

Exploring The Internal Mechanism Between Top Management Commitment, Innovation Capability, And Service Performance, Moderated By The Direction Of Communication In The Thai Hotel Industry

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ABSTRACT

The purpose of this research is to investigate the internal mechanism relationship between top management commitment, innovation capability, and service performance, moderated by the direction of communication. Resource-based view theory proposed that competitive advantage is enhanced by the organization's resources and its capability. Specifically, the study applied directions of communication flow to determine the relationship between top management commitment and innovation capability that enhance organization's service performance. The questionnaires were distributed to the accommodations industry with at least one star classification, and providing online service for 24 hours in Bangkok, Thailand. The result of the findings reveals that diagonal communication flow influence the most on the relationship between top management commitment and innovation capability toward service performance. Horizontal communication flow and vertical communication flow also report a great dedication to the service performance relationship. It is suggested that the communication in the organization should be monitored in all direction. Given that, the study contributed to the resource-based view (RBV) theory by incorporating directions of communication flow into the model as a moderating mechanism that strengthen the relationship between resource and service performance. Therefore, the findings clearly recommended that organization should emphasize on the diagonal communication because it helps enhancing the organization's service performance which results to profitability and growth.

Keywords: Top Management Commitment, Innovation Capability, Service Performance, Directions of Communication Flow, Accommodation Industry.

Introduction

In the current unpredictable market where there is extreme global competition, higher consumer demands, and rapid changes of technology cause the business organizations to seek for competitive advantages in order to compete in the market (Yesil et al., 2013). Innovation capability is considered to be a critical mechanism to satisfy customers and to endure the organization to strive in global business. It is the source of creation to the new techniques in order to gain a competitive edge,

such as cost leadership and differentiating product and service development (Toma et al., 2014). A greater capacity to innovate increases an organization's chances for long-term success (Saunila & Ukko, 2012). Therefore, companies must improve their innovation capability to retain satisfied customers, maintain the market share and develop organization's competency and market growth (Beknlyazova et al., 2016). Many businesses have elaborated innovation capabilities into their business these businesses include clothing and cosmetics, technology and physical entertainment, food and hygiene

products, household appliances, toys and activities, traveling and accommodation, music and video (Kemp & Moey, 2019).

Thailand Ministry of Digital Economy and Society (MDES) revealed that in the ASEAN countries e-commerce has attracted the greatest attention to changes in consumer behavior. Thailand is at the first rank of e-commerce values in ASEAN who has the highest growth rate of 14 percentage with the value of 3.2 trillion baht in 2018 till 2019. The first-highest expenditure and the second-fastest growing e-commerce sector in Thailand is travel and accommodation that weigh 4.140 billion dollars with a 28 percent growth rate (Kemp & Moey, 2019). However, e-commerce failure and mistakes in the delivery of services are unavoidable. Electronic Transactions Development Agency (2019) revealed that the service failure in e-commerce businesses include the unreliability of e-commerce systems, unstable online service systems, uncreative communication channels, no training course for people who work for e-commerce industry, and no of the center for one stop service of e-commerce for both entrepreneurs and consumers. To cope with the rapid changes of environment and the unavoidable service failure; organizations must collaborate more carefully and proficiently with their business partners and all the units within the organization (Chen, 2019). A single unit in the organization may not be able to take the full responsibility or any action to solve service failure due to their scope in responsibilities within the organization and their limited authority.

Service error can be mitigated by top management commitment, innovation capabilities, and communication (Hermano & Martin-Cruz, 2016). Particularly, an effective in communication process and communication channel could help organization to response to the service failure quickly in order to reduce customer dissatisfaction. The influence of management support factors such as management commitment and involvement (Tzempelikos, 2015), and internal

communication could lead to higher performance in recovery the service failures (Tian et al., 2020). As such, management should find ways to ensure that communication is conducive to the delivery of service quality. Thus, this study aims to investigate the moderating effect of communication flow toward the relationship between top management commitment and innovation capability that will lead to organization's service performance. The research question of the study is to what extend do directions of communication flow moderate the influence between top management commitment and innovation capability for the accommodation industry in Bangkok, Thailand. Precisely, the study aims to investigate if different direction of communication flow in the organization would impact the relationship between top management commitment and innovation capability differently.

Literature Reviews

Resource Based View (RBV)

Resource-based view (RBV) is used as the ground theory in this study. Barney (1991) proposed a RBV model that enlightens the strategic management of the organization through the relationship among resources, capabilities, and competitive advantage. The model depicts the relationship of cause and effect between resources and aspects that implicate the management team to understand the organization's success factors that can be used for strategic development and enhance performance of the systems. Colbert (2004) categorized resource into 2 types, human resources and organizational resources. Human resources are knowledge and behavior of the employees in the organization whereas organizational resources are the monitoring systems and the training mechanisms in the organization. Both resources are complicated social structures that developed over time and they are difficult to comprehend and emulate. Saa-Perez & Garcia-Falcon (2002) defined capability as an organization's ability to

implement the resources by applying the organizational procedure to achieve the intended objective. Nath et al. (2010) expressed capabilities as the knowledge of the business, an expert on technology, and experience in international diversification. Given that, capability is clarified as the organizational competencies in business knowledge, technological expertise, routines and processes of the organizations.

