Impact of market orientation, innovation capacity and government support on market development: Unburnt building materials in the Mekong Delta, Vietnam

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ABSTRACT

DOI:10.46223/HCMCOUJS. This study aims to examine the impact of market orientation, econ.en.13.1.2137.2023 innovation capacity, and government support on the development of the Unburnt Building Materials (UBMs) market in the Mekong Delta, Vietnam. In this study, we analyzed the impact of government support on UBMs market development through market orientation, and incoming innovation capacity. In addition, this study analyzed the impact of market orientation and innovation Received: January 05th, 2022 capacity on the market development of manufacturers' UBMs. Revised: February 16th, 2022 Because the whole manufacturers of UBMs in the Mekong Delta Accepted: February 21st, 2022 are small, the number of samples of the study is the target population - the whole overall with 78 owners or senior managers of micro, medium, and small manufacturing enterprises. For data analysis, we applied the Partial Least Squares Structural Equation Modeling (PLS-SEM) to test both measurement and structural models. The results show that government support has a positive impact on the market development of UBMs through market JEL classification code: development and innovation capacity. Furthermore, market M00; M10; M30; L10; L25 development is also influenced by one's market orientation and innovation capacity in terms of products, processes, and marketing. In this study, innovation capacity has the highest impact on the market development of UBMs of enterprises. This study has contributed to the knowledge related to the positive impact of Keywords: government support on market orientation, on innovation capacity from the perspective of small, medium, and micro construction innovation capacity; enterprises in Vietnam. Develop a new product market development government support; market development; market model for small, medium, and micro enterprises by integrating orientation; unburnt building external factors (government support) and internal resources of materials enterprises (market orientation and innovation capacity).

1. Introduction

There are many noticeable studies that have examined the powerful role of Market Orientation (MO) on innovation and their impact on other firm-level outcomes (Kohli & Jaworski, 1990; Narver & Slater, 1990). The results of a number of studies have shown that MO is considered very important for the innovation and Innovation Capacity (IC) of enterprises (Christensen & Bower, 1996). This is the expected outcome of corporate growth strategies towards (Grant, 1991).

This has been confirmed by many scholars in the resource-based theory approach to develop strategies for the market development of corporate products and industry development (Ketchen, Hult, & Slater, 2007; Murray, Gao, & Kotabe, 2011). Besides, Han, Kim, and Srivastava (1998) once cited Drucker (1954) assertion that business is creating customers, and developing customers is developing markets based on marketing and innovation. Market success is created through the power of market orientation and innovation (Atuahene-Gima, 1996). However, our understanding of the influence of MO on different types of innovation remains inconclusive (Cai, Liu, Zhu, & Deng, 2015) if not unclear. Furthermore, most of these studies have been conducted to test hypotheses using samples of large firms established in developed economies and very few studies consider in companies in a new industry in a transitioning, emerging market context. Developing countries with economies in transition are frequently characterized by inadequate institutions in support of business markets (Ahlstrom & Ding, 2014; Mair & Marti, 2009), so governments often want to initiate and support entrepreneurial efforts for firms in their own countries (Eijdenberg, Thompson, Verduijn, & Essers, 2019). These are research gaps that need to be reviewed. In that context, there are two questions to discuss. How do the impact of MO and IC (types of innovation) on the market development of companies in a (new) transitioning industry differ from the results of previous studies? How does government support affect MO and IC to market products in a transitioning industry?

In Vietnam, the transformation of new industry development has been carried out since 2010 through many mechanisms and policies from the government to local authorities in order to create a legal corridor, a basis for management and investment in Unburnt Building Materials (UBMs) production and business. The government has made many decisions on the roadmap to terminate the operation of manual brick kilns producing fired clay bricks and requires increasing the use of UBMs, limiting the production and use of fired clay bricks (Bui, 2017; D. T. Nguyen, 2012). Programs and development planning schemes of government from central to local levels are compulsory in state-funded works and encouraged with non-state-owned constructions to convert production and consumption of fired clay bricks to production as well as consumption of UBMs (Hoang, 2014a, 2014b; H. N. Nguyen, 2012). The conversion results show that the total production design capacity of UBMs accounted for about 8% in 2010 increased to 30% of the total designed capacity in 2018 (Cao, 2018; Pham, 2017). However, the development of UBMs is still lower than required by the government program (Ministry of Construction, 2020b). In fact, the average production output is only 40 - 50% of the total designed capacity of the UBMs production line. Although the consumption rate accounts for about 90% of total production, the process of consuming all UBMs is slow (Truong, Duong, & Truong, 2022). Consumption of non-construction materials is mainly for state works, public projects are required to be used according to orders (Ministry of Construction, 2020c). The outstanding issues in UBMs market development in the Mekong Delta, Vietnam provide an opportunity to test relevant hypotheses and fill in the research gap identified above.

The government support-based approach to promoting new product development through product innovation strategies is consistent with the research of Li and Atuahene-Gima (2001) who has studied the impact of Chinese government institutions and regulations on product innovation strategy and product innovation outcomes. Furthermore, the research results of Zhang, Qi, Wang, Zhao, and Pawar (2018) have shown that government support has a positive impact on process innovation, product innovation, and corporate performance in China. In addition, Qu and Ennew (2005) found evidence of market-oriented development in transitioning markets thanks to government institutional support. This study was conducted with the desire to demonstrate, from a sustainability perspective, how government support helps companies to realize market orientation and enhance IC (product, process, and marketing) to facilitate unburnt construction material market development in the Mekong Delta, Vietnam.

2. Theoretical basis

2.1. Market orientation

Ketchen et al. (2007) describe "the resource-based theory (RBV) by strategic resources, and the theory emphasizes that there is only potential value and that realizing this potential requires associated with other important business factors" (Ketchen et al., 2007, p. 962). MO is generally defined as the extent to which a market actor uses knowledge of the market, especially its customers, as a basis for making decisions about what to produce and how to produce it, and how to market it (Jaworski & Kohli, 1993). Market orientation is an important factor that creates an enabling environment for the strategic behavior of the business toward continuously creating more and more value for customers. This study uses the behavioral approach of Kohli and Jaworski (1990). Accordingly, market orientation includes market intelligence generation, market intelligence dissemination, and market responsiveness. The first two factors have no value if the organization is not able to respond to market information and market needs. According to Kohli and Jaworski (1990), all departments need to be responsive and this can take the form of selecting appropriate target markets, designing, manufacturing, promoting, and distributing products that meet the needs of current demand, and forecast future demand. This study focuses on the role of employee responsiveness, responsiveness to customers, and company performance as a result of market orientation (Kohli & Jaworski, 1990).

