



Product Development using Rattan as an Alternative Material in Padang West Sumatera

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Abstract: *This investigation involved micro, small and medium enterprises (MSMES) engaged in home furniture manufacturing services. The conventional method used by these craftsmen usually uses tools that are easily available around us, using a woven or plaited system. Commonly used materials include Manau, bamboo, ropes and nails. This work is also said to pose a risk, because rattan, if it has been scraped or thinned to make it flexible, can endanger the craftsman. However, there are complaints from craftsmen who say that nowadays not many people want to use furniture made from handicrafts or from natural materials. People who have used a lot of home furniture made from various materials such as plastic, glass and others. In making this craft, a heating system is also used to heat the Manau with fire so that it can be easily bent to form parts of the craft framework.*

Introduction

Rattan crafts, originating from the vine commonly found in tropical forests, particularly in Southeast Asia, have become notable for their artisanal quality. Indonesia, a leading producer of rattan, stands out in the global market due to the unique properties of this material, which blends natural beauty with strength and flexibility. These characteristics make rattan an ideal medium for crafting various products, such as the renowned rattan chairs, which exemplify intricate weaving techniques that demand significant skill and craftsmanship (Malik et al., 2023). The production process not only showcases the aesthetic qualities of rattan but also its long-lasting durability, as properly maintained rattan furniture can retain both functionality and appeal for years. Its use in home decor highlights its versatility, making it a popular choice for both indoor and outdoor settings.

In Indonesia, the cultural and economic importance of rattan is deeply rooted, particularly in regions such as Kalimantan, Sulawesi, and Sumatra. Here, local artisans are central to preserving traditional crafting methods while simultaneously contributing to sustainable development. Supporting these craftsmen through programs aimed at design innovation and technical advancement is vital for the growth of the industry. Such initiatives not only bolster their economic well-being but also help ensure that rattan products continue to be valued in both domestic and international markets (Amalia et al., 2024). The environmental advantages of utilizing rattan, which grows rapidly in tropical climates, further underscore the need to advocate for sustainable harvesting practices. As global demand for eco-friendly and sustainable products increases, rattan crafts are in a prime position to meet contemporary design needs while maintaining traditional craftsmanship (Hassan et al., 2020; Rahman, 2019).

Vibrant rattan crafting communities thrive throughout the Nusantara, playing a crucial role in maintaining traditional weaving and crafting techniques that have been handed down through generations. These skills are typically acquired informally through hands-on experience, where younger artisans learn by working alongside experienced craftsmen. This practical approach helps ensure the continuation of essential techniques, such as careful material handling, detailed design work, and intricate weaving patterns. Mastery of these skills is vital, as crafting with rattan requires precision and attention to detail to turn raw materials into both functional and artistic pieces. Moreover, rattan artisans often blend traditional methods with modern design trends, creating a harmonious fusion of heritage and contemporary style (Farhas, 2020). This integration keeps rattan crafts relevant in today's market while honoring their historical roots. However, these communities encounter challenges, including the necessity for sustainable rattan sourcing and the increasing competition from synthetic alternatives. Therefore, promoting natural rattan products is crucial not only for preserving the craft but also for fostering environmentally friendly practices.

To address these challenges, supporting sustainable harvesting practices is paramount. Rattan grows abundantly in tropical forests and, when harvested responsibly, does not harm the environment. The push towards sustainability aligns with a global trend favoring eco-conscious products. As interest in sustainability rises, rattan crafts are well-positioned to attract a broader market by offering environmentally responsible products without sacrificing quality or style. The ongoing effort to sustain and grow the rattan industry is multi-faceted. It involves fostering innovation in design and production techniques, promoting sustainable sourcing, and supporting the craftsmen whose skills bring these products to life. By creating platforms for artisans to showcase their work and access new markets, the long-term viability of rattan crafts can be ensured, benefiting both the craftsmen and the environment.