As mentioned above, RBV posits a sequential relationship among resources, capabilities, and competitive advantage. Competitive advantage is gained when the organization has a better chance in producing its goods and service than the rivals (Chen and Tsou 2007). Barney (1991) argued that outstanding organization's resources with a strong value creation capability can increase the competitive advantage. It is claimed that competitive advantage depends upon distinctive resources and distinguished capabilities to search for cost leadership and differentiation. Nevertheless, the process of maintaining a competitive advantage is indefinite and dynamic (Hung et al., 2010). Prior researchers have concluded that for an enterprise to stay ahead of the competition, it should create resources that have unique competencies and ongoing learning in which controlled by the top management (Wilden et al., 2013).

Top management commitment

Top management commitment is verified as the actions of the top management that disclose of quality and necessary policies (Yusuf et al., 2007). When top management illustrates supportiveness and implements sustainable practices with subordinates and partners, it provides the strategic strength to accomplish the organization's objectives (Burki et al., 2019). Moreover, Wijethilake et al. (2017) highlighted that the engagement of top management is capable of maintaining the sustainable development policies of organizations. Top management commitment

referred as the top management beliefs in the organization's resources, and power must be transferred to the people with the most direct knowledge and information. Given that, top management commitment is served as a proxy of resources in RBV theory. This is due to top management commitment is a critical factor that enhance the ability of the organization's inputs Wijethilake et al. (2017). The most successful organization should be mindful about developing the best resources equipped by capabilities.

Innovation capability

Porter (1985) suggested that the successful organization is derived from internal orientation and how the organization can develop better capabilities that will result in competitive advantages and superior performances. In this modernization, capabilities development should include innovation capability. Innovation capability referred as the degree of the organization's openness to implementing a new idea, knowledge or distinct act to improve the infrastructure, techniques, methods, strategies, products or services with the concerns of the external environment and responses to a changing environment (Jansen et al., 2006). In this study, innovation capability is considered as a proxy of capability in RBV model. It is believed that innovation capability is the critical factor that transform the resources of the organization into the competitive advantage of the organization.

Service Performance

Anwar et al. (2018) stated that competitive advantage is the common and significant approach to measure the organization's performance. Organizations with successful competitive strategies will lead to the highest profitability. Besides, it is confirmed that competitive advantage is significantly related to financial performance and market performance (Batista et al., 2016). Porter (1985) argued that the organization's

performance determines the organization's competitive advantage. Given that, the current study defines competitive advantage as the condition in which a firm provide greater value for consumers, and improve long-term business success in comparison to other rivals. The organization can enhance the performance by its competitive advantage strategy in which service performance is an important element of completing in today dynamic market. Based on RBV model, service performance is served as a proxy of organizational output which is the outcome of the organization's resources and capability.

Directions of communication flow

Organization is a social system that exists among people who have different spiritual, social and cultural backgrounds and who collaborate in order to attain the common goals. In a social system, it is necessary to reach the common goal by communication. In other words, communication is one of the important strategies in the business world in term of creating the connection, partnership, and teamwork. To increase business performance, internal communication strategy is created to promote communication within the organization between management and employees (Ki, 2004).

Internal organizational communication is the information flow within the organization that facilitated people in the organization. The dynamic system, organization structure, and the human dimensions of the organization can facilitate the communication flow. The internal communication within the organizations is related to the system inside the organization where all are connected to another. The management inside the organization consists of the connections from supervisor down to employees. It represents the network which holds the corporate together (Amah, 2016). Within the organization, the communication flow goes into three dimensions; vertically, horizontally, and diagonal communication flow (Shannon, 1948). Vertical communication

is transmitting information across the various levels of the organizational structure consisting of downward and upward forms of direction. Horizontal communication communicates information between individuals, divisions, sectors and department at the same level within the organization (Trahan, 2008). In addition, cross channel communication is transmitting information to different levels and different sectors in the organization (Clancy-Feliciano, 2016).

