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The Effect of Strategic Innovation on Company Performance: A Case Study of the Industrial Estate of Thailand

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Abstract

The purpose of this study to examine the effect of strategic innovation on organization development, organizational effectiveness, and firm performance of companies in the Industrial Estate of Thailand. The sample of this study was 360 companies and data was collected by distributing questionnaires through mail and Google form. Out of the 360 questionnaires, 192 responses were received and usable. The study period was November 2020 to February 2021. Structural equation modeling (SEM) was used to test hypotheses regarding the influence of strategic innovation on organization development, organizational effectiveness, and firm performance. The results of this study show that strategic innovation has a positive direct effect on organization development, organizational effectiveness, and firm performance. Organizational development has no significant relationship with organizational effectiveness and firm performance, and organizational effectiveness has no significant relationship with firm performance. Strategic innovation has a strong direct positive effect on the company's performance. It indicated that strategic innovation is essential for organizations to drive business growth, generate value for the company and its customers, and create a competitive advantage. This type of innovation is essential for organizations to adapt to the speed of technology change. In addition, theoretical contributions, managerial contributions, limitations, and future research recommendations were presented in this study, including conclusions were shown.

Keywords: Strategic Innovation, Organization Development, Organizational Effectiveness, Firm Performance

JEL Classification Code: M10, M19, M20

1. Introduction

The COVID-19 pandemic has spread with alarming speed, infecting millions and bringing economic activity to a near-standstill as countries imposed tight restrictions on movement to halt the spread of the virus. This was a rapid change and the organization was unable to control it. The same is true for industrial companies in Thailand, which were severely affected and many businesses were forced to reduce their production capacity. There are many other organizations unable to continue their business and had to shut down, as a result, many people lost their jobs and

their investments. This impact, if not corrected, will have a negative effect on Thailand because companies in the industrial estate contribute a huge amount of income to the country (Vivijinda, 2021). Strategic innovation gets at the core of how an organization should manage change and adapt to changing circumstances. Today, innovation acts as a game-changer for businesses, helping them to improve their speed to market while at the same time enabling organizations to deliver superior customer experience and increased revenue. (Ahmed et al., 2021). Without techniques to analyze the business world, the competition as well as how the company can innovate, it stagnates. As technology advances at a rapid pace, a business needs to be able to utilize that technology with innovative concepts. Businesses can fail if they can't grow in this ever-changing world (Dogan, 2017).

Industrial entrepreneurs must pay more attention to strategic innovation. Innovation is one way to make a lasting statement in the business world and keep a company going. The long-term strategy of a company is then one of the most important aspects of the business. By developing strategies to stay competitive, the business has a better chance to

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succeed. A company will look at its own products, and then decide how to improve them or make new ones that have an impact on the marketplace.

Strategic innovation is the creation of growth strategies, new product categories, services, or business models that change the game and generate significant new value for consumers, customers, and the corporation. Innovating corporate strategies could include the following considerations: what services or products need to be reinvented or developed; what markets to compete in; what business models to develop; how to optimize business processes; how to expand the customer base; how to position the company's brand in relation to target customers; how to make the supply chain and value chain more efficient; and go-to-market strategy (Sudarman et al., 2021). The organization survives and can continue to operate in the long run.

Therefore, the research objective is to examine the effect of strategic innovation on organization development, organizational effectiveness, and firm performance of companies in the Industrial Estate of Thailand. The Industrial Estate's companies are a suitable example of this study because these companies need huge investment at the same time contribute a huge amount of income to Thailand. Strategic innovation is important to the survival of a business in an intensely competitive environment, which can adjust the operations in the firm to respond to rapid changes. For this reason, this study has research questions: 1) how does strategic innovation impact organization development, organizational effectiveness, and firm performance? 2) how does organization development impact organizational effectiveness and firm performance? and 3) how does organizational effectiveness influence firm performance?