Nonetheless, the dedication to their craft fosters a strong sense of identity and cultural pride among the craftsmen. In this way, rattan weaving not only contributes to the local economy but also plays a vital role in maintaining cultural heritage and promoting environmental sustainability (Mina et al., 2023). By supporting these communities and their craftsmanship, Indonesia can ensure that the rich tradition of rattan weaving continues to thrive and be appreciated both locally and globally, preserving a unique aspect of its cultural fabric. Rattan craftsmen in Indonesia face numerous challenges that threaten the sustainability of their

craft, with one of the primary issues being access to raw materials. Although rattan grows abundantly in tropical forests, acquiring high-quality rattan has become increasingly difficult. This challenge is compounded by the effects of climate change and rampant deforestation, which lead to the depletion of natural habitats where rattan thrives (Wismoyo et al., 2023). Over-exploitation of forests for other resources also limits the availability of rattan, making it harder for artisans to source the raw materials they need to maintain their craft. Furthermore, regulatory barriers and the complexity of sustainable harvesting practices can limit access to these vital resources, leaving craftsmen at a disadvantage. In addition to raw material shortages, rattan craftsmen must navigate fierce market competition. Mass-produced rattan or synthetic alternatives, often manufactured in large-scale factories, flood the market with cheaper but lower-quality products. These industrially produced items appeal to price-sensitive consumers, making it difficult for small-scale, traditional craftsmen to compete, even though their handcrafted rattan products are of superior quality and durability (Latte & Manan, 2022). This competition puts downward pressure on prices, leaving artisans with slim profit margins and limited market reach. In order to survive, many craftsmen are forced to innovate and diversify, blending traditional methods with contemporary designs or collaborating with designers to create unique, high-end products. Moreover, there is a growing global demand for sustainable and eco-friendly goods, which presents an opportunity for rattan craftsmen to capitalize on their use of natural, renewable materials.

However, without adequate support in the form of government policies, access to sustainable rattan sources, and enhanced market visibility, these challenges will continue to stifle the growth and preservation of the rattan craft industry in Indonesia (Siagian et al., 2023). To remain competitive in a rapidly changing market, rattan craftsmen must embrace innovation and adapt to contemporary design trends while maintaining their cultural heritage. By introducing fresh ideas and modern aesthetics into their work, these artisans not only cater to evolving consumer preferences but also enhance the appeal of rattan products in both local and international markets. Rattan crafts are deeply embedded in local culture, often reflecting regional motifs and traditional techniques that tell a story of heritage and artistry (Achmad et al., 2023). As global awareness of sustainability increases, rattan crafts find themselves at the forefront of consumer interest. Modern consumers seek products that are not only visually appealing but also environmentally friendly, positioning rattan as a material with tremendous potential. Rattan craftsmen have the opportunity to capitalize on this trend by emphasizing the sustainable nature of their craft, promoting the durability and timelessness of their products (Sari et al., 2022).

Truly thrive, these artisans need comprehensive support systems, including the preservation of rattan forests, which are vital for sustainable sourcing. Training programs aimed at young craftsmen can ensure that traditional skills are passed on, while collaboration between artisans, designers, and government entities can enhance the quality and competitiveness of rattan products. Furthermore, promoting rattan in both local and international markets will be crucial for expanding their reach and securing better economic outcomes for these communities. Rattan crafts, with their unique blend of beauty, functionality, and cultural significance, form an essential part of the economic and cultural heritage of Southeast Asia (Fajri Rahman, 2024).

Continued investment in this sector, through support and promotion, will not only preserve traditional craftsmanship but also enable its evolution, ensuring that rattan crafts remain valued and appreciated for generations to come.

The purpose of this research is to explore the challenges and opportunities faced by traditional rattan craftsmen in Indonesia, focusing on sustainable sourcing, market competitiveness, and the preservation of cultural heritage. This study aims to analyze the impact of environmental and economic factors on the rattan craft industry, assess the effectiveness of current policies and support systems, and identify innovative strategies for enhancing the industry's growth and sustainability. By examining the intersection of traditional craftsmanship and modern consumer demands, the research seeks to provide actionable insights for stakeholders, including artisans, policymakers, and industry leaders, to promote the long-term viability and global recognition of Indonesian rattan crafts.

Research Methods

The research utilized a qualitative approach, conducting in-depth interviews with key stakeholders in the rattan chair crafting industry, particularly artisans known for their skills in this field. The interviews sought to obtain comprehensive insights into the entire manufacturing process of rattan chairs, detailing each stage from constructing the chair frame to the final painting and varnishing. Participants, including the owner of the MSME, shared their firsthand experiences regarding the techniques and tools used, as well as the safety measures implemented during production. This study aimed to explore the various crafting methods in the industry by engaging with artisans from a region renowned for their rattan chair craftsmanship.



