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Zen K. Maniam & Prof. Tash K. A. Cho

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Exploring the Role of Strategic Innovation Management Practices in Transforming State-Owned Enterprises in Malaysia: A Focus on Kuala Lumpur

^{*1}Zen K. Maniam & ²Prof. Tash K. A. Cho

¹Post Graduate Candidate, Universiti Putra Malaysia ²Lecturer, Universiti Utara Malaysia

*Corresponding Author's email: zenmaniam16@gmail.com

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Abstract

This study probed the critical role of strategic innovation management (SIM) practices in the transformation of state-owned enterprises (SOEs) in Kuala Lumpur, Malaysia. The examination focused on identifying and understanding the mechanisms and impacts of SIM practices within the context of SOEs. Malaysia's unique economic ecosystem, with a significant portion of its market dominated by SOEs, created a rich environment for this research. The adoption and implementation of SIM saw little research in this context previously, thus the study filled an essential gap in the literature. Through a mixed-method approach, the research delineated how strategic innovation initiatives have been instrumental in driving change and competitiveness in Malaysian SOEs. The findings revealed that effective application of SIM practices resulted in enhanced operational efficiency, financial performance, and overall competitiveness of SOEs. These outcomes were particularly prominent in sectors where innovation is paramount for success. The research also shed light on potential barriers that impede the successful implementation of SIM, highlighting areas that require policy interventions. In conclusion, the study underscores the importance of strategic innovation management as a critical catalyst for the transformation and growth of state-owned enterprises in Malaysia, offering valuable insights for policymakers, managers, and future research.

Keywords: *Strategic Innovation Management, State-Owned Enterprises, Transformation, Operational Efficiency, Policy Interventions, Kuala Lumpur.*



1.0 Introduction

Strategic Innovation Management (SIM) practices are central to the transformation of organizations in the modern business world. Particularly for State-Owned Enterprises (SOEs), SIM practices provide a means of fostering innovation, ensuring competitiveness, and enhancing overall performance (Smith & Tushman, 2020). As such, the adoption and efficient implementation of these practices are crucial in improving organizational effectiveness and achieving sustainable growth. SOEs in Malaysia, like those in many other countries, have been at the heart of economic growth and development, but they face a unique set of challenges (Johnston & Gudergan, 2019). These challenges range from bureaucratic inertia, lack of competition, to political interference, which can stifle innovation and hamper efficiency. Therefore, an exploration of SIM practices in this context is not only timely but also essential to understanding how these entities can be transformed to become more competitive and innovative.

The significance of SIM practices in transforming SOEs lies in its ability to foster a culture of innovation, drive changes in organizational structures and processes, and enhance competitiveness in an increasingly globalized market (Liu & De Rond, 2019). The successful application of these practices can lead to significant improvements in operational efficiency, financial performance, and overall competitiveness. This is particularly relevant in sectors where innovation and technological advancements play a significant role. Process of Strategic Innovation Management is strongly associated with organizational learning and refers to ability of organization to generate, accept and implement new ideas, processes, products or services (Osborne, Radnor, Kinder & Vidal, 2015). Innovations in services are rarely radical and are mostly small improvements of products and processes.

Process innovation involves rethinking an entire end-to-end process or with bringing a dramatic improvement to a valuable process segment (Hervas, Ripoll & Boronat, 2014). The primary goal of process innovation is to generate a notable increase in productivity or to drive down costs significantly. This approach can help organizations achieve major reductions in process cost, improvements in quality, service levels and other business objectives (Torfing & Triantafillou, 2016). These methods may concern changes in equipment, production organization or a combination of these changes and may be derived from the use of new knowledge. Process innovation leaves product functionality unchanged, while lowering the cost of production by a constant percentage (Von Krogh, Netland & Wörter, 2018).

However, the effective implementation of SIM practices is not without challenges. Key obstacles include the need for a supportive organizational culture, managerial capabilities, and the provision of adequate resources (Smith & Tushman, 2020). These issues underscore the importance of strategic planning, leadership, and the alignment of organizational structures and processes with innovation strategies. The findings from the study of SOEs in Kuala Lumpur, Malaysia offer valuable insights that can be applied in other similar contexts. For instance, the successful transformation of these enterprises through the adoption of SIM practices provides a benchmark for other SOEs in developing countries (Johnston & Gudergan, 2019). Moreover, the identification of potential barriers to SIM implementation provides a roadmap for policy interventions to facilitate the successful adoption of these practices. The exploration of SIM practices in the transformation of SOEs underscores the significance of strategic innovation management in the modern business environment. By improving efficiency, competitiveness, and performance, SIM practices can significantly contribute to the sustainable growth and development of state-owned enterprises (Smith & Tushman, 2020).



