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RESEARCH ARTICLE

THE STUDY OF INNOVATION CAPABILITY, CROSS-CHANNEL CAPABILITY AND FIRM PERFORMANCEOF VIETNAMESE RETAIL ENTERPRISES

Linh Nguyen
Business Administration Faculty,Thuongmai University, Hanoi City, Vietnam.

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Abstract

This study aims to investigate the impact of innovation capability on cross-channel capability and the effect of cross-channel capability on firm performance of an organization. On the base of literature review, this study suggests a research hypothesis model, and uses quantitative research method to examine. Research data is collected from 201 Vietnamese retail enterprises. The Structural Equation Modeling (SEM) by Smart-PLS is used for data analysis. The research result indicates that there is a significant and positive impact of innovation capability on cross-channel capability. Besides that, the finding shows that cross-channel capability plays an important role in improving firm performance. Based on the findings, some recommendations are suggested to enhance firm performance by generating cross-channel capability and innovation capability of Vietnamese retailers.

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Introduction:-

The rapid growth of Vietnamese economy in recent years has shown a lot of opportunities and threats. The market expansion, utilization of the latest technologies, capital, or managing style from foreigners are considered the remarkable opportunities. However, the fluctuations from trade conflict, competitiveness between domestic and international retailers, or the negative changes from natural disaster and diseases (Covid-19) are the conspicuous challenges for Vietnamese firms in general and Vietnamese retailers in particular. To defend the threats, it is necessary for Vietnamese organizations to generate and maintain special capabilities which are considered the competitiveness. The studies of Wang and Ahmed (2004), Hilmi et al. (2010), Zang and Li (2017),Du et al. (2018)assume that innovation capability plays an important role in reconstructing organization's activities, and creating new services which meet customers' needs.Meanwhile, for retail enterprises, cross-channel capability is also considered the vital capability which responses quickly to the changing environment (Cao and Li, 2018; Frasquet et al.,2018). Some previous studies investigated the relationship between innovation capability and cross-channel capability, or the effect of cross-channel capability on firm performance. There are few studies that examine the relationship of innovation capability, cross-channel capability and firm performance in a model. Therefore, it is necessary to examine the relationship between innovation capability and cross-channel capability, and the impact of cross-channel capability on firm performance in a study. Additionally, there are few studies for this topic which are conducted in the developing countries.Therefore, it is needed a systematic and comprehensive study for examining the relationship between innovation capability and cross-channel capability, and the impact of cross-channel capability on firm performance in developing countries like Vietnam.

Corresponding Author:- Linh Nguyen
Address**:-** Business Administration Faculty, Thuongmai University, Hanoi City, Vietnam.

RBV theory and dynamic capabilities view are the underpinning theories for this study. Based on RBV, resources and capabilities are the important inputs to sustain competitive advantages(Barney, 1991). Derived from RBV,Teece et al.(1997)considerdynamic capabilities as "the firm's ability to integrate, build, and reconfigure internal and external competencies to address a rapidly changing environment". Ambrosini et al. (2009), Wu and Lin (2014), Teece (2017) suggest that a dynamic capability of a firm must be valuable, rare, inimitable, and non-substitutable (VRIN). It is important for a firm to generate dynamic capability because it may adapt to the changes of environment (Eisenhardt and Martin, 2000; Helfat et al., 2007). Previous studies suggest that innovation capability is a component of dynamic capability (Wang and Ahmed, 2004; Grawe et al., 2009; Tidd et al., 2009; Terziovski, 2010). Meanwhile, the studies of Cao and Li (2015), (2018), Frasquet et al. (2018)assume that cross-channel capabilityis also a component of dynamic capability.

This study explores the impact of innovation capability on cross-channel capability, and cross-channel capability on firm performance of Vietnamese retailers. Based on the literature review, the studydevelops the hypotheses, and establishes the research model. By collecting data from 201 Vietnamese retailers, the hypotheses areexaminedthe impact of innovation capability on cross-channel capability, and cross-channel capability on firm performance.Based on the findings, the recommendations are suggested to maintain and reinforce innovation capability, cross-channel capability, and firm performance of Vietnamese retail enterprises.