Figure 1. Rattan chair making craft

Next, in our interview, we involved one of the employees or owner. During the discussion, the shop owner gave an explanation about making chairs from rattan. The following are the methods that were explained or taught to those of us who interviewed.

Stage 1:

The first step in making a chair craft is making its chair frame first. To form the chair frame can be curved, the thing that must be done is to heating manau with fire to a certain degree of pliability.

Stage 2:

After that, the heated manau is bent until form the parts of the chair craft framework.

Stage 3:

Once all the parts of the shell are formed. Step Next, connect all the parts the frame uses nails so that it becomes one and form the frame of the chair. In Nailing section- part of the frame, you have to hit it quite slowly connected frame parts are not cracked.

Stage 4:

The next step, make straps for connecting the chair frame with the manau the smaller size to shape the body chair. In forming the binding rope, it must be tied properly and firmly so that when used the strap does not break easily.

Stage 5:

The next step, making the chair body with smaller/cut manau. Then held together using existing straps made. Efforts are made to fasten the chair body with the chair frame must also be tight and correct so that the chair body does not easily come loose and is sturdy.

Stage 6:

The final step is painting/varnishing. Giving process This paint/varnish aims to beautify the results of chair crafts. Apart from that, the process of applying paint/varnish also makes crafts Chairs are durable, don't rot easily and aren't eaten by termites.

The use of non-hazardous materials significantly decreases the risk of accidents in the crafting process while promoting a safer and more environmentally friendly workspace (Akmal Abdullah et al., 2020). By avoiding tools and materials that pose fatal risks, many individuals are drawn to learning this craft, which primarily employs manual tools such as hand saws, chisels, and hammers to minimize electrical energy usage and lower carbon emissions. These manual tools offer better quality control and include options like hand drills or clamps that rely on human power, making them more eco-friendly.

Result and Discussion

The first thing we did was an interview with the MSME owner. In this research, the shop owner explained in detail the sequence of steps taken in making chairs from rattan using one of the techniques, namely wickerwork. The following section explains the steps the shop owner explained. The selection of materials is a fundamental step in the rattan chair-making process, as it directly impacts the chair's quality, durability, and aesthetic appeal. Rattan, a tropical vine known for its strength and flexibility, is the primary material used in crafting these chairs. Artisans typically look for high-quality rattan poles, which should be firm yet pliable enough to be woven without breaking. Various grades of rattan are available, with younger

poles being more flexible and older ones offering greater strength (Kusuma et al., 2023). In addition to rattan, other materials may be necessary, such as manau, a type of rattan used for tying, and natural finishes like varnish or oil for preserving the wood and enhancing its visual appeal. The craftsman must also consider any additional decorative elements that may be included in the chair design, such as cushions or fabric upholstery. Choosing sustainably sourced rattan is crucial not only for the integrity of the craft but also for environmental sustainability, as it ensures that the forests remain healthy and productive. By prioritizing high-quality, sustainably sourced materials, artisans can create beautiful and functional pieces that stand the test of time while contributing to the preservation of their cultural heritage.

Once the materials are selected, the next step is constructing the chair frame, which serves as the backbone of the furniture piece. The process begins with measuring and cutting the rattan poles to the desired lengths, which will form the legs, seat, and backrest of the chair. Precision is key in this step, as accurate measurements ensure stability and comfort. The poles are then assembled using a series of joints and connections, where the artisans skillfully weave the rattan strands to create a sturdy structure. This is often done using a method called lashing, where the thinner strands of rattan are used to secure the joints tightly. Artisans pay close attention to detail during this process, ensuring that each part of the frame fits perfectly and is well-balanced. The overall design can vary based on the style of the chair, whether it be traditional or contemporary, but the underlying principles of stability and durability remain constant. This step is crucial because a well-constructed frame not only influences the chair's functionality but also its overall aesthetic. Once the frame is completed, it is checked for strength and stability before moving on to the next stages of crafting, ensuring that the foundation is solid for the subsequent processes (Meilany & Winario, 2024).

