

# Survival through design: A case study on a Thai SMEs furniture manufacturer who apply design as business strategy

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## ABSTRACT

There are about 2,600 furniture manufacturers in Thailand, most of them are small or medium-sized enterprise (SMEs). Furniture in wood is estimated to account for 70% of all the furniture produced for export. After year 2015, the number of Thai exported furniture to foreign market were dropped dramatically since the economic crises in three major Thai furniture buyers; Europe, Middle East and United States. Many SMEs turned to be bankrupts, some who were survival has they own design products but they also need to reorganize themselves compete to large size company.

This paper reviewed an owned design furniture manufacturer from SMEs who survive from economic crisis through changing from OEM (Original Equipment Manufacturer) to ODM (Original Design Manufacturer). Ethnography approach and techniques were applied to examine how they reorganized their firm and what were the keys they used for the design break through.

The results of this case study were analyzed as critical checklist and rearranged to generated example of working procedure for Thai design firm development.

**Keywords:** furniture, industrial design, business strategy, original design manufacturer.

## INTRODUCTION

Thailand has been noted as a country that has competitive advantage in both furniture producer, especially wooden furniture. The Thai furniture industry plays a significant role in the country GDP. This industry expanded toward economic growth and the expansion of the urban community. The Thai furniture industry gains a high competitive advantage in two issues. First, Thailand locates in the tropical zone, the climate provides this land with rich biodiversity. Second, Thailand border Myanmar, Cambodia, Laos and Malaysia. This is not only to offer varieties of high-quality timber but also channel to export furniture both by land, sea and air [1, 2].

The achievement of the Thai furniture industry may prove by the increasing of participant and exhibitor in TIFF (Thailand International Furniture Fair) which was all well received for more than 20 years. Many exhibitors are categorized as small and medium-sized enterprise (SMEs), which have a family business background and developing their business from OEM to ODM [3]. (SMEs employ over 90% of workers in the non-agriculture and non-public sectors or 13 million of the Thai workforce).

Due to the 2019 Covid pandemic, Thailand's exports to its major markets US, China, EU, and Japan were likely to fall by 8%. Exports will only recover to their level in 2022. With the slowdown in exports and tourism so far, the incomes of local businesses and their employees have declined [4]. OEMs in furniture sectors have been particularly affected as they cannot develop their product to meet the new demand of customers.

However, there are still survivors in this business, mostly large manufacturers and ODMs or OBM in large scale business such as SB Furniture, Index Furniture, Modern form and also some SMEs who is not in OEMs category. The objective of this research was to study factors affecting the OEM transformation to ODM and OBM in the Thai furniture industry especially in small and medium enterprises (SME). To guide other SME entrepreneurs, especially in the furniture group, recognize the importance and lead to adaptation from OEM to ODM. The more advantages will create opportunities for survival and enhance growth in the Gross domestic product of the country [5].

## BACKGROUND

Thai furniture craftsmen trade and have survived the pressures of the modern economy and urbanization. Bang Po is a street near the centre of Bangkok that is known as carpenters' street. The shops that line this carpenters' street sell a comprehensive range of wood products and furniture. This Bangkok community grew up around the wood. Traditional skills have been preserved within the community to strengthen the local economy and keep the community with its distinctive character alive [3]. Many furniture shops have departed from the traditional all wood furniture. SB furniture is an example of a Thai OBM furniture manufacturer who originated from this ecosystem.



Figure 1. Carpenters' street (Bang Po)

In general, there are three modes of working with a factory, OEM, OBM and ODM. These acronyms are categories of manufacturing industry original equipment manufacturer (OEM), original design manufacturer (ODM) and original brand manufacturer (OBM). Many Thai well-known furniture brand started their family business as OEM then applied transformation steps as ODM and OBM [5].



Figure 2 Three modes of working with a factory, OEM ,OBM and ODM

First, an Original equipment manufacturer (OEM) is the mode that the factory that has zero or very little involvement in product development. Instead, it provides the production facility and labour to get the product produced based on the design provided by the clients. Given that, the factory does not have a lot of room for profit. Fewer and fewer factories in China are engaging in services like that given the increasing labour cost [6].

Afterwards, when the manufacturer starts to get involved with product design. That is called an original design manufacturer (ODM). Depending on its involvement with product design, the factory charges varying amount of non-recurring engineering (NRE) for the product, in addition to the sampling, testing, certification, etc. costs throughout the product development stages.

While some people incorrectly assume they can be used interchangeably, an OEM (Original Equipment Manufacturer) is quite different from an ODM (Original Design Manufacturer). Buyers provide the designs to OEMs, while ODMs take charge of the designs and overall specifications [5].

Finally, a factory will often strive to become an original brand manufacturer (OBM), design and build products under a brand name they own. This gives them a better margin and more control over the business. Other than developing the product on its own, the factory would also managing the marketing and sales of the product. It is like the top of the game in manufacturing and very few players can get there [7].