Literature Review And Hypothesis Development

Innovation capability

According to Hii and Neely (2000), innovation capability is defined as a capacity of an organization to generate new ideas, identify new opportunities, and implement innovativeness. Kogut and Zander (1992) assume that innovation capability refers to the ability of an organization to exploit and combine the knowledge to create and gain innovation performance, such as creating new products, new services, new processes, and/or new systems. Lawson and Samson (2001)suppose that innovation capability allows firm tocontinuously transform from the ideas and knowledge into new products, new processes, and new systems, to create the advantages for an organization and its stakeholders. Crossan and Apaydin (2010) consider innovation capability as an ability of "production or adoption, assimilation and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome". Accordingly, innovation capability is considered both a process and an outcome that creates more effective value added product/service and a process (Terziovski, 2010). For service organizations, innovation capability is a capability to exploit resources to gain product innovativeness, and process innovativeness (Wang and Ahmed, 2004; Grawe et al., 2009; Hilmi et al., 2010). Based on the literature review, this study composes a comprehensive definition of innovation capability which corresponds to the research objectives. Innovation capability is defined as "a capability to renew, innovate, create and re-create new processes and products/services to adapt the changing environment as well as the changes of organization".

There are two components of innovation capability, they are process innovation capability and service innovation capability. Process innovation capability is defined as a method to reconstruct the operational activities of an organization (Hilmi et al., 2010). Process innovation capability is necessary for an organization because it creates, renews and innovates the operational activities and the methods of managing, and manufacturing to improve the firm's processes and firm performance (Wang and Ahmed, 2004). If a firm attains a process innovation capability, it may improve firm performance through reducing costs of production and operation, applying new methods of delivery, or enhancing quality of products/services (O'Sullivan and Dooley, 2009; Gunday et al., 2011).

Service innovation capability refers to the capability to create new services (O'Sullivan and Dooley, 2009). Service innovation capability seeks new ideas and applies the latest technologies to new service offerings (Grawe et al., 2009; Chen, 2011). Service innovation capability is important for service organizations because it focuses on applying technologies for new and customized services. Therefore. Victorino et al. (2005) assume that if a firm gets service innovation capability, it can offer more value-added for its customers.

Cross-channel capability

According to Pentina and Hasty (2009), cross-channel integration capability refers to a firm's capacity to combine simultaneously offline and online channels, including the existing channels and new channels. Cao and Li (2018) suggest that a firm can decide tosimultaneously deploy different channels, such as physical channels, catalogs channels, online channels, hotline channels or mobile channels. Agnihotri (2015) assumes that enhancing and

integrating channels plays an important role in sustaining competitive advantage of a firm. A superior cross-channel integration capability allows a firm to improve the effectiveness of each channel throughcontinuously offering shopping experiences for its customer (Cao and Li, 2015). There are three approaches for defining cross-channel integration capability: customer-centric perspectives, firm-centricperspectives and combination perspectives (Cao and Li, 2015). Customer-centric perspectives focus on improving customer value through cross-channel integration capability (Gulati and Garino, 2000;Goersch, 2002; Stone et al., 2002; Montoya-Weiss et al., 2003;Kinget al., 2004; Schramm-Klein and Morschett, 2006) while firm-centric perspectives concern about the benefit for the firm (Steinfieldet al., 2002; Neslin et al., 2006; Chaffey, 2010). Cao and Li (2015) suggest the definition of cross-channel integration capability by combining two these perspectives,and consider cross-channel integration capability as "the degree that a firm combines the goals, design and implementation of its channel to create benefit for a firm and offer benefit a its consumers". Because cross-channel integration capability plays an important role in sustaining the competitiveness, this study defines cross-channel integration capability by adapting the combination perspective. Cross-channel integration capability is defined as "a firm's capability that allows it to achieve the strategic goals and offer more consumer value byflexible and effective channel coordination and integration".

According to Ohet al. (2012) and Goraya et al. (2020), cross-channel integration capability includes five elements: integrated information access capability, integrated order fulfillment capability, integrated product information management capability,integrated promotion capability and integrated pricing information management capability. This study adapted these five dimensions for cross-channel integration capability of Ohet al. (2012),Goraya et al. (2020).