2.2. Innovation capacity

The management literature emphasizes the fundamental role of innovation (Baker & Sinkula, 2002; Lyon & Ferrier, 2002; Wolfe, 1994) based on Resource Based Theory (Kibbeling, Van Der Bij, & Van Weele, 2013; Prajogo, 2016). Since Schumpeter introduced the concept of "creative destruction" in 1934 (Schumpeter, 2008), innovation has also been recognized as one of the strategic factors that create and maintain an effective competitive advantage in today's business market (Tidd, 2001). "The capacity to innovate is an improvement anywhere in the enterprise; not only in products, services, and processes, but also in other factors such as leadership, human resources, communications, organization, marketing, and any other activities that improve the business." (Csath, 2012, p. 10). Many studies have identified and recognized IC through combining different types of innovation including product innovation, process innovation, organizational innovation, and marketing innovation according to the classification published in The OECD Oslo Handbook for arguing that individual innovation capabilities are relevant to small and medium enterprises (Rajapathirana & Hui, 2018; Truong, Duong, & Truong, 2020).

The OECD Oslo Manual (2005) has asserted that product innovation can use new technologies and knowledge (p. 48), including the introduction of an entirely new product/service or substantial improvement in its characteristics or intended use. Process innovation is "the implementation of new or significantly improved production or distribution methods" (OECD Oslo Manual, 2005, p. 49). Marketing innovation is "the implementation of new marketing methods that involve dramatic changes in product design, product placement, and product communication or pricing" (OECD Oslo Manual, 2005, p. 50).

In this study, the author aims to discover the IC based on the classification point of view from the OECD Oslo Manual (2005). IC is a multi-dimensional concept and represents the ability of enterprises to use internal and external resources to change and improve their current products, services, processes, and marketing methods.

2.3. Government support

The concept of Government Support (GS) comes from institutional theory, which is an important advantage of institutions. An institutional theory emphasizes the normative context in which organizations exist so that organizational action cannot be separated from an understanding of their social environment (Martinez & Dacin, 1999). There is plenty of research that attributes the successes of many emerging economies to the strategic role their governments play in providing an environment that fosters business growth and development (Chadee & Roxas, 2013). The institutional theory states that the success of a business in the market depends partly and importantly on the institutional environment (Famiola & Wulansari, 2019). Government support to correct market failures or facilitate the development of strategically important industries (Li & Atuahene-Gima, 2001).

In order to create favorable conditions for converting the use of baked clay materials, the government from the central government to the government of each province has developed development strategies, regulations, schemes, policies, and measures, which help encourage innovation toward the production and use of UBMs. In the early stages, these public policies mainly targeted state-owned organizations and enterprises from large to Small and Medium-Sized Enterprises (SMEs), and issued many measures to support the transformation. While these policies are important and useful, their effect on innovation and firms' capabilities is still not clear due to the relatively low level of formal institutional trust and incomplete regulatory framework. It is therefore important that we examine how overall GS affects the relationship between MO and innovation capacity.

2.4. Market development

Market development has been widely recognized as a noticeable aspect of business operations (Hussinki, Ritala, Vanhala, & Kianto, 2017). Kotler and Armstrong (2018) argue that "Market development is defined as the growth of a business by identifying and developing new market segments for its existing products" (p. 71).

Corporate performance is enhanced when a company implements market development in planning to attract new customers, so the business's managers must focus on internal efficiency, which requires using enterprise resources (Ejike, 2020; Tavakolizadeh, 2014). Market development is one of the results of business performance (Dang, Le, & Peansupap, 2019) by managing and using resources and capabilities. All the companies in the industry with better market development results will promote the industry to survive and develop. Market development is a type of growth strategy in either the manufacturing industry or the service industry, so the way to develop the market in an industry or business is different. Market development is also considered as one of the business growth strategies by using existing products and services to find customers and explore new markets. Ansoff (1957) focuses on using the company's marketing strategy to increase the company's revenue levels through product discovery (David, David, & David, 2013; Hussain, Khattak, Rizwan, & Latif, 2013). This means that business performance results show an increase in sales volume, an increase in product sales that is successful market development.

2.5. Market orientation, innovation capabilities, and government support

The development of the construction industry in the changing economic environment also affects the needs of customers. Market-oriented businesses to meet current market needs and anticipate future needs through innovation is increasingly becoming a matter of survival. Due to the transformational nature of the building materials industry from baked clay materials (traditional bricks) to UBMs, businesses recognize the need to apply new technologies to respond to the change. It is therefore eminent to examine the relationship between MO and innovation in a fast-growing industry in Vietnam that may differ from what we have learned from advanced economies.

The production of building materials is labor intensive, and using non-renewable resources (agricultural land) for economic growth is no longer appropriate and unsustainable. Government intervention is the government's regulations and policies in the industry (O'Brien, London, & Vrijhoef, 2004). Litman (1998) has affirmed that government intervention is one of the important factors in the structure of the industry. The role of the government (government support) will be related to the strategic choices of the business (Shu, Zhou, Xiao, & Gao, 2016). The nature of the mode/types of innovation capabilities is significant for the most prominent causes of industry-wide innovation that generate industry growth (Martin & Scott, 2000). Therefore, effective forms of public support will affect private innovation (Martin & Scott, 2000). From this argument, the author expects that:

H1a: Government support positively affects the market orientation

H1b: Government support positively impacts innovation capacity

2.6. Market orientation, innovation, and market development

Drucker (1954) emphasized the importance of the market (creating customers) and innovation to achieve business success in business administration. There is a great deal of research exploring the relationship between market orientation and innovation in both manufacturing and service industries (Akman & Yilmaz, 2008; Atuahene-Gima, 1996; Gatignon & Xuereb, 1997; Hurley & Hult, 1998). The research of Kirca, Jayachandran, and Bearden (2005) has contributed quite a lot to the theory and practice related to the relationship between market orientation and IC of enterprises. Markets and innovation are equally important and synergistic effects can be achieved using the effect of market orientation on firm performance, and this effect is stronger when market orientation is combined with additional resources from within the business, such as innovation (Menguc & Auh, 2006). Snoj, Milfelner, and Gabrijan (2007) discovered and confirmed that market orientation positively affects the financial and market performance of companies indirectly through innovation capacity. Cai et al. (2015) enriches our understanding of the relationship between MO and IT innovation across the regions and industry sectors. Therefore, the author assumes that:

H2: Market orientation has a positive effect on innovation capacity

Many empirical studies provide results that show positive relationships between the market orientation and manager's perceptions of business performance (Jaworski & Kohli, 1993), sales growth (Slater & Narver, 1994), and manager's perceptions of new product performance (Atuahene-Gima, 1996; Slater & Narver, 1994). Moreover, there was no direct effect on market orientation on perceived new product market performance (Atuahene-Gima, 1996), market share, or market share growth (Pelham & Wilson, 1996). Kirca et al. (2005) also demonstrated that market orientation positively affects various variables related to firm's performance, such as market development, sales volume, and market share, perceived quality, customer loyalty and overall satisfaction through meta-analysis of previous literature. More specifically, the manufacturer's a stronger focus on understanding and satisfying the needs and wants of customers' increases sales, customer retention, new customers, and market share. Therefore, in the case of this study, the author also expects:

H3: Market orientation has a positive impact on market development

Innovation is very important for a company to sell more products and services, gain more customers and achieve higher profits (Cheng, Lai, & Wu, 2010), and improve the company's position in the market (Walker, Damanpour, & Devece, 2011). Product innovation involves creating a new product or improving an existing product (OECD Oslo Manual, 2005). Process innovation using a new type of production material, a new type of machine/equipment (OECD Oslo Manual, 2005), improve existing processes through cost reduction and/or increase process flexibility and performance (Karabulut, 2015); activities related to team/team training, improving hours worked in new product/service development or product/service improvement (Jiménez-Jiménez & Sanz-Valle, 2011). Marketing innovation is the implementation of a new marketing method that involves changes in product design or packaging, product placement, communication, or product pricing. OECD Oslo Manual (2005) aimed at satisfying customer needs, opening up new markets, or positioning the company's products/services in the market for the purpose of increasing the company's sales. Process innovation has a larger impact on production costs but less impact on a company's sales growth or market share than product innovation (Cheng, Yang, & Sheu, 2014). Marketing IC increases sales by increasing product consumption, and improving market performance of companies (Gunday, Ulusoy, Kilic, & Alpkan, 2011). Considering the above studies, the author formulated the following hypothesis:





3. Methodology

3.1. Data collection

To examine the market orientation and innovation capacity of UBMs manufacturers, we collected survey data from senior managers of UBMs manufacturing companies based in the Mekong Delta. Manufacturers of UBMs were aggregated in 2018 by 13 Departments of Construction in the Mekong Delta, Vietnam. Data collection was conducted from early August 2019 to early June 2020. Businesses must meet two criteria for inclusion in the sample: (1) at least three years of operation, and (2) engaged in the production of UBMs is the main field. Each

company was interviewed face-to-face for a period of 1.5 to 2 hours through a semi-structured questionnaire. We have selected these subjects as the main respondents for our survey because they are the ones who best understand the strategic directions of their company's UBMs production and business. Because the whole manufacturers of UBMs in the Mekong Delta is small, the number of samples of the study is the target population - the whole overall with 78 owners or senior managers of micro, medium, and small manufacturing enterprises. In this case, it is a survey of all UBMs manufacturers in the Mekong Delta because the target population is small. That is the reason why PLS-SEM is applied as a preferred choice for processing small samples (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014) with a sample size of 78. Some prior researches used PLS-SEM as a tool to avoid errors from small sample size such as Thirupathi and Vinodh (2016), which applied PLS-SEM with the data surveyed 70 experienced people more than 10 years in the manufacturing and design department in 50 automobile components manufacturing companies to test the model with 18 observed variables. Furthermore, other reasons that Hair, Hollingsworth, Randolph, and Chong (2017) stated are also very suitable for this study such as being non-normal data, maximizing explained variance of endogenous variables, number of interaction terms, a large number of variables, measures derived from archival data, explains an outcome of interest, identifying relationships, second-order constructs (MO), first-orderond-order constructs and firstorder construct (MD, GS) in study model.

The questionnaires were designed from using existing research variable scales inherited from previous research. The initial survey was discussed with the executives of the companies and it was pre-tested with 10 pilot interviews to ensure contextual relevance in terms of wording, format, and sequence.

3.2. Measurement

The research variable scales were designed on a five-point Likert scale (from 1 for "strongly disagree" to 5 for "strongly agree") according to previous research (see Table 3). The three MO dimensions, namely market intelligence generation, market information dissemination, and market information response, were adapted from Jaworski and Kohli (1993) and by Morgan, Vorhies, and Mason (2009). Jaworski and Kohli (1993) reported the appropriate reliability of the measure, with Cronbach's Alpha being greater than 0.70. The three dimensions of innovation capacity (IC) (i.e., product, process, marketing) were adapted from the OECD Oslo Manual (2005), Jiménez-Jiménez and Sanz-Valle (2011), and Karabulut (2015). Their study has shown the appropriate reliability of this measure with a composite confidence greater than 0.70. The measure of GS used was from Li and Atuahene-Gima (2001). Li and Atuahene-Gima (2001) reported the acceptable reliability of these measures with Cronbach's Alpha of 0.71. The order of the items in the questionnaire was chosen at random to avoid any bias due to survey fatigue.

4. Result and discussion

4.1. Result

4.1.1. Respondent profile

Managers in charge of production and consumption activities who play an important role in business development orientation related to UBMs are the subject of answering the questions in the survey (see Table 1).

Table 1

Profile of respondents

Demographic Profile	Content	Frequency	Percentage
Position	Business owners	39	50.0
	Managing director	25	32.1
	Sales manager	12	15.4
	Chief accountant	2	2.6
Academic level	Intermediate Professional Education	11	14.1
	College	21	26.9
	Undergraduate	46	59.0
Specialize	Construction	61	78.2
	Mechanical Engineering	19	24.4
	Economics and management	18	23.1
	Electricity	4	5.1
	Automation	1	1.3
Experience	From under 05 years	30	38.5
	From 06 years to 10 years	22	28.2
	From 11 years to 15 years	19	24.4
	From 16 years to 20 years	4	5.1
	Over 20 years	3	3.8

Source: Data analysis results (2020)

4.1.2. Business profile

The business profile of respondents shows in Table 2.

Table 2

Business profile of respondents

Business Profile	Content	Frequency	Percentage (%)
Type of business	Joint Stock Company	11	14.1
	Limited liability company	53	67.9
	Household business	10	12.8
	Private enterprise	2	2.6
	Cooperative	2	2.6

Business Profile	Content	Frequency	Percentage (%)
Number of years	Less than 05 years	30	38.5
of business	From 05 to 10 years	25	32.1
operation	From 11 years to 15 years	13	16.7
	From 16 years or more	10	12.8
Source of capital	Equity capital	78	100
of the business	Loans	64	82.1
Scale based on	Super small (From under 3 billion VND)	12	15.4
capital	Small (Over 3 billion VND to 50 billion VND)	58	74.4
	Medium (Over 50 billion VND to 100 billion VND)	7	9.0
	Large (over 100 billion VND)	1	1.3
Scale based on	Super small (From less than 10 employees)	29	37.2
personnel	Small (From 11 to 100 employees)	43	55.1
	Medium (From 101 to 200 employees)	3	3.8
	Large (From 201 employees or more)	3	3.8

Source: Data analysis results (2020)

4.1.3. Statistical analysis and results

We used Partial Least Squares Structural Equation Model (PLS-SEM) to analyze the data and test the model in this study. The sample size is relatively small, so PLS-SEM is the optimal choice to handle small samples (Hair et al., 2017). This section discusses the two stages of least squares analysis: measurement model analysis and structural model analysis. Then, the bootstrapping method was used to calculate the significance level of the path coefficients, as suggested by Hair et al. (2017). Analysis was performed using SmartPLS 3.3.3.

