



Print ISSN: 1738-3110 / Online ISSN 2093-7717
 JDS website: <http://www.jds.or.kr/>
<http://dx.doi.org/10.15722/jds.22.01.202401.61>

Distribution Competitive Advantage of Vietnamese Fintech Enterprises and its Impact on Dynamic Capabilities*

Nguyen Van THUY¹

Received: November 11, 2023. Revised: December 15, 2023. Accepted: January 05, 2024.

Abstract

Purpose: The study has identified factors affecting dynamic capabilities and the distribution of competitive advantage under the impact of dynamic capabilities of Vietnamese fintech businesses. **Research design, data, and methods:** The method used in this study is a survey analysis of 120 Vietnamese fintech businesses to test the hypothesized relationships of the research model as well as evaluate its effectiveness. The study uses the Cronbach alpha analysis, factor analyses, and structural equation modeling to assess the research's measurement and structural models. **Results:** Research results show that 3 critical success factors: "Capacity to develop financial service ideas," "Ability to develop a platform," and "Business capacity" have a positive impact on "Dynamic capabilities." In addition, the study also evaluates the effect of "dynamic capabilities" on the "competitive advantage" of fintech businesses. **Conclusion:** Theoretically, this result contributes to discovering new, specific factors affecting the dynamic capabilities of fintech businesses. In practice, the research results are empirical evidence of the distribution of competitive advantages of Vietnamese Fintech businesses and their impact on dynamic capabilities.

Keywords: Capability to Develop Financial Service Ideas, Capability to Develop Platform, Business Capacity, Dynamic Capabilities, Distribution Competitive Advantage, Fintech, Management Information System, Digital Transformation, Artificial Intelligence.

JEL Classification Code: C12, M15, O16

1. Introduction

Industrial Revolution 4.0 with the convergence of many different technologies based on digital technology and integrating all innovative technologies to optimize processes, production, and business methods. Using data and digital technology has radically and comprehensively changed all aspects of socio-economic life, reshaping the way we live, work, and relate to each other. Not an exception to that trend,

the financial sector has also quickly applied digital technology in its operations, along with the recent digitization of financial services called financial technology and distribute financial services to customers on digital platforms. According to Financial Stability Board, Financial technology, or Fintech, is technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and

* The author gratefully acknowledges the financial support from the Banking Academy of Vietnam.

¹ First Author. Lecturers, Academic Affairs, Banking Academy of Vietnam, Vietnam. Email: thuynv@hvn.edu.vn
 ORCID: 0000-0002-4990-8779

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

institutions and the provision of financial services. According to recent market research reports, the global Fintech market size generated revenue of 194 billion USD in 2023 with a CAGR of 18.97 %.

About Vietnam Fintech market, according to Nielsen, Vietnam has many favorable conditions and potential for the development of Fintech, such as a young population and the ability to access and use new technology quickly: 89% of users are between the ages of 20 and 44. using the Internet, 58% of the population uses the Internet at least 5 hours/day. Mordor Intelligence forecast Vietnam's Fintech market size in terms of transaction value is expected to increase from 34.50 billion USD in 2023 to 63.87 billion USD in 2028, with a CAGR of 2.91% during the forecast period (2023-2028). According to a survey by HyperLead (a leading affiliate marketing platform in Vietnam specializing in providing products and services in the field of Finance - Banking - Fintech), the number of companies in Fintech has increased by nearly 13%, from 156 companies in 2021 to 176 companies in 2022. The vigorous development of fintech businesses in the Vietnamese market has begun to create an excellent level of market competition. Businesses compete to distribute the best financial services to customers on digital platforms. To gain a competitive advantage in the market, what dynamic capabilities do companies need, and what factors affect the dynamic capabilities of fintech businesses? This study experimentally measures and evaluates these factors impact on dynamic capabilities of fintech businesses. How to distribute the competitive advantage of Vietnamese Fintech businesses under the impact of capabilities? This research is conducted with a structure of 6 parts: introduction, description of Research model, research method, results and discussion, and conclusion.

