

Application of Ulos Woven Wastra as Creative Industry Product for Lake Toba Tourism

Enrico,^{1*} Astrid Kusumowidagdo,¹ Melania Rahadiyanti¹

¹*Ciputra University, Surabaya, Indonesia*

*Corresponding email: enrico@ciputra.ac.id

Abstract

The Lake Toba region is recognized as one of the areas designated as a Super Priority Tourism Destination (SPTD) by the Ministry of Tourism and Creative Economy of Indonesia. The creative market, serving as the destination and icon of tourism in Lake Toba, needs to be developed for international and domestic visitors through various strategies, making research on this matter a pressing concern. Through the development of creative markets, it will enhance the products utilizing local textiles, thereby preserving the local cultural heritage and providing cultural experiences that can attract the interest of both domestic and international tourists. The aim of this research is to realize a model strategy for enhancing the sense of place and creative industry products in the Lake Toba creative market. The research method was conducted in two phases. The first was qualitative research to obtain the essential elements of the traditional cloth as a unique local sense of place, which could be adopted for the second phase, practice-based research through creative product design, utilizing key facts and sources from the first phase. The Qualitative research phase conducted interviews with driving actors in Ulos village, observation, documentation, and literature study, while the design research was carried out using research-led practice with stages of the design thinking process. The results of the first phase of research were the mapping out of traditional cloth characteristics and their various motifs. Meanwhile, the second phase would produce creative products based on traditional clothes to be produced as unique to that particular area. These products are expected to increase the competitive advantage of Ulos village as a sustainable tourism object.

Keywords: creative industry, ulos fabric, Lake Toba, fashion products, interior products

Introduction

Creative markets that offer local, creative product commodities as souvenirs play a crucial role in supporting tourism areas by enhancing the overall tourist experience, bolstering the local economy, and fostering unique relationships between tourists and the destinations they visit. Creative products serve as tangible representations of visitors' travel experiences, providing intrinsic value as concrete evidence of visiting different places and showcasing the unique aspects of the societies and cultures visited (Hung et al., 2014; Wu et al., 2022). The availability of creative products and traditional-style tourist equipment encourages strong links between tourism and other industries in the local economy, thereby encouraging economic growth (Wilson et al., 2001).

Creative tourism experiences, which often involve purchasing local products, influence tourists' memories, satisfaction, and behavioural intentions. Authentic product development meets the increasing demand from visitors and contributes to the overall tourism experience (Hung et al., 2014; Wu et al., 2022). These products serve as media that describe the physical setting, activities, and traditions of a tourism destination, thereby enabling tourists to construct a narrative of their tourism experience (Ross et al., 2017). A memorable souvenir will support and strengthen memories of a place, or what is also known as a sense of place, especially for international tourists.

Apart from that, products and market areas. Another important factor is that the active participation of souvenir traders in promoting tourism has a significant impact on the number of tourists visiting an area. Increasing tourism awareness among souvenir traders can attract tourists to visit the destination, thereby supporting economic growth (Dias et al., 2021). This, in turn, contributes to the tourism market and its ecosystem, ultimately benefiting the tourism sector.

With the development of Indonesian tourism, creative markets also deserve significant attention, especially those located in super-priority areas. One such market is the creative market near a local tourist destination in the Lake Toba area, which requires proper management. It is essential not only to develop and manage the facilities, but also to ensure that the products sold play a crucial role in enhancing the value and sustainability of tourism. Dawood and El-Din (2019) revealed that creative products based on local uniqueness play a vital role in enriching tourists' experiences and memories of their journey.

Designing creative products for both international and domestic visitors presents numerous challenges. The challenges associated with creative products in the Lake Toba region are multifaceted, encompassing issues related to authenticity, cultural representation, and environmental sustainability. The product is expected to reflect a destination's unique cultural heritage, offering travelers a tangible memento of their travel experience. However, in some cases, existing products may lack authenticity due to the prevalence of mass-produced goods in the market, which may reduce the cultural significance of the product (Paraskevaidis & Andriotis, 2015). This lack of authenticity can break the connection between creative products, souvenirs, and the destination they represent, thus potentially reducing the value of the memorabilia for visitors (Paraskevaidis & Andriotis, 2015). Several other problems were identified during the observation of the Lake Toba creative market, including the homogeneousness and lack of variety in souvenir products found at every selling location, with no products based on traditional cloths/wisdom, which would be easy to carry and package. Aside from this, products were found not to be keeping pace with lifestyle developments, thus

requiring a more in-depth exploration to produce creative, traditional cloth-based products that are also trendy.