2. Literature Review and Hypotheses Development

2.1. Strategic Innovation

Strategic innovation is the creation of growth strategies, new product categories, services, or business models that change the game and generate significant new value for consumers, customers, and the corporation. Strategic innovation takes the road less traveled – it challenges an organization to look beyond its established business boundaries and mental models and to participate in an open-minded, creative exploration of the realm of possibilities. Strategic innovation is a holistic, systematic approach focused on generating beyond-incremental, breakthrough, or discontinuous innovations. Innovation becomes “strategic” when it is an intentional, repeatable process that creates a significant difference in the value delivered to consumers, customers, partners, and the

corporation (Palmer & Kaplan, 2007). A strategic innovation initiative generates a portfolio of breakthrough business growth opportunities using a disciplined yet creative process. Core technologies and competencies are the set of internal capabilities, organizational competencies, and assets that could potentially be leveraged to deliver value to customers, including technologies, intellectual property, brand equity, and strategic relationships. A company's organizational readiness may drive or inhibit its ability to act upon and implement new ideas and strategies, and to successfully manage the operational, political, cultural, and financial demands that will follow. An organization moves beyond an ad hoc approach to innovation when it begins to develop and institutionalize a cultural mindset and a set of processes that support repeatable, sustainable innovation. This then becomes a foundation for ongoing competitive advantage (Palmer & Kaplan, 2007).

A solid understanding of a company's core technologies and competencies provides a pragmatic filter against which imaginative ideas can be assessed and shaped into practical investment—worthy opportunities. Even when an organization possesses deep insight into consumer/customer needs and future trends, transforming ideas into action is an uphill battle unless there is a keen sense of the organization's inherent strengths and ability to leverage its core assets (Teece & Pisano, 1994). It is essential to not just consider an organization's technologies but also other capabilities that are integral to success (Palmer & Kaplan, 2007). Such competencies may include intellectual property or patents, unique relationships with suppliers and partners, brand equity, speed, and operational agility or unique business practices. In large organizations with multiple business units, one group may have developed its own operational processes and have valuable competencies and best practices to share with other parts of the enterprise. While most organizations innovated rapidly during the COVID-19 pandemic, in the next phase they will need to be strategic rather than reactive. The key point is that organizations need to innovate with a purpose. Whether that is the well-being of employees, good environmental stewardship, or building communities, organizations that have an innovation focus are more likely to be successful in the long run. Based on the above, the proposed hypothesis is:

H1: Strategic innovation positively affects (a) organizational development, (b) organizational effectiveness, and (c) firm performance.

2.2. Organizational Development

Organizational development is a critical and science-based process that helps organizations build their capacity to change and achieve greater effectiveness by developing,

improving, and reinforcing strategies, structures, and processes. Organizational development is an attempt to improve the organization to continually change. Organizational development is aimed at organizational effectiveness. It, therefore, has a number of (business) outcomes. These can differ between organizations, but usually, they do include financial performance, customer satisfaction, organizational member engagement, and an increased capacity to adapt and renew the organization (Danvila-Del Valle & Sastre Castillo, 2009). Companies that engage in organizational development commit to continually improving their business and offerings. The organizational development process creates a continuous cycle of improvement whereby strategies are planned, implemented, evaluated, improved, and monitored. Organizational development is a proactive approach that embraces change (internal and external) and leverages it for renewal (Akdeniz et al., 2008).