Firm performance

Firm performance is an important dependent variable which is used widely in strategic management (March and Sutton, 1997). Firm performance is considered"a strategic goal of a firm; a cluster of criteria transform business strategies into the feasible results that include both financial and non-financial index to evaluate firm's success"(Hall, 2008). Based on evaluation of firm performance, a firm may decide to adjust its managing procedures (Ittneret al., 2003). Evaluating firm performance allows a firm to (1)- formulate and implementa strategy; (2)- communicate information about firm performance to stake-holders more quickly and strengthen firm's brand and reputation; (3)- motivate employees, develop organization culture to improve firm performance and foster firm's learning capability(Micheli and Mar,2014).

Hypothesis development

Innovation capability and cross-channel capability

Regarding to the relationship between innovation capability and cross-channel capability, Wilson and Daniel (2007) assume that innovation capability significantly impacts on cross-channel capability. Zang and Li (2017) also explorethe positive effect of innovation capability on cross-channel capability. If a firm explores the innovation capability, it may operate simultaneously different retail channels (Wilson and Daniel, 2007; Zang and Li, 2017). Du et al. (2018) suppose that innovation capability focuses on applying Internet and information technology on firm's activities and creating new services. For retail enterprises, innovation capability involves in operating both online and offline retail distribution to improve cross-channel capability (Cao and Li, 2018; Frasquet et al., 2018). These trends all suggest the positive mechanism, thus the hypothesis is:

H1: Innovation capability has a positive effect on cross-channel capability.

Cross-channel capability and firm performance

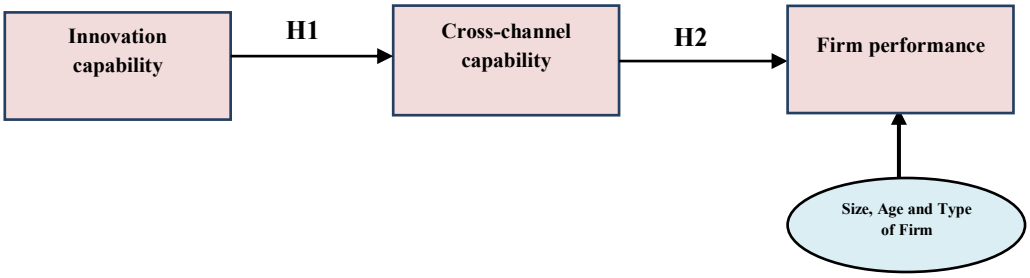
Cross-channel capability is considered an important capability of a retailer (Frasquet et al., 2018). Pentina and Hasty (2009) assume that there is a positive impact of cross-channel capability on firm performance. If a firm gets cross-channel capability, it will be more convenient for its customers to purchase(Goraya et al., 2020). Therefore, a firm may sustaincompetitive advantage and improve firm performance (Xia and Zhang, 2010; Yan et al., 2010; Zhang et al., 2010).Cao and Li (2015), (2018), Tagashira and Minami (2019) also assume that cross-channel capability may improve significantly firm performance. Thus, the hypothesis is:

H2: Cross-channel capability has a positive effect on firm performance.

Research hypothesis model

Based on the research hypotheses, the research model is identified as Fig. 1:

Figure 1:- Research model.



Research Methodology:

Sample and data collection

A Vietnamese retail firm is considered a unit of this study. The chosen retailers which are 3-year-old and more are operating their business assuper-markets, mini-markets, convenient stores, or specialist retailers. They are selected from the Annual Retail Report of Vietnamese Retail Association. The respondents are the middle and top managers who have had experience for one year and more. The survey for data collection which is used both online and offline is implemented between July 2020 and October 2020. In total, there are 201 valid responses, accounted 74.4% response rate.

For size of firm, the retailers which employ 50 and more employees contribute 76.1%. For type of firm, firms are operating as the super-markets accounted 21.9%, mini-markets and convenient stores contribute 49.3%, the rest is special retailers.For age of firm, the majority of retailers are 5-year-old and more (72.2%).

Measures

The research model includes exogenous constructs, endogenous constructs, and control variables. This study uses a five-point Likert scale which “strongly disagree” codes 1, and “strongly agree” codes 5. The dimensions for the constructs and variables are followed as:

Exogenous variables

The exogenous variables of this study isinnovation capability. Innovation capability is constructed as a reflective and 2nd-order factor. The dimensions for innovation capability are process innovation capability and service innovation capability. For process innovation capability, there are four items which are adapted from Wang and Ahmed (2004). For service innovation capability, the five itemswhich are adapted from Grawe et al. (2009).