Moreover, the commercialization of souvenirs can lead to cultural commodification, wherein traditional items are produced primarily for commercial purposes rather than for the preservation and promotion of cultural heritage (Azarya, 2004). This can result in the exploitation of local artisans and misrepresentation of cultural practices, ultimately undermining the authenticity of the souvenirs and damaging the cultural integrity of the destination.

This applied research addresses a research gap. Several previous studies discussed the Ulos village area in terms of tourism (Maleachi et al., 2023; Parinduri et al., 2024; Tarigan et al., 2024), from the aspect of the sense of place element of ulos village (Sudarwani et al., 2022a; Sudarwani et al., 2022b; Tobing et al., 2021), in terms of artisans and social life (Fitriani & Rahmawati, 2022; Subrata & Damanik, 2019), from the character of ulos fabric (Alamo et al., 2021; Tinambunan, 2023; Putri et al., 2024) and actors in the management of Ulos Village (Sagala, 2023; Nainggolan, 2024; Akbar et al., 2022). However, there has rarely been an integrated research into the unique elements of local traditional cloth linked to product implementation.

Aside from determining the characteristics of local traditional cloth, the advantage of this research lies in the effort to design creative products that may enhance the identity of Ulos village, Lake Toba. This research is also a follow-up to previous studies on the sense of place, focusing on novelty as a means of developing creative products based on local traditional cloth and in accordance with the needs of Lake Toba community partners.

Method

This research was conducted by implementing two approaches; firstly, using a qualitative approach, with the Lake Toba creative market and Ulos fabric as research objects. The second phase is the design research phase.

In the first phase, this research was conducted by collecting data through on-site observation, documentation, and interviews with economic actors and traditional cloth artisans in Lake Toba. The data collection instrument, which included interviews, focused on three aspects: experience gained from the Lake Toba tourism area, products and displays, culture, and social interaction activities with local Lake Toba economic actors.

In this research, one approach to assessing validity in qualitative research is triangulation, which involves converging information from various sources to strengthen findings and increase research credibility. Triangulation serves as a qualitative research strategy to test validity by ensuring consistency and reliability through the integration of diverse perspectives and data sources. In this research, triangulation of data sources was employed across three aspects, and mutual clarification was used to ensure the validity of the results.

Additionally, participant validation can be employed as a strategy to enhance the trustworthiness of research and address ethical concerns (Lindheim, 2022). By involving participants in the research process and incorporating their feedback and perspectives, researchers may increase the validity of their findings and build a stronger foundation for their conclusions. After interviews with several actors in Ulos Lake Toba Village, the results will be reviewed by participants involved in the process, and feedback will be obtained.



Figure 1. Interview and observation on-site

The next stage is research-led practice (Smith, 2009), which involves implementing research through design. This is carried out after data analysis, utilizing a mood board and design brief as a guide and limitation for design development, resulting from the research. A research-based design process is employed, as described by Barron (2021) and Steagall & Grieve (2023). This type of research makes it possible to study the sequence of design processes that naturally arise during implementation, providing a more comprehensive understanding compared to selective or controlled research (Croughan-Minihane et al., 2000).

