

DEVELOPING A CONCEPTUAL FRAMEWORK OF MALAYSIA FURNITURE INDUSTRY TOWARDS ECONOMIC TRANSFORMATION

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ABSTRACT

The purpose of this study is to monitor the impact of government investment in the furniture industry in order to address the Malaysia economic transformation. This study uses a literature review to document the current scenarios of Malaysia furniture industry. Then, it uses data analysis and interview to identify the appropriate components of the strategic plan in enhancing the Malaysia furniture design level. Finally, it uses an expert protocol discussion to validate the benefit of the strategic plan and implements its application for Malaysia furniture design. This study develops a measurement framework for examining the landscape of Malaysia furniture industry. Besides that, this study will enhance our understanding of the furniture industry in Malaysia and strengthen the evidence base for policy developers. From this study, it meets the expectations of policy-makers, practitioners and professionals in related fields, who have been long awaiting an analytical tool to assess the status of the Malaysia furniture design industry. This study entails a methodological research to address the primary issue of building the indicators. Its intended use is audience-specific, providing a segment of readers with an analytical framework to understand the Malaysia furniture industry. This study will contribute to three sectors; firstly, the education sector will benefit in information on the development and supply of design manpower. Secondly, the industry practitioners would be informed about the current landscape of the structure of the furniture industry. Lastly, for the community stakeholders this study is provided with a yardstick to examine the status of the furniture local industry, while the policy-makers would be able to gauge its strengths and weaknesses.

Key Words

Malaysia Furniture Industry, Action Plan, Conceptual Framework

INTRODUCTION

The nowadays Malaysia furniture industry has come a long way, transforming into a technologically-advanced multi-billion ringgit industry. From a mere RM32.4 million of exports in 1980, wooden and rattan furniture is today's star performer in Malaysia's wood-based exports, registering RM6.3 billion in 2014. In 2008 Malaysia ranked as the 10th largest exporter of furniture in the world, Malaysia exports around 80% of its furniture production; indeed, it was 3rd in Asia and 2nd amongst Association of Southeast Asian Nations (ASEAN). (MFPC, 2009; MTC,2015) (See figure 1, figure 2, table 1)

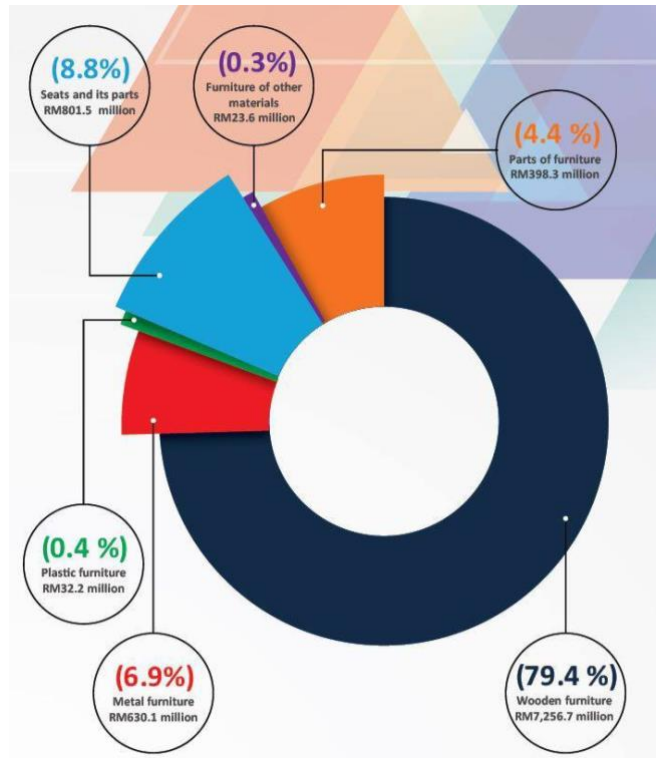


Fig 1 Malaysia furniture export by types 2015 (MFPC, 2015)