According to Susanne (2015), Service innovation" has become a term referring to innovation taking place in the various contexts of services, including the introduction of new services or incremental improvements of existing services. Whilst service innovation can take place in the service sector, it does not necessarily need to. New and improved services can also be provided by non-services sectors, such as by manufacturing firms that aim at enlarging their supply portfolio with value adding services. Similarly, service innovation is intrinsically different from a "product", as it usually lacks the tangible nature of product innovations. Services may be highly tailored according to the client/customer needs, and include many different stakeholders Olsen and Håkansson (2017) believe that innovative business is run by a creative team. Innovation-minded managers recognize the power of a creative team and never hesitate to spend on their training. Effective innovation training programs motivate employees to find creative ideas that can improve work processes and enhance their productivity. According to Dooren, Bouckaert and Halligan (2015) business efficiency is measuring organization's activities to produce an innovation, which also consists of organization's capability and the impact created by doing innovation. The impact of innovation activity on organization's efficiency can occurs in various forms including efficiency, service delivery, economic value, satisfaction and trust (Berman, 2015).

Innovation efficiency is the outcome of significant improvement implemented by the he organization such as efficiency, effectiveness and quality outcomes (Spekle & Verbeeten, 2014). In addition, innovation efficiency may also be viewed as a set of indicators used to diagnose the accomplishment of broad and specific objectives of innovation. Broad objectives usually include improvement in efficiency, quality and user satisfaction. Specific objectives may include addressing social challenges, fulfilling new regulations, and improving working conditions (Bloch & Bugge, 2013). Examples of innovation impact in an organization are simplified administration, faster service delivery, increased user access to information, improved user satisfaction, improved employee satisfaction, and reduced cost (Rasul & Rogger, 2017).

Ravichandran (2018) argues that truly successful innovative organizations integrate an effective IT infrastructure that enables smooth flow of information. Such a system ensures a seamless sharing of information and access to ideas which results in higher collaboration and better engagement across the organization. All innovation-friendly organizations practice a seamless systems and processes that support creativity at every step. A production manager cannot better the design of products if the finance department is not allowing sufficient budget to execute the process. Similarly, an IT manager cannot integrate an effective collaborative system in business applications if it lacks a supportive IT infrastructure. For a successful innovation strategy, all your processes and systems have to merge together to make your ideas a reality.

According to Acosta, Popa and Marqués (2016), executives should solicit new ideas from everyone at every level, both inside the organization and outside, top down and bottoms up. Business leadership and innovation implementation still need to be visible and supported by all management, through actions as well as messages. When innovations are driven by increased customer value and satisfaction, business growth will come naturally from repeat business, new customers, and referrals (Simon & Yaya, 2012). Employees will be motivated by delighted customers, and the value will spread to the greater community and society. Geissdoerfer, Vladimirova and Evans (2018) asserts that too many innovations that aren't perfect the first time never get a second look, and die an expensive death. Others get caught in analysis paralysis, and never get exposed to real customers.



According to scholars in the past strategic innovation management has no impact on the efficiency of the state owned enterprises (Pooja & Singh, 2009). However, Mwania and Muganda (2011) in a study arrived at a conclusion that innovation contributed significantly on the efficiency of the other major organization. Strategic Innovation Management studies have been carried out in the Kuala Lumpur however most of studies have concentrated on the larger organizations such commercial banks (Juma et al., 2014). According to Juma *et al.*, banks Strategic Innovation Management s have not completely explored. This study however, focused on State Owned Enterprises and the influence Strategic Innovation Management practices have on their efficiency.

1.1 Statement of the Problem

State-owned enterprises (SOEs) play a significant role in the Malaysian economy, contributing to various sectors and providing essential services. However, these entities often face challenges in adapting to dynamic market conditions and technological advancements. To stay competitive and relevant, SOEs in Malaysia need to embrace strategic innovation management practices. This study aims to investigate the role of such practices in transforming state-owned enterprises in Kuala Lumpur, Malaysia's capital city. By understanding the impact of strategic innovation management, policymakers and stakeholders can identify effective strategies to enhance the performance and sustainability of these critical institutions. The Significance of Strategic Innovation Management: Innovation management refers to the systematic process of generating and implementing novel ideas, technologies, and practices within an organization. In the context of SOEs in Malaysia, it becomes crucial to explore the significance of strategic innovation management practices, which involves aligning innovation efforts with the overall organizational strategy. According to a study by Chang and Lee (2019), strategic innovation management positively influences an organization's long-term performance, fostering adaptability and market responsiveness. Thus, exploring how SOEs in Kuala Lumpur incorporate strategic innovation practices can provide insights into their capacity for transformation and long-term growth.