2. Research Model and Hypotheses

2.1. Dynamic Capacity

According to Teece et al. (1997), dynamic capabilities are the ability to integrate, build, and reformat an enterprise's internal and external capabilities to respond to rapid changes in the business environment. The research of Eisenhardt and Martin (2000) introduced the concept of dynamic capabilities, which is also considered a process of product development, strategic decision-making, and coordination. According to Barreto (2010), dynamic capabilities are an enterprise's problem-solving ability, formed by the tendency to sense opportunities and challenges, make timely, market-oriented, and change the resource base. Research by Li and Liu (2014) adjusted the concept of dynamic capabilities to suit the transition economy as follows: "Dynamic

capabilities are the ability to solve problems of an enterprise, shaped by the towards sensing opportunities and challenges, making timely decisions and implementing effective strategic decisions and changes to ensure we stay on track." Dynamic capabilities are determined to include three essential components: creative capacity, adaptive capacity, and cognitive capacity (Wang & Ahmed, 2007). Later studies have expanded and identified dynamic capabilities, including six main components: mental ability, creative power, adaptive capacity, absorptive capacity, connecting capacity, and integrative capacity (Zhou & Li, 2010).

2.2. Factors Affecting the Dynamic Capabilities of Fintech Businesses

Fintech businesses are businesses with products and services that apply innovative, creative, and modern technologies to the financial sector to bring customers transparent financial solutions/services that are efficient and convenient with lower costs than traditional financial services. Therefore, in addition to the factors that impact dynamic capabilities like other conventional businesses, the dynamic capabilities of fintech businesses are also influenced by other powers.

Capacity to develop financial service ideas: The vigorous development of technology has improved the efficiency of the financial innovation system, which is the basis for the birth and growth of models and products. Fintech aims to personalize financial service products with optimal non-service costs. The nature of financial technology businesses is often that an individual or a group starts a fintech business by establishing a fintech business to solve the existing problems of traditional financial service products using technology. Fintech businesses must identify emerging customer needs to adjust their fintech products and services quickly. That requires the ability of fintech businesses to stay agile and adaptable to continuously modify their value proposition and core services to align with new standards. Leong et al. (2017), fintech businesses must identify challenges and take advantage of opportunities to develop their dynamic capabilities. Research by Kazan et al. (2018) has shown that the entrepreneurial and adaptive nature of FinTechs requires these businesses to continuously identify industry, market, and technology opportunities so that they can respond by attracting new resources and mobilizing existing resources to innovate products and business models. Fintech businesses with the capacity to develop new ideas in financial services can be an essential basis for developing the dynamic capabilities of businesses.

Platform development capacity: According to Puschmann (2017), to be able to deploy new ideas about financial service products, fintech businesses need to deploy products and business models through technology platforms.

A business's ability to develop fintech platforms reflects its ability to identify emerging technology trends and implement viable new fintech ideas on those platforms. This capability includes the technical knowledge to convert ideas into initial feasible FinTech designs that can be continuously refined into more suitable products for customers. Therefore, the ability to develop FinTech platforms promotes the formation and development of dynamic capabilities of FinTech enterprises.

Business capacity: Besides platform development, fintech businesses and startups must build and develop their business models. The ability of fintech businesses to develop business models depends on their FinTech business acumen and viable FinTech ideas. This capability helps fintech businesses identify key partners, activities, and resources, building customer relationships, transaction channels, and customer segments. A business model allows a fintech business to determine its cost structure and revenue streams. According to Oshodin et al. (2019), the business capacity of fintech businesses in the early stages helps companies to commercialize products from ideas and expand fintech in the growth stage. Business capacity is also considered one of the essential foundational capacities that form the power of fintech businesses.

2.3. Competitive Advantage

Competitive advantage is a concept in a business that implements a strategy that all current or potential competitors cannot imitate, thereby giving the company a cost advantage that can be exploited well. Market opportunities, and at the same time, avoid operational risks (Barney, 1991). When discussing competitive advantage, Porter (1985) divided competitive advantage into two groups: (1) Differentiation advantage and (2) cost advantage.