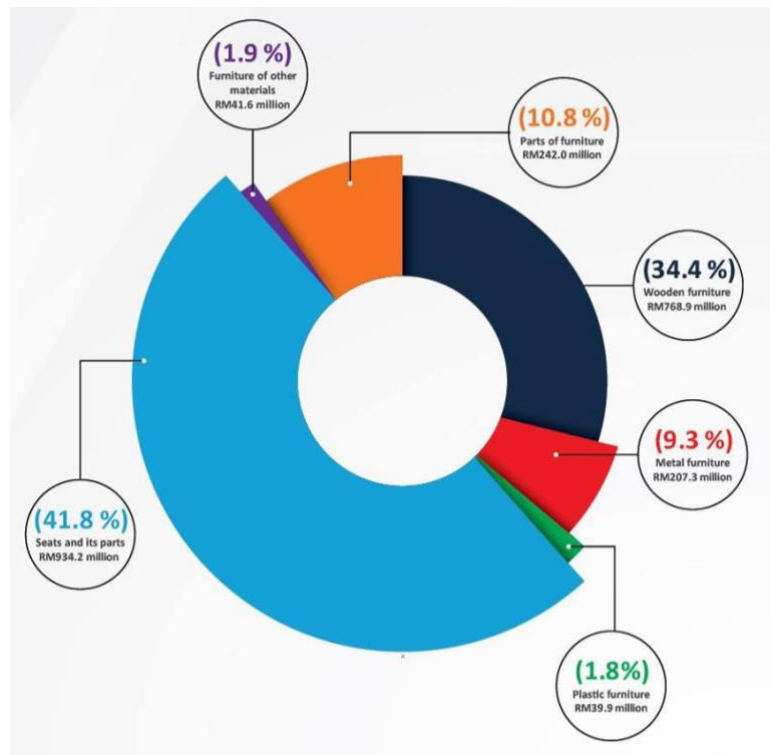


Fig 2 Malaysia furniture import by types 2015 (MFPC, 2015)

Table 1 Overview of the Malaysian furniture industry (MFPC Annual Report, 2013)

OVERVIEW OF THE MALAYSIAN FURNITURE INDUSTRY

Malaysia's Trade of Furniture, 2002-2013

Year	Export		Import	
	RM Mil.	Change %	RM Mil.	Change %
2002	5,539.0	8.9	650.0	71.4
2003	6,009.0	8.5	723.0	11.2
2004	7,050.6	17.3	1,032.9	42.9
2005	7,054.7	6.4	1,254.3	21.4
2006	8,083.7	7.7	1,319.5	5.2
2007	8,241.4	2.0	1,331.3	0.9
2008	8,692.6	5.5	1,460.3	9.7
2009	7,622.7	-12.3	1,092.0	-25.2
2010	7,959.2	4.4	1,311.0	20.1
2011	7,670.3	-3.6	1,340.1	2.2
2012	8,002.1	4.3	1,396.2	4.2
2013 ^p	7,358.3	-8.1	1,547.8	10.9

Source: MATRADE & MFPC p=provisional

In recent years, our furniture industry has seen exchange from the OEM (Original Equipment Manufacturer) model to ODM (Original Design Manufacturing) model. This change has been necessitated by the local furniture manufactures to add value to their products. After all this time, OEM provides a launch pad for these industry members to sell their products globally. According to Wee Jeck Seng (2015), the over-reliance on mass production and contract manufacturing over the years has come at the expense of creativity and innovation. One of the ways out of this creative rut was to revamp the model from producing or manufacturing products for international buyers to creating, designing and marketing our own products internationally. From these efforts certain key players need to play a role in encouraging the creativity and identify the upcoming talents for this industry. Currently, our furniture industry is still by and large, fragmented and is generally manufactured in Malaysia still lack of understanding in the real role of design and how to promoting the lifestyle furniture production, and also lack of guidance on how to achieve a higher margin through well designed offerings. Nowadays, mostly the designers are not aware of the various techniques and processes that involve in furniture making. Besides that, in this industry we also lack of successful local talent or the successful ones. This very important for young students, industry members and furniture manufactures to benchmark their capabilities as good role models and to see they can make a decent living from being a designer. With a business-friendly environment, good quality products and a high potential market, the Malaysian furniture industry is poised to exceed expectations and to continue its exponential growth. In order to achieve the objective of this paper, empirical evidence is derived from a case study of the furniture industry in Malaysia. Malaysia furniture industry warrants an in-depth analysis as it is among the very few fully fledged, homegrown industries that successfully penetrated the global market. This paper is structured as follows. Section 2 the conceptual framework for the case study, and section 3 describes the research methods used in this paper. Section 5 results and the discussion gained from the author's observation and intensive interview sessions with the key players in the furniture cluster in Malaysia. Finally, section 6 draws conclusions and provides the implication for policymakers.