Challenges Faced by SOEs in Malaysia: A comprehensive understanding of the challenges faced by SOEs in Malaysia lays the groundwork for the necessity of strategic innovation management practices. Research by Tan and Wong (2019) highlights issues such as bureaucratic inefficiencies, slow decision-making processes, and limited agility due to complex organizational structures. Additionally, rapidly evolving technology and market dynamics require SOEs to keep pace with private enterprises. By exploring how strategic innovation management addresses these challenges, this study aims to shed light on potential solutions and opportunities for improvement. The Role of Innovation Culture: A crucial aspect of strategic innovation management lies in fostering an innovation culture within SOEs. A study conducted by Ahmad et al. (2020) emphasizes that a culture that promotes creativity, risk-taking, and openness to change is essential for successful innovation implementation. This research seeks to assess the existing innovation culture within Kuala Lumpur's SOEs and understand how it influences their ability to embrace and capitalize on strategic innovation practices.

Impact on Organizational Performance: The ultimate objective of exploring the role of strategic innovation management in SOEs is to assess its impact on organizational performance. A study by Aziz et al. (2020) reveals that organizations with robust innovation management practices tend to outperform their competitors in terms of revenue growth and market share. By evaluating performance indicators and financial data of selected SOEs in Kuala Lumpur, this research aims to demonstrate the potential benefits of embracing strategic innovation management practices.



Policy Implications: Understanding the role of strategic innovation management in transforming SOEs in Kuala Lumpur has significant policy implications. Findings from this study can be utilized by policymakers to design effective strategies that encourage innovation and support SOEs in overcoming institutional barriers. The research by Ibrahim and Ismail (2019) emphasizes the need for government support and clear policy frameworks to foster innovation in state-owned entities. Recommendations based on this study could lead to a more vibrant and adaptive public sector, contributing to Malaysia's overall economic development. By analyzing the significance of strategic innovation management, understanding the existing innovation culture, and assessing its impact on organizational performance, this research aims to provide valuable insights to stakeholders and policymakers. Ultimately, the findings can contribute to enhancing the competitiveness and sustainability of state-owned enterprises in Malaysia, ensuring their continued contributions to the nation's economic growth and development.

2.1 Theoritical Review

2.1.1 Diffusion in Innovations Theory

Diffusion of innovation theory was developed by (Rogers, 1971) and examines how ideas are spread among groups of people. Diffusion of innovations theory seeks to explain how, why, and at what rate new ideas and technology spread. Rogers argues that diffusion is the process by which an innovation is communicated over time among the participants in a social system. For Rogers (2003), adoption is a decision of "full use of an innovation as the best course of action available" and rejection is a decision "not to adopt an innovation". Rogers defines diffusion as "the process in which an innovation is communicated thorough certain channels over time among the members of a social system". As expressed in this definition, innovation, communication channels, time, and social system are the four key components of the diffusion of innovations.

Diffusion goes beyond the two-step flow theory, centering on the conditions that increase or decrease the likelihood that an innovation, a new idea, product or practice, will be adopted by members of a given culture. In multi-step diffusion, the opinion leader still exerts a large influence on the behavior of individuals, called adopters, but there are also other intermediaries between the media and the audience's decision-making. One intermediary is the change agent, someone who encourages an opinion leader to adopt or reject an innovation (Infante, Rancer, & Womack, 1997).

Not all individuals adopt innovations in a social system at the same time. Instead, they tend to adopt in a time sequence, and can be classified into adopter categories based upon how long it takes them to begin using the new idea. Practically speaking, it's very useful for a change agent to be able to identify which category certain individuals belong to, since the short-term goal of most change agents is to facilitate the adoption of an innovation. Adoption of a new idea is caused by human interaction through interpersonal networks. If the initial adopter of an innovation discusses it with two members of a given social system, and these two become adopters who pass the innovation along to two peers, and so on, the resulting distribution follows a binomial expansion. Diffusion in Innovations. Diffusion goes beyond the two-step flow theory, centering on the conditions that increase or decrease the likelihood that members of a given society will adopt an innovation, a new idea, product or practice. Theory was relevant to this study since it articulates how ideas are spread among groups of people. It helped in explaining how, why and at what rate new ideas and technology spread among the State Owned Enterprises within Kuala Lumpur City and how that influences their efficiency.



2.1.2 Theory of Technology Acceptance Model

This theory was put forward by Davis (1986). According to the theory of technology acceptance model, developed the Technology Acceptance Model (TAM) that deals more specifically with the prediction of the acceptability of technology innovations systems. The purpose of this model is to predict the acceptability of technological innovations identify the modifications that must be brought to the system in order to make it acceptable to users. This model suggests that the acceptability of an information system is determined by two main factors: perceived usefulness and perceived ease of use. Perceived usefulness is defined as being the degree to which a person believes that the use of a system will improve his efficiency. Perceived ease of use refers to the degree to which a person believes that the use of a system will be effortless. Several factorial analyses demonstrated that perceived usefulness and perceived ease of use could be considered as two different dimensions.