A major benefit of organizational development is innovation, which leads to product and service enhancement. Innovation is achieved through employee development, which focuses on rewarding successes and boosting motivation and morale. In this scenario, employee engagement is high leading to increased creativity and innovation. Organizational development also increases product innovation by using competitive analysis, market research, and consumer expectations and preferences (Li et al., 2010). The organizational development process is an action research model designed to understand known problems, set measurable goals, implement changes, and analyze results (Teece et al., 1997). Organizational development is a continuous process. It takes at least one year to have a start and may continue for an indefinitely long period. It is a complicated process and hence needs top management support without which the process cannot be adopted or if adopted cannot be successfully implemented in the organization. Organizational development in this research focuses on employees applying existing knowledge and creating new knowledge to apply it in the operating process in accordance with uncertain situations. Based on the above, the proposed hypothesis is:

H2: *Organization development positively affects (a) organizational effectiveness and (b) firm performance.*

2.3. Organizational Effectiveness

Organizational effectiveness is the concept of how effective an organization is in achieving the outcomes the organization intends to produce. Organizational effectiveness groups in organizations directly concern themselves with several key areas. Organizational effectiveness is the efficiency of an organization, group, or company can meet

its goals. Strategies are implemented for the organization to survive and achieve its goals in monetary and non-monetary forms (Palmer & Kaplan, 2007). Leading to the progressive growth of the organization to be able to adapt in operations to respond to the rapid change in both the customer and the current competition. Organizational effectiveness is defined as a concept to measure the efficiency of an organization in meeting its objectives with the help of given resources without putting undue strain on its employees. It is about how the company can produce the target quota of products, how efficient its process is, and how much waste is produced.

In this study, organizational effectiveness is making improvements to increase productivity, reduce production and operating costs, and generate income or profit for the organization. Human resources are the most valuable asset of a company, and this is why the proper emphasis is given on hiring and retaining the best of the best (Sundbo, 2001). It is essential to find the right fit for the job and develop their skills and know-how through training and other learning methods to increase organizational effectiveness. Business entities are particular about rewarding knowledge, talent, and expertise to boost employee performances so that they can ultimately have a positive impact on organizational effectiveness (Danthamrongkun, 2003). The efficiency of business processes also affects organizational effectiveness. Processes that are faster, leaner, and more cost-effective, for instance, will improve organizational effectiveness and efficiency. Today, all organizations use digital technology. But they do not always use it well. Effective digital adoption efforts can improve digital workflows, data insights, business processes, employee training, and many other business areas. It should be apparent that a more effective organization would be better at achieving its goals and strategic priorities (Jones, 2002). and the better it can achieve its goals and meet its aims, the more profitable it will be. Based on the above, the proposed hypothesis is:

H3: *Organizational effectiveness has a positive effect on firm performance.*

2.4. Firm Performance

The firm performance is a term that may include organizational performance, functioning of the firm, and outcomes of its operations. Firm performance is a performance that the organization that has a strategic advantage. Firm performance is the potential and ability of a business to efficiently utilize the available resources to achieve targets in line with the set plans of the company, keeping in mind their relevance to the users. An innovation strategy should be consistent with the mission, vision, goals, and strategies of a firm. Firms should be dedicated to investing in research

and development, manufacture innovative products, and achieve substantial performance to be competitive (Kaplan & Norton, 1992).

2.5. Conceptual Framework

The resource-based view is a managerial framework used to determine the strategic resources a firm can exploit to achieve sustainable competitive advantage (Barney, 1991). RBV analyzes and interprets the internal resources of the organizations and emphasizes resources and capabilities in formulating a strategy to achieve sustainable competitive advantages. Resources may be considered as inputs that enable firms to carry out their activities.

Strategic innovation is essential to dynamic change. The organization can improve the development of the organization's operations to be able to face even more challenges (Barth, 2003). An innovation strategy outlines the goals of the organization's innovation activities and helps focus efforts on reaching those goals. Strategic innovation is a multi-functional approach that brings together all the creative assets, capabilities, and disciplines of your organization to work together on producing breakthrough ideas and driving new business growth (Lavie, 2006; Teece, 2007). The conceptual framework of this study is shown in Figure 1.