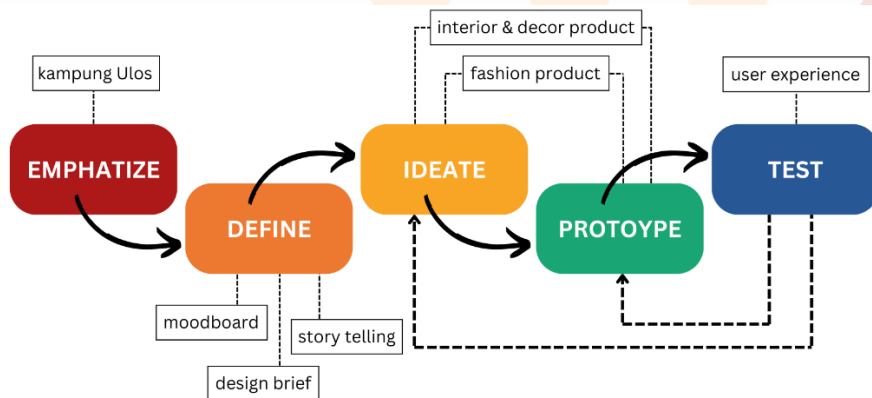


Figure 2. The design process

Result and Discussion

1. Qualitative Phase

The Ulos woven fabric is a traditional textile type that serves as a prominent feature in the Lake Toba area and holds significant appeal for tourism purposes. Through on-site observations in the Hutaraja area, it is evident that the Ulos fabric predominantly produced in the region features Karo Batak motifs, which are highly favoured by buyers (Siburian, 2017). Initially, ulos functioned as clothing; however, ulos now have a symbolic function (Tinambunan, 2023). Each ulos has its properties and associations with certain conditions. The presence of ulos fabric in ceremonies or cultural events organized by the local population is a unique expression of identity. Ulos fabrics are used in various events with special motifs and decorations. This ulos fabric is believed to symbolize love, establishing a relationship between tribes and communities (Desiani, 2022).

The colours of the Ulos fabric themselves carry symbolic meanings; red is associated with courage, black signifies wisdom, and white denotes purity. In addition to these colours, other colours such as yellow, purple, and green are also commonly found in a variety of colours and motifs. Ulos are made using simple spinning machines. The primary material is yarn spun from cotton. To give the basic colour, ulos use yarn dyed with natural dyes. The process takes months; hence, the price can be costly.

Typically, the process of making ulos weaving involves several steps, including spinning cotton / Mamipis using a tool called a Sorha. Then the colouring process. After these two processes, the yarn is coloured. Following this is the Garip process, where the yarn is strung in a standard size and then re-colored. These processes are rarely observed in the corridor area of the Ulos village for display, which is usually viewed by tourists starting from

the Ani process of thread weaving, followed by the Tonun/weaving process, the Sirat for binding the Ulos cloth, and finally the Manirat to complete the cloth. In addition to the bolon house, the striking colours of the ulos, and the impression of being crowded, are a special attraction (Siahaan, 2019).

This textile product serves as a focal point in the display areas, allowing buyers to witness firsthand the weaving process conducted by artisans. Such an experience enriches the tourist visitation in the Lake Toba area. Incorporating Wastra into the luxury tourist experience can also elevate the appeal of contemporary lifestyle products. Every stakeholder plays a crucial part in creating exceptional experiences that reflect the creativity and legacy inherent in Wastra. Destinations can appeal to tourists seeking culturally immersive experiences by emphasizing Wastra's cultural value within the upscale category. (Iloranta & Komppula, 2021).



Figure 3. Ambience of Ulos Creative Market Ulos Village Huta Raja

2. Design Research Phase

Based on the observation and data collected, the Ulos woven fabric will be developed into fashion and lifestyle products to create trendier textile-based product variations. By going through the design thinking phases, the research analysis at the definition phase is visualized in the form of a mood board, which will produce a narrative and design guide for fashion products, including clothing and lifestyle items, as well as home decor such as cushion covers, table runners, and wall displays.

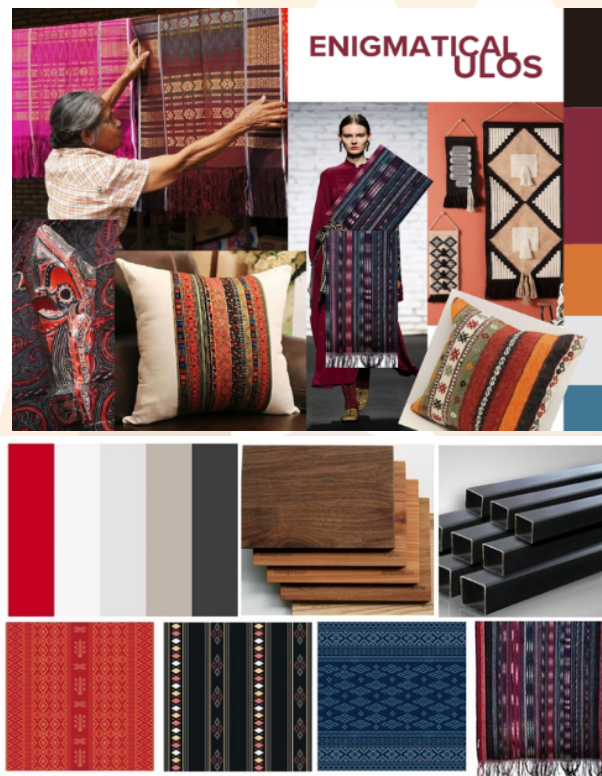


Figure 4. Moodboard

A mood board, as a visual narrative, is intrinsically linked to user experience because it encompasses storytelling elements that involve users' emotions and shape their journey, visualized through images. Empirical studies have shown that user satisfaction can be influenced by various factors, including emotional and pragmatic elements, as well as confirmation of user expectations (Chien et al., 2016). The use of storytelling on mood boards is not only a method to enhance creativity but also a means to achieve deeper relationships with users, which ultimately contributes to user satisfaction (Peng, 2017).