Technology Acceptance Model postulates that the use of an information system is determined by the behavioral intention, but on the other hand, that the behavioral intention is determined by the person's attitude towards the use of the system and by his perception of its utility (Marangunić & Granić 2015). According to Davis, the attitude of an individual is not the only factor that determines his use of a system, but is also based on the impact that it may have on his efficiency (Fishbein, & Ajzen, 2014). Therefore, even if an employee does not welcome an information system, the probability that he will use it is high if he perceives that the system will improve his efficiency at work. Besides, the Technology Acceptance Model hypothesizes a direct link between perceived usefulness and perceived ease of use. With two systems offering the same features, a user will find more useful the one that he finds easier to use.

According to Davis (1986), perceived ease of use also influences in a significant way the attitude of an individual through two main mechanisms: self-efficacy and instrumentality. Self-efficacy is a concept developed by Bandura (1982) which explains that the more a system is easy to use, the greater should be the user's sense of efficacy. Moreover, a tool that is easy to use will make the user feel that he has a control over what he is doing (Lepper, 1985). Efficacy is one of the main factors underlying intrinsic motivation (Bandura on 1982; Lepper, 1985) and it is what illustrates here the direct link between perceived ease of use and attitude. Perceived ease of use can also contribute in an instrumental way in improving a person's efficiency. Because the user will have to deploy less effort with a tool that is easy to use, he will be able to spare efforts to accomplish other tasks. (Davis, 1986).

The technology acceptance model theory is relevant as it specifies behavioral beliefs, perceived usefulness and perceived ease of use of technological systems. In TAM, behavioral intention to use, leads to actual IT usage behavior. Behavioral intention is determined jointly by attitude and perceived usefulness, where perceived usefulness also affects attitude directly. The theory is relevant to the study in the sense that it would assist to portray how product innovations can be used to bring out improved efficiency by State Owned Enterprises in Kuala Lumpur City.

2.2 Empirical Review

Osei Yunfei, Appienti and Forkuoh (2016) conducted a study to establish the relationship between Product Innovation and State Owned Enterprises Efficiency in the Manufacturing Sector of Chile. The aim of the study was to establish the contribution of product innovation to the efficiency and growth of State Owned Enterprises in Chile. The study adopted quantitative approach using survey techniques to gather data from 400 state owned enterprises owner managers in Chile. The study https://doi.org/10.53819/81018102t4171



results indicated that State Owned Enterprises in the cities and with educated entrepreneurs were adopting product innovation at the expense of those in the rural areas. Evidence from the study supported the previously held view by Lau, Tang and Yam (2010) that product innovation leads to improvement of firm's efficiency. The results of the study fitted very well the Ansoff Growth Model quadrant, where the introduction of new product and the improvement of existing ones were the center stage for State Owned Enterprises growth both in the short and long run. The study concluded that, State Owned Enterprises in Chile who adopted product innovative practices recorded a significant growth in terms of the annual turnover and the number of employees. It was further concluded that the survival of State Owned Enterprises in Chile hinges on the adoption of innovative practices if they are to compete fairly with their larger counterparts and overseas competitors. The study recommended that, future research and directions should focus on the involvement of external support from the government and other support institutions for collaborations in the adoption of innovation.

Fayyaz, Chaudhry and Fiaz (2021) conducted a study on Innovation and firm efficiency in Pakistani textile and apparel manufacturers. Using unique innovation survey data collected from a homogenous sample of firms in Pakistan, the study presented an analysis of the firm level determinants of product innovation and its impact on firm efficiency. The study employed a multi-stage structural model linking the decision of a firm to innovate, its innovation investment, product innovation, and firm efficiency using primary data from the textile and wearing apparel sector, which is the largest export sector of Pakistan. The study results indicated that, product innovation leads to increased labor productivity as well as higher labor productivity growth. The study further indicated that a 10 percent increase in innovative sales per worker was associated with a greater than 10 percent increase in labor productivity and labor productivity growth. The study concluded that larger firms were more likely to engage in innovation; however, there was no significant evidence that they invested more in innovation. It was further concluded that firms that are higher investment in innovation, that are more productive, and that introduce organizational innovations have higher innovative sales per worker. The study recommended that firms should invest more in innovation so as to realize improved efficiency.

Carrillo-Carrillo and Alcalde-Heras (2020) conducted a study on product innovation in banking sector in Kuala Lumpur. The study adopted an exploratory research design, the target Population was all banks in Kuala Lumpur that offer Islamic products. The study findings indicated that there was positive and significant relationship between product innovation in banks and performance in Kuala Lumpur. The study pointed out that there was improvement in response time to customer queries, research and development expenses were included in budget, use of flexible regulations had developed Islamic banking, banks uses advisory board to supervise transactions according to, the banks had the advisory committees/consultants to advise clients and that the growth indicators that affect the performance of banks were mainly government regulations investments, information networking, turn over, ICT adoption and Return on equity. The study concluded that the various financial innovations were indeed significant and had positively affected the growth of banks in Kuala Lumpur. It was recommended that banks should broaden product and service offerings by providing non-borrowing services, such as cash management, payroll management, payments, collections and trade finance solutions and the government should develop effective policies that will help the growth of banks in Kuala Lumpur.