4.1.3.1. Evaluation of the measurement model

In the measurement model evaluation, the convergent and discriminant validity of the measurements was estimated. Regarding convergent validity, according to Hair et al. (2017), all indicators show loads above the threshold of 0.70 as shown in Figure 2 and Table 1. The extracted mean variance values output (AVE) is greater than 0.50 for all constructs, indicating an acceptable degree of convergence validity. The composite reliability values range from 0.883 to 0.954, as shown in Table 3. The minimum accepted threshold is 0.70.

Furthermore, according to Henseler, Ringle, and Sarstedt (2015), the HTMT must be lower than 0.9. Garson (2016) argues that the discriminant validity between the relevant variables is demonstrated when the value of the HTMT indexes is less than 1. Table 4 shows that the Heterotrait-Monotrait Ratio values for each construct are lower than 1.0. The repeat indicator method was used to estimate the quadratic latent structure as suggested by Hair et al. (2017). This is evident in the first-order structure (see Figure 2).

Table 3

Item loading, validity, and reliability

Variable	Factor Loading	Cronbach's Alpha	CR	AVE
Market Orientation (MOF)				
Market intelligence generation (MIGF)		0.781	0.901	0.820
MIGF1	0.895			
MIGF2	0.916			
IDF		0.820	0.894	0.739
MID1	0.906			
MID5	0.912			
MID2	0.751			
Market responsiveness (MRIF)		0.835	0.883	0.655
RI1	0.862			
RI2	0.920			
RI3	0.731			
RI4	0.705			
Innovation Capacity				
Product Innovation (PUIF)		0.814	0.915	0.843
PUIF2	0.710			
PUIF3	0.780			
Process Innovation (PSIF)		0.887	0.922	0.748
PSIF1	0.790			
PSIF2	0.831			
PSIF3	0.714			
PSIF4	0.802			
Marketing Innovation (MI)		0.846	0.908	0.767
MI1	0.908			
MI2	0.913			
MI3	0.801			
Government support (GS)		0.893	0.926	0.758
GS1	0.810			
GS2	0.903			
GS3	0.880			
GS4	0.886			
Market Development (MD)		0.942	0.954	0.775
MD1	0.857			
MD2	0.896			
MD3	0.882			
MD4	0.907			
MD5	0.871			
MD6	0.868			

Source: Data analysis results (2020)

Variables	GS	IDF	IGF	MD	MI	PSI	PUI	RI
GS	1.000							
IDF	0.624	1.000						
IGF	0.489	0.943	1.000					
MD	0.638	0.670	0.555	1.000				
MI	0.627	0.680	0.578	0.656	1.000			
PSI	0.593	0.741	0.572	0.656	0.698	1.000		
PUI	0.534	0.655	0.715	0.700	0.691	0.744	1.000	
RI	0.421	0.486	0.329	0.503	0.525	0.591	0.451	1.000

Table 4

Discriminant validity

Notes: GS, Government Support; IDF, Market intelligence dissemination; IGF, Market intelligence generation; MD, Market Development; MI, Marketing Innovation; PSI, Process Innovation; PUI, Product Innovation; RI, Market responsiveness

Source: Data analysis results (2020)



Figure 2. Measurement model

Source: Data analysis results (2020)

4.1.3.2. Structural model evaluation

After the evaluation of the fit of the measurement model, the second phase is the evaluation of the structural model. The relevance of PLS-SEM depends on the ability to predict the endogenous structure of the model through certain criteria: coefficient of determination (R^2). R^2 value is used to evaluate the predictive accuracy of the research model and indicates the contribution of each exogenous variable to the explanation of variance in the endogenous variable. R^2 ranges from 0 to 1, where the values 0.75, 0.50, and 0.2 indicate a significant, moderate, and weak contribution, respectively (Hair et al., 2017; Sarstedt, Ringle, & Hair, 2017). In this case (Table 5), the model's R^2 coefficient is moderate and satisfactory, with a value of 0.510 for market development, a value of 0.549 for IC, and with a weak explanatory value ($R^2 = 0.294$) for MO.

Table 5

Predictive relevance of	f the I	PLS	path	model
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Endogenous	\mathbb{R}^2
Innovation Capacity	0.549
Market Development	0.510
Market Orientation	0.264

Source: Data analysis results (2020)

4.2. Hypothesis testing

The last step is to check the path coefficient of the structural model through the bootstrapping method. The results show that all structural relationships are significant. Table 6 and Figure 3 highlight the essential role of GS in MO and IC driving, with path coefficients of ($\beta = 0.514$, t = 5.972, p < 0.001) and ($\beta = 0.339$, t = 3.816, p < 0.001), respectively, thus providing support for H1a and H1b. Moreover, MO positively affects on IC, which is significant at the 1% significance level ($\beta = 0.507$, t = 5.762, p < 0.001), supporting H2. In addition, the hypothesized relationship between IC and MD is positive and significant ($\beta = 0.567$, t = 5.959, p < 0.001), supporting H3. Particularly, MO has a positive effect on MD, which is significant at the 10% significance level ($\beta = 0.195$, t = 1.819, p = 0.069 < 0.1), supporting H4.

Table 6

Results of hypothesis testing

Hyp. No	Hypothesis statement	Path coefficient	SE	t-value	p-value	Decision
H1a	Government support \rightarrow Market Orientation	0.514***	0.086	5.972	0.000	Supported
H1b	Government support \rightarrow Innovation Capacity	0.339***	0.089	3.816	0.000	Supported
H2	Market Orientation \rightarrow Innovation Capacity	0.507***	0.088	5.762	0.000	Supported
H3	Innovation Capacity \rightarrow Market Development	0.567***	0.095	5.959	0.000	Supported
H4	Market Orientation \rightarrow Market Development	0.195 ^a	0.107	1.819	0.069	Supported

Note(s): ${}^{a}p < 0.1$; ${}^{*}p < 0.05$; ${}^{**}p < 0.01$; ${}^{***}p < 0.001$ Source: Data analysis results (2020)



Figure 3. Structural model

Source: Data analysis results (2020)

4.3. Analysis of indirect effects

Indirect impact analysis is used to analyze the impact of government support on the market development of UBMs. In the context of this study, the indirect impact of government support on manufacturer UBMS market growth was examined using MO and IC. The results of this study show that government support significantly affects both MO and IC, and MO and IC positively affect UBMs market development. It can be concluded that government support has an indirect impact on the market development of manufacturers (Table 7).