Instructions for decor and interior products involve several important aspects for application, including material quality and combination, motifs and colours, precision in craftsmanship, sourcing and production, as well as usage. For materials, utilizing high-quality Ulos fabric paired with matching materials according to the colour mood, combined with canvas and linen fabrics, is recommended. Ulos motifs, such as Ragi Hotang, Ragi Boru, and Ragi Pangondian, can be used, ensuring proper visual presentation by paying attention to their placement. Regarding the use of displays in the Ulos village creative market, the research implies design considerations related to arrangement, cultural themes and materials, product grouping, seating facilities, and weaving demonstrations.



Figure 5. Décor and interior product design recommendation

Regarding fashion products, considering the interests of visitors, the character of the products is determined by an exotic style, aligning with the ambiance of the Lake Toba area. This ensures that buyers acquire an experience they can take home by either observing or wearing fashion products made with Ulos fabric. In the design/ formulation process of this fashion product collection, we also pay attention to the application of design principles, so that the product designs are seen as one harmonious collection. The repetition of the ulos motif and detailed elements in the design, as well as the principle of emphasis, are the first attractions for visitors, prompting them to perceive the need to purchase more than one product to truly experience the Lake Toba area. Apart from paying attention to aesthetic design factors, the standard materials used will be a combination of linen and cotton. The comfort factor will also always be taken into consideration, as it is a commercial product.

From the results of on-site observations, the ulos fabrics most popular with visitors are the Ragi Hotang and Mangiring ulos types. These Ulos feature a minimalist motif in the form of lines and a contrasting colour combination, with a dominant red colour, making them a fabric that is easily matched and combined with clothes or other style products. In addition, the two ulos have their own philosophical meanings and cultural value. Ulos Ragi Hotang means a bond of affection, and Ulos Mangiring symbolizes prosperity and good luck. The cultural meaning of the ulos motif may result in a personally strong emotional connection with the user, leading to positive experiences for each user. This is why the design of fashion products in this research attempts to apply these two types of ulos as variations in blends with linen and cotton fabrics.



Figure 6. Fashion product design recommendation

The design recommendations involve utilizing more than 50% ulos in each look, a decision guided by data revealing that prospective consumers prefer garments with substantial use of traditional cloth rather than merely incorporating it as minor details. However, this approach will likely position the garments within a price range accessible only to middle- to upper-class consumers or international tourists who prioritize quality and cultural experiences. Handmade ulos, rich in sensory elements, can be leveraged to create emotionally resonant user experiences in fashion products. The varying textures, resulting from the unique weaving techniques of each artisan, serve as a design medium that plays with light and shadow, adding depth and dimension to the garments.

Specifically, products made from fabric with various characteristics must be well accommodated, and it is crucial to provide seating facilities and weaving demonstrations, as this is the experience visitors seek when they visit the creative market of Ulos village. The effectiveness of visual narratives in user experience design lies in their ability to convey complex information in an intuitive and emotionally resonant manner, thereby enhancing visitor engagement and satisfaction.

Thus, this design implements the symbols, colours, and textures of Ulos Village. This integration demonstrates a deep understanding of local culture and heritage, resulting in a

design that is aesthetically pleasing and culturally meaningful. The application of literary elements not only enhances the visual appeal of the design but also serves as a tribute to the rich traditions of Ulos village. This approach not only creates a unique and meaningful experience for users but also serves as a valuable tool for preserving and promoting cultural heritage (Desiani, 2022).

Conclusion

This research has produced detailed design implications that will be realized in various creative products, including fashion items, interior and decorative products, as well as display products. The recommendations for fashion products include incorporating elements of Ulos village's culture into contemporary ready-to-wear fashion products, paying attention not only to design aesthetics but also to aspects of the senses, both visual and tactile. The following recommendation for decorative and interior products is to incorporate visual elements and philosophy from the culture of the Ulos village, focusing on the quality and matching of materials, motifs, and colors, as well as the precision of workmanship, source, and manufacture, and the intended use of the product. The key innovation of this research lies in its application of design solutions rooted in a deep exploration of Ulos village culture within the Lake Toba region. This approach highlights the sense of place and leverages local potential to create products that solidify Lake Toba's creative market position.