2.4. The Relationship between Dynamic Capabilities and Competitive Advantage

According to Teece (2007), dynamic capabilities are the key to competitive advantage. To survive and develop in a business environment with rapid technological development and fierce competition, fintech businesses need to be sensitive to changes in the external environment to explore opportunities, new markets, and potential risks. Therefore, one of the critical capabilities for business survival is the ability to think strategically. With dynamic capabilities, businesses adapt quickly to changes in the business environment, maintain existing competitive advantages, and develop new competitive capabilities. Companies with strategic thinking capabilities can find, interpret, and understand information about the environment they are facing, responding faster than competitors through

innovation and innovation. Constantly innovate to understand better changes in customer needs to develop new products, thereby achieving a distinct competitive advantage. Besides, strategic thinking capacity also helps businesses explore the advantages and disadvantages of current resource bases, improving the coordination between existing resources reasonably to Take advantage of them effectively, thereby saving operating costs to gain a cost advantage. According to Witschel et al. (2023), dynamic capabilities are constantly required to exploit new business opportunities and respond to environmental threats proactively. This is especially relevant in volatile, constrained environments such as fintech businesses, where companies must manage new technology and create new business model innovation formulas to remain viable, forming and developing competitive capacity. According to Chari et al. (2022), dynamic capabilities are essential for businesses to adapt to the rapidly changing digital environment. In response to a constantly changing environment, they enable businesses to recognize, develop, and evaluate technological prospects related to customer needs and mobilize external talent, resources, and capabilities. Inside and outside. Dynamic capabilities can help build resilience into circular supply chains. The concept of resilience requires continuous adaptation and deployment of capabilities. Specifically, manufacturing organizations must be able to scan and mitigate potential threats through manufacturing innovation capabilities to remain competitive in unstable environments.

Therefore, the author sets out the research model and research hypotheses, as shown in Figure 1:

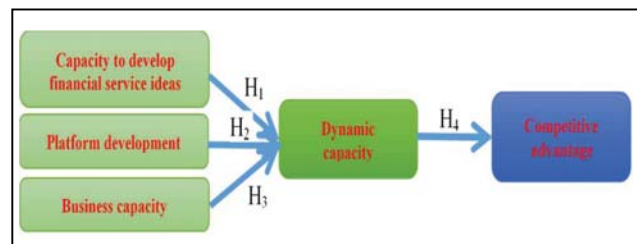


Figure 1: Research Model

- H₁:** The capacity to develop financial service ideas positively impacts the external power of fintech businesses.
- H₂:** Platform development capacity positively impacts the dynamic capability of fintech businesses.
- H₃:** Business capabilities positively impact the dynamic capabilities of fintech businesses.
- H₄:** Dynamic capabilities have a positive impact on the competitive advantage of fintech businesses.

3. Research Methods

3.1. Data Measurement

In this study, the authors use the concepts: "Capacity to develop financial services ideas," "Capability to develop platforms," "Business capacity," "Dynamic capacity," and "Competitive advantage" of fintech businesses. These scales are inherited from previous studies and adjusted to suit the context of Vietnamese fintech businesses. The scales of the variables in the research model (Table 1) use a 5-level Likert scale, in which "1- completely disagrees, 5- completely agrees".

Table 1: Scales of the Research Model

Variable	Coding	Scale	Reference
Capacity to develop financial services ideas	DFS ₁	Ability to generate ideas in an ever-changing financial industry landscape	Oshodin (2019)
	DFS ₂	Ability to detect problems in financial services	
	DFS ₃	Identify emerging technologies and their potential applications	
	DFS ₄	Ability to deliver new approaches to financial services	
Capability to develop platforms	PDC ₁	Ability to convert ideas into viable Fintech designs	Oshodin (2019)
	PDC ₂	Ability to effectively apply technology to develop fintech products and services	
	PDC ₃	Continuous improvement capacity to perfect fintech products	
Business capacity	BC ₁	Capacity to develop new business models for fintech products	Oshodin (2019)
	BC ₂	Capacity to commercialize fintech products	
	BC ₃	Business expansion capacity	
Dynamic capacity	DC ₁	Creative capacity	Zhou & Li (2010)
	DC ₂	Adaptive capacity	
	DC ₃	Cognitive capacity	
	DC ₄	Integrated capacity	
Competitive advantage	CA ₁	Optimize customer experience	Buckley et al. (1988); Li & Liu (2014)
	CA ₂	Differential advantage	
	CA ₃	Cost advantage	

The survey questionnaire was designed based on scales measuring concepts in the research model. The survey also includes general questions about Vietnamese fintech businesses, such as establishment year, main operation fields, and staff size.

