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Content

ANALYSIS OF GRASSROOTS INNOVATION PRACTICE TOWARDS SUSTAINABLE DEVELOPMENT IN MALAYSIA

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Grassroots innovation is an activity that uses multiple resources or indigenous technology to create an innovation more creatively. The innovations are often utilised to improvise the community and environment. The invented product or process is created at the bottom of the pyramid due to necessities, difficulties, and challenges. Malaysia thrives to become a high income developed nation through several initiatives, such as lifelong learning and innovation. Malaysians are encouraged to undertake education programmes to enhance knowledge and skills. These grassroots activities need to be discovered as they affect income and social values. The local grassroots innovators have difficulty commercialising the innovations due to a lack of skills, knowledge, and technology. This study aimed to identify the grassroots innovations, the process in developing innovation, and complement the innovation towards commercialisation. Local innovators adapt to the new product development process as a mutual understanding and for grassroots sustainable development.

Keywords: Grassroots innovation, New product development (NPD) process, Commercialisation, Grassroots sustainable development

1. INTRODUCTION

Grassroots innovation refers to the innovative product, process or service developed by grassroots innovators, usually due to necessities and challenges in life. Malaysia expects employees or human resources to be highly knowledgeable, creative and innovative in line with the government's policy. The indigenous resources and technology at the grassroots levels empower the society and country. According to the Prosperity Vision (2030), Malaysia is committed to achieving sustainable growth concurrently with fair and equitable distribution across income groups, ethnicities, regions and supply chains. The commitment aims to strengthen political stability, enhance the nation's prosperity, and ensure a united society while celebrating ethnic and cultural diversity as the nation-state's foundation.

The grassroots innovation movement seeks an innovation process that is socially inclusive towards local communities concerning the knowledge, process, and outcomes involved (Smith, Fressoli &Thomas, 2014). Point number six stated in the 'Nine Challenges of Malaysia's Vision 2020' discusses establishing a scientific, innovative, forward-looking and progressive society. Society should be a consumer of technology and a contributor to future scientific and technological civilisation (Vision, 2020). The society in this country is expected to be more innovative by 2020, not only as consumers of technology but also contribute to the advancement of technology used.

Grassroots innovation differs from conventional market-based innovations because grassroots innovations are driven by ideological commitment rather than profit-seeking (Seyfang & Smith, 2007). Grassroots innovation generates sustainable economic growth, realises social innovation and exposes society to environmental responsibility. Point number eight stated in "17 Goals to Change Our World" discusses decent work and economic growth (Sustainable Development Goals (SDGs), 2015). The 17 goals to transform the world for persons with disabilities parallel to the United Nation's vision for 2030. This group of people create innovation, increase the local community income and enhance social values.

Grassroots innovation is the activity that use multiple resources or indigenous technology to create an innovation more creatively to empower the community. Hilmi (2012) stated that grassroots innovation is a collection of innovations and products, whereas the projects are implemented by those at the bottom of the pyramid and create sustainable development. Many types of products are produced by grassroots innovators, such as recyclable furniture design, low cost of housing development, agriculture products, multipurpose products and vehicles and handicrafts involving community development schemes or programmes.

Ciftci and Walker (2017) asserted that products and innovations practised by grassroots innovators include craft, music instruments, shoes, jewellery, brassware, carpets and others. Grassroots innovation in Malaysia is one of the high impact programmes intended to empower the bottom 40% of the income pyramid (Hashim, 2012). Figure 1, shows examples of products and innovations developed by local grassroots innovators such as traditional instruments, *kompang, gasing, wau* and food processing equipment to be commercialised as an initiative and with support from the Malaysia Innovation Foundation or *Yayasan Inovasi Malaysia (YIM).*

Figure 1: Examples of products and innovation created by Malaysian grassroots innovators (Malaysia Innovation Foundation Gallery, 2016).

2. METHODOLOGY

This study focused on the innovator's role in producing grassroots innovation to adapt to the new product development (NPD) process towards the country's sustainable development. Product commercialisation is a fundamental component to be addressed throughout the NPD process and focuses on extensive exploration of systematic literature studies on grassroots innovation practices. Data were collected from books, papers, journals, documents and other sources. This primary research and literature review is essential to identify and understand the current issues and seek information within grassroots innovation as the world moves towards a technology era.