Endogenousvariables

The endogenous constructs are cross-channel capability and firm performance. Cross-channel capability is the reflective and 1st-order construct.Thedimension of cross-channel capability is adapted fromOh et al. (2012) and Goraya et al. (2020).There are five items of cross-channel capability which are “integrated information access capability”, “integrated order fulfillmentcapability”, “integrated transaction informationcapability”, “integrated prommotion managementcapability”, and “integrated product and pricing information managementcapability”.

For firm performance,this study adopts the measure from Arend (2014), Torres et al. (2018). The dimension for firm performance includes both financial and non-financial index which are return on investment (ROI), sales, profit, return on assets (ROA), growth, market share, competitive position and general success.

Control variables

This study usescontrol variables to eliminate the differences of retailers’ size, age and type that may influence on the research results. Control variableincludes three items which are “Size of retailers”, “Type of retailers”, and “Age of retailers”. The dimension is adapted from Danneels (2008).

Research Methodology:-

This study uses PLS-SEM to examine the hypotheses. Smart-PLS is selected for data analysis.There are two steps for analysis: (1)-Evaluating the measurement model (the outer model), (2)- Examining the structural model (the inner model).

For the first step, the construct reliability is examined. According to Hair et al. (2014), Cronbach's Alpha, Composite reliability (CR), and Total variance extracted (AVE) are suggested to use.Hair et al. (2014)assume thatto be fit for the exploratory research,Cronbach's Alpha and CR must be greater than 0.6. Since there is a 2nd-order construct which is innovation capability (IC), to test the construct reliability, it is needed to score the latent variables. After that, the latent variables are labeled and are analyzed for the measurement model (the second time). Next, AVE and outer-loading is examined. According to Henseler et al.(2009), AVE and outer-loading must be greater than 0.5 and 0.7, respectively. If outer-loading ranges from 0.4 to 0.7, Hair et al. (2014) suggest to check Cronbach's Alpha and AVE which are must be greater than 0.6 and 0.5, respectively. Lastly, the discriminant validity is tested to consider the statistical difference between all pairs of constructs. The HTMT index is suggested to use, HTMT must be less than 0.85 to assure the statistical differences(Henseler et al., 2015).

For the second step, the structural model is tested. It is needed to examine the multi-collinearity by using VIF first. The VIF should be less than 10 (Henseleret al., 2009). Next, R^2_{adj} is examined to identify the total of variance of cross-channel capability which is explained by innovation capability and the total of variance of firm performance which is explained by cross-channel capability. Next, bootstrapping (with 5000 bootstrapped samples) to evaluate the direct impact of innovation capability on cross-channel capability and the direct effect of cross-channel capability on firm performance. Hair et al. (2014) suggest to use one-tailed test. The results need to be checked by p-value (<0.05), t-value (>1.65), path coefficient, and confidence intervals bias corrected. In addition, it is needed to examine the effect size (f^2) to quantify how substantial the significant effects are.

Results:-

Examination of measurement model

The results of construct reliabilityare shown in Table 1.The results of construct reliability show that Cronbach's Alpha scores of all constructs are satisfactory. Examination of composite reliability shows that CR scores of IC_PC, IC_SC, IC, CC, and FP are0.908, 0.920, 0.960, 0.870, and 0.930, respectively. Thus, the construct reliability is suitable for the exploratory research.

For testing discriminant validity, the results of AVE and outer-loading are considered. AVE scores of all dimensions are above 0.5, range [0.575, 0.924]. For outer-loading, there is one item which is 0.622, others are greater than 0.710. Thus, all items, dimensions, and constructs are qualified for construct validity.

The examination of discriminant validity is shown in Table 1. HTMTscores in Table 2 express that all three pairs of constructs range from [0.440, 0.790] which are less than 0.85. Thus, these pairs of constructs are statistically different.

Because the measurement model evaluation is valid and reliable for the constructs in this study, the next step is assessment of the structural model.

Table1:- Examination of measurement model.