3.2. Research Data

To research the impact of factors on "mass capacity" and

the effect of "dynamic capacity" on the "competitive advantage" of fintech businesses. Research and conduct surveys with Vietnamese fintech businesses by emailing survey forms to business leaders. The sample results yielded 120 valid votes included in the analysis. Analyzing the research sample has shown the diversity of types of fintech businesses in Vietnam, mainly established in the last five years. Descriptive statistics from the survey sample of 120 Vietnamese fintech businesses were obtained as follows:

Table 2: Descriptive Statistics of the Study Sample

Criteria	Rate (%)	
Number of years in operation	Over 5 years	10
	3-5 years	45
	1-3 years	30
	Less than 1 year	15
Type of fintech businesses	Payment fintech	35
	Fintech credit	25
	Fintech capital market	20
	Regtech	5
	Insurtech	5
	Fintech in personal finance and wealth management	10
Personnel size	Under 5 people	20
	5-10 people	25
	10-20 people	40
	20-50 people	10
	Over 50 people	5

Most fintech businesses in the survey sample with 1-5 years of operation (75%) are new businesses entering the market. These businesses' main areas of operation focus on financial services related to payment and payment intermediation, credit, and capital mobilization. The staff size of fintech businesses in the survey sample is very compact, with less than 20 people, accounting for 85%.

3.3. Analytical Method

After having data, the study used SPSS 20 and AMOS 20 software to test the hypothesized relationships of the research model as well as evaluate the reliability of the scales of variables in the research model based on Cronbach Alpha reliability coefficient, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to identify and confirm factors and scales in linear equation models (SEM) to determine the impact relationship between variables in the model.

4. Research Results

Cronbach's Alpha reliability coefficient and exploratory

factor analysis (EFA), then tested through composite reliability, convergent validity, and Discriminant value using the confirmatory factor analysis (CFA) method. The linear structural method SEM (Structural Equation Modeling) tests the theoretical model and hypotheses. The estimation method is ML (Maximum likelihood).

The initial proposed scale has 5 concepts with 17 observed variables: Capacity to develop financial service ideas, Platform development capacity, Business capacity, Dynamic Capabilities, and Competitive Advantage. The preliminary and confirmatory testing results show that no observed variables were eliminated. The results of testing the scale are presented in Table 3.

Table 3: Summary of Scale Testing Results

Ingredient	Number of observed variables	Cronbach's Alpha (α)	Variance (ρ_{vc})	Value
Ability to develop financial service ideas	4	0.854	0.696	Qualified
Platform development capacity	3	0.807	0.842	
Business capacity	3	0.740	0.662	
Dynamic capacity	4	0.859	0.705	
Competitive advantage	3	0.802	0.813	

The results of CFA analysis with the critical model show that this model has a >Chi-square statistical value of 118.756 with 109 degrees of freedom (df), a value with $p_value = 0.000 < 0.05$; Chi-square/df = 1,090 meets compatibility requirements. Other indicators such as GFI = 0.903, TLI = 0.987, CFI = 0.989, RMSEA = 0.027 < 0.80 all meet the requirements. Therefore, it can be concluded that the critical model achieves compatibility with market data (Anderson & Gerbing, 1988).

SEM results (Figure 3) show that the theoretical model has 115 degrees of freedom, with $p_value = 0.000 < 0.05$; Chi-square/df = 1.241, GFI = 0.882, TLI = 0.964, CFI = 0.970, RMSEA = 0.045. Heywood phenomenon does not appear during the estimation of CFA and SEM models. Therefore, this model is suitable for market data.