Conceptual Framework and hypotheses

Top Management Commitment, Innovation Capability, and Service Performance

Top management serves as a leader or source of power in the execution of quality management, including the generating values, purposes, and procedures for customer's satisfaction. Besides, top management acts as the critical player who need to display their commitment to certify the effective implementation of the total quality management (Petersen, 1999). Due to the unpredictability of the business environment, innovation has become a primary mechanism for organizations' enduring success and endurance, that drives the organization's ability in adapting, differentiating, and regenerating so as to survive in this diverse and complex technological as the market develops (Santos-Vijande & Alvanrez-Gonzalez, 2007). A positive relationship exists among the implementation of quality management and innovation (Prajogo & Sohal, 2003). The ability to innovate has been accepted as a key driver for organizations to create value and exert significant influence on competition (Chen, 2019). The uncertainty of external environmental and dynamic market can be mitigated by the innovation and adaptability for the long-term success of the organization (Nguyen et al., 2019). Additionally, innovation

capability is driven by the organization's ability to use the available resources to increase efficiency and achieve the service performance in the dynamic market (Wang & Wang, 2012). Furthermore, innovation capability encourages the organizations to achieve a service performance in many perspectives (Parasuraman, 2010). Fundamentally, successful innovation empowers organizations to generate and support the service performance (Chen, 2019). Providing a high-quality service will also have an impact on an organization's performance. This is due to the quality service such as the capabilities to accommodate problems, maintain information up to date, and communicate efficiently will sustain the delightfulness among customers (Panayides, 2006).

As mentioned in the literature review, RBV model has served as the grounded theory to comprehend the relationship between the variables anticipated in this study. The proposed relationships have been illustrated in Figure 1 below. Top management commitment acts as a proxy for resources, innovation capability acts as a proxy for capability, and both leads to organization's service performance. Evidently, the association among the implementation of quality management and innovation has been confirmed (Prajogo & Sohal, 2003). Organizational learning capability has a beneficial influence on its innovation capability (Ugurlu & Kurt, 2016). For instance, innovation empowers organization to generate and to endure with a competitive advantage in term of service performance (Chen, 2019). Nevertheless, lack of empirical study that investigate the sequential relationship among these three variables namely; top management commitment, innovation capability, and service performance. Therefore, the study hypothesized as following:

H1: Top management commitment has a positive influence on innovation capability.

H2: Innovation capability has a positive influence on service performance.

H3: Innovation capability mediates the relationship between top management commitment and service performance

Directions of Communication Flow: the moderator

Due to the rapidly changing market, the organization structure is required to be adaptable and flexible in order to compete in the competition and create value-added to divergent investors (Nwachukwu & Chladkova, 2018). Communication is a critical factor that enhance organizational performance (Tian et al., 2020). Organization performance significantly increases by effective communication between leaders and followers because management can illustrate their level of commitment toward their people capital via communication (Marchalina & Ahmad, 2017). The internal communication within the organizations is related to the system inside the organization where people are connected to one another. The management inside the organization consists of the connections from supervisors down to subordinates (Amah, 2016). Within the organization, the communication flow goes into three dimensions; vertically, horizontally, and diagonal. All directions of communication flow presented the relationship between leader, followers, and colleagues. Specifically, communication flow can enhance the coordination between all departments regarding task accomplishment (Clancy-Feliciano, 2016). Although prior research has supported the important of internal communication; however, it is lack of empirical study that investigate which communication flows would strengthen the RBV model. As such, the study hypothesizes the following:

H4: Directions of communication flow moderate the relationship between top management commitment and innovation capability

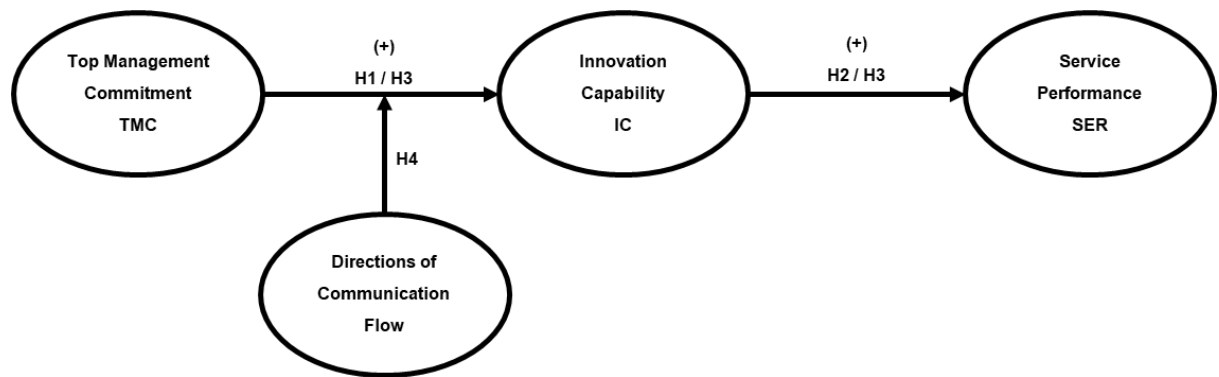


Figure 1: Directions of communication flow as a moderate in service performance relationship

Research methodology

As previously stated, the aim of the study is to investigate the internal mechanism between top management commitment, innovation capability, and service performance, moderated by the direction of communication. The study intends to discover the moderating effect of each direction of communication flow on the existing relationship. Statistical tests using a quantitative approach are necessary for the analysis to comply with the hypotheses stated in the previous section. For this reason, the quantitative research approach was selected to answer the research question. The study employed path-analysis and hypothesis testing using the Structural Equation Modeling (SEM) approach. Type of the investigation is a causal relationship at the organization's level. The sampling design is the accommodation industry operation in Bangkok, Thailand. The measurement of variables is the definition of the elements, the interval, the scale (seven-point Likert scale).