3. Research Methodology

3.1. Sample and Data Collection

The sample of this study collected data from 360 companies in the Industrial Estate of Thailand, and

the data was collected from November 2020 to February 2021. The information of the companies was obtained from the website of the Industrial Estate Authority of Thailand, <https://www.ieat.go.th/ieat-industry-port-factory/industrial-list>. Managing directors or managing partners were the main informants of this study. Questionnaires were used for data collection and distributed through the mail and Google forms. Out of the 360 questionnaires, 192 responses were received and usable. The effective response rate through Google forms was 53.33 % that is more than 20 % for a mail survey response (Aaker et al., 2001).

3.2. Variables

The model of this research was measured by multi-item scales on a five-point Likert scale for all variables. The main variables of this study are strategic innovation, organization development, organizational effectiveness, and firm performance. In this study, strategic innovation is the independent variable. It meant business strategic implementation, supporting strategic engagement based on readiness and operational potential, dynamic learning, identifying consumer needs, core competencies, organizational resource readiness, and business process transformation. A twenty-seven item scale measure was adapted from Palmer and Kaplan (2007).

For, organization development, a four-item scale measure is adapted from Teece et al. (1997) and Eisenhardt and Martin (2000). Furthermore, for organizational effectiveness, an eleven-item scale measure was adapted from Kaplan and Norton (1996). For firm performance, a ten-item scale measure was adapted from Kaplan and Norton (1992).

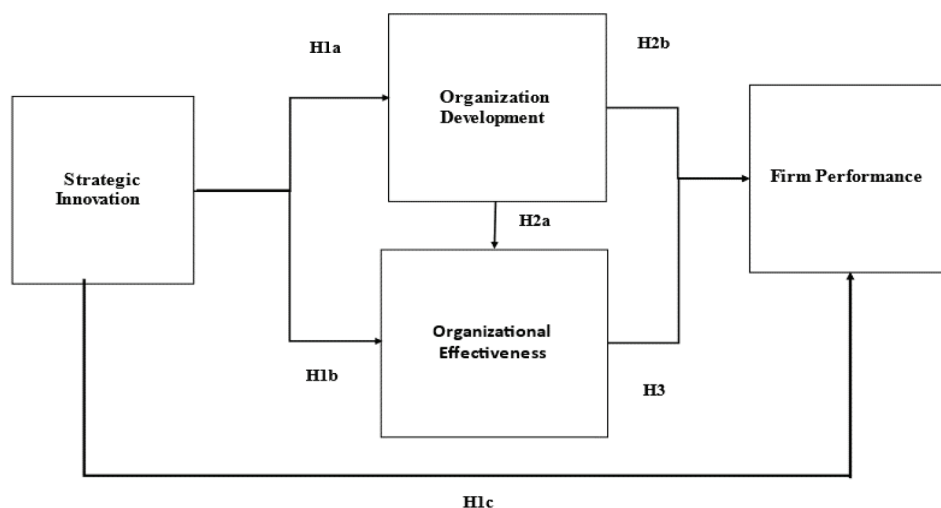


Figure 1: Framework Concepts of the Study

3.3. Research Instrument Testing

First, we test the validity and reliability of the research instrument. Table 1 shows alpha coefficient values between 0.759–0.919 which meets the required criteria of >0.70 (Nunnally & Bernstein, 1994). According to Kline (1993), the discriminant power must be at least 0.40. The resulting discriminant values are in the range of 0.523–0.837. Factor loading should be greater than 0.4. The resulting factor loading values are in the range of 0.619–0.952. These results show that the research instrument was reliable and valid.

3.4. Using Statistical Technique

In this study, the appropriate statistic for hypothesis testing is the Structural Equation Model (SEM) and it is used to investigate the effects of strategic innovation on organization development, organizational effectiveness, and firm performance. Data analysis of variables includes standard deviation, mean, and correlation coefficient.

4. Discussion

The relationship between independent variables is shown in Table 2, and it was found that the variables were related and statistically significant at a confidence level of 0.01. The correlation coefficient between the variables was in the range of 0.645–0.792. This shows that there were no problems with the independent variables because the correlation coefficient was below 0.8, and is acceptable (Hair et al., 2010).