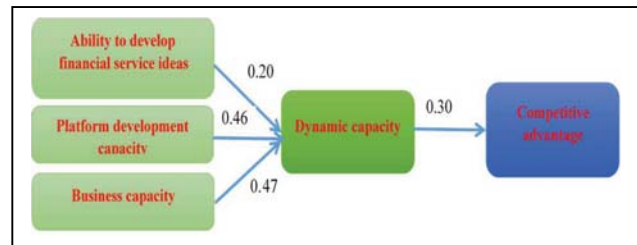


Figure 2: SEM Results of the Theoretical Model (standardized)

Table 4: SEM analysis results

Relationship		Estimate	S.E.	C.R.	P_value	Conclude
Ability to develop financial service ideas	→ Dynamic capacity	0.201**	0.076	2.291	0.022	Accept H ₁
Platform development capacity	→ Dynamic capacity	0.456***	0.120	4.160	0.000	Accept H ₂
Business capacity	→ Dynamic capacity	0.467***	0.070	4.960	0.000	Accept H ₃
Dynamic capacity	→ Competitive advantage	0.305***	0.111	2.785	0.005	Accept H ₄

Source: From research results

Note: *, **, *** correspond to the 10%, 5% and 1% statistical significance levels, respectively.

Testing the research model hypothesis: Results of SEM model analysis with unstandardized regression weights in table 4 show that at the 5% significance level (95% confidence level), testing the relationships. The relationship between the variables in the research model is statistically significant, so hypotheses H₁→H₄ are accepted.

5. Discuss Research Results

The study tested the relationship between "Financial service idea development capacity," "Platform development capacity," and "Business capacity" to "dynamic capacity" and the impact of "dynamic capabilities" on the "competitive advantage" of fintech businesses.

According to research results, "Business capacity" also

substantially impacts the "dynamic capacity" of fintech businesses at 0.467 standard units. This result is compatible with the research results of Oshodin et al. (2019) and Witschel et al. (2023). The vigorous development of Fintech is an opportunity to optimize business operations, but it also poses many challenges for fintech businesses. Obtaining optimal solutions to address opportunities and challenges, making timely decisions, and implementing effective strategic decisions and changes require high business capacity of fintech enterprises.

Also, according to the research results, "Platform development capacity" substantially impacts the "dynamic capacity" of fintech businesses by 0.456 standard units. This result is consistent with the research results of Oshodin et al. (2019) and Chari et al. (2022). New technology-based FinTech businesses provide innovative solutions in financial

products and services. These businesses develop groundbreaking innovative technology platforms in the fields of payment, payment intermediation, asset management, lending, crowdfunding, insurance, and capital markets ... through digital media such as social networks, extensive data analysis, cloud computing, smartphones and mobile services, artificial intelligence, with many breakthrough features, improving products Fintech customer-facing products and services provide customers with optimal, seamless and multi-channel experiences. That helps fintech businesses form and develop dynamic capabilities.

The research results also show that the "Capacity to develop financial service ideas" impacts the "dynamic capacity" of fintech businesses by 0.201 standard units. The results of testing this relationship are consistent with the research results of Oshodin et al. (2019) and Day et al. (2016). For fintech products and services to be successful in the market, good ideas need to go through the process of analyzing and understanding practices and in-depth professional knowledge, experience, and lessons from failures and successes: fintech products and services. Idea capacity combined with technological and business capacity will be the basis for forming the dynamic capacity of fintech businesses.

In addition, according to research results, "dynamic capabilities" also impact the "competitive advantage" of fintech businesses by 0.305 standard units. This result is compatible with the research results of Day and Schoemaker (2016), Witschel et al. (2023), Chari et al. (2022), and Oshodin et al. (2019). Dynamic capabilities in fintech businesses refer to a business's ability to sense, grasp, and readjust its resources and activities to respond to environmental challenges and opportunities to achieve sustainable and environmentally beneficial results. These capabilities enable businesses to integrate environmental considerations into their business strategies, operations, and innovation processes, differentiating themselves from competitors and gaining a competitive advantage.

6. Conclusions

The research was conducted based on the research model proposed from the review of related research results, then verified the model based on the results of investigations and surveys from more than 120 businesses—Vietnamese fintech. The research results contribute significantly to identifying factors affecting dynamic capabilities and distributing the competitive advantage of Vietnamese Fintech businesses under the impact of dynamic capabilities.