LITERATURE REVIEWS

Conceptual Framework

This section discusses about the conceptual framework gaps that need to be taken in improving the furniture industry level in Malaysia. (See figure 3)

Design

Adams, J.L (2012), state design is the function in the creation of products that reduces specific goals of the producer to even specific inputs for manufacturing. Besides that's, design plays the critical role in determining the product quality. According to Philip Yap (2016), Malaysian furniture manufacturers in a comfort zone, which is not conducive for nurturing creativity. Design must be the cornerstone of the industry's next level of success. Without design, most Malaysian made furniture will continue to be perceived as a base for low-end, promotional furniture and we will forever compete on price, against the likes of Vietnam and Indonesia. Therefore, in design the creativity is an essential element of design and also of organizational changes. Creativity is important to increase the quality and to imply change and innovation. Additionally, many producers have little understanding of the design process; many still think that designers are the ones that only need to know the technical and process. On the other hand, as the gaps of design preference are narrowing and forming a no-boundary global trend, we could start to provide our own creations to international buyers, instead of continuing with the OEM business model.

2. Human Capital

In Malaysia there are just a few successful local designers in furniture industry. These students, industry members and furniture manufacturers need good role models that they can perhaps benchmark against their design ability or design team capabilities. Manufacturers, for example, need a design-focused operation models to manage their internal design team. We haven't capitalized on our design talents for the furniture industry is because we do not have a workable "cross platform" dedicated for design-focused talent to perform. (Philip Yap, 2016). There are plenty of Malaysian colleges and universities offering excellent design-based courses, but not enough of such efforts are channeled directly to the furniture industry, and little focus is placed for the integration of talents from different design disciplines to collaborate through this platform. At the end of the day, a design successful may be due to a cross-fertilization of ideas from different disciplines: design, engineering, material technology etc.(MTC,2016).

3. Investment

The relationship between R&D expenditures and firm performance has been a subject of great interest. For example, Sbragia et al., (2003) suggest there is a consistent positive association between the amount of R&D investment and the rate of product innovation, and the gross profit of a firm. Similarly, Liu and Tsai (2007) suggest there is also a link between new product introduction and R&D investment. They argue that new product development performance is significant when R&D tendency is higher. The literature on R&D expenditures and firm value further includes references to the impact of R&D expenditures on generating Innovation and utilizing information available in the marketplace (Cohen and Levinthal, 1989), the impact on shares value (Chan et al., 1990), the linkage between R&D expenditures and stock value (Doukas and Switzer, 1992), strategic value of R&D expenditures (Sundaram et al., 1996), value creation through R&D (Kelm et al., 1995), the impact of R&D on reducing cost and creating demand (Levin and Reiss, 1988), and contribution of R&D expenditures to a country's economy (Brox and Fader, 2006). These studies suggest R&D expenditures can be vital to the success of a firm in the market place.

4. Industry Structure

The furniture and timber-based industry in Malaysia has long been an important part of the manufacturing sector. The Malaysian timber industry has successfully developed and diversified into downstream activities with strong support from the government and the implementation of the First and Second Industrial Master Plans (1986-1995 and 1996-2005). Over the past 40-50 years, the timber industry has developed from a primary processing industry to a much more sophisticated infrastructure today which consists of a significant number of downstream value-adding industries such as furniture, mouldings as well as wood-based panels. Malaysia is considered amongst the top 10 producers of furniture in the world and in addition, the National Timber Industry Policy (NATIP) has set a target of RM53 billion in annual export earnings by 2020, with furniture export aimed at RM16 billion (MTIB, 2012).

5. Manufacturing

Ngui, K. S (2011), state furniture manufacturers lack sufficient capital and scale economies to adopt new manufacturing technologies. The problems faced by furniture manufacturers are further compounded by rigid government policies and cumbersome bureaucratic processes, many of which have disadvantaged small furniture manufacturers. While, Ratnasingam & Thomas (2008) contend that the level of technology employed within the Malaysia furniture industry is on par with other furniture manufacturing countries, if not higher. A somewhat similar point of view has been revealed by MTC (1998a) where most of the Malaysian furniture manufacturers have invested considerable in machinery and equipment. However, most of the machinery purchased is special function machinery with increased throughput levels. It may therefore be inferred that much of these technologies are aimed at reducing the labour content in the manufacturing outfit, with the ultimate aim of reducing manufacturing cost or unit cost. This is to be expected as the industry is labour intensive in nature, and there is increasing reliance on foreign-contract workers within the industry (Ratnasingam, 2005).

