E-BOOK OF EXTENDED ABSTRACT

THE 14TH INTERNATIONAL INVENTION, INNOVATION & DESIGN COMPETITION 2025

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Organized by:

Office of Research, Industry,
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DESIGN DEVELOPMENT OF LOCAL RATTAN PRODUCTS IN TRANGSAN VILLAGE, INDONESIA, BASED ON *MINGEI* CRAFT

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ABSTRACT

Trangsan Village, located in Sukoharjo Regency, Central Java, is recognized as the second largest rattan craft center in Indonesia. However, the current rattan product design process tends to follow external market demands and global trends. This shift has reduced the role of local rattan crafters as original creators. In reality, the originality rooted in local values and hereditary skills is essential for preserving cultural sustainability. The expression of cultural identity is a crucial aspect of the creative process, especially when viewed through the lens of the Mingei Craft approach. This approach seeks to strengthen the distinctive character of Trangsan's rattan products while involving local artisans as active participants in the design process. The primary aim of this research is to develop rattan product designs based on the Mingei approach. This approach emphasizes local aesthetic values and encourages rattan crafters to play a central role in the creative process, rather than merely acting as executors of external ideas. The research methodology employed is Participatory Action Research (PAR), which involves direct participation of rattan crafters in every stage of design development. Design Thinking is also applied to ensure that the solutions are based on empathy, user needs, and local context. The findings of this study led to the creation of four unique rattan handicraft products, each developed by different crafters from Trangsan Village. These products were adapted to meet market demands while maintaining their original functional and aesthetic values. This research demonstrates how cultural identity and local craftsmanship can thrive in harmony with contemporary design practices.

Keyword: Design Development, *Mingei* Craft, Rattan Craft, Local, Trangsan Village

1. INTRODUCTION

Trangsan Village, located in Sukoharjo Regency, Central Java, has great potential as the second-largest rattan craft center in Indonesia. However, serious problems arise in the product design process. Currently, the designs produced tend to follow the demands of outside clients and trends circulating on the internet, so products with original ideas from local crafters are increasingly rare. Originality can reflect the integrity of the crafters in terms of creativity and the core of culture. Ideas born from experience, local values, and hereditary skills create products that are not only functional but also culturally meaningful. In accordance with the thoughts in the article *'Flowering of the Total Person'* by Naoto Suzuki and Kiyoshi Miyazaki (2008), individual development occurs when a person is given the space to express their cultural identity and values through the creative process. Basically, local culture and individuals are one of the main design elements in the development of local culture-based design.

Therefore, local culture-based design development and active community participation are important strategies in preserving traditional crafts. Combined with the Mingei approach, which is rooted in the philosophy of appreciating beauty in folk works, it can be a relevant method to be applied in Trangsan Village. Through this approach, the creation process not only emphasizes the result but also values the process and cultural context of the maker. By developing rattan products based on the Mingei approach, crafters in Trangsan are supported to re-appreciate local values, revive traditional techniques, and be actively involved in the design process.

2. METHODOLOGY

This research focuses on the design development of local rattan products in Trangsan Village by adopting the Mingei craft philosophy as a conceptual foundation. The Mingei approach, which emphasizes aesthetic values, was chosen to strengthen the identity and character of Trangsan Village rattan products. For data collection, the "Participatory Action Research" (PAR) method is used, making local crafters active subjects in every stage of the design. This approach allows for direct interaction, joint exploration of ideas, and the creation of solutions that are relevant to local needs. In the meantime, the product design process is carried out using the Design Thinking method, with an empathy-based creative process, problem definition, ideation, prototyping, and testing. The combination of the PAR method, Design Thinking, and the Mingei approach is expected to produce innovative rattan product designs based on local meaning.

3. FINDINGS

Rattan Stool

1. Crafter's Name : Mr. Pungky Pratama
2. Rattan Type : *Manau*
3. Dimensions : 37 x 22 x 42 cm

Figure 1. Design development of rattan stool

The rattan chairs developed by the crafters use the bending technique, which is a technique of curving the rattan with hot steam so the rattan becomes flexible and easy to shape. This technique has become a signature technique for crafters because it has a high level of difficulty. The rattan chair was inspired by the king's crown and has undergone several design developments to make it more perfect.

