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Challenges of Innovation in the Small and Medium Enterprises (SMEs) in Malaysian Furniture Industry: A Study of Design Related Conflicts

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Abstract

The Small and Medium Enterprises (SMEs) in the Malaysian furniture industry tend to have a propensity to concentrate on short-term earnings rather than investing in long-term growth and sustainable development, which contributes to design related conflicts among stakeholders. The conspicuous knowledge gaps in the industry, namely limited understanding of the underlying factors contribute to these conflicts. Despite the significance of this issue, there is a lack of in-depth research on design related conflicts in the context of SMEs in the Malaysian furniture industry. This study aims to explore and understand the key challenges encountered by the Malaysian furniture industry SMEs in terms of innovation from the perspective of design-related conflicts. Through a systematic literature review, a conceptual framework was established to shed light on the factors that constitute critical challenges and their consequences that contribute to these design-related conflicts which hinder innovation in Malaysian furniture industry SMEs. The research has identified the original equipment manufacturer's (OEM) practices, lack of financial resources, and scarcity of market knowledge as the primary factors that lead to design related conflicts between stakeholders and hinder innovation. Therefore, there is a need for a framework to address these conflicts. The findings of this study are important as the starting point for policymakers, manufacturers, and industry stakeholders to develop effective strategies to promote innovation and overcome design conflicts.

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1.0 INTRODUCTION

The Small and Medium Enterprises (SMEs) in the Malaysian furniture industry have been recognized by the Malaysian government for its significant role in encouraging investment in the country and promoting greater value addition and brand awareness recognition (Ratnasingam et al., 2020). It has been highlighted that this industry has the highest number of SMEs compared to other manufacturing sectors, accounting for 85% of all registered manufacturing SMEs in the country (SME Corporation Malaysia, 2019). The majority of furniture innovative companies are domestic. The complete control over this industry can be viewed as a huge accomplishment for local industry players because almost 80% of them are fully owned by Malaysians. The employment potential of SMEs in the Malaysian furniture

industry is critical as they generate new entrepreneurs and employ around 105,000 people (MTIB, 2020). This scenario highlights the crucial role of SMEs, which form the backbone of the country's furniture industry and ensure the viability of the entire sector by providing the necessary adaptability in furniture design and mass production in the ever changing and style-sensitive global furniture market. The success of this industry has a direct impact on economic progress, social uplift, and political stability, influencing both technological progress and future development on a national and international level.

1.1 Problem Statement

In the age of information and globalization, the current business environment is more challenging

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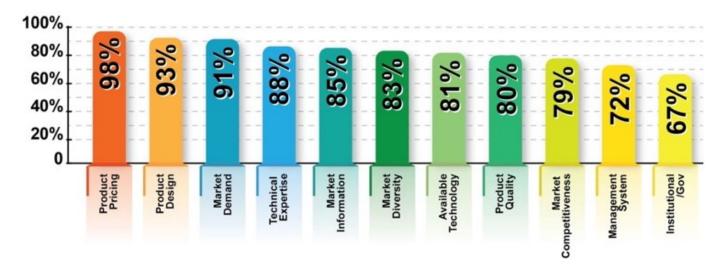


Figure 1: External Factors in Innovation (Ratnasingam et al., 2018).

compared to the last five years. Innovation has become an important source for improving business performance and gaining sustainable competitive advantage in the market (Hanifah et al., 2022), especially for the Malaysia furniture industry SMEs under volatile market conditions. According to McDowell et al., (2018), the ability to innovate is critical to SME success, and it is widely recognized that innovation drives SMEs success. As a result, the study of the elements that influence the development of innovation performance has become an essential part of improving organizational innovation capability. For this reason, the Malaysian government initiated several programs by establishing a wide policy framework to support value creation and innovative activities to encourage SMEs in the furniture sector to innovate, however, the success has been limited (Ratnasingam et al., 2018).