6. Market Demand

Over the past years the competitiveness of the Malaysian furniture industry has been ameliorating drastically as it has been experiencing outstanding growth. Thus, Malaysia's export performance of furniture has been going through impressive growth as furniture export rate has been escalating at a regular pace of 10% in a span of 10 years every year (Salleh et al., 2008) In the year 2008, Malaysia's export of furniture product heightened to USD 3.5 billion due to which in a short span of time Malaysia has successfully ranked the tenth exporters of furniture product globally, third in Asia and at a regional level it is placed as second tenth which provided it with the opportunity to export furniture to more than 160 countries around the world (Ng and Thiruchelvam, 2011) which includes the conventional markets such as U.S. U.K, Japan and Australia as well as non-conventional markets which such as Africa, South America, West Asia, Russia West Asia, and other ASEAN (Radam et al., 2010). In the year 2008, Malaysia's export of wooden furniture accumulated to 79.4% of the country's total furniture exports (Ng and Thiruchelvam, 2011). Today, the furniture industry has emerged as one of the most important manufacturing sectors within Peninsular Malaysia. In recent years, Malaysian furniture exports have increased at a steady rate allowing Malaysia to be one of the leading furniture exporters globally as well as regionally providing them with a competitiveness edge over their competitors. Therefore, the Malaysian furniture industry has favorably contributed to the development of Malaysian economy.

7. Business Environment

By 2020, the Malaysian government aims to achieve an estimated RM53 billions of timber-based exports, of which RM16 billion is expected to be contributed by the furniture industry. But these targets will remain castles in the air if we are not able to successfully incorporate design to be part and parcel of the Malaysian furniture industry and to provide an enabling environment to propel the industry into its next phase of growth (MTC, 2015). In recent years, Malaysia's furniture industry has

seen a shift from the OEM (Original Equipment Manufacturer) model to ODM (Original Design Manufacturing) model. This shift has been necessitated by the need for local furniture producers to add value to their products. For a long time, OEM provided a launchpad for industry members to sell their products globally. However, the over-reliance on mass production and contract manufacturing over the years has come at the expense of creativity and innovation. One of the ways out of this creative rut was to revamp the model – from producing or manufacturing products for international buyers to creating, designing and marketing our own products internationally.

8. Social and cultural environment

Malaysia government has maintained its support for the furniture industry through the creation of different institutions such as the Malaysian Furniture Industry Council and the Malaysian Furniture Promotion Council. This institution function is to promote the overall industry internally and externally to public as a awareness. According to MFPC, 2005 this institution also provided an extraordinary window of opportunity for the local furniture players to keep abreast of contemporary trends, updates of the world furniture arena and the dynamics of the global furniture market.

9. Intellectual Property Rights

Global filing activity for patents and trademarks grew in 2013, representing the fourth consecutive year that applications have increased for these two IP rights. For utility models and industrial designs, growth in filing activity has been uninterrupted for over a decade. The estimated 2.6 million patent applications filed worldwide in 2013 represents growth of 9 percent on 2012. Rising much faster, utility model (UM) applications increased by about 18 percent due to sharp growth in China. Trademark filing activity rose by around 6 percent— similar to the level witnessed in the previous year. And industrial design filing activity grew by only 2.5 percent in 2013, considerably less than the 16 percent recorded in 2012. This lower growth mainly resulted from a slowdown in the number of industrial design applications filed in China. (WIPO, 2014)