Data collection included reviewing the attributes of local grassroots innovators, stakeholders, and supporting agencies. The data were extracted from journals and books related to past studies conducted by various researchers and reporting on issues related to grassroots innovation. In addition, data were collected through interview sessions conducted with the Malaysia Innovation Foundation or YIM, the central agency and critical player in the development of Malaysia's grassroots innovation. Researchers linked three main components, namely grassroots innovators, NPD process and commercialisation, from the data collected. According to the primary and

secondary research, the NPD process elements were identified, and conceptual framework approach for local innovators was developed to produce innovations towards commercialisation.

3. PROBLEMS RELATED TO GRASSROOTS INNOVATORS

The grassroots innovators have difficulty commercialising innovations due to a lack of skills, knowledge, and technology. Grassroots innovators need to adapt to the NPD process to complement the innovation by adding value to current output and transforming existing practices. Bhaduri and Kumar (2010) defined grassroots innovators as individual innovators who often undertake innovative efforts and produce innovative products to solve localised problems and generally work outside the realm of formal organisations business firms. According to Seyfang dan Smith (2007), grassroots and niche innovations differ from mainstream and business reforms as they practise different kinds of sustainable development. Some grassroots innovators are unwilling to engage or get involved with commercial entrepreneurs (Ahmad R., 2011).

The innovation process by grassroots is still focused on traditional methods, and most innovations are not commercialised. Initiatives and support to improve grassroots innovation production are available, but these initiatives are considered new and require time to materialise. Mohamed Salleh and Mohd Daud's (2019) study in the field of grassroots innovators' sustainability in Malaysia is still in an early stage and requires more in-depth research. Figure 2, illustrates the problem faced by local grassroots innovators and the ecosystem involving different agencies.
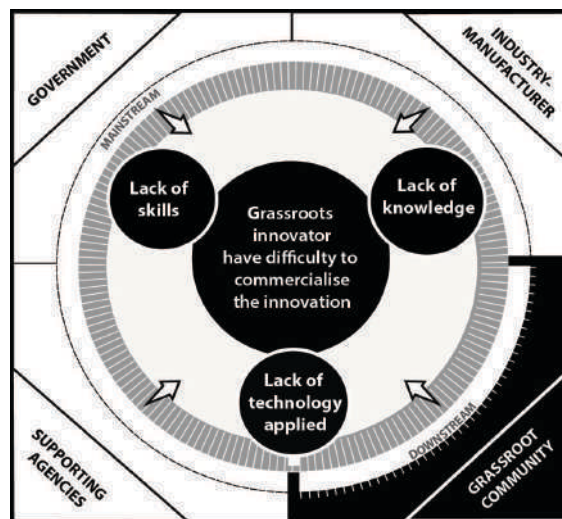

Figure 2: Problems faced by local grassroots innovator.

4. GRASSROOTS INNOVATORS

Hilmi (2012) stated that humans who respond to hardship and difficulties in life could easily become accidental innovators. The profits earned are based on satisfaction from problem-solving. Grassroots innovators are unique because the majority work as farmers and never received formal education or exposed to engineering or related knowledge (Innovation Walk, 2011). In general, roots denote the lower or primary level of people in the community, whereas innovation encompasses creative ideas with added value (Innovation Walk, 2012). The grassroots includes children, youth, women, non-governmental organisations (NGOs), rural communities, and disabled individuals. The grassroots innovators are the assets in the country's sustainable development, and these innovators should be given early exposure and a platform to develop themselves.

Mohamed Salleh and Mohd Daud (2021) stated that the innovator is an individual from rural areas using their creativity of tacit knowledge and traditional skills inherited for generations to produce, enhance, and add value to existing products or services within the limitation of resources to ensure sustainability. In addition, innovators with basic knowledge in design process and management are organised and no longer rely solely on individual skills or thirds parties. According to Seyfang (2009), space is created by values and culture instead of regulation or subsidies and tend to involve ownership structures and operate in the social economy. Grassroots innovators are often relying on voluntary labour or mutual exchange.

