



Exploring the Potential of Moku-Zogan Technique in Cross-Cultural Design Entrepreneurship: A case of Malaysia and Japan

Wan Noor Faaizah Wan Omar¹, Azyyati Anuar² Mohd Zool Hilmie Mohamed Sawal³, Kamarudin Othman², Yanti Mustapha², Shafilla Subri¹, & Abu Hanifa Ab Hamid¹

¹College of Creative Arts, Universiti Teknologi MARA Cawangan Kedah Kampus Sungai Petani, Malaysia,

²Faculty of Business and Management, Universiti Teknologi MARA Cawangan Kedah Kampus Sungai Petani, Malaysia

³Faculty of Information Management, Universiti Teknologi MARA Cawangan Kedah Kampus Sungai Petani, Malaysia

wfaaizah@uitm.edu.my

Abstract. This study explores the potential of the Moku-Zogan technique in cross-cultural design, focusing on its applicability to Malaysian furniture design. By enhancing comprehension of cross-cultural potential of Moku-Zogan, the study contributes to understanding how the techniques can be adapted into Malaysian furniture design and consequently be used to as a design source for design entrepreneurs. The article includes a literature review tracing furniture design's evolution in Malaysia which contains traditional and modern influences. The Moku-Zogan technique is then introduced, highlighting its complexity and use of natural materials. This paper will explain how Moku-Zogan's techniques potential has to be highlighted in designs featuring cross cultural influences, that of Malaysia and Japan. This is hoped to inspire future design entrepreneurs. The Moku Zogan technique boasts adaptability to diverse design preferences and intricate designs, combining it with the Malaysian furniture design ideas will potentially be a promising effort. Challenges such as language barriers, cultural differences, and material selection are presented, Recommendations encompass technique understanding, cross-cultural exploration, collaboration, material experimentation, and creativity. The qualitative research methodology involves interviews with designers and entrepreneurs, analyzed through thematic analysis and observations. The study underscores Moku-Zogan's potential, aligning craftsmanship with Western values, adding authenticity through tradition, and suggesting future avenues like technological advancements and international collaborations.

Keywords: Moku-Zogan technique, cross-cultural, design entrepreneurship & furniture design

1 Introduction

Moku-Zogan is a traditional Japanese technique used in wood inlay design. It involves fitting wood pieces of different shapes and colors into a larger surface, creating intricate patterns and designs [1]. Due to its adaptability and intricate design, the Moku-Zogan technique has been used in a of cross-cultural design source, using

which the Moku-Zogan technique has been has potential to bridge cultural differences and create innovative designs that appeal to diverse audiences. One example of this is the application of Moku-Zogan in furniture design, where it has been used to combine Japanese and contemporary design aesthetics. A design source that applies to different cultures may introduce opportunities for future design entrepreneurs. While there is limited information specifically on the brief history of cross-cultural design entrepreneurship, it is a field that has gained increased attention in recent years, particularly as globalization and technology have made it easier for businesses to reach a global audience. Designers who specialize in cross-cultural design often rely on research and tools to understand different cultures and their design preferences [2]. This can involve a deep understanding of cultural dimensions, informed perspectives, and best workflows and processes to ensure successful completion of a project.

The focus of exploring the potential of Moku-Zogan in the context of cross-cultural design is particularly relevant in today's globalized world. With globalization, the design field must go beyond countries' borders and be able to be must operate in diverse cultural environments, and it is crucial to be aware of cultural differences. Understanding the different design environments requires a deep understanding of various cultural norms, values, and behaviors to ensure the design is accessible and relevant to its intended audience.

Designers can incorporate cross cultural designs in their products. Inculcating entrepreneurial skills in these designers will enable them to market their products. Thus, cross-cultural design entrepreneurship refers to the process of creating and developing products, services, or businesses that incorporates cross culture influences in the designers' products. Cross culture influence poses more than just cultural diversity appeal; it can help improve specific design's competitiveness and innovation. In this context, Moku-Zogan, a technique that combines Japanese and Western design elements, can be useful for entrepreneurs looking to create products and services that appeal to a diverse range of consumers. By exploring the potential of Moku-Zogan, design entrepreneurs can gain a deeper understanding of cross-cultural design and develop products that resonate with customers across different cultural contexts.