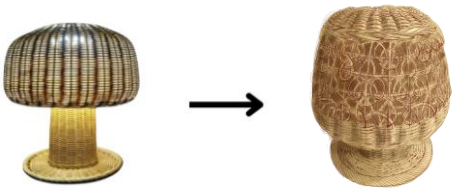
Glass Coaster

1. Crafter's Name : Mr. Sardimin
2. Rattan Type : *Pitrit*
3. Dimensions : 8-9 x 4 cm

Figure 2. Design development of glass coaster

The type of weaving in this product is a development of the *tebah* mattress pattern. *Tebah kasur* is a traditional tool for cleaning mattresses of dust by patting them on the surface of the mattress. The *tebah kasur* tool is in the form of three stacked flat circles of rattan with a rattan handle. The woven pattern was developed into a long and flexible pattern so that it can be formed in a circle to cover the bottom of the glass.

Bed Lamp

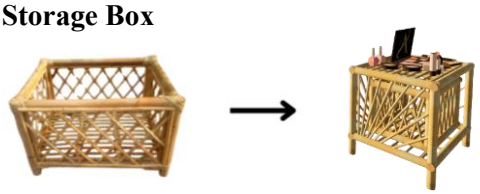


1. Crafter's Name : Mr. Sardimin
2. Rattan Type : *Pitrit*
3. Woven : *Tokek*
4. Dimensions : 25 x 25 x 30 cm

Figure 3. Design development of bed lamp

This sleeping lamp product is a development of ideas from crafters inspired by the name of Njamur village (*Jamur*: Mushroom), with the hope that the light from this lamp can shine on Njamur village so that it will always prosper. The product uses a woven *tokek* (gecko) pattern to have a cavity so that the light released by the lamp is bright enough for a bed lamp.

Storage Box



1. Crafter's Name : Mr. Bambang
2. Rattan Type : *Mandola* and *jawit*
3. Dimensions : 40 x 30 x 30 cm

Figure 4. Design development of storage box

This product is a design development of a clothes basket made by craftsmen; its primary function is to store items. The design has been modified by reducing its size and adding a variation in the form of a storage rack to hold the basket, making the overall appearance more organized. The decorative rattan pattern on this product highlights the creativity of the crafters in applying their decoration techniques, featuring a unidirectional horizontal weave combined with a fan-shaped embellishment.

4. CONCLUSION

The design development demonstrates that the Mingei approach is rooted in a philosophy that values the beauty of folk works—products that are functional, simple, and reflective of local cultural values. This aligns with the ideas presented in the article *"Flowering of the Total Person,"* which supports the strengthening of product identity while empowering artisans as creators of original ideas drawn from experience, local values, and hereditary skills. This design development employs Participatory Action Research (PAR) and Design Thinking methods, in which crafters are directly involved in each stage of the design process. As a result, the designs produced are expected to be not only innovative but also grounded in local meaning.

Through this collaborative process, four innovative and culturally rich rattan products were developed: the rattan stool by Mr. Pungky, featuring a distinctive bending technique inspired by the symbolic form of a royal crown; the glass coaster by Mr. Sardimin, which adapts the traditional mattress slump pattern into a functional coaster design; the bed lamp, also by Mr. Sardimin, incorporating a woven structure that resembles a mushroom—symbolically linked to the village of Njamur; and the storage box by Mr. Bambang, a redesigned clothes basket with a smaller size and added drawers for better organization.

This design development has successfully positioned crafters as active creators of functional and aesthetically pleasing rattan products that retain strong local cultural values. It is hoped that this approach will continue to support the cultural sustainability and creative growth of crafters in producing original and meaningful works.

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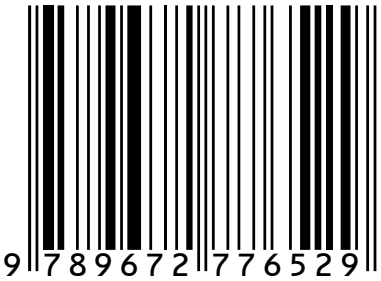

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