This study examined and found the consistency of the model with the empirical data (Table 3). The results show that chi-square statistics (χ^2) is 103.94 at degrees of freedom (df) 88; χ^2/df is 1.175, Goodness of Fit Index (GFI) is 0.943; Adjusted

Goodness of Fit Index (AGFI) is 0.900; the Incremental Fit Index (IFI) is 0.994; the Normal Fit Index (NFI) is 0.961; the Root Mean Square Error of Approximation (RMSEA) is 0.030; and the Comparative Fit Index (CFI) is 0.994.

The results indicate that the model is consistent with the empirical data, which is concluded from the following criteria: proportionality criteria c^2/df should not be no more than 3.00 (Hair et al., 2010), GFI value should be greater than 0.90 (Hair et al., 2010), AGFI value should be greater than 0.90 (Schumacker & Lomax, 2004), CFI is typically between 0 and 1 (Kline, 2010), NFI should be greater than 0.90 (Byrne, 1998). the IFI value should be greater than 0.90 (Byrne, 1998), and RMSEA should be between 0.05–0.08 (Schumacker & Lomax (2010).

Results of the path coefficient in Table 4 and Figure 2 show the relationship between strategic innovation, organization development, organizational effectiveness, and firm performance.

In addition, the results of the effects of strategic innovation, organization development, organizational effectiveness, and firm performance are shown in Table 5. Strategic innovation has a positive direct effect on organization development ($b = 0.886, p < 0.01$), organizational effectiveness ($b = 0.899, p < 0.01$), and firm performance ($b = 0.890, p < 0.01$). Clearly, if the organization has strategic innovation, it will have a strong direct effect on organization development, organizational effectiveness, and firm performance because strategic innovation enables to develop organization’s capabilities. Strategic innovation helps in the development of something new in the form of products, services, and work processes or even a new business model (Wutthirong, 2015). Innovation, as a concept, refers to the process that an individual or organization undertakes to conceptualize brand new products, processes, and ideas, or to approach existing products, processes, and ideas in new ways. Strategic innovation is an important source of growth and a key determinant of competitive advantage for many organizations. Achieving innovation requires

Table 1: The Factor Loading, Item-Total Correlation, and Alpha Coefficient of Constructs

Constructs	Factor Loadings	Item-Total Correlation	Alpha Coefficient
Strategic innovation (SI)	0.645–0.883	0.619–0.837	0.919
Organization development (OD)	0.619–0.699	0.523–0.584	0.759
Organizational effectiveness (OE)	0.679–0.952	0.643–0.823	0.860
Firm performance (FP)	0.783–0.865	0.711–0.759	0.855

Table 2: Mean, Standard Deviation, and Correlation Matrix

Variables	SI	OD	OE	FP
Mean	3.985	4.107	4.077	3.833
S.D.	0.453	0.523	0.420	0.516
SI				
OD	0.760***			
OE	0.792***	0.704***		
FP	0.767***	0.645***	0.730***	

Note: *** $p < 0.01$.