Multilevel agency collaboration is critical in sustainable ecosystems consisting of communities, government, manufacturing industry and supporting agencies. The joint effort by Malaysian agencies is led by organisations such as the Malaysia Innovation Foundation (YIM) (2012), an NGO such as the Malaysian Association of Creativity and Innovation (MACRI) (2019), Network of Urban-Rural Innovators (NURI) (2019), a research and academic arm for innovation such as the Institute of Research Management and Innovation (IRMI), University Teknologi MARA (UiTM), (2019) and Innovation Management, University Putra Malaysia (UPM), (2019). The organisations can be pioneers in spearheading the sustainable movement of the grassroots innovator community nationwide (Mohamed Salleh & Mohd Daud, 2019). Community and agencies should participate in the effort to develop inclusive innovation that is organised through activities and programmes, including training and workshop.

The grassroots innovation needs to be improvised comprehensively. The improvisation effort is implemented by the government and major agencies such as Malaysia Innovation Foundation (YIM) through approaches and programmes, including the Mainstreaming Grassroots Innovation (MaGRIs). This programme aims to enhance the

development and commercialisation of grassroots innovation in Malaysia through collaboration among the government, industries and the community. In addition, this programme provides innovation development grants and building opportunities to local grassroots innovators (Article YIM, 2018). Subsequently, the intervention fulfils responsibilities and promotes innovative talents from the grassroots level. The YIM acts as a platform to find, develop and match innovation development funds with a network of more than 4,000 innovators nationwide to promote and cultivate grassroots innovations that have the potential to be commercialized while improving the well-being of the community especially the quality of life of the B40s (*Yayasan Inovasi Malaysia*, 2021).

The grassroots play a significant role in family institution and community and becomes a social unit that provides resources and ensures the continuity of human beings for future generations. National Population and Family Development Boards or *Lembaga Penduduk dan Pembangunan Negara* (LPPKN) encourage promoting and championing innovation produced by grassroots and society members. The National Family Policy (2010) aims to develop prosperous, healthy and resilient families to ensure social stability. The policy also catalyses the awareness and commitment of stakeholders, including every member of society, to achieve the desired goals. The principles applied in National Family Policy (2010) encourages the development of the family. For example, principle number four states that solid family relationships, sharing resources, and mutual responsibilities ensure family well-being. In contrast, principle number five describes knowledge and information as the basis of a prosperous family.

The innovation centres developed by the government allows the grassroots to share ideas and facilities and collaborate to create the innovations because the grassroots have different expertise or field of innovation. According to Wagner and Watch (2017), collaboration importantly underpins "open innovation" and convergence as a trend where disparate sectors and disciplines come together as a means of innovation. Innospace is a community innovation centre established by the Ministry of Science, Technology and Innovation (MOSTI) to assist local communities in developing ideas and prototypes of innovative products (MOSTI Annual Report, 2011). The Innospace contains basic facilities and a centre to provide technical and marketing advice.

The government introduced several initiatives geared towards inculcating entrepreneurial behaviour among Malaysians. According to Hilmi (2012), Malaysians are now encouraged to become entrepreneurs instead of working as employees and become innovators rather than just a user of innovation product or services. Grassroots initiatives tend to operate in civil society arenas and involve committed activists who experiment with social innovation and use greener technologies and techniques in

contrast to the greening of mainstream business (Seyfang &Smith, 2007). Grassroots innovators have the potential to produce products and innovations that can be marketed in the market more effectively through the intervention process. Consequently, knowledge of entrepreneurship is necessary for grassroots innovators to commercialise their products and innovations. Figure.3, displays a flow diagram on the process of grassroots innovation practices in Malaysia.

Figure 3: Flow diagram process for grassroots innovation practices in Malaysia.

5. NEW PRODUCT DEVELOPMENT (NPD) PROCESS

The NPD emphasises the importance of introducing new products in the market for continuous business success. Amue and Adiele (2012) determined that the NPD process is the development of original products, product improvements, product modifications, and new brands through the firm's R&D efforts. Firms develop several activities labelled as NPD to introduce new goods (products or services) in the market. Hence, the NPD refers to the development of original products or product improvements. The critical success of a product and innovation is to fulfil market needs depending on many factors. The NPD process is guided by a new product strategy that aims to align the NPD efforts with the firm's strategic imperatives.