Items and construct	Outer-loading	Cronbach's Alpha	CR	AVE
Innovation capability (IC)		**0.917**	**0.960**	**0.924**
Process Innovation capability (IC_PC)		**0.865**	**0.908**	**0.712**
We are constantly improving our business processes (IC_PC1)	0.830			
During the past three years, our firm has developed many new management approaches (IC_PC2)	0.846			
When we cannot solve a problem using conventional methods, we improve on new methods (IC_PC3)	0.834			
Our firm changes production methods at a great speed in comparison with our competitors (IC_PC4)	0.864			
Service innovation capability (IC_SC)		**0.890**	**0.920**	**0.697**
Innovation is readily accepted in program/project management (IC_SC1)	0.846			
Our firm's top management gives special emphasis to service innovation (IC_SC2)	0.890			

Our firm constantly seeks new ways to better service our customers (IC_SC3)	0.872			
Our firm is able to change/modify our current service approaches to meet special requirements from customers (IC_SC4)	0.787			
Compared to our competition, our firm is able to come up with new service offerings (IC_SC5)	0.774			
Cross-channel capability (CC)		**0.815**	**0.870**	**0.575**
Integrated information access capability (CC1)	0.622			
Integrated order fulfillmentcapability (CC2)	0.785			
Integrated transaction information capability (CC3)	0.798			
Integrated promotion management capability (CC4)	0.768			
Integrated product and pricing information managementcapability (CC5)	0.804			
Firm performance (FP)		**0.913**	**0.930**	**0.623**
Current firm performance of the firm is better than its rivals in terms of Return on investment (FP1)	0.764			
Current firm performance of the firm is better than its rivals in terms of Sales (FP2)	0.799			
Current firm performance of the firm is better than its rivals in terms of Profit (FP3)	0.808			
Current firm performance of the firm is better than its rivals in terms of Return on Assets (FP4)	0.752			
Current firm performance of the firm is better than its rivals in terms of Growth (FP5)	0.710			
Current firm performance of the firm is better than its rivals in terms of Market share (FP6)	0.779			
Current firm performance of the firm is better than its rivals in terms of Return on investment (FP1)	0.848			
Current firm performance of the firm is better than its rivals in terms of Sales (FP2)	0.846			

Table2:- HTMT index.

	CC	FP
IC	0.462	
FP	0.790	0.440

4.2. Assessment of construct model

To evaluate the structural model, it is needed to check multi-collinearity first. The coefficient of variance magnification (VIF) is used. Table 3 indicates VIF scores between two pairs of constructs are less than 1.047,which is fit for the analysis.

TABLE3
Checking multi-collinearity

	CC	FP
IC	1.000	
CC		1.047

As shown in Table 4, the R^2_{adj} value indicates the significant explanation of endogenous variables, which explains 17.7% of cross-channel capability, and 49.5% of firm performance of Vietnamese retail firms.

TABLE 4
R^2 and R^2_{adj}

	R^2	R^2_{adj}
Cross-channel capability (CC)	0.181	0.177
Firm performance (FP)	0.505	0.495

The empirical evidence supports all two hypotheses (Table 5). We can see that:

Table 5:- Examining research hypotheses.

Hypo-thesis	Relationship	Std. Beta	T-value	P-value	f^2	Result

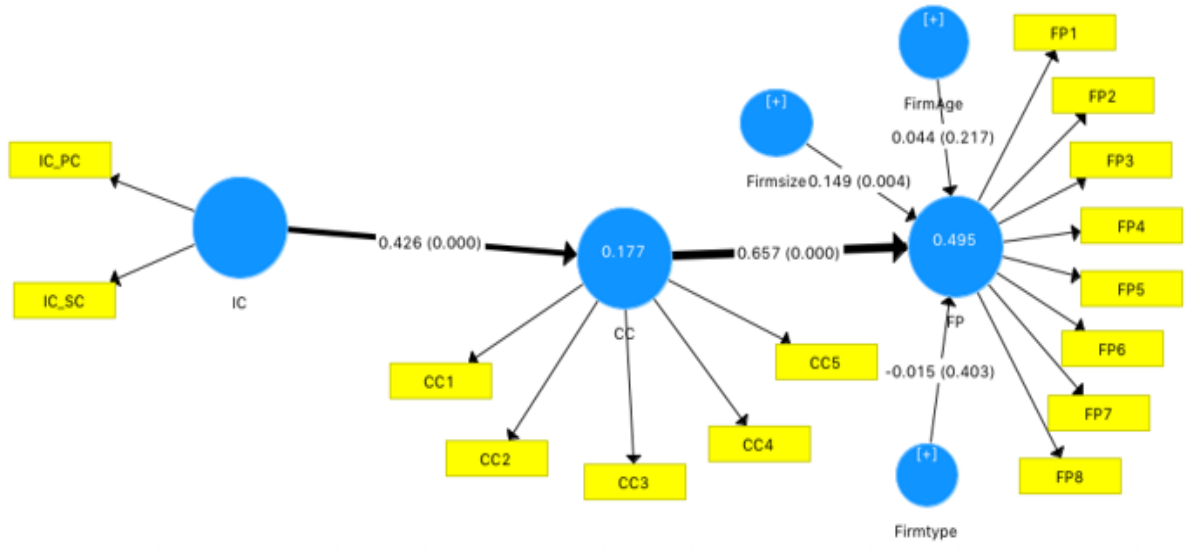
H1	Innovation capability has a positive impact on cross-channel capability (IC →CC)	0.428	7.312	0.000	0.221	Supported
H2	Cross-channel capability has a positive impact on firm performance (CC → FP)	0.659	17.778	0.000	0.833	Supported