Bending rattan is a critical technique used in the chair-making process, allowing artisans to create curved shapes that add elegance and comfort to the chair design. The bending process begins by heating the rattan poles, which increases their pliability. Traditionally, this is done by placing the rattan over a heat source, such as steam or hot water, for several minutes until it becomes soft and flexible. Alternatively, some craftsmen may use an open flame to heat the rattan, although caution is required to avoid burning or damaging the material. Once heated, the rattan is carefully removed from the heat source and immediately bent to the desired shape. This requires skill and precision, as the rattan must be manipulated gently to prevent it from cracking or breaking. The artisans often use a mold or template to ensure that the bend is uniform and consistent, which is particularly important for the chair's armrests or backrest. After bending, the rattan is typically secured in place with clamps or weights to maintain the shape while it cools and sets. This step is vital not only for aesthetics but also for ensuring that the chair provides ergonomic support and comfort to users. Mastering the art of bending rattan enhances the chair's overall design and reflects the craftsman's expertise (Sanivo et al., 2023).

After heating and bending the rattan to achieve the desired curves, the next step involves integrating these bent pieces into the chair frame. Artisans carefully position the bent rattan sections, such as the backrest and armrests, into the pre-constructed chair frame, ensuring that they align perfectly with the structure's design. This integration requires a keen eye for detail, as the aesthetics and functionality of the chair depend on how well these components fit

together. Once the bent rattan is positioned, artisans use additional rattan strands to secure the joints, weaving them through the frame to create a seamless connection. This weaving process not only reinforces the structural integrity of the chair but also adds a decorative element to the design. Craftsmen may employ various weaving patterns, which can reflect traditional motifs or contemporary styles, further enhancing the chair's visual appeal. The attention given to this step is crucial, as it determines the overall stability and strength of the chair. Once the bent rattan is secured and the frame is fully assembled, the chair undergoes a thorough inspection to ensure that all parts are securely attached and that the structure meets the desired standards of quality and durability (Najoan et al., 2015). This meticulous process showcases the artisan's skill and dedication to producing a functional piece of art that is both beautiful and enduring.

Once the frame is assembled and the rattan bent into shape, the next crucial step is tying the components together using manau, a specific type of rattan known for its strength and flexibility. This tying process is essential for ensuring that the chair maintains its structural integrity and remains sturdy over time. The craftsman begins by cutting lengths of manau to the required size, which will be used to secure various joints and connections within the chair. The tying technique often involves a combination of lashing and knotting, where the manau is wrapped tightly around the joints to create a firm bond between the rattan pieces (Farhas, 2020). This step requires precision and skill, as the artisan must ensure that the manau is not only tight enough to hold the structure together but also aesthetically pleasing. The resulting woven patterns can add a decorative touch to the chair, reflecting the artisan's creativity and style. Additionally, tying the chair with manau provides added strength, making the chair more resilient to wear and tear. After completing the tying process, the craftsman inspects each joint to confirm that the chair is stable and secure. This attention to detail in the tying process not only enhances the chair's durability but also showcases the traditional techniques that have been passed down through generations of rattan craftsmen (Suryanatha et al., 2024).

The final step in the rattan chair-making process involves painting and drying, which adds the finishing touches to the piece and enhances its visual appeal. Once the chair frame is fully assembled and tied securely with manau, artisans carefully prepare to apply a protective finish. This process begins by sanding the surface of the chair to create a smooth texture, ensuring that any rough edges are smoothed out for a polished look. The craftsman then selects a suitable paint or natural finish, such as varnish or oil, which not only enhances the chair's color but also provides protection against moisture and environmental factors. Applying the finish requires careful attention, as it must be evenly distributed to avoid drips or uneven patches. Some artisans choose to use eco-friendly paints or finishes, aligning with the growing demand for sustainable products in the market. After the application is complete, the chair is left to dry in a well-ventilated area, allowing the finish to cure properly. This drying process is crucial, as it ensures that the paint adheres effectively and creates a durable surface that will withstand everyday use. Once dried, the chair is inspected for quality, ensuring that the finish is smooth and that the overall aesthetic meets the artisan's standards. This final step not only elevates the chair's appearance but also encapsulates the hard work and dedication that went into its creation, culminating in a beautiful, functional piece that reflects the rich tradition of rattan craftsmanship.