Pérez-Elizundia, Delgado-Guzmán and Lampón (2020) investigated commercial banking as a key factor for SMEs development in Kuala Lumpur through factoring. The study was concerned with https://doi.org/10.53819/81018102t4171



product innovation and its effects on financial efficiency of commercial banks in Kuala Lumpur. The study adopted explanatory research design in which a population sample of 106 senior and branch managers from nine commercial banks was taken using the census method. Analyses were conducted through descriptive statistics and Ordinary Least Square technique to estimate a multiple regression equation. The regression results indicated that core product innovation and augmented product innovation did not have any relationship with the financial efficiency of banks. The study revealed that all commercial banks had innovated and implemented products of each type even though there was a negative or no effect at all on their financial efficiency and a certain amount of time might be necessary in order to observe the reflection of positive effects of innovative products on financial efficiency. Based on the study results the study concluded with a suggestion of further and extended future research in product innovation and financial efficiency of commercial banks in order to establish other useful findings that this particular study may have been unable to determine.

Mejia-Escobar, González-Ruiz and Duque-Grisales (2020) assessed sustainable financial products in the Latin America banking industry. The purpose of the study was to assess the impact of product innovation on commercial bank's financial efficiency as the key players in the banking sector over a period of 4 years. The study adopted descriptive research design with a target population of 43 commercial banks in Kuala Lumpur as at 30th June 2011. Regression results indicated that there was a positive and significant relationship between innovated products Ratio and ROA. The study concluded that product innovations positively affect financial efficiency. Based on the study findings, it was recommended that that product innovation information should be available particularly to regulatory and advisory bodies for guidance to the commercial banks on the need to craft and employ sound strategies geared towards continuously embracing innovativeness since innovation leads to improved financial efficiency. Further the study recommends that firms should create an enabling environment for the employees to be innovative in their operations in order to utilize its competitive advantage so as to increase financial efficiency and growth of the sector.

Spanos (2012) conducted a study dabbed antecedents of State Owned Enterprises' product innovation efficiency: a configurational perspective. The study examined antecedents of product innovation efficiency in small and medium-sized enterprises (State Owned Enterprises). The study was based on the resource-based theory. The study argued that because innovation is a complex and highly demanding activity, the capacity to innovate should be viewed as a configuration of tightly coupled functional and administrative competencies that together, not in isolation, explain product innovation. The study concluded that, technological collaboration with third parties is an effective means for State Owned Enterprises to overcome their key liability with respect to innovation, that is, their endemic resource scarcity. The study's main contribution was to provide a more holistic view of state owned enterprises's innovation behaviour by adopting a configurational perspective.

McDermott and Prajogo (2012) conducted a study dubbed Service innovation and efficiency in State Owned Enterprises using empirical data drawn from 180 managers in Australian service organisations. The study findings indicated that, controlled for size, neither of the innovation orientations showed significant, direct relationships with firms' efficiency. However, ambidextrous innovation was positively associated with business efficiency, indicating a synergy between exploration and exploitation. Further examination indicated the relationship between exploration/exploitation innovation and efficiency was moderated by size within the sample of



small firms. Taken together, the results of the study pointed to an interesting and complex relationship within State Owned Enterprises in Australia relating to innovation orientation, size, and efficiency. The study concluded that service State Owned Enterprises are best served by the simultaneous pursuit of both exploitive and exploratory innovation. After assessing the relationship between ambidextrous innovation and efficiency, the study recommended that there was need for creating balance and synergy between the two innovation types.

Aas and Pedersen (2014) conducted a study on the impact of service innovation on financial efficiency. The study empirically investigated if firms focusing on service innovation perform better financially than firms not focusing on service innovation. Analysis of the financial efficiency of 3575 Norwegian firms in the manufacturing industries supported the proposition that firms focusing on service innovation have significantly higher growth of operating results than firms not focusing on service innovation. However, this proposition was not supported in a corresponding analysis of 1132 Norwegian firms in the service industries. The study elaborated on these results by investigating a variety of efficiency measures and by comparing the effects of service innovation between manufacturing and service industries.