Firstly, innovation capabilityimpacts positively and significantly on cross-channel capability (β = 0.4289; t-value = 7.312 (>1.65); p-value = 0.000 (<0.005). Besides that, the effect size f^2= 0.221 indicates that there is asignificant and positive effect of innovation capability on cross-channel capability. Hence, H1 refers to the positive impact of innovation capability on cross-channel capability of Vietnamese retailers is supported.

Secondly, the effect of cross-channel capability on firm performance of Vietnamese retail firms is extremely significant and positive (β = 0.659; t-value = 17.778 (>1.65); p-value = 0.000 (<0.005). Additionally, the effect size is 0.833, shows that cross-channel capabilitystrongly impacts on firm performance of Vietnamese retailers. Thus, H2 mentions the positive relationship between cross-channel capability and firm performance of Vietnamese retail enterprises is supported.

Fig. 2 shows the assessment of the significance and relevance of structure model relationships:

Figure 2:- Assessment of the significance and relevance of structure model relationships.



(path coefficient and p-value areperformed on the path while R^2_{adj} is indicated in the middle of endogenous variables)

Discussions And Recommendations:-

This study aims to examine the impact of innovation capability on cross-channel capability and the effect of cross-channel capability on firm performance of Vietnamese retailers. All two hypotheses are supported and showed in Table 5 and Fig. 2.

For hypothesis H1, the relationship between innovation capability and cross-channel capability: the effect size $f^2$is 0.221 and Beta is 0.428, shows that if a firm improves innovation capability, it may enhance cross-channel capability by 42.8%. In addition, the effect size indicates that cross-channel capability depends largely on innovation capability. This finding is suitable for the finding of Wilson and Daniel (2007), Zang and Li (2017), Cao and Li (2018), Du et al. (2018). To improve cross-channel capability, Vietnamese retailers should pay more attention to develop innovation capability which includes both process innovation capability and service innovation capability. Some recommendations for innovation capability improvement are followed as:

- Generate process innovation capability by (1)- Accelerating the change of production methods in comparison to competitors by applying new technologies on business, such as applying new retail methods or allowing customers

to finish their payment by cash, bank transfer, card, QR code, or authorized payment providers. (2)- Applying the modern management styles to improve firm performance by implementation of KPI or BSC to labor productivity assessment. (3)- Improving the capability of solving a problem by hiring the experts for assistance on conflict management. (4)- Enhancing the business processes by applying new process for internal communication, seeking new retail methods, and shortening delivery time.

- Explore service innovation capability, it is necessary for Vietnamese retail firms to: (1)- Improve the awareness of the importance of innovation capability in general and of service innovation capability in particular, by giving commitments of innovation capability in a firm's business mission. Additionally, Vietnamese retailers should invite the experts and lecturers from universities or colleges to clarify the necessity of service innovation capability in a firm. (2)- Continuously seek new methods to better service by establishing a R&D department which is mainly responsible for researching, innovating, and developing. (3)- Appreciate the role of innovation in the firm's success. (4)- Reinforce the capacity of modifying current services approaches to meet special requirements from customer, and (5)- Accelerate the new service offerings by applying CRM software to collect customers' data, and customizing a retail service.