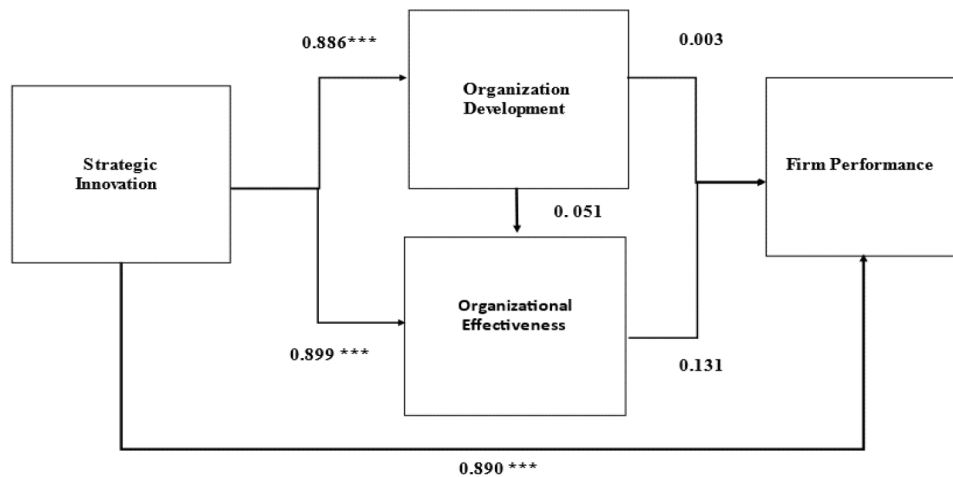
Table 3: Statistical Values Assess the Consistency of the Model

Goodness of Fit Measures	Recommended Value	Results of Structural Models	Reference
CMIN/DF	≤3.00	1.175	Hair et al. (2010)
GFI	≥0.90	0.943	Hair et al. (2010)
AGFI	≥0.90	0.900	Schumacker and Lomax (2004)
CFI	≥0.90	0.994	Kline (2010)
NFI	≥0.90	0.961	Byrne (1998)
IFI	≥0.90	0.994	Byrne (1998)
RMSEA	≤0.08	0.030	Schumacker and Lomax (2010)

Table 4: The results of Path Coefficients

Dependent Variable	OD			OE			FP		
	TE	DE	IE	TE	DE	IE	TE	DE	IE
SI	0.886***	0.886***	–	0.899***	0.854***	0.045***	0.890***	0.776***	0.114***
OD	–	–	–	0.051	0.051	–	0.003	–0.004	0.007
OE	–	–	–	–	–	–	0.131	0.131	–
Statistics	$\chi^2 = 103.394$, $df = 88$ GFI = 0.943, NFI = 0.961; CFI = 0.994; IFI = 0.994; RMSEA = 0.030								

Note: TE: Total Effect; IE: Indirect Effect; DE: Direct Effect (Standard Errors: SE); *** $p < 0.01$.



*** $p < 0.01$; GFI = 0.943, NFI = 0.961; CFI = 0.994; IFI = 0.994; RMSEA = 0.030

Figure 2: A Summary of the Relationships Between Company Performance

the coordinated efforts of many different actors and the integration of activities across specialist functions, knowledge domains, and contexts of application. It is an important factor for the organization to survive and increase opportunities for entrepreneurship. (Hana, 2013). Thus, hypotheses 1a, 1b, and 1c are supported.

Next, organization development has no significant relationship with organizational effectiveness ($b = 0.051$) and firm performance ($b = 0.003$). Organizational effectiveness has no significant relationship with firm performance ($b = 0.131$). Strategic innovation has a direct positive effect on company performance. Organizational development is

Table 5: The Summary of Hypotheses Testing

Hypotheses	Relationships	Coefficients	Results
H1a	SI OD	0.886***	Supported
H1b	SI OE	0.899***	Supported
H1c	SI FP	0.890***	Supported
H2a	OD OE	0.051	Not Supported
H2b	OD FP	0.003	Not Supported
H3	OE FP	0.131	Not Supported

Note: *** $p < 0.01$.

a dynamic technique. It uses behavioral science knowledge to assist the organizations in adjusting easily to the changes (Bhatt, 2001). Every organization needs to remain viable and to survive in the world of change. Entities that participate in organizational development continually develop their business models (Yesil et al., 2013). Organizational development creates a constant pattern of improvement in which strategies are developed, evaluated, implemented, and assessed for results and quality. In essence, the process builds a favorable environment in which a company can embrace change, both internally and externally. The change is leveraged to encourage periodic renewal (Palmer & Kaplan, 2007). Looking at the overall is the organization development and the efficiency of the organization.