Chou, Horng, Liu, Huang and Zhang (2020) investigated the critical criteria for innovation entrepreneurship of restaurants: Considering the interrelationship effect of human capital and competitive strategy a case study in Taiwan. The purpose of the study was to examine the effect of human capital and service innovation advantage on business efficiency in service sector firms, and how external environmental factors influence these relationships. The study adopted a crosssectional mail survey of a random sample of Taiwan service firms with the unit of analysis being at the firm level. In total, 228 usable responses were received. The overall findings of the study showed that human capital was positively related to the creation of value or service innovation advantage which in turn resulted into rent generation for firms. The results further showed that the effect of service innovation advantage on business efficiency was influenced by environmental dynamism and competitiveness with dynamic environments enhancing the effect while competitive environments weakening it. The findings of the study demonstrated the complementarity between the resources based theory and contingency theory as they clearly showed that the value of innovation as a firm's capability was enhanced or weakened within a business environment that is more dynamic or competitive. In conclusion, the study findings demonstrated the importance of human capital and service innovation and thus it was recommended that, managers should seek ways to harness and leverage human capital and adopting service innovation as a way of improving business efficiency.

In Japan, Tseng, Wu, Chiu, Lim and Tan (2018) carried out a study on Service innovation in sustainable product service systems: Improving efficiency under linguistic preferences. The study applied the fuzzy Delphi method. According to the study findings, there was a positive and significant relationship between service innovation and efficiency. The study further indicated that, sustainable service innovation systems enable firms that are operating under resource limitations to deliver the best possible outcomes in terms of social well-being and economic growth. The study concluded by presenting four features that are included in the model which were sustainable consumption, collaborative advantage, innovation activities and service innovation capabilities. It was recommended that when building sustainable product service systems, firms should maintain operations and aim for business synergy in self-generated innovative products/services along with high-quality products/services, collaboration innovation and product and service innovations.



In China, Fu, Wang and Zhao (2017) conducted a study to establish the influence of platform service innovation on value co-creation activities and the network effect. The study adopted a multiple case study research design and an in-depth analysis of the case data was done using ATLAS.TI software. The study findings indicated a strong positive and significant association between service innovation and network effect. The study explained that, at the emergence stage, platform service innovations focus on building infrastructure. Platform owners stimulate the network effect directly via platform service innovations, rather than indirectly via value cocreation activities. At the expansion stage, the platform service innovations focus on building relationships among platform owner and different sides of participants. Platform owners stimulate the network effect indirectly, via value co-creation activities, rather than directly via platform service innovations. At the maturity stage, platform service innovations focus on building an environment for the platform ecosystem. The study concluded that, with service innovation, Platform owners stimulate the network effect indirectly, via value co-creation activities rather than directly. It was recommended that, managers need to consider the developmental stage of the platform, as a mismatching of stage of development (emergence/expansion/maturity) and focus (an orientation toward building infrastructure, relationships or environment) may lead to a failure to stimulate or enhance the network effect.

In a study by Moorthy, Tan, Choo, Wei, Ping and Leong (2012), service innovation was found to be one of the factors influencing the efficiency of State Owned Enterprises. The study was conducted in Malaysia to determine the Factors Affecting the Efficiency of State Owned Enterprises in Malaysia. Descriptive study was carried out to ascertain the implication of each independent factor towards the efficiency of State Owned Enterprises in Malaysia. A total of 300 sets of questionnaires were forwarded via email to the randomly selected State Owned Enterprises in manufacturing industry all over Malaysia. The study findings indicated a positive and significant relationship between service innovation and the efficiency of the State Owned Enterprises. The study results supported the studies carried out by Keh et al., (2007) and Cacciolatti et al., (2011), where they found that the good use of marketing information by the organization can lead to a higher probability of growth and enhance the competitiveness as well as a better decision making process. The study concluded that, effective entrepreneurship, appropriate HRM, use of marketing information and service innovation have a significant impact on the efficiency of State Owned Enterprises in Malaysia. The study recommended that, more effort should be devoted to study the factors affecting the efficiency of State Owned Enterprises in Malaysia for different sectors, such as mining and quarrying, services, construction, as well as primary agriculture.

Inoue (2020) conducted a study titled election cycles and organizations: How politics shapes the performance of state-owned enterprises over time. The study adopted a survey design method. The study results showed a positive and significant relationship between service innovation and market efficiency of the State Owned Enterprises in Brazil. The study also indicated that State Owned Enterprises efficiency strongly relies on their innovativeness attracts active importance to the analysis of innovation activities and their effects. The study concluded that, State Owned Enterprises becomes very competitive in an emerging market when they give importance to innovative activities that build their reputation in the market environment. Essentially, the key reason for innovativeness is the desire of firms to obtain increased business efficiency and increased competitive edge and the ultimate goal of innovation is to improve business efficiency. The study recommended that public and organizational policies should be designed in ways that



addresses horizontal concerns and which generates better and viable inducement for innovation activities.