Although it is evident that this industry has increased and is growing rapidly, its growth rate is somewhat limited. This is especially true because productivity and innovation in the Malaysian furniture industry have been stagnant from 2003 until 2019, suggesting that this sector is losing its global competitiveness (Ratnasingam et al., 2022). This scenario had a significant impact on the furniture industry's current contribution to the country's gross domestic product (GDP) of 1.5%, which is low compared to other commodity-based sectors such as rubber and oil palm (MTIB, 2020). Moreover, a survey conducted by Ratnasingam et al., (2018) revealed that product pricing (98%), followed by product design (93%), market diversification/demand (91%), lack of technical expertise (88%), and lack of market information (85%)

are the major challenges faced by this industry in internalizing R&D and innovation activities and successfully implementing innovation on its own (Figure 1).

Given the aforementioned challenges, demonstrated that the growth of these industries is primarily driven by comparative advantage resulting from low-cost factor inputs and increased production to meet market demand at a competitive price, rather than innovation, technology adoption, or even design development. This situation may prevent the furniture sector from exploring novel design concepts and implementing cutting-edge technology. As a result, due to different goals and expectations, these problems can lead to conflicts among stakeholders, especially between manufacturers and designers, hindering the industry's shift from manufacturing generic products to designing its products. Although there are scholars who argue that the conflict between manufacturers and designers is not a significant problem in the industry (Kuys et al., 2021; Battaïa et al., 2018), however, the lack of indigenous product design has been identified as a critical obstacle to the growth and sustainability of the industry (Ratnasingam et al., 2018).

In line with the Malaysian government's drive to become an innovation-driven economy by promoting innovative performance, the study on innovative performance deserves more attention. While many studies on innovation performance have been conducted, very few of these studies have specifically addressed the issue of design conflict in the context of Malaysian SMEs in the furniture industry and their role in improving innovation

performance. In this study, the challenges faced by SMEs in the furniture sector were recognized as predictors of design conflict; they are critical and interrelated factors that can hinder growth and competitiveness. It is hypothesized that addressing these key challenges would mitigate design conflicts and consequently lead to improved innovation performance in Malaysian furniture SMEs.

Therefore, the objective of this study is to conceptually examine the influence of the key challenges in Malaysian furniture industry SMEs that lead to conflicts among stakeholders from the perspective of innovation. With this in mind, a conceptual framework was proposed to identify factors that contribute to critical challenges and design conflicts. This framework can provide valuable insights to furniture manufacturers, policymakers, industry associations, and other stakeholders in developing strategies to address these challenges and promote innovation in the Malaysian furniture industry.

2.0 LITERATURE REVIEW

The government has identified the need for innovation in the Malaysian furniture industry as part of industrial master plans and has created blueprints to foster it (Ratnasingam et al., 2018). However, numerous factors have significantly influenced and challenged innovation in this industry, including:

2.1 Original Equipment Manufacturer (OEM) Practice

In the OEM strategy, manufacturers produce furniture according to the specifications and designs of their contract clients, usually foreign retailers, or large corporations (Latib et al., 2022). While this practice has allowed the industry to make short-term profits and sell products on a large scale, it has hindered the move toward original design manufacturing (ODM) practice. The overreliance on OEM in the furniture industry has created a stagnant environment where innovation and value creation are limited. The survey of 514 furniture companies conducted by Ratnasingam et al., (2018), has revealed that the furniture industry in Malaysia relies heavily on the OEM strategy, while the mixed strategy and original design manufacturing (ODM) is the second most applied by manufacturers (Figure 2). Furthermore, the industry has been stranded in the OEM phase for two

decades without making any significant progress toward the original design manufacturing (ODM) phase which is regarded as ample testimony to this fact (Mansor & Ibrahim 2022).