Figure 2. Steps in making rattan chairs

Preserving the craft of rattan chair-making is essential for maintaining cultural heritage and ensuring the sustainability of this traditional art form. One effective strategy is to hold workshops and courses for local craftsmen, enabling them to learn new techniques that enhance efficiency and product quality while still respecting traditional methods (Beddu et al., 2021). These educational initiatives not only equip artisans with modern skills but also foster a sense of community and collaboration among craftsmen. Additionally, building a strong brand identity for traditional rattan products can significantly impact their marketability. By effectively storytelling—highlighting the origins, cultural significance, and intricate manufacturing processes of rattan chairs—artisans can attract consumers who value authenticity and cultural narratives. This approach resonates particularly well with a growing demographic of consumers who prioritize sustainability and ethical consumption in their purchasing decisions (Meyer et al., 2020). Furthermore, leveraging social media and online platforms can expand the reach of these stories, connecting artisans with a global audience that appreciates handcrafted goods. By integrating modern marketing strategies with traditional craftsmanship, the rattan chair industry can thrive, ensuring that this unique cultural heritage is preserved and appreciated for generations to come. After careful research there are also several positive and negative impacts caused by this rattan , like:

Improper management of rattan planting can lead to significant environmental consequences, most notably deforestation. As demand for rattan products increases, there is a tendency to clear new land for cultivation without considering sustainable practices (Syarifuddin et al., 2022). This practice not only depletes existing forests but also reduces biodiversity, as many species rely on these ecosystems for their habitat. The loss of trees disrupts the natural balance of flora and fauna, leading to diminished populations of various species and potentially driving some to extinction. Moreover, deforestation contributes to soil erosion, as tree roots that once held the soil in place are removed, leading to degraded land that is less suitable for future cultivation. This erosion can result in sedimentation in waterways, further harming aquatic ecosystems and affecting local communities that depend on these

resources for their livelihoods. Additionally, the reduction of forest cover negatively impacts carbon sequestration, exacerbating climate change by increasing atmospheric carbon dioxide levels (Food and Agriculture Organization, 2020). Therefore, it is essential to adopt sustainable practices in rattan cultivation that balance economic interests with environmental conservation, ensuring that natural ecosystems remain intact and resilient for future generations (Moh. Alif Fahli, 2024).

Sustainable rattan cultivation plays a crucial role in forest conservation and environmental health. When managed properly, rattan plantations can serve as a means to restore degraded areas while providing an alternative livelihood for local communities. Unlike traditional logging, which often results in permanent forest loss, rattan can be harvested selectively, allowing the surrounding forest ecosystem to thrive. This practice not only preserves biodiversity but also enhances carbon sequestration, as rattan's growth contributes to reducing atmospheric CO₂ levels (Angelsen & Kaimowitz, 2001). Furthermore, well-managed rattan plantations can provide habitat for various species, promoting ecological balance and supporting local wildlife. By integrating rattan cultivation into agroforestry systems, farmers can create sustainable economic opportunities while maintaining the integrity of forest ecosystems. This harmonious approach to land use not only benefits the environment but also empowers communities to engage in conservation efforts, fostering a sustainable future for both rattan production and forest health (Apriyani, 2023).

Uncontrolled rattan harvesting poses significant risks to soil stability, particularly in steep or sloped areas where the removal of vegetation can lead to severe soil erosion. When rattan is harvested indiscriminately, the protective cover provided by the plants is lost, leaving the soil vulnerable to the forces of wind and water. This erosion can degrade soil quality, reducing its fertility and making it less capable of supporting future vegetation (Hoffmann et al., 2015). Implementing good harvesting practices is crucial to mitigate these effects. Techniques such as selective harvesting, maintaining buffer zones, and minimizing machinery use can help preserve the integrity of the soil and surrounding ecosystem. By ensuring that harvesting practices are sustainable, not only can soil erosion be controlled, but the fertility of the land can also be maintained, allowing for continued agricultural productivity and biodiversity conservation in the region. Therefore, educating rattan harvesters on sustainable practices is essential for balancing economic needs with environmental protection (Nasrulloh & Sutisna, 2022).