For Hypothesis H2, the research result indicates that there is a positive impact ofcross-channel capability on firm performance. The effect size f^2 is 0.833 and Beta is 0.659shows the extremely significant impact of cross-channel capability on firm performance. If a retailer reinforces cross-channel capability, it can improve firm performance by 65.9%. Besides that, the effect size refers to the main dependence of firm performance on cross-channel capability of Vietnamese retailers. This research result strengthens the view of positive and significant relationship between cross-channel capability and firm performance which is suggested by Xia and Zhang (2010), Yan et al. (2010), Frasquet et al. (2018), Tagashira and Minami (2019), Goraya et al. (2020). To improve firm performance, it is necessary for Vietnamese retail firms to develop cross-channel capability. These are some recommendations for cross-channel capability improvement:

- Improve the capability of integrated product and pricing information management. It is needed to give detailed instruction of product classification on both online and offline stores. Therefore, Vietnamese retailers should establish consistently product category classifications in all retail channels, including online and offline channels. The product prices also should be consistent in all firm's retail channels. Additionally, it is necessary for domestic retailers to analyze customer behavior and find the optimal solution for product display and description for easy and convenient purchases. For online channels, it is needed to use multiple visual effects for product description.

- Enhance the capability of integrated transaction information.Domestic retailers should apply the customer relationship management software to keep an integrated purchase history of customers' online and offline purchases. Especially, based on the customers' data, domestic retailers should make the future purchase recommendations to clients, andcustomize Webpages which is based on the customer's previous purchases.

- Improve the capability of order fulfillment.All online and offline channels should be usually integrated and exchanged information with others. Information about customer's orders must be informed in all retail channels. Besides that, it is necessary for retail firms to allow customers to select any stores to pick up. Vietnamese retailers should facilitate payment methods. Customers may make payment by any methods they want.

- Enhance the capability of promotion management through implementing sale promotion, coupons… on both the physical stores and online stores. Regardless of online or offline purchases, the gift coupons or other promotion programs issued by the physical stores must be redeemed either online or offline channels.In addition, online channels must inform and highlight promotion programs which are taking place in the physical stores. Conversely, it is necessary for the offline channels to advertise the online channels through pamphlets, receipts, or carrying bags.

Reinforce the capability of integrated information access through: (1)- allowing online customers to search for products' availability in the physical store; (2)- applying inventory management software, and allowing online customer to checking inventory status at the offline stores; (3)- providing the information and instruction for customers to visit the firm's online channels.

For endogenous variable which is firm performance of Vietnamese retail enterprises, based on the outer-loading, there are four indicators of firm performance that are more important than others, they are competitive position

(FP7); the general success (FP8); the profit (FP3) and the sales (FP2). To improve firm performance, domestic retailers should pay more attention to these indicators.

Conclusion:-

This study refersto the impact of innovation capability on cross-channel capability and the effect of cross-channel capability on firm performance of Vietnamese retail firms. The new contributions of this study are: (1)- The dimensions for innovation capability includes two 1st-order constructs which are process innovation capability and service innovation capability. Therefore, this study considers innovation capability as a reflective and 2nd-order construct. Besides that, this study adapts dimensions for innovation capability fromWang and Ahmed (2004) for process innovation capability; and from Grawe et al. (2009) for service innovation capability. (2)- Examining the impact of innovation capability on cross-channel capability before testing the effect of cross-channel capability on firm performance of service organizationswhichis not conducted by previous studies.The research results show that there is a positive and significant impact of innovation capability on cross-channel capability. In addition, if a cross-channel capability is enhanced, the firm performance is also improved remarkably. In other words, there is also an extremely significant and positive impact of cross-channel capability on firm performance.(3)- This study is an empirical study whichis conducted in the certain context of Vietnamese retailers. The findings are valuable and useful reference sources for domestic retailers' strategistsin formulating and implementing business strategies to improve their firm performance. However, there are some limitations of this study. Firstly, are there other capabilities that impact cross-channel capability? Secondly, innovation capability is known as an important capability of a firm, thus is there a direct or indirect impact of innovation capability on firm performance?Thirdly, are there other capabilities which is not identified in this study influence on firm performance? These limitations may become the future research for the author. Later studies will focus on exploring the relationship between cross-channel capability and other capabilities, examining the impact of innovation capability on firm performance, and investigating the effect of other capabilitieson firm performance.

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