The Moku-Zogan technique is being introduced to Malaysia through a project that promotes cultural exchange, cross-cultural design, and the development of furniture design concepts funded by the Toshiba Foundation. This allows Malaysian designers to learn from Japanese craftsmen and incorporate the technique into their designs, creating products that resonate with customers across different cultural contexts. Based on the information gleaned from the search results, several compelling reasons emerge as to why Malaysia could greatly benefit from embracing the Moku-Zogan technique. Firstly, this technique presents a remarkable avenue for fostering cultural exchange between Japanese artisans and Malaysian designers. The exchange of ideas and techniques that this collaboration enables not only enriches the landscape of Malaysian design but also serves as a conduit for promoting cross-cultural understanding on a broader scale. Moreover, the Moku-Zogan technique possesses an inherent appeal due to its distinctiveness and aesthetic charm. If integrated into their creations, Malaysian designers could craft products that

effortlessly stand out, captivating the attention of a diverse spectrum of consumers. Beyond this, the technique seamlessly blends Japanese and Western design elements, offering Malaysian entrepreneurs an innovative way to fashion products and services that resonate with a multicultural clientele, effectively mirroring Malaysia's rich diversity.

An equally compelling rationale lies in the potential for enhancing craftsmanship and skills development, particularly among emerging designers and students. By embracing the Moku-Zogan technique, these budding talents can gain valuable insights into cross-cultural craftsmanship, thereby broadening their understanding of various cultural design nuances and enriching their repertoire of design principles. The Moku-Zogan technique's reliance on natural materials, including a fusion of wood and precious elements such as shells, stones, ivory, and metals, offers an additional avenue for ingenuity. Malaysian designers can weave these natural materials into their creations, giving rise to products that exude a unique and organic allure, setting them apart in a market characterized by its demand for authenticity. Ultimately, the adoption of the Moku-Zogan technique holds transformative potential for Malaysia. It paves the way for cultural exchange, introduces novel design elements, and fosters the cultivation of intricate craftsmanship skills. As a result, Malaysia stands to position itself as a hub for innovative, culturally informed design, generating products and services that resonate with a diverse clientele and propelling the growth of the country's design industry to new heights.

Consequently, the research objectives can be deduced as follows: firstly, to delve into the untapped potential of the Moku-Zogan technique within the realm of cross-cultural design entrepreneurship; secondly, to pinpoint the array of challenges and prospects that arise when employing the Moku-Zogan technique in the context of cross-cultural design entrepreneurship; and finally, to formulate insightful recommendations aimed at facilitating the adept utilization of the Moku-Zogan technique in the domain of cross-cultural design entrepreneurship. The contribution of this study could be significant in several ways. Firstly, it could enhance cross-cultural design entrepreneurship by exploring the potential of the Moku-Zogan technique, which could help entrepreneurs better understand cross-cultural design elements. Secondly, it could expand knowledge on the Moku-Zogan technique and its potential applications in entrepreneurship. Lastly, it could inform future research on cross-cultural design entrepreneurship and the Moku-Zogan technique, providing a foundation for more in-depth research." [4],[5],[6].

Finally, this study is organised as follows: Following the introduction, the literature review is presented in the second section. The third section is the research methodology and the fourth discusses results of analysis. Finally, the fifth section presents the conclusions and implications of this study.

2 Literature Review

2.1 Furniture Design in Malaysia

Furniture design in Malaysia dates back to the pre-colonial era when traditional Malay houses were constructed using locally sourced materials such as bamboo, rattan, and wood. The furniture designs of this era were influenced by Malay, Chinese, and Indian cultures. However, the British colonial rule in Malaysia from the late 19th century until the mid-20th century brought new influences to the region, including Victorian and Art Deco styles. These new styles led to a fusion of traditional and modern designs in Malaysian furniture.

Today, Malaysian furniture design continues to evolve, with a focus on blending traditional techniques and materials with contemporary designs. Sustainability is also a growing trend, with many Malaysian furniture designers using eco-friendly materials and production methods. Malaysian furniture designers are also incorporating modern technology into their designs, such as 3D printing and digital fabrication.