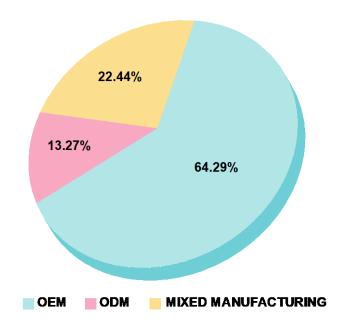


Figure 2: The Furniture Industry's Manufacturing Strategy (Ratnasingam et al., 2018)

In addition, the industry is already in its comfort zone with its short-term profit mentality. Moreover, OEM provides a launching pad for industry members to sell their products on a large scale and globally, thus keeping the industry as OEM (Perkins & Murmann, 2018). Another factor driving the Malaysian furniture industry SMEs to continue its OEM strategy is the competition coming from other Asian countries, including China, Thailand, and Vietnam. These countries offer furniture at lower prices, which is seen as strong competitors for the Malaysian furniture industry (Ratnasingam et al., 2018). In addition, this situation poses a major challenge for Malaysian furniture manufacturers in gaining access to new markets and expanding their customer base, which limits their growth potential and makes it difficult for them to compete with larger companies that have more financial resources. As a result, manufacturers in this sector tend to take a more cost-driven approach to furniture production, focusing on price competition rather than innovation and creativity to remain competitive (Ratnasingan et al., 2020). However, the over-reliance on mass production and contract manufacturing over the years is not conducive to fostering innovation and creativity.

2.2 Lack of Financial Resources

Another notable aspect of concern is related to the lack of financial resources, which acts as a critical and challenging factor to innovation. This industry often lacks internal and external funding, which can lead to limited innovation in the industry and ultimately resulting in a smaller innovation portfolio (Ratnasingam et al., 2018). In fact, the resource-based perspective theory asserts that the assets and capabilities of a company are the primary sources of its competitive advantage (Grant, 1991). The theory implies that a firm's resources, including financial resources, are essential for creating and sustaining a competitive advantage. Another key point, such challenges discourage the industry from investing in new technologies and equipment that could improve its productivity and competitiveness in the market (Ratnasingam et al., 2020).

As a result, this can lead to a lack of modernization within the industry and continued reliance on outdated technologies and equipment. It also becomes difficult to recruit skilled personnel, which limits the ability to innovate and improve competitiveness in the marketplace (Ratnasingam et al., 2020). This ultimately leads to a shortage of skilled manpower in the industry and dependence on unskilled workers. In addition, the limited financial resources available to SMEs in the Malaysian furniture industry hinder their ability to invest in appropriate platforms that enable innovation. Innovation often requires collaboration with external stakeholders such as suppliers, distributors, customers, and any design agencies or consultants who could provide valuable expertise and guidance in design development (Harel et al., 2020).

According to Shaikh (2019), this financial constraint further exacerbates the problem of the limited number of skilled designers in the industry. Without sufficient funding to attract and retain talented designers, the industry has difficulty overcoming the problem of expertise and lack of skilled designers. As a result, SMEs in the furniture industry often have only designers available with limited design development experience, skills, and knowledge. Due to this constraint, maintaining a sustainable supply of raw materials has become a complex challenge for the industry, which is currently

facing a shortage and increase in the price of raw materials, especially rubber wood, which is an important component in the manufacturing of solid wood for furniture production.

2.3 Lack of Market Knowledge

A lack of understanding of the market can pose a challenge for manufacturers seeking financing to expand their business (Lalic et al., 2020). Lenders and investors require evidence that a business comprehends its target market and the demand for its products. If a manufacturer lacks a clear understanding of its target market, it may encounter difficulties in convincing lenders and investors of the feasibility of its expansion plans. Moreover, inadequate market knowledge may result in a mismatched product design, wherein the furniture design fails to cater to the needs and preferences of the target market. Typically, manufacturers create furniture with mass production and/or ease of manufacturing as their primary focus (Ratnasingam et al., 2018), causing them to introduce somewhat different styles every year while retaining old product lines. This is due to their lack of knowledge regarding the styles that customers need and prefer, as well as their limited access to new markets, resulting in a vast product line that escalates the cost of maintaining large inventories, since the way companies perceive a piece of furniture may differ from consumer preferences.

As a result, this may contribute to the lack of differentiation in the market and a reliance on outdated furniture design. Agyeman et al., (2023) point out that not having sufficient market knowledge causes this industry to face difficulty in identifying unique selling points and differentiating products from competitors. Given these challenges, these industries are struggling to maintain their competitiveness and survive in Malaysia's demanding business environment. Consequently, many furniture manufacturers tend to prioritize short-term profitability over long-term growth and sustainable development.