Target Population and Sample Size

The unit of analysis in this study is the organization level, indicated by the head of the department whose work are related to online service in the accommodation industry in Bangkok, Thailand in the total of 793 accommodations including hotel, guesthouse,

and apartment with at least 1 star classification, and providing the service for 24 hours (Booking Holding Inc, 2021). Bangkok is chosen because it can represent the area of hospitality industry operating in Thailand. Bangkok is a major and perennially popular tourist attraction and it has the highest market competition operating in the accommodation industry (DBD, 2020). The researchers focus only on service employees whose work is related to online services such as i.e., reservation, call-center, reception, financial department, and IT department. This target group of respondents tends to familiar with online communication on the internet such as providing the service via network (Ahn, 2012). The accommodation industry was selected as the focus of the study because of the significant spending growth rate by the customers during 2018 to 2019 (Electronic Transactions Development Agency, 2019).

For sample size determination, Hair (2014) have stated that SEM approach requires a large representative sample to obtain an accurate result. Jackson (2003) proposed that the proportion of sample size for parameter estimation must exceed 10. Due to the limited population of 793 accommodations, the researcher followed the suggestion provided by Weston & Gore (2006) in which the sample size must exceed 200. Boomsma and Hoogland (2001) also indicated that a sample size of fewer than 200 may produce a nonconvergence

issue. As such, there was 207 samples from a target population of 793, which accounts for 26 percent of the response rate, is acceptable.

This study employed a mail-out questionnaire as a data collection tool. Data collection conducted during December 2021 to May 2022. The preliminary questionnaire is being translated into Thai language, this study adapted the back-translation approach proposed by (Cha et al., 2007). To maximize rate of response and the completeness of return, the study followed the steps proposed by Sekarn & Bougie (2010). A cover letter using the letterhead attached to the survey form to identify and build up the qualifications of the research, and to clarify the survey goals and declare the confidentiality for each responder and the Instruction stated on the questionnaire that a donation of 10 baht for each completed will be given to the 'the nursing home in Phranakhon Si Ayutthaya, Thailand'. In term of ethical issues, the survey cover letter included a statement explaining the ethics approval process. The questionnaires have been approved by the researcher's affiliation, Institution Review Board (IRB) issued on December 2021, certification no. 5/2021.

Research Findings

After 793 questionnaires were distributed via electronic mail to the official address of the accommodation via human resource department of the hotel who have listed in the accommodation online platform (Agoda.com, Booking.com, Traveloga.com, and Expedia.com), two hundred and twenty-four were returned. Of the 224 questionnaires returned with a response rate of 26%, 2 were left blank and 15 of which were incomplete. This generated a total of 207 useable replies, for a usability percentage of 68.99 percent. Given the fact that the study with firm-level is

typically receiving response rate around 20% (Powell, 1992). In general, it exceeds the sample size calculation ($n = 200$).

Descriptive statistics provide information about the accommodations. Out of a total of 207 hotels, there are 18 chain hotels (8.7 percent) and 189 non-chain hotels (91.3 percent). The majority of hotel (36.2 percent) are 3-star hotel classifications, 30.4 percent are 4-star hotel classifications, 18.8 percent are 2-star hotel classifications, 6.8 percent are 5-star hotel classifications, and 7.7 percent are 1-star hotel classifications. Accommodations were addressed with the technical system associated with online service 4-6 years (29.5 percent), 10-12 years (25.1 percent), 7-9 years (19.3 percent), 1-3 years (15.9 percent), 13-15 years (9.2 percent), and 16-21 years (1 percent). Furthermore, 38.2 percent of the hotel used vertical communication flow, 34.3 percent used diagonal communication flow, and 27.5 percent used horizontal communication flow.

Validity and reliability

The validity and reliability of all measuring items were tested prior to the preliminary study. Cronbach's Alpha was utilized to indicate the validity of the data, and all constructions achieved an acceptable alpha value (0.70) (Hair et al., 1995). Construct validity has been discovered via factor analysis, as seen in the Table 1. Moreover, CFA was employed to verify the essential structure for a group of variables (Hair et al., 2020). Moreover, CFA was done using principal components with varimax rotation and eigenvalues of more than 1. No cross-loading factor was presented. Table 1 outlines all of the measuring items used to represent each variable in this study as well as the Cronbach's Alpha as shown.