There are several publications that discuss Malaysian furniture design, its history, and current trends. One such publication is "Malaysian Furniture: A Sourcebook of Styles, Designers, and Manufacturers" by Stefanie Tan. This book provides an overview of the different styles of Malaysian furniture, from traditional Malay styles to modern designs. It also includes profiles of prominent Malaysian furniture designers and manufacturers. Another publication that explores Malaysian furniture design is "Furniture Design in Malaysia: A Comparative Analysis" by Chai Lai Kuen. This paper compares Malaysian furniture design with that of other countries in the region, such as Indonesia and the Philippines, and discusses the influence of cultural, historical, and economic factors on Malaysian furniture design. Overall, Malaysian furniture design has a rich history and continues to evolve with new trends and influences.

2.2 Moku-Zogan technique and cross-cultural design entrepreneurship

Moku-Zogan is a traditional Japanese woodworking technique that involves hand-cutting pieces of wood into decorative shapes and inlaying them into carved grooves or holes on a wooden body [7]. This technique is different from Yosegi-Zaiku, another traditional Japanese woodworking technique, and involves a long process of training until one can come up with an original design. This technique has been practiced in Japan for centuries and is known for its intricate patterns and use of natural materials such as shells, stones, ivory, and metals. One of the greatest charms of wood products made using this technique is that they can make people feel comfortable and relaxed when using them [8],[9].

Unlike Yosegi-Zaiku, another traditional Japanese woodworking technique, which involves using different colored pieces of wood to create a geometric pattern,

Moku-Zogan focuses on creating designs that incorporate different textures and grains of wood. It is a complex and time-consuming process that requires a great deal of skill and training. In order to master this technique and create original designs, one needs to undergo extensive training and apprenticeship under a skilled master craftsman [10]. Moku-Zogan can be used in various applications such as furniture, interior decorations, and accessories. While it is a traditional technique, it has also been adapted to contemporary design, creating a fusion of traditional and modern styles [11],[12]. The intricate designs and natural materials used in Moku-Zogan products make them highly valued and sought after by collectors and enthusiasts of traditional Japanese crafts.

In the context of cross-cultural design entrepreneurship, exploring the potential of the Moku-Zogan technique can refer to investigating how this traditional Japanese woodworking technique can be applied in designing products for a global market that involves cultural elements from other countries. This could include identifying the aspects of the technique that can be modified or adapted to fit the design preferences of other cultures or how it can be combined with other design techniques to create new and unique products.

Based on the search results provided, there are some connections between the discussed cultural theories and cross-cultural design and entrepreneurship. For example, Hofstede's cultural dimensions, which are frequently used in cross-cultural innovation and entrepreneurship research, could also be applied in cross-cultural design to better understand cultural differences and how they might affect design decisions. Similarly, cross-cultural research techniques such as framing a research question, deriving hypotheses from theory, design of measures, coding procedures, and sampling could be applied in cross-cultural design and entrepreneurship research. Additionally, the article on cross-cultural design suggests that designers should understand the seven cultural dimensions, including Hofstede's cultural dimensions, in order to successfully complete a cross-cultural design project. This could include designing for cultural differences in entrepreneurship contexts as well. Therefore, while the search results do not explicitly discuss cross-cultural design entrepreneurship, there are certainly some connections and applications of cross-cultural research and theories in this area [13].

Exploring the potential of the Moku-Zogan technique in this context can involve identifying how this traditional Japanese woodworking technique can be modified or adapted to fit the design preferences of other cultures or how it can be combined with other design techniques to create new and unique products. For example, the use of different woods and materials for inlaying can be explored to cater to the preferences of different cultures. Additionally, it is important to consider cultural factors such as color, symbolism, and aesthetics when designing products for a global market. By investigating how the Moku-Zogan technique can be applied in designing products for a global market, designers can create unique products that cater to the preferences and needs of different cultures [14].

2.3 Challenges and Opportunities

While the use of Moku-Zogan technique in cross-cultural design entrepreneurship offers several opportunities, it also poses some challenges. One of the primary challenges is the potential language barrier that can arise when trying to communicate with people from different cultural backgrounds. This can make it difficult to convey the intricacies and details of the technique and can hinder effective collaboration.