Table 7

Indirect effects

Indirect Effects	Path coefficient	SE	t-value	p-value
GS -> IC -> MD	0.192***	0.061	3.160	0.002
GS -> MO -> MD	0.100ª	0.058	1.732	0.083
$GS \rightarrow MO \rightarrow IC \rightarrow MD$	0.148***	0.051	2.910	0.004
MO -> IC -> MD	0.287***	0.076	3.802	0.000

Note(s): ap < 0.1; *p < 0.05; **p < 0.01; ***p < 0.001 Source: Data analysis results (2020)

4.4. Discussion

In summary, this study has made significant contributions in the following three aspects. First, our study contributes to existing theory by incorporating an institutional perspective into new product market development strategies. Second, this study enriches our understanding of the relationship between MO and IC in a developing country's construction industry. Third, this study presents important insights for managers in micro, small, and medium enterprises and also for public policy development purposes.

This study introduces an institutional perspective into new product market development strategies through a conceptual model of the relationship between MO and IC. This cannot be considered a mere duplicate of existing research. Emerging markets today play a very important role in the world economy. However, we still do not have a complete understanding of these emerging market contexts in relation to MO, IC, and MD. In particular, the impact of government support on this relationship is all the more interesting. This result supports Bui (2019)'s view that the Government is an external source that will actively support businesses in many aspects such as subsidies, tax incentives, incentives to borrow, or facilitate the increase of internal resources. Especially, when the UBMs industry is very new. The government support factor has a positive and strong impact on the market orientation of manufacturers of UBMs and a rather strong impact on the innovation capacity of manufacturers. This is absolutely true in fact, the government and related agencies in the construction industry from the central to local levels have orientations, plans, and regulations for the development of the building materials industry in order to reduce the use of baked clay bricks in Vietnam in general and the Mekong Delta in particular. The government has also issued a number of regulations, standards, and documents to guide manufacturers of UBMs to produce according to standards in Vietnam, supporting manufacturers with necessary information and technology support, and interest rate support for UBMs to purchase production technology or import technology/equipment to assist in production. Therefore, government support has stimulated the strategic choice of enterprises to invest in production (Scott, 1995; Shu, Wang, Gao, & Liu, 2015; Shu et al., 2016). From the initial support along with a few small projects in some localities, the manufacturer of UBMs in the production process has had market orientation, improved product/service innovation, process innovation, and marketing to survive and thrive. For the use of UBMs, the government is using a compulsory policy in building state capital to gradually create a habit and replace the use of fired clay bricks, yet there is no policy to stimulate the use of UBMs or a policy to limit the use of fired clay bricks. This is also an issue that needs attention in the upcoming government policies toward businesses using UBMs.

In addition, the impact of the manufacturer's market orientation on market development at the 10% significance level, consistent with the market orientation theory, positively affects the performance of the organization or market orientation creates a context that is favorable for effective organizational activities (Kohli & Jaworski, 1990) and is consistent with proven empirical studies (Atuahene-Gima, 1996; Gligor, Gligor, & Maloni, 2019). Manufacturers of UBMs do market development and improve the quality of their products and services to meet the market through researching market information, disseminating market information, and adjusting their own operations. The results of this study are also consistent with the findings of Kirca et al. (2005) that market orientation positively affects various variables related to a firm's performance, such as the growth of the market. Market growth, sales, market share, perceived quality, loyalty, and overall customer satisfaction through meta-analysis. If we consider this relationship more strictly at the 5% or 1% significance level (based on the results of many studies in the field of business administration), the results of this study do not have enough evidence to support this relationship. At the same time, the research results also show that the market-oriented manufacturers of UBMs are not good enough to produce good performance results. This is understandable because the starting point of the production of UBMs is from the regulations, programs of the government, ministries, sectors, and localities under provincial management, and the use of UBMs is now mandatory in construction works that are approved by the funding from the state budget. Therefore, the proactive market orientation of UBMs manufacturers is still not good.

Moreover, compared with the impact of the manufacturer's market orientation, the manufacturer's innovation capacity has a stronger impact on market development. This means that the manufacturer of UBMs with better innovation capacity in both manufacturing/service, process, and marketing, the better UBMs market development results. This result is also confirmed, consistent with the research results of previous authors such as Kirca et al. (2005); Prajogo (2016); Damanpour, Walker, and Avellaneda (2009); Gunday et al. (2011); Cheng et al. (2014); Kafetzopoulos and Psomas (2015); Psomas, Kafetzopoulos, and Gotzamani, (2018); Rajapathirana and Hui (2018). This also agrees with the results of Dang and Dao (2016) that building materials companies need to improve their capacity to improve product production technology to create products that are suitable for consumers' tastes. use and harsh climatic conditions as well as monitor the production process, improve, and innovate equipment and production processes to improve product quality. Thus, the innovation capacity of UBMs manufacturers suggesting that UBMs manufacturers need to consider innovation in terms of products, services, processes, and marketing will be more likely to succeed in the market.

This study contributes to the theory by adding to the body of knowledge regarding the positive association between government support, market orientation, and capacity for innovation in the perspective of construction material manufacturers in developing countries. The findings of this study contribute to explaining some of the arguments in some of the controversies about the effectiveness of government support for SME survival. Furthermore, this study has succeeded in developing the survival model of micro, small, and medium enterprises in the situation of industry transformation by integrating external factors (government support) and internal resources (market orientation, innovation capacity). Therefore, this study also contributes to verifying the factors affecting the business existence of micro, small, and medium enterprises producing and trading new technology products.

5. Discussion & implications

5.1. Conclusions and implications

Our study explains the impact of government support on SMEs, especially new products -UBMs in the building materials industry. It is urgent and important to help stimulate SMEs to establish, survive and thrive in the transformation of the industry into one of the responsibilities of the government. However, this is not all because the business itself must orient and develop its own internal capacity to help develop the product market in the long term. This study has explained quite clearly how market orientation and innovation capacity affect new product market development in an emerging market country. The impact of government support on market orientation, and innovation capacity in developing the UBMs market of SMEs, and micro enterprises has been demonstrated in this study. All hypotheses proposed in this study are accepted. Government support effectively influences the UBMs market development. However, in this study, the impact of government support on firm survival is mediated by both market orientation and types of innovation capabilities.