2.4 Design-Related Conflicts

Conflict in the context of design can be defined as discrepancies or incompatibilities between different parties in terms of opinions, views, and ideas related to desires, activities, needs, or goals (Borrego et al., 2013) that occur at different stages of the design process. As part

of the design process, conflict is inevitable, some researchers argue that conflict is necessary for better relationships and can promote growth and lead to a better final product (Kozlovski, (2022). However, others believe that conflict is not good for projects and can lead to hostility or drama (Malik et al., 2021).

Within this perspective, Hopmann et al., (2020) revealed that high and low levels of disagreement reduced the effectiveness of performance. It is therefore desirable to maintain the conflict levels within a moderate range. A moderate degree of task-related conflict is often deemed optimal to ensure a successful project outcome. Therefore, it is desirable to keep the level of conflict within a moderate range of task-related conflict. Design conflicts present unique challenges to any team of designers, engineers, project managers, or other stakeholders involved in the conceptualization, design, or implementation of a project and can significantly impact the project outcome.

These conflicts can arise at any stage of a project and can result from disagreements over aesthetic issues, functionality. divergent conceptual approaches. discrepancies in the interpretation of design briefs, disagreements over resource allocation or scheduling, or differences concerning the use of technology. Maltarich et al., (2018) emphasize the importance of team processes, including team communication, decision-making, and organizational politics, in the early phases of a project, as they can impact team conflict and the overall performance of the project throughout the project life cycle. To deal with these problems, they also suggest that project managers must maintain a balance between team conflicts (task conflicts, interpersonal conflicts, and process conflicts) throughout the early stages of the project.

2.5 Hypothesis Development

2.5.1 Original Equipment Manufacturer (OEM) Practice

The SMEs in the Malaysian furniture industry have historically relied heavily on OEM practices (Mansor & Ibrahim, 2022). However, this practice can lead to conflicts among the various stakeholders of the industry, as it focuses on the cost-effectiveness of mass production and contract manufacturing rather than nurturing designers' creativity and innovation (Brissaud et al.,

2022). As a result, this can lead to nipping in the bud the exploration of new design concepts and the introduction of new technologies in furniture manufacturing. Consequently, divergent perspectives and goals, design feasibility and manufacturability, cost consideration (Roper, et al., 2016) timelines and deadlines (Gunasekara et al., 2023) communication gaps, and a lack of crossfunctional collaboration (Akbar et al., 2020) may lead to conflicts between manufacturers and designers (Mansor & Ibrahim 2022).

Additionally, Roper et al., (2016) concluded that the differences in perspectives and goals between the manufacturing and design teams can lead to conflicts in decision-making and compromises. Previous studies by Yang et al., (2022) have shown that the OEM practice used by SMEs in the Malaysia furniture industry may face conflicts in pricing and profit margins if they are unable to negotiate favorable prices for raw materials or compete with low-cost manufacturers of furniture in the region, mainly China and Vietnam. In addition, according to Ratnasingam et al., (2018), conflicts related to design control may arise because of the limited control over the design of products. Original Equipment Manufacturer (OEM) practice may also face conflicts if the design specifications provided by the customer are unclear or difficult to meet, resulting in production delays, additional costs, and disputes over the quality of the final product.

It is also worth mentioning that intellectual property protection conflicts can occur when disputes arise over ownership of a particular design because OEM furniture manufacturers do not have control over the branding and marketing of their products leading to issues such as trademark, copyright, or patent infringement. Akbar et al., (2020) have also argued that conflicts related to quality standards and quality control can arise because of the limited control OEM have over the quality standards of their products. Potential problems such as defects or errors in the manufacturing process can significantly affect the quality of the final product. In addition, according to Wlazlak et al., (2019) OEM practices can hinder manufacturers' ability to integrate different divisions and streamline their operations, leading to coordination problems between different departments such as design, production, and sales. As a result, the lack of coordination within the company can lead to conflicts. Based on this description, the following hypothesis is formulated:

H1: Original Equipment Manufacturer (OEM) practices have a positive impact on design-related conflicts in the Malaysian furniture industry SMEs.