Rattan processing often involves the use of chemicals to preserve or whiten the material, ensuring its durability and enhancing its aesthetic appeal. Chemicals such as sodium hypochlorite or hydrogen peroxide are commonly used for whitening rattan, making it more visually appealing for consumers (Siregar et al., 2019). Additionally, preservatives like chromated copper arsenate (CCA) may be applied to protect rattan from pests and decay, prolonging the lifespan of the final products. However, the use of these chemicals raises environmental concerns, particularly regarding their potential impact on local ecosystems and human health. Improper disposal of chemical-laden wastewater can contaminate soil and waterways, posing risks to both wildlife and communities that depend on these resources. Therefore, it is vital for rattan processors to adopt environmentally friendly alternatives and

implement best practices that minimize chemical usage while maintaining product quality. This approach can help ensure the sustainability of rattan processing and contribute to the overall health of the environment (Abdul, Dewi, Siti, 2022).

The production of rattan crafts inevitably generates waste, including both unused rattan residues and liquid and solid by-products from the processing stages. Unused rattan pieces, often left over after crafting, can contribute to environmental degradation if not properly managed (Husniar et al., 2023). Liquid waste, such as chemical effluents from bleaching or preserving treatments, poses significant risks to local ecosystems if discharged untreated, potentially contaminating soil and waterways. Solid waste, including packaging materials and rattan shavings, can accumulate and lead to pollution if not recycled or disposed of responsibly. However, these waste materials also present opportunities for innovation; for instance, unused rattan can be repurposed into new products, such as biodegradable packaging or furniture components, while liquid waste can be treated using eco-friendly methods before disposal (Wismoyo et al., 2023). By adopting sustainable waste management practices, rattan producers can minimize their environmental footprint and contribute to a circular economy, promoting both ecological health and resource efficiency in the industry. The rattan craft industry has the potential for significant environmental impacts, both positive and negative. With good management, negative impacts can be minimized and even converted into environmental benefits through sustainable practices and a holistic approach to planting, harvesting and production (Rifai et al., 2020) .

Challenges and Solutions in the Rattan Craft Industry

Rattan craftsmen in Indonesia face numerous challenges, primarily related to regulatory barriers and environmental changes. Strict regulations on rattan harvesting and export, while essential for environmental conservation, often create bureaucratic hurdles that limit artisans' access to high-quality raw materials. These regulations, coupled with the effects of climate change—such as deforestation and habitat loss—further exacerbate raw material shortages. Additionally, market competition from mass-produced and synthetic alternatives poses a significant threat to traditional craftsmen, as these products are cheaper and often more accessible to price-sensitive consumers. To address these challenges, comprehensive strategies are needed. Simplifying regulatory processes and providing artisans with training on sustainable harvesting practices can enhance access to quality raw materials. Furthermore, government and private sector partnerships should focus on promoting Indonesian rattan crafts through certification programs that emphasize sustainability and quality, helping differentiate traditional products in competitive markets. Investing in design innovation and collaboration between artisans and modern designers can also add value to traditional crafts, enabling them to cater to contemporary tastes and secure a higher market share.

Global Perspective on the Rattan Craft Industry

The rattan craft industries in the Philippines and Vietnam offer valuable insights that can be leveraged to strengthen Indonesia's position in the global market. In the Philippines, for example, government-backed initiatives provide extensive support to local craftsmen, including subsidies for sustainable raw material sourcing and programs to improve technical skills.

Similarly, Vietnam's rattan industry benefits from a strong export-oriented approach, supported by robust marketing strategies and a well-established global supply chain. Both countries have successfully integrated traditional craftsmanship with modern technology, enabling them to meet international standards while preserving their cultural heritage. Indonesia can adopt similar practices by enhancing market visibility through digital platforms, creating strategic alliances with international buyers, and offering training programs focused on blending traditional techniques with contemporary production methods. By learning from these countries' best practices, Indonesia can elevate its rattan industry, ensuring it remains competitive while maintaining its unique cultural identity.

Conclusion and Recommendation

Rattan chair crafts, deeply rooted in Southeast Asian culture, especially in Indonesia as one of the largest rattan producers, blend tradition and innovation to create functional and aesthetically valuable furniture. Rattan's flexibility, strength, and durability make it an ideal material, with the crafting process requiring intricate skills, from material preparation to weaving. To sustain this industry, it is crucial to implement subsidized training for craftsmen on sustainable harvesting, modern techniques, and innovative designs, supported by financial incentives for replanting and sustainable sourcing. A national branding campaign and digital marketing strategies can boost global visibility, while collaborations between artisans, designers, and stakeholders can drive innovation. These initiatives will not only preserve cultural heritage but also ensure the economic and environmental sustainability of Indonesia's rattan craft industry.