Besides theoretical implications, this study provides important implications for corporate senior managers in charge of development strategy. Findings show that high MO and IC can enhance MD. Therefore, managers should lead their companies proactively based on a balanced approach to managing to achieve optimal MD results. Managers should also pay attention to the difference and the appropriateness in the use of resources and the use of product, process, and marketing innovative capabilities.

5.2. Limitations

This study introduces limitations regarding the results that are drawn solely on the construction materials sector, which is quite specific and should be generalized with caution. The study also focuses on GS, MO, IC and their effects on MD. Future research may consider the potential effects of other variables. Finally, the results of the present study are drawn based on the perceptions of the managers, it will be worthwhile to further consider the customer perceptions to develop the product market based on innovation and market orientation.

References

- Ahlstrom, D., & Ding, Z. (2014). Entrepreneurship in China: An overview. *International Small Business Journal*, 32(6), 610-618. doi:10.1177/0266242613517913
- Akman, G., & Yilmaz, C. (2008). Innovative capability, innovation strategy and market orientation: An empirical analysis in Turkish software industry. *International Journal of Innovation Management*, 12(1), 69-111.
- Ansoff, H. I. (1957). Strategies for diversification. Harvard Business Review, 35(5), 113-124.
- Atuahene-Gima, K. (1996). Market orientation and innovation. *Journal of Business Research*, 35(2), 93-103.
- Baker, W. E., & Sinkula, J. M. (1999). The synergistic effect of market orientation and learning orientation on organizational performance. *Journal of the Academy of Marketing Science*, 27(4), 411-427. doi:10.1177/0092070399274002
- Baker, W. E., & Sinkula, J. M. (2002). Market orientation, learning orientation and product innovation: delving into the organization's black box. *Journal of Market-Focused Management*, 5(1), 5-23.
- Bui, K. P. (2017). Circular No. 13/2017/TT-BXD of the Ministry of Construction: Regulations on the use of unburnt building materials in construction works. Retrieved October 10, 2021, from http://moc.gov.vn/vn/Pages/ChiTietVanBan.aspx?vID=412&TypeVB=0
- Bui, U. N. L. (2019). Research on factors affecting innovation capacity of high-tech industrial enterprises in some key southern provinces of Vietnam (Doctoral dissertation). University of Economics Ho Chi Minh City, Ho Chi Minh City, Vietnam.
- Cai, L., Liu, Q., Zhu, X., & Deng, S. (2015). Market orientation and technological innovation: The moderating role of entrepreneurial support policies. *International Entrepreneurship and Management Journal*, 11(3), 645-671. doi:10.1007/s11365-013-0290-3
- Cao, L. V. (2018). Thông báo số 14/TB-VPCP của Văn phòng Chính phủ: Kết luận của Phó Thủ tướng Trịnh Đình Dũng tại Hội nghị toàn quốc về vật liệu xây dựng năm 2017 [Notice No. 14/TB-VPCP of the Government Office: Conclusion of Deputy Prime Minister Trinh Dinh Dung at the National Conference on Building Materials in 2017]. Retrieved October 10, 2021, from http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?class_id =2&_page=1&mode=detail&document_id=192551

- Castela Bernardo, M. S., Ferreira Fernando, A. F., Ferreira João, J. M., & Marques Carla, S. E. (2018). Assessing the innovation capability of small- and medium-sized enterprises using a non-parametric and integrative approach. *Management Decision*, 56(6), 1365-1383. doi:10.1108/MD-02-2017-0156
- Chadee, D., & Roxas, B. (2013). Institutional environment, innovation capacity and firm performance in Russia. *Critical Perspectives on International Business*, 9(1/2), 19-39. doi:10.1108/17422041311299923
- Cheng, C. C. J., Yang, C.-l., & Sheu, C. (2014). The link between eco-innovation and business performance: A Taiwanese industry context. *Journal of Cleaner Production*, 64, 81-90. doi:10.1016/j.jclepro.2013.09.050
- Cheng, C. F., Lai, M. K., & Wu, W. Y. (2010). Exploring the impact of innovation strategy on R&D employees' job satisfaction: A mathematical model and empirical research. *Technovation*, 30(7/8), 459-470.
- Christensen, C. M., & Bower, J. L. (1996). Customer power, strategic investment, and the failure of leading firms. *Strategic Management Journal*, *17*(3), 197-218.
- Csath, M. (2012). Encouraging innovation in small and medium sized businesses: Learning matters. *Development and Learning in Organizations*, 26(5), 9-13.
- Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies*, 46(4), 650-675. doi:10.1111/j.1467-6486.2008.00814.x
- Dang, C. N., Le, L. H., & Peansupap, V. (2019). Linking knowledge enabling factors to organizational performance: Empirical study of project-based firms. *International Journal* of Construction Management, 1-14. doi:10.1080/15623599.2019.1637097
- Dang, M. T. T., & Dao, H. T. T. (2016). Đánh giá năng lực cạnh tranh trường hợp Công ty Cổ phần Đầu tư sản xuất vật liệu xây dựng sao Việt Nhật miền Trung (SJVC) [Evaluation of competitiveness in the case of Central Star Viet Nhat Construction Materials Production Investment Joint Stock Company]. Kỷ yếu Hội thảo Khoa học Quốc gia CITA 2016 "CNTT và ứng dụng trong các lĩnh vực", 5(114).
- David, F. R., David, F. R., & David, M. E. (2013). *Strategic management: Concepts and cases: A competitive advantage approach*. Upper Saddle River, NJ: Pearson.
- De Martino, M., & Magnotti, F. (2018). The innovation capacity of small food firms in Italy. *European* Journal of Innovation Management, 21(3), 362-383. doi:10.1108/EJIM-04-2017-0041
- Drucker, P. F. (1954). *The practice of management: A study of the most important function in America society.* New York, NY: Harper & Brothers.
- Eijdenberg, E. L., Thompson, N. A., Verduijn, K., & Essers, C. (2019). Entrepreneurial activities in a developing country: An institutional theory perspective. *International Journal of Entrepreneurial Behavior & Research*, 25(3), 414-432. doi:10.1108/IJEBR-12-2016-0418
- Ejike, I. K. (2020). Expansion strategies (product-market strategies) and competitiveness of nigeria brewing firms: a study of Nigeria Breweries Awo-Mmamma, Imo State. *Emerald International Journal of Scientific and Contemporay Studies*, 2(1), 1-19.
- Evangelista, R., & Vezzani, A. (2010). The economic impact of technological and organizational innovations. A firm-level analysis. *Research Policy*, *39*(10), 1253-1263.