2.5.2 Lack of Financial Resources

SMEs with limited financial resources in the Malaysian furniture industry may restrict a company's ability to invest in design-related activities such as design and innovation, research and development, training, and technology adoption. This can lead to conflicts between design and manufacturing teams, as designers may not have sufficient resources to create innovative and customized product designs, while manufacturers may lack the resources to implement novel production processes and fabricate high-quality (Ratnasingam et al., 2018). In addition, this situation may also limit industry access to new technologies, depriving designers of the latest design software or tools while manufacturers lack access to the latest production equipment. In this regard, limited investment in training may contribute significantly to the above limitations, as designers may lack the necessary skills to create designs that are suitable for manufacturingwhile manufacturers may lack the requisite abilities to produce high-quality products.

As highlighted by Ratnasingam et al., (2018) due to these limitations, manufacturers often look at other manufacturers or larger companies for inspiration or to imitate their design to create contemporary design because it is less expensive to imitate rather than to create new furniture design. Such practices can lead to conflicts between designers and other stakeholders such as managers, marketers, and manufacturers, as the value of industrial designers may not be adequately recognized in this industry (Koch, (2022). Although designers produce their designs, they are often unable to invest in intellectual property protection due to financial constraints, leading to conflicts in the design and production process, as designers may lack the resources necessary to protect their designs, while manufacturers may lack the resources to ensure that they do not infringe on the intellectual property rights of others (Brissaud et al., 2022). Based on this description, the following hypothesis is formulated:

H2: Lack of financial resources has a positive impact on the design-related conflict in the Malaysian furniture industry SMEs

2.5.3 Lack of Market Knowledge

Lack of market knowledge may limit SMEs in the furniture industry's ability to invest in design-related activities and be a hindrance to innovation based on consumer preferences and market demand (Wahlström, M. L., & Bergström, J. (2010). Such constraints can lead to design-related conflicts and challenges between designers and other stakeholders, including marketers and manufacturers. Ratnasignam et al., (2018) point out that without a deep understanding of market demand, designers and manufacturers may miss potential market opportunities and it can be difficult for designers to identify customer preferences, and current trends and develop designs that stand out in the marketplace. This can lead to conflict between designers and manufacturers, as designers may create designs that do not meet market requirements, while manufacturers demand innovative designs from designers but are unwilling to adapt and make changes to meet the market demands. This is mainly because they focus on efficiency and cost while increasing sales and profits.

Roper et al. (2016) have concluded that a lack of market knowledge can lead to a mismatch between furniture product design and the target market, resulting in conflict between designers, managers, and marketers. Marketers may find it difficult to effectively market products that do not appeal to the desired target audiencewhile managers may question the feasibility and profitability of the design decisions. These findings are consistent with several theoretical and empirical studies. For example, Červený et al., (2022) have expanded the scope of their study to analyse the importance of market research and innovation in the design and production process to narrow down the mismatch between stakeholders. Furthermore, Parcells et al., (2018) found that there is a significant misalignment between a student's body proportions and the furniture that is available in the classroom, which can lead to adverse health effects and discomfort. Hence, it can be hypothesized that:

H3: Lack of market knowledge has a positive impact on the design-related conflict in the Malaysian furniture industry SMEs.

2.5.4 Relationship between Challenges Factors, Design-Related Conflicts and Innovation Performance

Internal and external factors contribute to the heavy reliance of SMEs in the Malaysian furniture industry on OEM practices due to a lack of financial resources and market knowledge, which may lead to design conflicts and affect innovation performance. Prasad and Junni (2017) assert that design-related conflicts can arise from cognitive and affective conflicts within top management teams (TMTs). Empirical research by Harel et al., (2020) supports this assertion by showing that insufficient financial capital can constrain a firm's ability to invest in innovative initiatives. The study found underinvestment in innovation by SMEs is due to the cognitive biases of entrepreneurs, as they do not properly assess the risk and potential benefits of innovative initiatives, which can lead to cognitive conflicts and negatively impact innovation performance. constraint prevents firms from engaging in research and development (R&D), acquiring new technologies or advanced equipment, and hiring highly skilled employees, all of which are critical components of innovation.