## MATERIALS AND METHODS

This study investigates how the transformation of latecomer small- and medium-sized enterprises (SMEs) in emerging economies from dependent or subcontracting original equipment manufacturing (OEM) firms into independent or original brand manufacturing (OBM) firms is possible to achieve a significant catch-up in their share of regional or global markets.

The ethnography approach was used for investigating the furniture manufacturers to start a successful Thai SMEs furniture manufacturing. Survey, observation and interview techniques were applied to collect data from sample group furniture manufacturer in the Bangkok area, of Thailand. Survey and interview questions were followed standard assessment for logistics scorecard, which were composed of organizing strategy, planning and ability to work, efficiency, effectiveness, information technology and data management, collaborating, and product design with Likert rating scales of 5 [2]

## RESULTS AND DISCUSSION

Observation of furniture trade fairs between the year 2015 and 2020 exhibit many advancements of Thai furniture manufacturer. There was an award winner from Asia Talents award who just be the one for Thai furniture design who embark upon something fresh and exciting rather than present ornate Thainess. Following its success at the Bangkok International Gift Fair and Bangkok International Housewares Fair 2014 in April (BIG+BIH), where it won the Outstanding Asia Talents of the Year 2014 award chosen by ELLE decoration magazine, buaDESIGN is ready to present a unique concept of Thai furniture to the global market.



Fig.3 The first award winning outdoor furniture by buaDesign

The results from a survey and interview with Pariwat Leesakul, founder of buaDESIGN may conclude that the company's design philosophy is all about simplicity and the ability to merge in well with any ambience. Their commercial furniture has a mild Thai identity that can be displayed anywhere. He tried to make designs of his furniture unique, but they shouldn't be too different from others. Beautiful, durable, and affordable are the keywords Leesakul uses to describe his design concept. He aims to produce something that will be strong and last long. As it is shown in figure 3, the brand uses high-quality Siamese Sal wood to produce the outdoor benches.



Figure.4 Pariwat Leesakul, founder of buaDESIGN and his workshop

In early, buaDESIGN was started as very much a small-scale enterprise. buaDESIGN employ six people at their factory in Bangkok. Around 10 to 20 pieces of furniture are produced each month, which are sold via buaDESIGN's Facebook page. There is no mass production. Even the brand's name has a familiar twist. The company introduced the buaDESIGN brand to sell quality furniture at affordable prices along with made-to-order products. The prices are surprisingly cheap, ranging from 4,900 baht (approx. US\$150) to 14,900 baht (approx. US\$460). Their clients were amazed by our products low prices. The low prices and the simple yet difficult to copy designs, topped with the quality of the wood, make buaDESIGN a potential Thai furniture brand for every client.

Leesakul is appreciative towards the Asia Talent Award and the opportunity to see the potential of the furniture export market. Knowing that there are many potential clients in the world beyond the realm of social media, buaDESIGN is now ready to create more designs which will be easy to sell to both domestic and international buyers [8].

Results from buaDESIGN owner interviewed revealed that overall factor of transformation was showed at fair important and very important level as it is shown in Table 1. Factor that affected the most to organization transformation was product design, market opportunity and passion [2].

Table 1. Important level factor of competitive advantage in transformation

Factor of competitive advantage that significant in transformation					
	Not at all important	Not so important	Neutral	Fairly important	Very important
unique concept design	OEM			OEM	ODM
trademarked	OEM			ODM	OEM
Market opportunity		OEM			ODM/OEM
good network				OEM/ODM	OEM
passion			OEM	OEM	ODM
reputation				ODM	OEM

The investigation proceeds linear discriminant analysis in which it is shown that manufacturers in SMEs are significantly more flexible in their operations and more likely to produce design-intensive outputs than the



large size manufacturers. Producers in Bangkok are especially vulnerable to process and product upgrading. The institutional underpinnings of the Thai furniture industry's modest but definite success in contesting international markets are reviewed [1].

Radical innovation has been considered as the main source of competitive advantage for the Thai furniture industry which is the important industrial sector that needs creative ideas, skills to increase value-added and industrial value. The innovative capability of firms in this industry is also required to enable them to survive and prosper in face of increasing both local and foreign competitors [3].

As a result, SMEs are rarely able to make such a transition. These SMEs created their products instead of following their forerunners. The study identifies several factors, such as unique concept design, trademarked, market opportunity, good network, passion and reputation, that SMEs developed from large size manufacturers. Besides, it is emphasized that the importance of design is the most important key that needs for the organization transformation [6]

### CONCLUSION

This research aims to develop a structural model of radical innovation and the relevant factors of transformation affecting the competitive advantage of firms in the furniture industry. To remain competitive, Thai SME furniture manufacturers are advised to give up the Original Equipment Manufacturer (OEM) production by developing the original design manufacture (ODM) services and own brand manufacture (OBM) products.

To analyze the development process and difficulties faced by the companies, an analytical framework is developed with a particular focus on the furniture manufacturing industry. Through the case studies of three companies in Thailand, the findings are used to compare with the assumptions suggested in the analytical framework. Finally, the result from the value of this research will be a structural model of innovation that can be applied to improve the competitive advantage of firms in the furniture industry.

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