First, the research results are empirical evidence showing the strong impact of "Financial service idea

development capacity," "Platform development capacity," and "Business capacity" on the "dynamic capabilities" of fintech businesses. This group of new capabilities strongly impacts the formation and development of dynamic capabilities of fintech businesses. Theoretically, this result contributes to discovering new, specific factors affecting the dynamic capabilities of fintech businesses. In terms of practice, the research results are empirical evidence demonstrating the importance of dynamic capabilities in fintech businesses. In addition to traditional resources, special attention must be paid to resources of idea capacity, capacity platform development capacity, and business capacity. These capabilities help fintech businesses, mostly startups with financial difficulties and other resources, increase their dynamic capabilities to promote innovation in price propositions-value for fintech products, services and distribute excellent digital financial services to customers.

Second, the study also examines the impact of dynamic capabilities on the competitiveness of fintech businesses. The research results have reaffirmed the role of faculty in helping fintech businesses increase their competitive advantage. With dynamic capabilities, fintech businesses have many benefits to identify and capture environmental opportunities while realigning resources to address sustainability challenges effectively. This adaptive approach enables fintech businesses to respond expertly to changes in the business environment and embrace emerging technologies, ultimately strengthening their ability to achieve competitive advantage.

The limitation of the study is that the sample size is small, and in the study sample, most Vietnamese fintech businesses are startups that have not been operating in the market for a long time. In the future, with the larger scale of fintech businesses and longer operating times, research needs to focus on identifying new factors that affect the dynamic capabilities of fintech businesses according to the characteristics of each field and according to each industry in each phase. In addition, research needs to focus on ways for fintech businesses to form and develop sustainable, dynamic capabilities, thereby increasing their competitive advantage.

Acknowledgement

The author gratefully acknowledges the financial support from the Banking Academy of Vietnam.

References

Anderson J. C., & Gerbing D. W. (1988), Structural equation modeling in practice: A review and recommended two-step

- approach, *Psychological bulletin*, 103(3), 411.
- Barreto, I. (2010), Dynamic capabilities: A review of past research and an agenda for the future, *Journal of management*, 36(1), 256-280.
- Chari, A., Niedenzu, D., Despeisse, M., Machado, C. G., Azevedo, J. D., Boavida-Dias, R., & Johansson, B. (2022). Dynamic capabilities for circular manufacturing supply chains- Exploring the role of Industry 4.0 and resilience. *Business Strategy and the Environment*, 31(5), 2500-2517.
- Day, G. S., & Schoemaker, P. J. (2016), Adapting to fast-changing markets and technologies, *California Management Review*, 58(4), 59-77.
- Eisenhardt K.M., Martin J.A. (2000), Dynamic capabilities: what are they?, *Administrative Science Quarterly*, 21 (10-11), 1105 – 1121
- Kazan, E., Tan, C. W., Lim, E. T., Sørensen, C., & Damsgaard, J. (2018), Disentangling digital platform competition: The case of UK mobile payment platforms, *Journal of management information systems*, 35(1), 180-219.
- Leong, C., Tan, B., Xiao, X., Tan, F. T. C., & Sun, Y. (2017), Nurturing a FinTech ecosystem: The case of a youth microloan startup in China, *International Journal of Information Management*, 37(2), 92-97.
- Li, D. Y., & Liu, J. (2014), Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China, *Journal of business research*, 67(1), 2793-2799.
- Milian, E. Z., Spinola, M. D. M., & de Carvalho, M. M. (2019), Fintechs: A literature review and research agenda, *Electronic Commerce Research and Applications*, 34, 100833.
- Oshodin, O., Molla, A., Karanasios, S., & Ong, C. E. (2019, January). How do FinTech Start-ups Develop Capabilities? Towards a FinTech Capability Model, *In PACIS*, p. 59.
- Puschmann, T. (2017), Fintech, *Business & Information Systems Engineering*, 59, 69-76.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.
- Wang, C. L., & Ahmed, P. K. (2007), Dynamic capabilities: A review and research agenda, *International journal of management reviews*, 9(1), 31-51.
- Witschel, D., Müller, J. M., & Voigt, K. I. (2023). What Takes the Wind out of Their Sails? A Micro-Foundational Perspective of Challenges for Building Dynamic Capabilities Towards Digital Business Model Innovation. *Schmalenbach Journal of Business Research*, 75, 345–388.
- Zhou, K. Z., & Li, C. B. (2010). How strategic orientations influence the building of dynamic capability in emerging economies. *Journal of Business Research*, 63(3), 224-231.