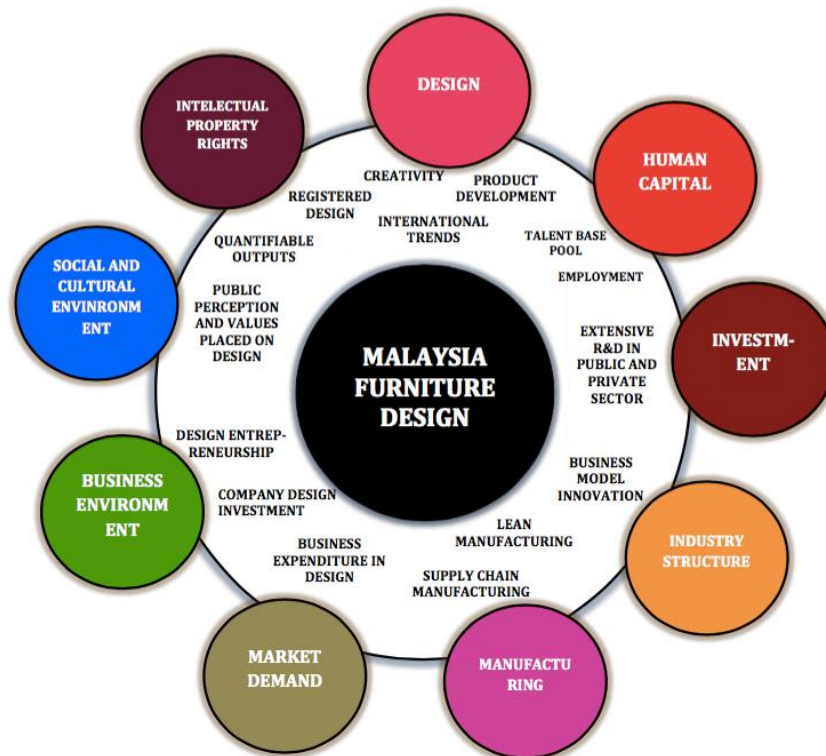


Fig. 3 A conceptual framework of Malaysia furniture design status

PROBLEM STATEMENTS

According to Huat, I.C (2005), when the Malaysian government implemented the first Industrial Master Plan on 1986 to 1995, the furniture industry was identified and included as one of the top priority industries in Malaysia and a number of incentives in furniture industry were design to further enhance its growth and development. After the first Industrial Master Plan, Malaysia government working under its second IMP (1996 to 2005), and its shown the furniture industry is growing extraordinarily fast. Even during the Asian economic crisis in 1997 then followed by the 1999 when the global economic downturn, furniture industry still grows at the rate of 8 to 10% annually. Malaysia is considered amongst the top 10 producers of furniture in the world. In addition, the National Timber Industry Policy (NATIP) has set a target of RM53 billion in annual export earnings by 2020, with furniture export aimed at RM16 billion. In recent years, Malaysia furniture industry growth has switched from producing a general product towards self-designed products, and this has been key in propelling Malaysia onto the international arena. Currently, Malaysia furniture industry received an overwhelming response from the oversea buyers, while foreign buyers looking for Malaysia manufactures who can meet their growing demand. However, the issue of how the furniture industry can move forward has been debated exhaustively, with recurring subjects focusing on lack of manpower, lack of raw materials, human skills development, stagnant technology and low end market stigma (MTIB,2012) (see figure 4). Therefore, Malaysia government needs to understand the furniture industry for each state in Malaysia as a reference, to track and monitoring the impact of government investment in this industry. With these issues it will help the government to monitor the growing needs of each state and international needs of audiences in Malaysia.