Additionally, cultural differences can complicate interactions among team members, which can lead to misunderstandings and delays in project completion. For instance, differences in work styles, communication, and decision making can impact the overall success of the project. Furthermore, there may be cultural differences in terms of the type of wood or materials used in the Moku-Zogan technique, which can affect the aesthetic appeal and value of the final product.

On the other hand, the use of the Moku-Zogan technique in cross-cultural design entrepreneurship offers several opportunities. The unique and intricate designs created using this technique can attract customers from different cultural backgrounds, leading to an increase in sales and profits. Moreover, the incorporation of different cultural elements into the design can help promote cultural diversity and appreciation among customers and team members [15],[16].

In summary, the use of Moku-Zogan technique in cross-cultural design entrepreneurship presents both challenges and opportunities. To overcome the challenges, it is crucial to understand and appreciate different cultural backgrounds and to communicate effectively with team members. By doing so, it is possible to create unique designs that appeal to customers from different cultural backgrounds while promoting cultural diversity and appreciation.

2.4 Recommendations for the effective application of Moku-Zogan technique in cross-cultural design entrepreneurship

Here are some recommendations for the effective application of the Moku-Zogan technique in cross-cultural design entrepreneurship:

- i. Understand the technique: Before incorporating the Moku-Zogan technique into your designs, it's important to understand the technique and its history. Moku-Zogan involves hand-cutting wood into decorative shapes and inlaying them into carved grooves or holes on a wooden body, and can include inlaying materials such as shells, stones, and metals. By gaining a deeper understanding of the technique, you can develop a greater appreciation for its unique characteristics and how it can be effectively utilized in design entrepreneurship.
- ii. Explore cross-cultural influences: One of the benefits of using the Moku-Zogan technique in cross-cultural design entrepreneurship is the opportunity to incorporate diverse cultural influences into your designs. By exploring the cultural backgrounds of the different

- materials used in the technique, as well as the cultural traditions surrounding the technique itself, you can develop a more nuanced approach to incorporating Moku-Zogan into your designs.
- iii. Foster collaboration: Cross-cultural design entrepreneurship involves collaboration between designers from different cultural backgrounds, and effective collaboration can help to create more innovative and culturally sensitive designs. By fostering an environment of collaboration and open communication, you can ensure that different perspectives are taken into account and that the unique strengths of each collaborator are utilized.
 - iv. Experiment with materials: While Moku-Zogan traditionally involves inlaying wood into wood, it can also include the inlaying of other materials such as shells, stones, and metals. Experimenting with different materials can help to create more unique and visually interesting designs, while also providing opportunities for cross-cultural exploration.
 - v. Embrace creativity: Finally, it's important to embrace creativity when utilizing the Moku-Zogan technique in cross-cultural design entrepreneurship. By allowing for experimentation and exploration, you can develop designs that are truly innovative and reflect a deep understanding of both the Moku-Zogan technique and the cultural traditions surrounding it.

3 Literature Review

This study will employ a review approach to examine the effectiveness of Moku-Zogan in design entrepreneurship. A review approach involves the systematic analysis of existing literature, research studies, and relevant materials to gain insights into a specific topic or phenomenon. In the context of assessing the effectiveness of Moku-Zogan in design entrepreneurship, the review will involve the comprehensive examination of prior research, case studies, and practical experiences related to the application of Moku-Zogan in design and entrepreneurship. The researchers will gather and analyze information from a wide range of sources, including academic journals, books, reports, case studies, and online resources. By synthesizing and critically evaluating the existing body of knowledge on Moku-Zogan in design entrepreneurship, this review approach aims to provide a comprehensive overview of the potential benefits and challenges associated with the use of Moku-Zogan in this context.

The review will include an analysis of various aspects, such as the historical and cultural significance of Moku-Zogan, its relevance to design entrepreneurship, and any existing success stories or challenges faced by entrepreneurs who have incorporated Moku-Zogan into their ventures. Additionally, the review will explore consumer perceptions and market trends related to products utilizing Moku-Zogan techniques. By adopting a review approach, this study aims to offer valuable insights and a holistic understanding of the potential of Moku-Zogan in cross-cultural design

entrepreneurship, based on the existing body of knowledge and experiences documented in the literature.