This research holds value in preserving the local values inherent in the fabrication of Ulos fabric, the sales process, and the integration of Ulos fabric into product development, whether for ready-to-wear fashion products, interior products, or display products, to enhance the Lake Toba Creative Market. Strengthening creative products as elements of the area's sense of place will provide a unique experience for visitors to Ulos village, allowing them to take Ulos products back to their home regions as souvenirs. This research not only focuses on enhancing product value economically, but also considers the sustainability of local culture. This approach can be replicated in collaborations between designers, artists, and communities worldwide. By fostering knowledge exchange and best practices regarding sustainable materials, production methods, and fair-trade principles, such collaborations can contribute to a more responsible and environmentally conscious design ecosystem. This collaborative approach holds the key to unlocking the full potential of the creative industries to drive positive social, cultural, and economic change worldwide. In future research, exploring design applications or "research through design" types of studies could provide valuable insights into design and be beneficial for the development of both creative product design and the broader creative market.

References

- Akbar, A., Harahap, R. H., & Rujiman, R. (2022). Efforts to Develop the Tourism Sector Through the Role of Youth Creativity. *Perspectives* 11(1), 69-76.
- Alamo, E., Eliza, M., Syailillah, G., & MAKNA, D. F. K. (2021). ULOS AT THE PEMATANG SIANTAR BATAK OPERA PRACTICE CENTER (PLOT) IN PEMATANG SIANTAR, NORTH SUMATRA PROVINCE. *Gorga: Fine Arts Journal*, 10 (1), 94. In National Seminar on Quantitative Methods (Vol. 978, pp. 187-194).
- Azarya, V. (2004). Globalization and international tourism in developing countries: marginality as a commercial commodity. *Current Sociology*, 52(6), 949-967. <https://doi.org/10.1177/0011392104046617>
- Barron, L. (2021). The creative influence of history in fashion practice: The legacy of the silk road and Chinese-inspired culture-led design. *Fashion Practice*, 13(2), 275-295.
- Chien, C. F., Kerh, R., Lin, K. Y., & Yu, A. P. I. (2016). Data-driven innovation to capture user-experience product design: An empirical study for notebook visual aesthetics design. *Computers & Industrial Engineering*, 99, 162-173.
- Croughan-Minihane, M., Thom, D., & Petitti, D. (2000). Research interests of physicians in two practice-based primary care research networks. *Journal of Manipulative and Physiological Therapeutics*, 23(3), 221-222. [https://doi.org/10.1016/s0161-4754\(00\)90257-4](https://doi.org/10.1016/s0161-4754(00)90257-4)
- Dawood NAEG, El-Din RMB. The role of souvenirs and handicrafts in achieving tourists' satisfaction "Applied on Luxor City". *Research Journal of The Faculty of Tourism and Hotels Mansoura University*. 2019; 6(6):66-106. <https://doi.org/10.21608/mkaf.2019.107063>
- Desiani, I. F. (2022). Symbols in the Ulos fabric of the Toba Batak Tribe. *Journal of Cultural Studies*, 18(2), 127-137.
- Dias, Á., Rodríguez, M., & Patuleia, M. (2021). Creative tourism destination competitiveness: an integrative model and agenda for future research. *Creative Industries Journal*, 16(2), 180-203. <https://doi.org/10.1080/17510694.2021.1980672>
- Fitriani, L. R., & Rachmawati, D. (2022). Participatory Communication Empowering the Ulos Village Community in developing Ulos as a Revitalization Effort. *News of the Indonesian Communication Scholars Association*, 5(2), 156-167.
- Hung, W., Lee, Y., & Huang, P. (2014). Creative experiences, memorability and revisit intention in creative tourism. *Current Issues in Tourism*, 19(8), 763-770. <https://doi.org/10.1080/13683500.2013.877422>
- Iloranta, R. and Komppula, R. (2021). Service providers' perspective on the luxury tourist experience as a product. *Scandinavian Journal of Hospitality and Tourism*, 22(1), 39-57. <https://doi.org/10.1080/15022250.2021.1946845>