Table 1: Summary of factor loading for all items

Variables	Factor Loading
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Top Management Commitment (Mean = 6.43 SD = .53 Cronbach's (α) = .731)	
Top management consistently assesses the impact of businesses.	0.697
Top management show behavior that indicates the competitive advantage.	0.456
Top management has a great knowledge of the industry's requirements.	0.646
Top management effectively communicates practices of the organization.	0.740
Innovation Capability (Mean = 6.27 SD = .61 Cronbach's (α) = .708)	
I see my organization often tries different operation procedures to achieve the realization of the organization's goals.	0.820
I see my organization always acquires new skills or equipment to improve the service process.	0.797
I see my organization adopts new leadership approaches to lead all staff towards task completion.	0.442
Service Performance (Mean = 6.50 SD = .52 Cronbach's (α) = .815)	
The ability to provide services to the right customer in the right place at the right time.	0.791
The ability to carry out an accurate and reliable service process.	0.777
The ability to offer a standardized service.	0.669
The ability to improve service quality and fulfill customer requirements.	0.660

Table 2 illustrates the correlation coefficient between the constructs. The bivariate correlation presented the degree and direction of a linear correlation between the components (Hair et al., 2014). The significant correlations suggest that top management commitment and innovation capability associate to service performance. The outcomes obtained how the

independent variable (i.e., top management commitment and innovation capability) determine the dependent variable. Though, the casual interactions between indicators and outcomes will be explored by using structural equation modelling (SEM); multigroup analysis.

Table 2: Correlation Statistics and Discriminant Validity for all constructs

	Mean	Std. Deviation	Correlations				
			AVE	CR	TMC	IC	SER
TMC	6.43	0.53	0.415	0.734	0.644		
IC	6.27	0.61	0.501	0.739	.320**	0.708	
SER	6.50	0.52	0.528	0.816	.291**	.455**	0.727

TMC= Top Management Commitment, IC= Innovation Capability, SER= Service Performance,
 AVE= Average Variance Extracted, CR= Construct Reliability

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).
 Square root of AVE are shown in the diagonal.

One of the conditions in the Multiple Regression Analysis is each independent variable must be independent of each other. Tolerance and Variance Inflation Factor (VIF) statistics were performed to analyze the

condition. From table 3, it is found that the Tolerance statistic of the variable is close to 1 (0.898) and has a Variance inflation factor less than 10 (1.114); therefore, it is possible to derive that all independent variables have no

relationship, which assumes that the degree of correlation of variables does not cause multicollinearity.

Table 3: Collinearity Statistics: Tolerance Levels and VIF

	Unstandardized Coefficients		Unstandardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	Variance Inflation Factor
(Constant)	3.344	.441		7.583	.000		
Top Management Commitment (TMC)	.157	.063	.162	2.492	.013	.898	1.114
Innovation Capability (IC)	.342	.055	.403	6.225	.000	.898	1.114

Dependent Variable: Service Performance

Common Method Variance

The purpose of testing for common method variance is to assess the extent to which such biases occur. Common method variance can be determined by Harman's single factor test. This method employs exploratory factor analysis, wherein all variables are put onto a single component and rotation is prevented. The Harman single factor approach has the advantage of being simple to study the occurrence of common method variance (CMV) (Podsakoff et al., 2003). Results indicated that there was the total variance of 30.41% for the first factor (<50%); as such, it demonstrated that no single factor explained the entirety of covariance.

Model fit for measurement model

All constructs in this study were assessed by measurement model fit, throughout structural equation modelling (SEM). The constructs were analyzed by AMOS version 21. The results of model fit for the measurement model are shown as a good match for the data and obtained an overall good fit. The chi-square/degrees of freedom ratio were within the recommended level of 1.00 to

3.00 ($\chi^2/df = 2.236$), indicating a reasonable fit. All structural model measurements of fit are represented by fit statistics with all goodness-of-fit indices in the desirable ranges: goodness-of-fit index (GFI) = 0.929, adjusted goodness-of-fit index (AGFI) = 0.882, root mean square residual (RMR) = 0.026, comparative fit index (CFI) = 0.933, normed fit index (NFI) = 0.888, incremental fit index (IFI) = 0.935, and root mean square error of approximation (RMSEA) = 0.077.

Data Analysis

In this study, SEM is especially suitable for multiple association estimations, because it concurrently combines detected and latent association constructs, and takes into consideration the biases of random measurement errors for latent constructs (Hair et al., 2014). With SEM, the relationship structure can be visually depicted for the hypothesis conceptualized more clearly. The postulated model can then be statistically examined concurrently with the variable system to assess data consistency. In this section, the AMOS version 24 was used as a tool of SEM in building a measurement model to confirm the factor structure.

Regarding the notion of resource base view theory and past empirical evident, the study estimated that innovation capability will mediate the relationship between top management commitment and service performance. Thus, a structural equation modelling (SEM) was conducted to test the mediation relationship. Which bootstrap for

mediation has been tested show in table 5 the table explained that the path analysis of the role of the mediator of innovation capability in the relationship among top management commitment, and service performance is a full mediation as the indirect effect of .512* (.001) is significant, while the direct effect of .164ns (.209) is not significant.