References

- Abdul, Dewi, Siti, W. (2022). Tantangan Perkembangan Perbankan Syariah Di Indonesia. *Jurnal Tabarru': Islamic Banking And Finance*, 5(2), 355.
- Achmad, G. N., Yulianti, S. D., Sharaha, M., Priandana, M. A., Khatimah, N., Hidayat, A. N., M., N. J., Handayani, Y. T., Aditya, D. F., & Dary, R. W. (2023). Pengembangan Usaha Mikro, Kecil Dan Menengah Dalam Rangka Pertumbuhan Ekonomi Di Desa Sekitar Ibu Kota Nusantara. *Jurnal Riset Pembangunan*, 6(1), 51–65. <https://doi.org/10.36087/jrp.v6i1.181>
- Akmal Abdullah, Mauli Kasmi, Karma, & Ilyas. (2020). Aplikasi Teknologi Program Pengembangan Produk Unggulan Daerah (PPPUD); Produksi Ikan Hias Karang Lestari Di Pulau Barrang Lompo, Makassar, Sulawesi Selatan. *Dinamisia: Jurnal Pengabdian Kepada Masyarakat*, 4(4), 708–714. <https://doi.org/10.31849/dinamisia.v4i4.4122>
- Amalia, N., Ghoniyah, I., Widiyanti, R. N., A, D. M. P., Hidayat, R., & Ikaningtyas, M. (2024). Menyusun Strategi Bisnis Berbasis Teknologi: Membangun Keunggulan Kompetitif Di Era Digital. *Economics And Business Management Journal (EBMJ)*, 3(1), 1–10.
- Apriyani, M. E. (2023). Pemberdayaan Ibu-Ibu PKK Bunulrejo Dalam Kerajinan Kreatif Rumah Tangga Serta Pemasaran Online. *Jurnal Pengabdian Kepada Masyarakat*, 5(3), 1–14. <https://www.ncbi.nlm.nih.gov/books/NBK558907/>
- Aulia, D. P., Puspita, A. A., & Malasan, S. L. (2022). Penggunaan Istilah Lokal Perajin Pada Proses Penyamaan Imagery Dalam Kolaborasi Perajin Dan Desainer: Sebuah Kajian Literatur. *Jurnal Desain Indonesia*, 6.