- Lindheim, T. (2022). Participant validation: a strategy to strengthen the trustworthiness of your study and address ethical concerns., 225-239. https://doi.org/10.1007/978-3-030-90769-3_13
- Maleachi, S., Juliana, J., Sianipar, R., & Sitorus, N. B. (2023). TOURISM DEVELOPMENT WITH QUALITY TOURISM APPROACH IN ULOS HUTARAJA VILLAGE. *Jurnal Ilmiah Global Education*, 4(4), 2356-2370.
- Nainggolan, C. R. A. (2024). THE ROLE OF REGIONAL GOVERNMENT IN DEVELOPING THE TOURISM POTENTIAL OF SAMOSIR DISTRICT (STUDY AT ULOS HUTARAJA VILLAGE). *Journal of Politic and Government Studies*, 13(2), 568-582.
- Paraskevaidis, P. and Andriotis, K. (2015). Values of souvenirs as commodities. *Tourism Management*, 48, 1-10. <https://doi.org/10.1016/j.tourman.2014.10.014>
- Parinduri, R. Y., Siregar, B., Batu, F. L., Yanti, N., & Karim, A. (2024). Analysis and Interaction with the Management of the Ulos Hutaraja Village Tourism Area, Lumban Suhi-Suhi Toruan Pangururan Village, Samosir Regency. *UPMI ABDIMAS JOURNAL*, 3(1), 8-16.
- Peng, Q. (2017, May). Storytelling tools in support of user experience design. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 316-319).
- Putri, J., Firmando, H. B., & Simbolon, R. (2024). Batak Ulos as Cultural Heritage in Traditional Ceremonies in the Huta Nagodang Tourism Village, Muara District, North Tapanuli Regency. *Journal of Human Education and Social Humanities*, 2(2), 114-134.
- Ross, D., Saxena, G., Correia, F., & Deutz, P. (2017). Archaeological tourism: a creative approach. *Annals of Tourism Research*, 67, 37-47. <https://doi.org/10.1016/j.annals.2017.08.001>
- Sagala, A. R. (2023). Penta Helix Model in the Development of the Silalahi Beach Tourism Area as a Geopark Caldera in Silahisabungan District, Dairi Regency. View [Http://Eprints.Ipdn.Ac.Id/11335/Akses Pada](Http://Eprints.Ipdn.Ac.Id/11335/Akses%20Pada), 15.
- Siahaan, U. (2019). Toba Batak Traditional House and its Ornaments, Jangga Dolok Village, Toba–Samosir District. *J. SCALE*, 6(2), 24.
- Siburian, T. P. (2017). The Symbolic Meaning of Toba Batak Culture Gorga Ornaments (Doctoral dissertation, Yogyakarta Indonesian Art Institute)
- Smith, H. (Ed.). (2009). Practice-led research, research-led practice in the creative arts. Edinburgh University Press
- Steagall, M. M., & Grieve, F. (2023). Creative practice as research: an undergraduate practice-led project in Communication Design in New Zealand. *DAT Journal*, 8(1), 5-41.
- Sudarwani, M. M., Widati, G., Situmorang, L. B., & Sere, F. (2022). The Beauty of Toba Architecture Living in harmony with the surrounding natural environment. *Local Wisdom Scientific Online Journal*, 14(2), 116-130.

- Sudarwani, M. M., Widati, G., Bintang, S. L., & Simanjuntak, F. S. (2022). Study of Toba Architecture in the Sigumpar Area, Toba Samosir District.
- Subrata, A. G., & Damanik, D. (2019). Factors Affecting Revenue in the Ulos Weaving Home Industry in Pematangsiantar City: Factors Affecting Revenue in Ulos Household Industry in Pematangsiantar City. *Journal of Equinomy* 1(1), 327971
- Tarigan, F. N., Sibuea, N., Elfina, H., Situmeang, M., Bangun, N. B., & Daulay, D. E. (2024). Exploring the Attractions of Samosir Island to Attract Tourists to Visit. *UPMI ABDIMAS JOURNAL*, 3(1), 24-31.
- Tinambunan, E. R. (2023, October). Toba Batak Ulos: Religious Meaning and Implications for Civilization and Aesthetics. In *Forum* (Vol. 52, No. 2, pp. 122-142).
- Tobing, R. R., & Sakti, A. K. (2021, November). Identification of the architectural housing form and the existence of ulos communities in Hutaraja Village, Samosir, North Sumatra, Indonesia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 903, No. 1, p. 012007). IOP Publishing.
- Wilson, S., Fesenmaier, D., Fesenmaier, J., & Es, J. (2001). Factors for success in rural tourism development. *Journal of Travel Research*, 40(2), 132-138. <https://doi.org/10.1177/004728750104000203>
- Wu, J., Zhang, L., Lu, C., Zhang, L., Zhang, Y., & Cai, Q. (2022). Exploring tourists' intentions to purchase homogenous souvenirs. *Sustainability*, 14(3), 1440. <https://doi.org/10.3390/su14031440>