Table 5: Bootstrap for Mediation

Path	TMC → IC → SER
	.164ns (.209)
	.512* (.001)
Result	Full Mediation

* = $P < 0.001$, ns = "not significant"

The findings support the hypothesis that the proposed model was a good match for the data and obtained an overall good fit. The chi-square/degrees of freedom ratio were within the recommended level of 1.00 to 3.00 ($\chi^2/df = 2.281$), indicating a reasonable fit. Even though the chi-square goodness of fit is considered to be noteworthy ($\chi^2 = 93.540$, $df = 41$, $p = 0.000$), All structural model measurements of fit are represented by fit statistics with all goodness-of-fit indices in the desirable ranges: goodness-of-fit index (GFI) = 0.927, adjusted goodness-of-fit index (AGFI) = 0.882, root mean square residual (RMR) = 0.028, comparative fit index (CFI) = 0.929, normed fit index (NFI) = 0.882, incremental fit index (IFI) = 0.930, and root mean square error of approximation (RMSEA) = 0.079. Overall,

the fit statistics indicate that this study's model fits the data well.

Table 6 illustrate the hypotheses test. The statistics analysis was started by testing the direct effect between top management commitment and innovation capability was at a significant level (estimate = 0.530, p -value > 0.001) supported H1. In addition, the direct effects of innovation capability and service performance (estimate = 0.610, p -value > 0.001) was significant level supported H2. Consequently, the mediating variables (service performance) were observed to mediate the relationship between top management commitment and innovation capability (estimate = 0.512, p -value > 0.001) H3 is supported.

Table 6: Hypotheses Test

Hypothesis	Path	Estimate	P-value	Result
1	TMC → IC	0.530	0.001	Supported
2	IC →SER	0.610	0.001	Supported
3	TMC → IC → SER	0.512	0.001	Supported

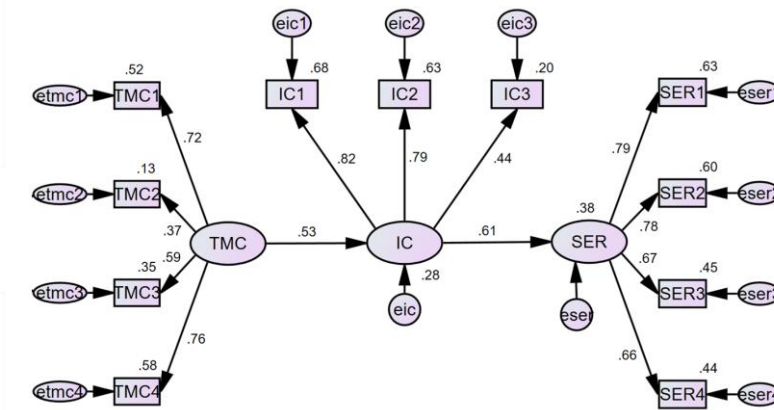


Figure 2: Path Diagram with Standardized Regression Weight of Innovation Capability Mediates the Relationship between Top Management Commitment and Service Performance for Accommodation Industry Operating in Bangkok, Thailand.

Hypothesis 4: Directions of communication flow moderate the relationship between top management commitment and innovation capability.

All directions of communication flow presented the relationship between the leader and followers, and colleagues. They also illustrated how they are interacting with one another. Specifically, communication flow can enhance the coordination between all

departments regarding task accomplishment (Clancy-Feliciano, 2016). Regards to the importance of internal organization communication, the study estimated that the direction communication flow will moderate the relationship among top management commitment and innovation capability. Thus, a structural equation modelling (SEM) was conducted to test the multigroup analysis.

Table 7: Parameter Estimates of the SEM Model in three directions of communication flow.

DIRECTIONS OF COMMUNICATION FLOW	Path Name	Estimate	Sig.	Hypotheses
Vertical Communication	TMC → IC	0.326	.011	Supported
	IC → SER	0.470		
	TMC → IC → SER	0.153		
Horizontal Communication	TMC → IC	0.440	.002	Supported
	IC → SER	0.518		
	TMC → IC → SER	0.228		
Diagonal Communication	TMC → IC	0.802	***	Supported
	IC → SER	0.486		
	TMC → IC → SER	0.390		

Note: AMOS gives Standard Errors (S.E.) as well as Critical Ratios (C.R.) to assess the

consequence of each approximation. The standard normal deviates which are greater

than 2.00 are equivalent to the critical ratios of the standard normal deviates, and are measured to be important. We express the Critical Ratio (CR) = Estimate/SE;*** $p < 0.001$

According, to the findings, the measurement model invariance was a good fit for the data and obtained an overall good fit. Overall, the fit statistics indicate that this study's measurement model invariance matches the data well.

