64		

Table 6: Correlation Matrix for Variables

Variable Name	DM	IN	MO	FP
Digital Marketing (DM)	1			
Innovation (IN)	.75	1		
Market Orientation (MO)	.83	.77	1	
Firm Performance (FP)	.43	.49	.79	1

Statistical Model

Figure 1. Statistical Model



CMIN=92.926 df=33 p-value=.000 CMIN/DF=2.816
 GFI=.968 AGFI=.898 NFI=.980 CFI=.987 RMSEA=.069 RMR=.018

Table 7: Assessing the model fit indicators

Chi-square/Degree of freedom)CMIN/df(2.81
Goodness-of-Fit Index)GFI(.968
Adjusted Goodness-of-Fit Index)AGFI(.898
The Root Means Square Error of Approximation)RMSEA(.069
Normed Fit Index (NFI)	.980
Comparative Fit Index)CFI(.987

Table 8: Hypothesis Testing

			Estimate	S.E.	C.R.	p-value
Innovation	<---	Digital Marketing	.739	.055	17.87	***
Market Orientation	<---	Digital Marketing	.422	.072	5.26	***
Market Orientation	<---	Innovation	.497	.052	6.48	***
Firm Performance	<---	Innovation	-.090	.057	-.759	.448
Firm Performance	<---	Market Orientation	.746	.042	21.18	***

*** p-value < .001

With reference to the findings, it is clear that digital marketing exerts a significant effect on hotels' innovation $\beta=.739$ with p-value <.001) and market orientation $\beta=.422$ with p-value <.001(. Furthermore, innovation has a significant effect on their market orientation $\beta=.497$ with p-value <.001(. Lastly, market orientation exerts a significant effect on firm performance $\beta=.746$ with p-value <.001(.

Table 9: Standardised Direct and Indirect Effects

	Direct Effect			Indirect Effect			Total Effect		
	IN	MO	FM	IN	MO	FM	IN	MO	FM
Digital marketing	.739	.422			.367	.522	.739	.789	.522
Innovation		.497	-.097			.371		.789	.281
Market orientation			.746						.746

Discussion

Implications for practice

According to the empirical results, we found digital marketing has a direct effect on both innovation and market orientation. Similar to studies that have been conducted on digital marketing tools such as social media, this analysis found that both radical and incremental innovations in the hotel industry are mediated by multiple digital channels and moderated by digital capabilities (Torres de Oliveira, Indulska, Steen, & Verreynne, 2019). Moreover, our study applies knowledge management as another variable in the context of digital marketing. Knowledge management activities have been found to impact on hotels' innovation and organisational performance (Mardani, Nikoosokhan, Moradi, & Doustar, 2018). For this reason, the management team of a small hotel should consider utilising digital marketing in terms of better information technology that encourages innovation, market orientation and results in more customers.

Our study focused on the service industry and examined how businesses use innovation to drive product and organisational improvement. Product innovation was investigated in terms

of how firms develop new products and goods/services compared to their competitors. Moreover, following customers' suggestions is also important to get feedback on how well the development program is progressing and whether services have improved. Organisational innovation is an area where management must focus on organisational development and investment to create business opportunities. Consequently, innovation will exert a direct effect on market orientation which is considered in three dimensions: customer orientation, competitor orientation, and interfunctional coordination. First, customer orientation refers to the measurement of employees' contribution to customer services and customer satisfaction. Moreover, customer satisfaction programs must be continuously investigated and refined. Second, we considered competitor orientation wherein services have to respond to what competitors are doing, if a small hotel wants to have a large and ongoing customer base.

Finally, interfunctional coordination was based on information sharing and efficiency of using internal resources to support value creation from which customers will benefit. According to market orientation, it directly affects innovation and firms' performance. As with studies done on the healthcare sector, it emerged that market orientation does impact on innovativeness and organisational performance (Altuntaş, Semerciöz, & Eregez, 2013). This study measured organisational performance in both non-financial and financial contexts. The former was determined in terms of service quality and customer satisfaction, while the latter looked at occupancy rate, market share, and operating profit when compared to how competitors were doing. Our results indicate there is a link between digital marketing, innovation, and market orientation which consequently affect firms' performance. These factors have not been studied in great detail in the services industry, and that is why this present analysis adds to the literature on the topic and especially the relationships between the observed variables.

Limitations and future research

This study gathered data as a cross-sectional study during a period lasting less than one year. To find out more about what an in-depth investigation can achieve, other researchers could undertake a longitudinal study covering a period of during 3–5 years. Results of hotel management studies in the future and especially for the hospitality industry may depend on a country's political and economic situation. The period of data collection for this study in Thailand was one of serious political instability in 2014. Results over the long-term may be very different for a properly functioning democracy. Future research should be done to resolve this limitation.



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