Lack of market knowledge further compounds the difficulties faced by SMEs in the Malaysian furniture

industry by preventing firms from understanding consumer demand, market trends, and competitor strategies (Ratnasingam et al., 2020). This can lead to affective conflicts caused by incompatible interpersonal relationships or disagreements that can create negative feelings among stakeholders. If these disagreements are not managed effectively, they can affect the company's ability to innovate (Chen et al., 2019).

The heavy reliance on original equipment manufacturer (OEM) practices indicates that the company relies too heavily on outside entities for design decisions and innovation, which in turn could lead to conflict among stakeholders (Akkermans et al., 2019). The study by Quesada et al., (2006) examined the relationship between OEM practices, concurrent engineering practices, and OEM evaluation of supplier performance in new product development (NPD) projects in the automotive industry. The study found that OEM practices influence their perceptions of supplier performance. This means that conflicts arising from OEM practices can potentially affect supplier performance, which in turn can affect a company's overall performance.

H4: The relationship between challenges factors (lack of finances, lack of market knowledge, and heavy reliance on OEM practice) has a positive impact on the design-related conflicts and

Independent Variables

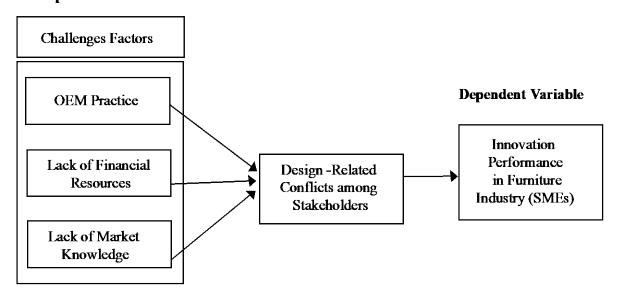


Figure 3: A conceptual framework for the relationship between the challenges factor in furniture SMEs, design-related conflicts among stakeholders, and innovation performance.

innovation performance in the Malaysian furniture industry SMEs.

Based on the above literature discussion, a hypothesized framework for SMEs in the furniture industry was developed, which proposes the factor challenges of SMEs in the furniture industry as a cause of design-related conflicts among stakeholders. In this framework, design-related conflicts are assumed to be a mediating variable for the relationship between the challenges factor and innovation performance. (Figure 3)

3.0 METHODS

The focus of this study is to understand the relationship between challenges, conflicts, and innovation among SMEs in the Malaysian furniture industry. Therefore, both qualitative and quantitative research methods are implemented. In the initial phase of the study, a literature review was conducted to gain insights into the challenges, conflicts, and innovation performance of SMEs in the Malaysian furniture industry. The research focuses on OEM practices, lack of financial resources, and lack of market knowledge that contribute to design-related conflicts among stakeholders.

The findings will be the guide to formulating the research hypotheses. A survey of a large sample of SMEs in the Malaysian furniture industry will be conducted to collect data on OEM practices, financial resources, market knowledge, experience with design-related conflicts, and firm innovation performance. The target audience of the survey is business owners and employees in different hierarchical positions within the company, from managers to employees. It targets the SMEs in the furniture industry which has been established in Malaysia for more than half a decade. The scale to be used in this study is a Likert scale (5-point scale: 1 strongly disagree to 5 strongly agree). The data to be collected using this method can be statistically analysed to test the research hypotheses using correlation and regression analysis.

To understand the causes and effects of designrelated conflicts on the innovation performance of SMEs in the furniture industry, in-depth focus group interviews will be conducted with a smaller sample of key stakeholders, such as the general manager/CEO or individuals who are responsible for product design in the company. These interviews will provide detailed insights into the experiences and perceptions of conflict in the design process. Specific SMEs in the Malaysian furniture industry that have successfully overcome design-related conflicts and improved their innovation performance could be studied in depth. These cases could provide practical strategies that other SMEs in the furniture industry can adopt.