- Beddu, M., Nurbakti, R., & Natsir, U. (2021). Analisis Pemanfaatan Media Sosial Terhadap Pengembangan Usaha Industri Rumah Tangga Era New Normal. *YUME: Journal of Management*, 4(3), 378–391. <https://doi.org/10.37531/yume.vxix.532>
- Fajri Rahman, A. I. (2024). Perhutanan Sosial: Pengelolaan Hutan Nagari (HN) Berbasis Masyarakat Di Pesisir Selatan. *Journal of Forest Science Avicennia*, 07(01), 65–76. <https://doi.org/10.22219/avicennia.v7i1>.
- Farhas, R. J. (2020). Focus Group Discussion Pemetaan Potensi Pasar Dan Teknologi Produk Industri Provinsi Riau Pada Balai Pengembangan Produk Dan Standadisasi Industri Kota Pekanbaru. *Jurnal Pendidikan Dan Konseling*, 2(2). <http://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/6787>
- Husniar, F., Sari, T. R., Safira, A. M., & Kamila, E. R. (2023). Strategi Pengembangan Produk Baru Sebagai Upaya Dalam Meningkatkan Daya Saing Perusahaan. *Jurnal Riset Manajemen Dan Akuntansi*, 3(2), 22–34. <https://doi.org/10.55606/jurima.v3i2.2156>
- Kusuma, A. H., Muhaemin, M., Mayaguezz, H., & Effendi, E. (2023). Rehabilitasi Ekosistem Terumbu Karang Menggunakan Terumbu Buatan Di Perairan Desa Kunjir, Kecamatan Rajabasa, Kabupaten Lampung Selatan, Provinsi Lampung. *Jurnal Pengabdian Fakultas Pertanian Universitas Lampung*, 2(1), 280. <https://doi.org/10.23960/jpfp.v2i1.7216>
- Latte, J., & Manan, A. (2022). Pengaruh Desain Produk Terhadap Keputusan Pembelian Produk Tas Anyaman Purun Di Kecamatan Haur Gading Kabupaten Hulu Sungai Utara. *Inovatif Jurnal Administrasi Niaga*, 4(1), 35–44. <https://doi.org/10.36658/ijan.4.1.92>
- Malik, K., Washinton, R., Ranelis, R., & Fajrina, R. M. (2023). PKM Kerajinan Rotan Dalam Pengembangan Desain Produk Untuk Mencapai Selera Pasar Di Kota Padang. *SELAPARANG: Jurnal Pengabdian Masyarakat Berkemajuan*, 7(1), 491. <https://doi.org/10.31764/jpmb.v7i1.13798>
- Meilany, M., & Winario, M. (2024). Strategi Pemasaran Pada UMKM Berbasis Kuliner (Studi Kasus: UMKM Siti Hajar Kota Pekanbaru). *Jurnal Teknik Industri Terintegrasi*, 7(1), 156–165. <https://doi.org/10.31004/jutin.v7i1.23842>
- Mina, Z. M., Ramadhan, M. S., & Yuningsih, S. (2023). Pemanfaatan Limbah Meubel Sebagai Material Alternatif Plat Cetak Block Printing Dengan Inspirasi Motif Islam Masjid Menara Kudus Untuk Perancangan Produk Fashion. *Proceeding of Art & Design*, 10(3), 3819–3840.
- Moh. Alif Fahli. (2024). Strategi Pengembangan Daya Saing Industri Menggunakan Analisis SWOT Pada Industri Rotan Di Kabupaten Cirebon. *Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(28), 183–191.
- Najoan, O., Lengkong, F., & Tulusan, F. (2015). Efektifitas Sistem Komputerisasi Pada Kinerja Pegawai Di Kecamatan Sonder Olivia. *Jurnal Administrasi Publik UNSRAT*, 2(30), 10.
- Nasrulloh, S. F., & Sutisna, A. (2022). Pengembangan Learning Management System Perguruan Tinggi Berdasarkan Permendikbud No. 3 Tahun 2020. *Nuansa Informatika*, 16(3), 60–67. <https://journal.uniku.ac.id/index.php/ilkom/article/view/4991>
- Rifai, M. A., Candra, Muzdalifah, & Kudsiah, H. (2020). Pemberdayaan Istri Kelompok Pembudidaya Ikan Patin Dengan Pengembangan Produk Fillet. *Jurnal Pengabdian Masyarakat*, 4(3), 369–379.
- Sanivo, D., Seni, P., Jurusan, R., Seni, P., & Padang, U. N. (2023). Anyaman Pandan Di Nagari Paninggahan Kecamatan Junjung Sirih Kabupaten Solok. *Jurnal Humaniora, Sosial Dan Bisnis*, 1(4), 342–359.
- Sari, D. R., Shellamitha, D., Pratama, Y., Hertati, L., Hendarmin, R., Syafri, L., & Munandar, A. (2022). PKM Pengembangan Produk Lokal Singkong Menjadi Keripik Singkong Rasa Balado Khas Desa Petanang Program MBKM KKN Tematik. *Prima: Portal Riset*

Dan Inovasi Pengabdian Masyarakat, 2(1), 11–19.
<https://doi.org/10.55047/prima.v2i1.326>

- Siagian, Y., Syah, A. Z., & Irawati, N. (2023). Pemberdayaan Anggota PKK Melalui Pelatihan Pembuatan Dan Pemasaran Kokedama Secara Digital Di Desa Sei Silau Timur. *Jurnal Pengabdian Kepada Masyarakat Mitra Kreasi Cendekia*, 1(2), 72–75.
- Suryanatha, I. B., Ningrum, W. S., Ahriyati, Hapsari, I., & Ryamizardin, D. (2024). Inovasi Produk Rotan Serta Peningkatan Skill Digital Marketing Berbasis E-Commerce Dan Media Sosial Dalam Menunjang Local Pride. *Jurnal Pembelajaran Pemberdayaan Masyarakat (JP2M)*, 4(4), 816–825. <https://doi.org/10.33474/jp2m.v4i4.21119>
- Syarifuddin, U., Ilyas, G. B., Misbahuddin, Mustafa, H., & Sani, A. (2022). Strategi Pengembangan Usaha