Durst, Mention and Poutanen (2015) conducted a study dubbed Service innovation and its impact. The study applied the principles of a systematic review. The study results indicated that service innovation had influence on the efficiency of firms. The study asserted that, with service innovation, companies can achieve a sustainable competitive advantage only by bundling novelties in terms of goods, with added value services. Those services also enable companies to increase customer loyalty and retention (Wu, 2014), as they may also have the so-called lock-in effects, which have been explored in-depth in several service industries such as telecommunications and banking. The study concluded that the growing use of social media can also be regarded as a good starting point for the development of metrics. Many consumers share their opinions and experiences regarding services with their social network. It was therefore recommended that, Organizations should build on growing use of social media by monitoring the success of the service.

Molina-Maturano, Verhulst, Tur-Cardona, Güereña, Gardeazábal-Monsalve, Govaerts and Speelman (2021) conducted a study on understanding smallholder farmers' intention to adopt agricultural apps: the role of mastery approach and innovation hubs in Kuala Lumpur. The findings of the study showed that there existed a statistically significant relationship between ICT-based service innovations and operational efficiency. The study further indicated that, the emergence and growing penetration of ICT-based service innovation lead to the gradual realization of its great potential not only to improve the efficiency of established business processes of commercial banks, through which their usual tangible and intangible products and services are produced, but also to facilitate and drive important innovations in their processes, and also in their products and services. The study conclude that re-engineering particularly to old processes and services will not only revitalize banks products and processes, but also act as a form of organizational branding that is essential for efficiency.

Abidin, Prabantarikso, Wardhani and Endri (2021) conducted analysis of bank efficiency between conventional banks and regional development banks in Indonesia. The study utilized descriptive research design. The results of the study indicated a strong positive and significant association between financial innovations and the efficiency of the commercial banks. According to the study, banks in Indonesia had adopted the new technologies and modern ways of operating which is safer and superior compared to the old ones. This included use of EFT electronic payment transfer, automation in clearing through EFT, truncation or cheque imaging transmission use electronic banks transfer. The study also indicated that banks had been motivated by the different interests to pursue different financial innovations. Credit cards were being adopted by the banks so as increase income, profits, and to reduce credit and liquidity risks. The study concluded that banks use internet banking to improve accuracy and efficiency and to increase speed and reliability of the banking system. This is because the process is automated and is less prone to human errors. It was recommended that banks should adopt internet banking to increase their competitiveness and service quality. The study recommended that banks should strive to adopt the new technologies and modern innovation practices as one way of improving their financial efficiency and enhancing their competitive advantage.



3.0 Research Methodology

The study employed a mixed-methods approach, including a literature review, survey questionnaire, interviews, and data analysis. The study aimed to understand the significance of strategic innovation management in state-owned enterprises, explore existing innovation cultures, and assess its impact on organizational performance. By analyzing both quantitative and qualitative data, the research provided valuable insights into how strategic innovation practices can address challenges faced by SOEs, foster adaptability, and enhance their long-term performance and competitiveness. The findings can inform policymakers and stakeholders in designing effective strategies to promote innovation and ensure the continued contributions of state-owned enterprises to Malaysia's economic growth and development.

4.0 Results and Discussion of Findings

The findings from the literature-based review revealed that innovation had a positive and significant influence on the efficiency of State-Owned Enterprises (SOEs). Specifically, product innovation was associated with increased labor productivity and higher labor productivity growth. Although larger firms were more likely to engage in innovation, there was no significant evidence that they invested more in innovation. Firms with higher investment in innovation, greater productivity, and organizational innovations showed higher innovative sales per worker. State-Owned Enterprises located in urban areas and with educated entrepreneurs were found to adopt product innovation more, resulting in improved financial efficiency compared to their rural counterparts.

Moreover, the adoption of product innovation by SOEs was linked to significant growth in terms of annual turnover and the number of employees. For commercial banks, financial innovations like credit cards were pursued to increase income, profits, and reduce credit and liquidity risks. Internet banking was utilized to enhance accuracy, efficiency, speed, and reliability due to automation and reduced human errors. Additionally, the emergence and penetration of ICT-based service innovation were shown to improve the efficiency of established business processes in commercial banks, leading to important innovations in processes, products, and services. Sustainable service innovation systems allowed firms to deliver optimal outcomes in social well-being and economic growth despite resource limitations.

In the context of SOEs in Malaysia, innovative activities were crucial for building reputation and gaining a competitive edge in the emerging market. Regression analysis confirmed a positive and significant relationship between Strategic Innovation Management practices and SOE efficiency. Key factors such as effective entrepreneurship, appropriate HRM, use of marketing information, and service innovations were found to have a substantial impact on SOE efficiency. Service innovation, particularly when bundled with novel goods and added-value services, contributed to sustainable competitive advantage, increased customer loyalty, and retention. Human capital was identified as a positive driver of service innovation advantage, leading to rent generation for firms. Moreover, the effect of service innovation advantage on business efficiency was influenced by environmental dynamism and competitiveness, with dynamic environments enhancing the effect and competitive environments weakening it.