- Famiola, M., & Wulansari, A. (2019). SMEs' social and environmental initiatives in Indonesia: An institutional and resource-based analysis. *Social Responsibility Journal*, 16(1), 15-27. doi:10.1108/SRJ-05-2017-0095
- Garson, G. D. (2016). *Partial least squares: Regression & structural equation models*. Asheboro, NC: Statistical Associates Publishing.
- Gatignon, H., & Xuereb, J.-M. (1997). Strategic orientation of the firm and new product performance. *Journal of Marketing Research*, 34(1), 77-90.
- Gligor, D., Gligor, N., & Maloni, M. (2019). The impact of the supplier's market orientation on the customer market orientation-performance relationship. *International Journal of Production Economics*, 216, 81-93. doi:10.1016/j.ijpe.2019.04.022
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, *33*(3), 114-135. doi:10.2307/41166664
- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. International Journal of Production Economics, 133(2), 662-676. doi:10.1016/j.ijpe.2011.05.014
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management* & Data Systems, 117(3), 442-458. doi:10.1108/IMDS-04-2016-0130
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121. doi.10.1108/EBR-10-2013-0128
- Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: Is innovation a missing link? *Journal of Marketing*, 62(4), 30-45. doi:10.1177/002224299806200403
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hoang, H. T. (2010). Decision No: 567/QD-TTg on approving the program to develop unburnt building materials until 2020. Retrieved October 10, 2021, from https://thuvienphapluat.vn/van-ban/Xay-dung-Do -exam/Quyet-dinh-567-QD-TTg-Pheduyet-Chuong-trinh-phat-trien-vat-lieu-xay-khong-nung-104751.aspx
- Hoang, H. T. (2014a). Decision No. 1469/QD-TTg of the Prime Minister: Approving the Master plan on development of building materials in Vietnam to 2020 and orientation to 2030. Retrieved October 10, 2021, from http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?class_id=2&_page=1&mode=detail&document_id=175657
- Hoang, H. T. (2014b). Decision No. 1696/QD-TTg of the Prime Minister: On a number of solutions to treat ash, slag and gypsum of thermal power plants, chemical fertilizer plants to use as raw materials for the production of materials. build. Retrieved October 10, 2021, from http://www.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?mode=detail&docum ent_id=176238
- Hoyle, R. (1995). *Structural equation modeling: Concepts, issues, and applications*. London, UK: Sage Publications.
- Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing*, 62(3), 42-54. doi:10.1177/002224299806200303

- Hussain, S., Khattak, J., Rizwan, A., & Latif, M. A. (2013). ANSOFF matrix, environment, and growth-an interactive triangle. *Management and Administrative Sciences Review*, 2(2), 196-206.
- Hussinki, H., Ritala, P., Vanhala, M., & Kianto, A. (2017). Intellectual capital, knowledge management practices and firm performance. *Journal of Intellectual Capital*, 18(4), 904-922. doi:10.1108/JIC-11-2016-0116
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal* of Marketing, 57(3), 53-70. doi:10.1177/002224299305700304
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408-417. doi:10.1016/j.jbusres.2010.09.010
- Kafetzopoulos, D., & Psomas, E. (2015). The impact of innovation capability on the performance of manufacturing companies: The Greek case. *Journal of Manufacturing Technology Management*, 26(1), 104-130. doi:10.1108/JMTM-12-2012-0117
- Karabulut, A. T. (2015). Effects of innovation types on performance of manufacturing firms in Turkey. *Procedia-Social and Behavioral Sciences*, 195(3), 1355-1364. doi:10.1016/j.sbspro.2015.06.322
- Ketchen, D. J., Hult, G. T. M., & Slater, S. F. (2007). Toward greater understanding of market orientation and the resource-based view. *Strategic Management Journal*, 28(9), 961-964.
- Kibbeling, M., Van Der Bij, H., & Van Weele, A. (2013). Market orientation and innovativeness in supply chains: Supplier's impact on customer satisfaction. *Journal of Product Innovation Management*, 30(3), 500-515. doi:10.1111/jpim.12007
- Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69(2), 24-41. doi:10.1509/jmkg.69.2.24.60761
- Kline, R. (2013). Exploratory and confirmatory factor analysis. In Y. Petscher, C. Schatschneider & D. L. Compton (Eds.), *Applied quantitative analysis in the social sciences* (pp.171-207). New York, CA: Routledge.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing* (17th ed.). New York, CA: A Pearson Education Company.
- Li, H., & Atuahene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. Academy of Management Journal, 44(6), 1123-1134. doi:10.5465/3069392
- Litman, T. (1998). Driving out subsidies: How better pricing of transportation options would help protect our environment and benefit consumers. *Alternatives Journal*, 24(1), 36-43.
- Lyon, D. W., & Ferrier, W. J. (2002). Enhancing performance with product-market innovation: The influence of the top management team. *Journal of Managerial Issues*, 14(4), 452-469.
- Mahmoud, M. A., & Hinson, R. E. (2012). Market orientation, innovation and corporate social responsibility practices in Ghana's telecommunication sector. *Social Responsibility Journal*, 8(3), 327-346. doi:10.1108/17471111211247910
- Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24(5), 419-435. doi:10.1016/j.jbusvent.2008.04.006

- Martin, S., & Scott, J. T. (2000). The nature of innovation market failure and the design of public support for private innovation. *Research Policy*, 29(4/5), 437-447. doi:10.1016/S0048-7333(99)00084-0
- Martinez, R. J., & Dacin, M. T. (1999). Efficiency motives and normative forces: Combining transactions costs and institutional logic. *Journal of Management*, 25(1), 75-96. doi:10.1177/014920639902500104
- Menguc, B., & Auh, S. (2006). Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. *Journal of the Academy of Marketing Science*, 34(1), 63-73.
- Ministry of Construction. (2020a). *Report on development program of unburnt building materials to 2020 and development program of unburnt building materials to 2030*. Hanoi, Vietnam: Ministry of Construction.
- Ministry of Construction. (2020b). *Report on the implementation of Program 567 /QD-TTg dated April 28, 2010 of the Prime Minister on the development of unburnt building materials until* 2020. Hanoi, Vietnam: Ministry of Construction.
- Ministry of Construction. (2020c). Evaluation of 10 years of the program to develop production and consumption of unburnt building materials. Paper presented at the Summary of 10 years of implementation of the program to develop unburnt building materials and a project to treat and use ash, slag, and gypsum. Hanoi, Vietnam: Ministry of Construction.
- Ministry of Construction. (2020d). Use economically and effectively lightning sources for the construction ceramic industry. Retrieved October 10, 2021, from https://moc.gov.vn/tl/tin-tuc/64486/su-dung-tiet-kiem--hieu-qua-nguon-set-cho-cong-nghiep-gom-su-xay-dung.aspx
- Ministry of Construction. (2020e). *New technology trends in construction*. Retrieved October 10, 2021, from https://moc.gov.vn/tl/tin-tuc/66726/xu-huong-cong-nghe-moi-trong-xay-dung.aspx
- Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, *30*(8), 909-920. doi:10.1002/smj.764
- Murray, J. Y., Gao, G. Y., & Kotabe, M. (2011). Market orientation and performance of export ventures: the process through marketing capabilities and competitive advantages. *Journal of the Academy of Marketing Science*, 39(2), 252-269. doi:10.1007/s11747-010-0195-4
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20-35. doi:10.2307/1251757
- Nguyen, D. T. (2012). Directive No. 10/CT-TTg of the Prime Minister: On increasing the use of unburnt building materials and limiting the production and use of baked clay bricks. Retrieved October 10, 2021, from http://vanban.chinhphu.vn/portal/ page/portal/chinhphu/hethongvanban?class_id=2&_page=1&mode=detail&document_id= 157713
- Nguyen, H. N. (2012). Circular No. 46/2012/TT-BCT of the Ministry of Industry and Trade dated December 28, 2012 detailing some contents of Decree No. 45/2012/ND-CP dated May 21, 2012 of the Government. Hanoi, Vietnam: Ministry of Industry and Trade.
- O'Brien, W. J., London, K., & Vrijhoef, R. (2004). Construction supply chain modeling: A research review and interdisciplinary research agenda. *ICFAI Journal of Operations Management*, 3(3), 64-84.