This study will use a qualitative research method, specifically a review approach, to examine the effectiveness of Moku-Zogan in design entrepreneurship. The review approach is a specific type of qualitative research methodology that focuses on exploring a single phenomenon in-depth. In the context of examining the effectiveness of Moku-Zogan in design entrepreneurship, a case study approach could involve examining one or more examples of entrepreneurs who have used Moku-Zogan in their designs and analyzing their experiences, challenges, and successes. This approach could help provide a deeper understanding of the potential benefits and drawbacks of using Moku-Zogan in design entrepreneurship.

While a designer and an entrepreneur can indeed be the same person, they represent distinct roles within the context of this study. A designer primarily focuses on the creative aspects of generating innovative and aesthetically pleasing design concepts, often specializing in crafting unique visual or functional elements. An entrepreneur, on the other hand, centers on the business aspects, such as identifying market opportunities, managing resources, and scaling a venture to ensure financial viability and growth. While some individuals may possess skills and interests that align with both roles, the study intentionally sought to involve participants who excel in both design and entrepreneurship separately, allowing for a comprehensive exploration of the Moku-Zogan technique's potential impact on cross-cultural design entrepreneurship. By involving participants with this background, the study aimed to obtain a well-rounded perspective on the potential of Moku-Zogan in this context. The interviews were transcribed and analyzed using thematic analysis, which involves identifying recurring themes and patterns in the data. The researchers also observed the participants as they worked on Moku-Zogan projects and analyzed the finished products. These observations were used to supplement the interview data and provide a more comprehensive understanding of the potential of Moku-Zogan in design entrepreneurship.

Overall, the study's findings suggest that Moku-Zogan has significant potential in cross-cultural design entrepreneurship. The technique's emphasis on craftsmanship and attention to detail aligns with the values of many consumers and can provide a unique selling point for designers and entrepreneurs. Additionally, the use of traditional techniques can add a sense of authenticity and cultural significance to a product, making it more attractive to consumers.

3 Conclusion

In conclusion, this study aimed to thoroughly review the potential of the Moku-Zogan technique within the country of cross-cultural design entrepreneurship. The study was driven by a multifaceted agenda, seeking to assess the advantages and obstacles associated with employing the Moku-Zogan technique in the context of cross-cultural

design entrepreneurship. Its broader objective was to discern strategies for fostering cultural diversity and fostering an environment of mutual appreciation by seamlessly integrating diverse cultural elements into design practices. A significant facet of the study was to underscore the market potential of the distinctive and intricate designs emanating from this technique, effectively attracting a diverse spectrum of customers and thereby fueling heightened sales and profitability.

Theoretically, this study contributes by shedding light on the Moku-Zogan technique's viability as a conduit for cross-cultural design entrepreneurship, serving as a reference point for future research exploring the synergy between design innovation and multicultural business strategies. From a managerial standpoint, the insights from this study can guide industry practitioners in optimizing their design practices for cross-cultural appeal, ultimately enhancing market penetration and fostering sustainable growth.

However, it is important to acknowledge a limitation in the scope of this study. The focus remained centered on exploring the historical and contemporary trends of Malaysian furniture design, without delving into the intricacies of the manufacturing process that underpin the Moku-Zogan technique. Furthermore, the study's reliance on predominantly secondary sources raises a concern regarding the comprehensiveness of the insights obtained, potentially leaving certain aspects of the industry's current state unaddressed.

In light of these findings and limitations, future studies could take a more in-depth approach by investigating the technological advancements that are reshaping the furniture manufacturing landscape and assessing their implications for Malaysian furniture design. Furthermore, there is a promising avenue for research into how the burgeoning global emphasis on sustainability is shaping the contours of Malaysian furniture design and how the industry is adapting to align with this growing trend. The potential for cross-border collaboration between Malaysian furniture designers and their international counterparts remains an unexplored area that could yield innovative designs rich with diverse cultural influences.

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