4.0 DISCUSSION

This study proposes a conceptual framework (Figure 4) for improving SMEs innovation performance in the Malaysian furniture industry. The framework applies a systematic review process that consolidates relevant articles and significant findings and provides a structured and evidence-based approach to identify a comprehensive list of critical dimensions of design conflicts among primary stakeholders. This framework shows that three main challenges contribute to eighteen critical dimensions of design conflict in SMEs in the Malaysian furniture industry and consequently affect innovation performance in the sector. One major issue is the practices of the original equipment manufacturers (OEM) that lead to disagreements tied to quality standards and control, design control, pricing and profit margin, decision making, integrated different divisional, production capacity and timeliness, and possible copyright or patent infringement. This indicates that manufacturers need to allow some flexibility in OEM practices where possible to foster creativity and innovation.

Another important finding is the lack of financial resources that can disrupt long-term plans for growth and sustainable development, leading to design-related conflicts in the form of limited investment in design, limited access to technology, limited adaptation, limited investment in training, limited investment in research and development, limited investment in intellectual protection, and recognition of industrial designers. This suggests that strategic financial planning and resource allocation, especially when it comes to considering design and innovation issues are critical for SMEs.

In addition, the lack of market knowledge of these SMEs was highlighted as a critical factor that can lead to conflicts due to failure to identify market opportunities, limited ability to differentiate, mismatch between design and target market, and limited understanding of customer preferences, leading to disagreement about the feasibility and viability of certain design decisions. In this regard, stakeholders need to invest in market research to



Figure 4: Conceptual framework for key dimensions of design-related conflicts among stakeholders.

understand the market and adapt to market trends to avoid potential design conflicts. In addition, a deep understanding of the market landscape can help align designers' goals with strategic business decisions, foster collaboration, and avoid disputes. Strategies should also be developed to promote knowledge sharing and collaboration among stakeholders to reduce designrelated conflicts and improve innovation. Studying the design conflicts that occur in these industries helps primary stakeholders, especially SMEs manufacturers, consumers, and workers, identify the issues they frequently dispute, which in turn facilitates conflict resolution planning. From these findings and discussions, it is evident that design-related conflicts among stakeholders are the barriers to innovation for SMEs in the Malaysian furniture industry. These design conflicts can have a significant impact on overall product quality, time to market, and customer satisfaction. Therefore, the efforts to manage these conflicts can potentially lead to improved innovation performance.

5.0 CONCLUSION AND RECOMMENDATIONS

Based on the presented study, it can be concluded that conflicts in the design process of Malaysia's furniture industry SMEs, can significantly hinder innovation. It shows the importance of understanding underlying factors such as original equipment manufacturer (OEM) practices, lack of financial resources, and disparity in market knowledge as key drivers of these conflicts become clear. OEM practices can lead to disagreements over intellectual property rights and quality control, while a lack of financial resources limits investment in sustainable development and long-term growth plans. Insufficient market knowledge can limit a company's responsiveness to customer preferences and market demand. The hypothesis model provides further depth to unravel the complex relationship between challenges, conflicts, and innovation performance. The conceptual framework developed in this study provides essential insights to manufacturers, policy makers, and other

stakeholders in the Malaysian furniture industry that they can use as a blueprint to contextualize the challenges and identify potential ways to mitigate the conflicts that lead to improved innovation and competitive advantage. If addressed systematically these issues are strategically, including fostering an innovation culture, promoting knowledge sharing, allocating substantial financial investment, conducting detailed market research, government support, flexibility in OEM practices, and a solid conflict management framework, there can be significant progress. This will lead not just to improved innovation performance of Malaysia's furniture industry SMEs but also the better satisfaction of consumers' needs and expectations and sustainable industry development. Future research can further explore this field to validate and extend the proposed framework, thereby contributing to a flourishing furniture industry in Malaysia.

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