- OECD Oslo Manual. (2005). *The measurement of scientific and technological activities*. Retrieved October 10, 2021, from https://www.oecd-ilibrary.org/docserver/9789264013100-en.pdf? expires=1650228350&id=id&accname=guest&checksum=23F47B881B0F5B149BAB91D 2D88AA1A6
- Pelham, A., & Wilson, D. T. (1996). A longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimension of small-firm performance. *Journal of the Academy of Marketing Science*, 24(1), 27-43.
- Pham, B. V. (2017). Kết quả bước đầu sau 6 năm thực hiện Quyết định 567/QĐ-TTG và hoàn thiện cơ chế chính sách thúc đẩy phát triển VLXKN [Initial results after 6 years of implementing Decision 567/QD-TTG and completing mechanisms and policies to promote the development of unburnt building materials]. Hanoi, Vietnam: Hội Vật liệu xây Dựng Việt Nam.
- Prajogo, D. I. (2016). The strategic fit between innovation strategies and business environment in delivering business performance. *International Journal of Production Economics*, 171(Part 2), 241-249. doi:10.1016/j.ijpe.2015.07.037
- Psomas, E., Kafetzopoulos, D., & Gotzamani, K. (2018). Determinants of company innovation and market performance. *The TQM Journal*, 30(1), 54-73. doi:10.1108/TQM-07-2017-0074
- Qu, R., & Ennew, C. T. (2005). Developing a market orientation in a transitional economy: The role of government regulation and ownership structure. *Journal of Public Policy & Marketing*, 24(1), 82-89.
- Rajapathirana, R. P. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44-55. doi:10.1016/j.jik.2017.06.002
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Treating unobserved heterogeneity in PLS-SEM: A multi-method approach. In H. Latan & R. Noonan (Eds.), *Partial least squares path modeling*. Cham, Switzerland: Springer.
- Schumpeter, J. A. (2008). The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle, translated from the german by redvers opie. London, UK: Transaction Publishers.
- Scott, W. R. (1995). Institutions and organizations (Vol. 2). Thousand Oaks, CA: Sage.
- Shu, C., Wang, Q., Gao, S., & Liu, C. (2015). Firm patenting, innovations, and government institutional support as a double-edged sword. *Journal of Product Innovation Management*, 32(2), 290-305. doi:10.1111/jpim.12230
- Shu, C., Zhou, K. Z., Xiao, Y., & Gao, S. (2016). How green management influences product innovation in China: The role of institutional benefits. *Journal of Business Ethics*, 133(3), 471-485. doi:10.1007/s10551-014-2401-7
- Sideridis, G., Simos, P., Papanicolaou, A., & Fletcher, J. (2014). Using structural equation modeling to assess functional connectivity in the brain: Power and sample size considerations. *Educational and Psychological Measurement*, 74(5), 733-758. doi:10.1177/0013164414525397
- Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of Marketing*, 58(1), 46-55. doi:10.1177/002224299405800104

- Smirnova, M., Naudé, P., Henneberg, S. C., Mouzas, S., & Kouchtch, S. P. (2011). The impact of market orientation on the development of relational capabilities and performance outcomes: The case of Russian industrial firms. *Industrial Marketing Management*, 40(1), 44-53. doi:10.1016/j.indmarman.2010.09.009
- Snoj, B., Milfelner, B., & Gabrijan, V. (2007). An examination of the relationships among market orientation, innovation resources, reputational resources, and company performance in the transitional economy of Slovenia. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration, 24*(3), 151-164. doi:10.1002/cjas.22
- Song, Z.-h. (2015). Organizational learning, absorptive capacity, imitation and innovation: Empirical analyses of 115 firms across China. *Chinese Management Studies*, 9(1), 97-113. doi:10.1108/CMS-05-2014-0092
- Tavakolizadeh, S. (2014). Growth strategies in mature markets. Sweden: LTH at Lund University.
- Thirupathi, R., & Vinodh, S. (2016). Application of interpretive structural modelling and structural equation modelling for analysis of sustainable manufacturing factors in Indian automotive component sector. *International Journal of Production Research*, *54*(22), 6661-6682.
- Tidd, J. (2001). Innovation management in context: Environment, organization and performance. *International Journal of Management Reviews*, *3*(3), 169-183.
- Truong, O. T. H., Duong, T. N., & Truong, H. T. B. (2020). Innovative capacity in micro, small and medium enterprises: Review of international articles on empirical research. *Ho Chi Minh City Open University Journal of Science-Economics and Business Administration*, 10(2), 146-154.
- Truong, O. T. H., Duong, T. N., & Truong, H. T. B. (2022). Unburnt building materials in the trend of sustainable development-Situation and solutions in the Mekong Delta, Vietnam. *Ho Chi Minh City Open University Journal of Science-Economics and Business Administration*, 12(1), 20-35.
- Walker, R. M., Damanpour, F., & Devece, C. A. (2011). Management innovation and organizational performance: The mediating effect of performance management. *Journal of Public Administration Research and Theory*, 21(2), 367-386.
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, 73(6), 913-934. doi:10.1177/0013164413495237
- Wolfe, R. A. (1994). Organizational innovation: Review, critique and suggested research directions. *Journal of Management Studies*, 31(3), 405-431.
- Zhang, M., Qi, Y., Wang, Z., Zhao, X., & Pawar, K. S. (2018). Effects of business and political ties on product innovation performance: Evidence from China and India. *Technovation*, 80(2019), 30-39. doi:10.1016/j.technovation.2018.12.002



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