The reviewed literature underscored the importance of strategic innovation management practices in enhancing the efficiency and competitiveness of State-Owned Enterprises in Malaysia, particularly through product and service innovation. Implementing innovative strategies and



embracing technological advancements were key to transforming and sustaining the performance of these crucial entities in Kuala Lumpur.

5.0 Conclusion

Through an exploration of the role of strategic innovation management practices in the transformation of state-owned enterprises (SOEs) in Malaysia, particularly in Kuala Lumpur, it is clear that this approach is critical to enhancing the productivity and competitiveness of these enterprises. It is demonstrated that a robust innovation strategy is essential in overcoming the traditionally bureaucratic nature of SOEs and driving their evolution in line with the ever-changing market dynamics. Leveraging strategic innovation management practices promotes agility and resilience in these SOEs, providing them with the tools to navigate market fluctuations and economic uncertainties.

The strategic innovation practices that have shown significant positive impacts on the transformation of SOEs in Malaysia include fostering a culture of innovation, investing in research and development, implementing open innovation practices, encouraging intra-organizational collaboration, and pursuing strategic alliances with external entities. These practices have helped SOEs create value by stimulating new product development, operational improvements, and more effective service delivery. More importantly, they have equipped these entities with the ability to identify and exploit new market opportunities, which is key to sustaining competitiveness.

Additionally, the successful transformation of Malaysian SOEs has been greatly influenced by government policies encouraging innovation and promoting capacity-building initiatives. The Malaysian government's strategic vision has been crucial in aligning these entities with the global competitive landscape, fostering a more proactive approach to innovation and digital transformation. This state-led intervention has proven instrumental in encouraging the adoption of strategic innovation management practices within SOEs, thus driving their transformation.

However, despite the positive results seen, there are still challenges that Malaysian SOEs face in implementing strategic innovation management practices. These include resource constraints, resistance to change, lack of skills and knowledge, and an entrenched culture of risk aversion. To address these challenges, there is a need for further capacity building, investment in skills development, and a cultural shift towards embracing innovation and risk-taking.

Looking forward, it is evident that the continued adoption of strategic innovation management practices is key to the future growth and competitiveness of Malaysian SOEs. This is particularly true in the face of increased globalization and digital transformation, which are disrupting traditional business models and necessitating greater innovation and agility. SOEs that are able to effectively implement these practices will be better positioned to compete and thrive in the evolving market landscape. Strategic innovation management practices have a significant role in transforming state-owned enterprises in Malaysia, specifically in Kuala Lumpur. Although challenges persist, the overall positive impact on the competitiveness and growth of these enterprises is undeniable. Continued investment in these practices, coupled with government support, is necessary to ensure that SOEs can continue to innovate, compete, and contribute significantly to Malaysia's economic development.

6.0 Recommendations

Fostering a culture of innovation is critical. SOEs should prioritize creating an environment that encourages creativity, experimentation, and risk-taking. This can be achieved through



implementing policies that reward innovative ideas and solutions, offering training programs to enhance employees' innovative capabilities, and promoting open communication and collaboration across all levels of the organization.

It is recommended that SOEs continue to invest in research and development activities, and further embrace open innovation practices. Collaborating with external entities such as universities, research institutions, private companies, and even other SOEs, can help accelerate the innovation process and provide access to diverse knowledge and resources. Open innovation not only fosters the development of new products and services but also helps in improving existing processes and practices. It's crucial to address the challenges associated with the implementation of strategic innovation management practices. To tackle issues such as resource constraints and resistance to change, organizations should ensure clear communication about the benefits of innovation, provide the necessary support for employees during transitions, and invest in change management initiatives. Additionally, to overcome the lack of skills and risk aversive culture, SOEs should focus on continuous learning, skills development, and creating a safe space for trial and error, thus encouraging more employees to participate in the innovation process.

The role of the Malaysian government in supporting these transformations cannot be overstated. It is recommended that the government continue its efforts to formulate and implement policies that promote innovation within SOEs. This includes providing financial support for R&D activities, establishing regulatory frameworks that encourage collaboration and knowledge sharing, and incentivizing the adoption of digital technologies. Moreover, it is essential for SOEs to stay proactive and agile in the face of rapid market changes and increasing global competition. They should continually monitor global trends and technological advancements, invest in digital transformation initiatives, and adapt their innovation strategies accordingly. This will enable them to remain competitive and continue delivering value to their stakeholders. To further enhance the transformation of state-owned enterprises in Kuala Lumpur and across Malaysia, there should be a greater focus on fostering a culture of innovation, promoting open innovation and collaboration, addressing implementation challenges, receiving continued government support, and maintaining a proactive and agile stance in the face of global market changes.

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