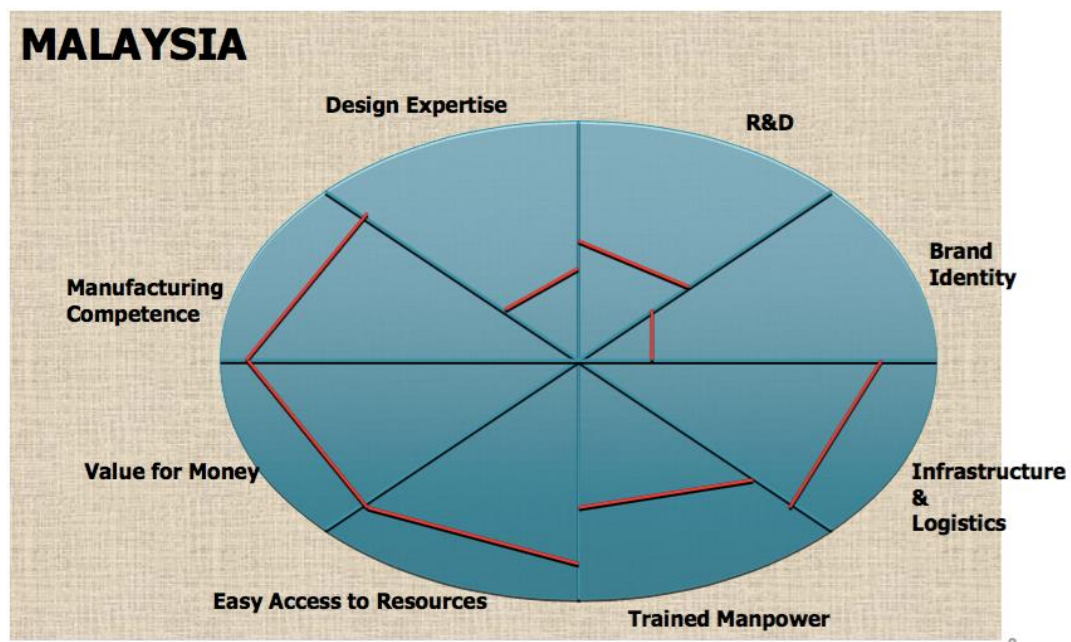


Fig 4 How Malaysia stack up in furniture design (Malaysia Furniture Council, 2012)

Drawing on the literature review, this proposes an integrative model to analyses this relationship. With this mind, this paper has two aims (1) to identify the current design level of Malaysia furniture industry; (2) to document the current condition of global furniture design. Consistent with these aims, we see two specific research questions: RQ1: Who is affected by current design level for Malaysia furniture design industry? RQ2: What is the current condition of global furniture design?

METHODOLOGY

In this research, a qualitative method was adopted in order to accomplish these research aims. As several researchers have noted (Yin, 1994 ; Gummesson, 2002), qualitative approach and in-depth

case study method are very useful to generate new understanding of existing phenomena. According to Yin (2003), the case study research method is an empirical inquiry that investigates a contemporary phenomenon within its real life context. In the same vein, Sekaran (2003), believed that qualitative case studies are useful in applying solutions to current problem based a past problem solving experiences. This study involves three phases. First, a literature review was undertaken to gain insights into the scenarios of the study as well as to aid in the design of the survey content. Second, the survey was conducted with the Malaysia Timber Industry Board (MTIB), Malaysia Furniture Promotion Council (MFPC), Pengusaha Kayu-Kayan Dan Perabot Bumiputera (PEKA), Malaysia Design Council (MRM) and as well as industrial training institutes and university to determine whether it was relevant and complete. Third, the collected data from the interview was analyse and being a guidance to build the conceptual framework.

In addition, other material was analysed to obtain additional source information on Malaysia furniture design industry.

Phase 1	Documented information and existing data research and analysis
Phase 2	Gather data by interview with an organization that involve in the furniture design industry
Phase 3	Comprehensive significance analysis and the establishment of the design indicators

RESULTS & DISCUSSION

The proposed framework needs to refined regularly, and more importantly, be substantiated by cautious compilation of robust data. This would be an ongoing process that requires commitment. Even this conceptual framework is not a comprehensive study to tackle some important issues that the design communities may be looking forward to. For instance, more applied studies are required on subjects such as measurement of the value of design in business or regional and international trade on design goods and services. This study develops a measurement framework for examining the landscape of Malaysia furniture industry. Besides that, this study will enhance our understanding of the furniture industry in Malaysia and strengthen the evidence base for policy developers. From this study, it meets the expectations of policy-makers, practitioners and professionals in related fields, who have been long awaiting an analytical tool to assess the status of the Malaysia furniture design industry. Through this study, community stakeholders are provided with a yardstick to examine the status of the furniture local design sector while policy- makers would be able to gauge its strengths and weaknesses.

CONCLUSION

This paper has attempted to address the current scenarios of Malaysia furniture design industry. This research shows, although the government has provided the various incentives and supporting the infrastructure to stimulate the technological capabilities of the industry, we still lack of view of cooperation and mutual understanding between the government and the industry. This has resulted in the poor take up of this government assistance, particularly in terms of R&D, technology upgrade funding and human capital development programmed. In addition, the government agencies and trade associations need to undertake industry awareness program to update the latest incentive, financial assistance, and grants that the government provides. The initiative from this study will help to develop a measurement framework for examining the landscape of furniture industry. It will enhance our understanding of the furniture industry in Malaysia and strengthen the evidence base for policy development. Further, the study would meet the expectations of policy-makers,

practitioners and professionals in related fields, who have been long awaiting an analytical tool to assess the status of the Malaysia furniture industry.

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