Organizational effectiveness is defined as the extent to which an organization achieves its predetermined objectives with the given amount of resources and means without placing undue strain on its members (Inkinen et al., 2015). Organizational effectiveness should simplify and clarify long-term objectives for a company. The clearer these objectives are outlined at a strategic level, the easier it is to translate across departments (Odea & Ayavoo, 2020). Strategic innovation has a great influence on a company's performance. It will be a catalyst for industrial estate firms to be alert to the challenges of adaptation, increase competence, and improve the efficiency of work in the organization by focusing on strategies application with innovation to survive in the current situation (Soewarno & Permatanadia, 2020). Therefore, Hypothesis 2a, 2b, and hypotheses 3 are not supported.

In summary, strategic innovation is a multi-functional approach that brings together all the creative assets, capabilities, and disciplines of your organization to work together on producing breakthrough ideas and driving new business growth. Strategy and innovation are often shown to be two primary contributors to sustained financial excellence and competitive advantage. Industries are led by organizations that know how to harness innovation to win and sustain a competitive advantage. Organization development involves an ongoing, systematic, long-range process of

driving organizational effectiveness, solving problems, and improving organizational performance. organizational innovation influences the company's performance through improving quality of work, information exchange, the capacity of learning, and the use of new knowledge and technologies. Therefore, theoretically, organizational innovation will enhance the performance of firms (Soewarno & Permatanadia, 2020; Wutthirong, 2015).

5. Contributions

5.1. Theoretical Contribution

This research focuses on the resource base theory that is still important for the organization in adapting to external situations that affect operations. Resource-based theory suggests that resources that are valuable, rare, difficult to imitate, and nonsubstitutable best position a firm for long-term success. These strategic resources can provide the foundation to develop firm capabilities that can lead to superior performance over time. Capabilities are needed to bundle, manage, and otherwise to exploit resources in a manner that provides value-added to customers and creates advantages over competitors. Contingency theory, which pays more attention to adaptability, claims that there is no best way to organize a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external situation.

5.2. Managerial Contribution

Managing the organization depends on the situation. Applying strategic innovation to the operations of industrial estate companies helps them to adapt and build new capabilities in accordance with uncertain situations. Thus, companies that are developed become more competitive in the industry. Innovation strategy helps a company in three ways: exciting its customers, outperforming competitors, and building a new product portfolio. The company should

increase its efforts to cope with the highly competitive situation in the midst of a volatile environment. Strategic innovation occurs when a company identifies gaps in the industry positioning map, decides to fill them, and the gaps grow to become the new mass market. By gaps, mean: (1) new, emerging customer segments or existing customer segments that other competitors have neglected; (2) new, emerging customer needs or existing customer needs not served well by other competitors; and (3) new ways of producing, delivering, or distributing existing or new products or services to existing or new customer segments.

6. Conclusion

Strategic innovation is simply the way an organization reinvents itself or adjusts to changes in the marketplace. The focus is on business growth and gaining an advantage over competitors. Although it is not a new concept for most companies, recovering from the COVID-19 pandemic will require a vast amount of innovation. This study tested the effect of strategic innovation, organization development, organizational effectiveness, and firm performance of 192 companies in the Industrial Estate of Thailand and used the structural equation model (SEM) to test the correlation in this research.

The results of this study show that strategic innovation has a positive direct effect on organization development, organizational effectiveness, and firm performance. Organization development has no significant relationship with organizational effectiveness and firm performance, and organizational effectiveness has no significant relationship with firm performance. Strategic innovation has a strong direct positive effect on the company's performance. It indicated that strategic innovation is essential for organizations to drive business growth, generate value for the company and its customers, and create a competitive advantage. This type of innovation is essential for organizations to adapt to the speed of technology change.

Future research should include mediation variables of strategic innovation and other relational variables or perform tests with other statistical techniques with a sample of industrial companies to see the difference and to make the test results more widely accepted.

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