1) Vertical communication direction; top management commitment is positively related to innovation capability, as the path is positive, with a direct effect of 0.326, and is significant at the $p < 0.05$ level. A critical ratio (2.553) greater than 2.00 also supports acceptance of this hypothesis. 2) Horizontal communication direction; top management commitment is positively related to innovation capability, as the path is positive, with a direct effect of 0.440, and is significant at the $p < 0.05$ level. A critical ratio (3.061) greater than 2.00 also supports acceptance of this hypothesis. 3) Diagonal communication direction; top management commitment is positively related to innovation capability, as the path is positive, with a direct effect of 0.802, and is significant at the $p < 0.001$ level. A critical ratio (4.230) greater than 2.00 also supports acceptance of hypothesis 4.

In conclusion, for horizontal communication the p-value of the chi-square difference test is significant; the model differs across groups. As for diagonal communication, the p-value of the chi-square difference test is significant; the model differs across groups. Table 7 reveals that the total effect of the innovation capability mediated the relationship between top management commitment and service performance. Hence, diagonal communication has the strongest effect of (0.390), followed by horizontal communication the effect of (0.228), and the lowest effect is vertical communication (0.153).

Research Findings

The first hypothesis proposed that the top management commitment has a positive influence on innovation capability. The coefficient of the relationship between top management commitment and innovation capability indicated a substantial positive association. This implies that senior management should contribute in innovation of the organization in order to enhance innovation capability. For instance, the significant relationship between top management commitment and innovation capability was consistent with the finding of the implementation of total quality management and technological innovation (Prajogo & Sohal, 2003). The finding suggested that the ability of the organization to manage its own competencies and resources through periods of fast and uncertain change when the organization commit through top management commitment.

The second hypothesis proposed that innovation capability has a positive influence on service performance. The correlation coefficient between innovation capability and service performance revealed a positive significant relationship. This implies that the organization should focus in dynamic capability proxy as innovation capability in order to enhance service performance. However, the strong correlation between innovation capability and service performance was consistent with the finding that external environmental and dynamic market factors can be mitigated by innovation and adaptability, resulting in the organization's long-term success (Nguyen et al., 2019). The finding suggested that organization service performance enhance base on the organization capabilities.

Hypothesis 3 proposed that innovation capability mediates the relationship between top management commitment and service performance. The finding confirmed the fundamental theory of resource based-view (RBV), which capability will mediate the resource of the organization in order to enhance

organization competitive advantage. Thus, the direct influence between top management commitment and innovation capability is consistent with resource based-view theory that knowledge management, organizational ability, and competitive advantage mediated by innovation have been examined and confirmed (Chatzoglou & Chatzoudes, 2018). The relationship between innovation capability and service performance was consistent with the finding of successful technological innovation empowers organizations to generate a competitive edge (Chen, 2019).

Hypothesis 4 proposed that directions of communication flow will moderate the relationship between top management commitment and innovation capability. It is confirmed that difference flow of the directions will react differently to the interaction indicating that not all directions flow shares the strong common roles in the hotel electronic service context. The result reveals that vertical communication flow has the lowest moderating effect on the relationship between top management commitment and innovation capability (0.153) toward service performance, however, the result is consistent with recent meta-analysis research that established the relationship between resources (top management commitment) and capability (innovation capability). Thus, horizontal communication flow has more influence (0.228) on the relationship compared to the vertical communication flow. Departments may tend to be more comfortable communicating among the same level of management as the horizontal communication flow is based on the same level of communication. The strongest communication flow among the three directions is diagonal communication flow. Diagonal communication flow has the strongest moderating effect on the relationship between top management commitment and innovation capability (0.390) dedication to enhance service performance when people in the organization are freely random to communicate

with other unit or department inside the organization.

In summary, directions of communication flow have a shared role of having a moderating effect on the resources-based view theory, between the relationship of resources (top management commitment) and capability (innovation capability) towards service performance. Whilst, diagonal communication flow plays a significant role in strengthening the influence the relationship between top management commitments and innovation capability toward service performance.

Research Discussion

The study explores the internal mechanism between top management commitment, innovation capability, and service performance, moderated by the direction of communication, with an emphasis upon the accommodation industry in Bangkok, Thailand. The suggested model is based on a well-known underpinning theory, which is resources-based view (Barney, 2001). The study applied dynamic capability theory (Teece et al., 1997) to explain the relationship between innovation capability and service performance, the proxy of competitive advantage that the basis of a company's competitive edge is its capacity to control its own capabilities and resources especially in times of rapid and uncertain change. In doing so, the study contributed to the resources-based view concept by integrating internal communication (directions of communication flow) as a regulating mechanism that strengthens the link between top management commitment and innovation capability towards service performance.

The propose model demonstrated the extent into which directions of communication flow moderate the relationship of top management commitment and innovation capability toward service performance. The study investigated the relationship between top management commitment and innovation capability and how these relationships affect

the service performance. The role of exploring the internal mechanism between top management commitment, innovation capability, and service performance, moderated by the direction of communication. The findings show that three directions of communication (vertical communication, horizontal communication, and diagonal communication) appear to significantly moderate the relationship between top management commitment and innovation capability toward service performance. The departments who have received support from the organization or management level report positively influence on innovation capability toward service performance. The departments should then aware that aside from the commitment provided by management level, they should also take into the directions of communication flow factor when it comes to service performance.

It has been discovered that diagonal communication flow is the strongest influence on the relationship between top management commitment and innovation capability toward service performance, which a p-value for difference of multigroup tests in different directions of communication flow compare to vertical communication, but no difference with horizontal communication. Horizontal communication is second strongest influence on the relationship between top management commitment and innovation capability toward service performance, which a p-value for difference of multigroup tests in different directions of communication flow compare to vertical communication, but no difference with diagonal communication. Lastly, vertical communication is the lowest influence on the relationship between top management commitment and innovation capability toward service performance, which a p-value for difference of multigroup tests in different directions of communication flow compare to horizontal and diagonal communication.

Contributions

This study shows a considerable theoretical contribution. Initially, the current study confirms resource based-view theory and prior research studies supporting the argument that quality resource and capability of the organization influence the organization's competitive advantage. Since RBV highlights the importance of the resource in the organization as it determines the organization capability to use the resource and perform in the market that further potential lead the competitive advantage (Chen, 2019), The recent study endorses the notion, which explains that top management commitment and innovation capability influence service performance. Next, the positive relationship between innovation capability and service performance also validates the hypotheses for RBV theory. Consequently, the significant relationships between innovation capability and this study's findings on service performance give an empirical contribution that aids in verification the theory. The directions of communication flow also play a significant role on the relationship between top management commitment and innovation capability towards service performance. In response for the suggestion of this studies, direction of communication flow shall be incorporated into the model in order to comprehend how communication directions may explain variation in the connection between top management commitment and innovation capability toward service performance in resource-based view model. The results indicated that the positive influence of top management commitment and innovation capability towards service performance are stronger for those who use diagonal communication flow.

Lastly, the study also adds to the body of accommodation industry literature. While most of the accommodation industry focuses on industrialized nations such as the United Kingdom and the United States, or on developing countries, the current study can help to widen the literature and provide actual data on the changing environment of the

lodging industry. Conducting study on Thailand's lodging can contribute to unique insights for the literature. As, accommodation industry plays a crucial role not only in service industry but also in e-commerce market. As a result, the current study provides a deeper understanding that resource of the company (top management commitment), capability (innovation capability) and directions of communication flow, particularly diagonal communication flow, are the primary influences of service performance in Thai accommodations.

Recommendations

Several guidelines for management activities are proposed in this study. Firstly, as the purpose of the research is to comprehend the moderating effect of directions of communication flow between top management commitment and innovation capability toward service performance. This study enables management in comprehending the scope of the problem to which directions of communication flow could moderate top management commitment and innovation capability toward service performance for the organization's advantage. By way of the result showed, organization can now determine the specific direction of communication flow, diagonal communication flow which is the most influential toward service performance relationship. The organization may use the results as a basis for recruiting since they will be able to find a suitable individual for the appropriate position. This is especially true for the human resource department of the organization those seeking for people who can really collaborate for effective communication and organization-wide service. The findings should be utilized to design and improve internal communication and techniques for selecting approaches that will improve service performance. Using the right communication flow in the organization enables the organization to keep a pool of productive personnel that take pleasure in servicing customers with the right innovation capability

and enable to response effectively to the customer (Bartels et al., 2010).

Second, service organization that provides customer service, such as reservation, call-center, reception, financial department, and IT department need to provide high-quality service to ensure service performance regarding future profitability. The present framework offers some excellent guidance on what management can do to effectively manage productivity in a resource-based perspective model. The linkages between top management commitment and innovation capability toward service performance imply that top-level management commitment in the form of processes and policies is required as well as the organizational communication are critical for promoting desirable service performance. Considering this conclusion, the commitment and organization innovation are crucial in delivering quality service performance. Management may show their appreciation for workers by offering a support system and discipline of organizational communication, while supervisors can show their support by communicating in the form of understanding, sympathy, and inspiration for the staff.

Given that organizational competence is the key to success, organizations may need to examine departments' perceptions of the element on a frequent basis of top management commitment and organizational communication to comprehend how effectively the firm is employing these management supports impact on customer service behaviors. The management should guarantee that adequate resources are accessible not just for customers but also for workers. For example, organization can provide management level and employees level a training to improve the communication skill. This is useful as supervisors and subordinates need to display appropriate communications, especially in accommodation industry. Moreover, as diagonal communication flow was found to strengthen the influence between top management commitment and innovation capability toward service performance. This

suggests that it is likely to be worthwhile in determining organization who use the diagonal communication flow with a significant level of top management commitment and innovation capability that help enhance the service performance. In specifically, internal communication should not concern about the level of management or department/sector but the organization communication should communicate in term of diagonal flow in all level and sector inside the organization. Despite the continuous approach of quality resource, organization capability, this might help to emphasize the competitive advantage (service performance) among the accommodation and other service industry.

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