The NPD process is a strategy in marketing to develop a product to be produced and cater for a broader market. This method has been used in companies and industries to ensure the products and innovation produced meet users' needs and

can be marketed widely. The NPD process consists of activities undertaken by firms when developing and launching new products. Bhuiyan (2011) stated that a new product introduced in the market evolves over a sequence of stages, beginning with an initial product concept or an idea that is evaluated, developed, tested and launched. The NPD process has to be adapted to complement the grassroots innovation because the skills are only viewed from the local perspective without applying the actual design process.

The NPD contributes to the companies' growth, influences profit performance, and plays a crucial role as a critical factor in business planning (Bhuiyan, 2011). Society expects the manufacturing industry to improve business performance continuously (Ebarefimia, 2014). All industries strive to operate and compete to expand within the dynamic environment, where NPD is a source of competitive advantage. A new product concept is a statement about anticipated product features (form or technology) that yield selected benefits relative to other products or available problem solutions (Amue & Adiele, 2012). The grassroots are the suppliers of ideas for products, processes and services. The local idea should be commercialised for the local market since innovation entails developing a new method more appropriate for local conditions (Ahmed& Al-Roubaie, 2012).

The Information, Communication and Technology (ICT) today is an innovation form in the Malaysian society accepted as part of new life culture. ICT use in life has several positive impacts on families and communities, explicitly facilitating information retrieval, online services, electronic commerce, and educational management. Grassroots innovators have the opportunity to use online services for businesses and seek various information. Online services, such as online payment and delivery and hosting, including online base business, are categorised as ICT based businesses and also frequently debated (Fuad, Am Bohari., & Hin, 2011). Governments and communities need to redouble efforts to encourage and increase more use of internet-based ICT, such as e-commerce and e-business, among grassroots.

The ICT is a medium to reduce the poverty gap. Besides, ICT is a medium and tool that translate business into economic development in the current world. Science, technology, and innovation have been identified as the key elements and catalysts for economic output, social well-being, innovation, and creativity, as proven in Malaysia's ICT ecosystem (Mohamed Salleh & Mohd Daud, 2021). Based on these rationales, grassroots need to adopt an approach to utilise ICT to empower the community and enable sustainable development.

6. COMMERCIALISATION

Smith and Seyfang (2013) discussed grassroots responses by showing limitations for some extensions of current political, economic and social structures. Grassroots innovation usually involves a network of activists and organisations that produce solutions at the bottom for sustainable development, problem-solving in local situations, and giving importance to the communities' values. However, grassroots innovators have their own skills and green technologies, whereas the skills and knowledge of the community should be constantly enhanced. The development of entrepreneurship and human skills improvement have emerged as two crucial factors for a country to be a world leader in all aspects of life, such as economy, trade, military, technology, and sustainable economic and social development (Fuad, Bohari, & Hin, 2011).

There are four critical and attention groups of technologies essential for socio-economic transformation. According to Rahman (2013), the critical group of technologies include technologies for meeting basic needs (food, water and shelter), quality of life (e.g., education, healthcare, stabilisation of population and environmental stability), wealth creation in support of economic growth and competitiveness, and good governance in the public and private sector. Hence, improving the quality of living through technology and innovation must begin at the grassroots level.

The Research, Development and Commercialisation (RDC) system is crucial for local innovators, particularly developing local communities and delivering global goals. Rahman (2013) acknowledged that Science, Technology and Innovation (STI) formulation must include the STI and RDC system and provide for the total ecosystem to deliver the national STI agenda. Several sectorial policies may be formulated, such as for innovation, commercialisation or research funding once the inclusion is completed. The STI and RDC parallel systems show that grassroots innovators need to commercialise the inventions or the products for sustainable development to align with the national STI agenda.

Sarkar and Pansera (2017) emphasised the future of ecopreneur grassroots innovation globally. Grassroots innovation improvises economic value by combining social and environmental goals or better known as ecopreneur. Entrepreneurs in this field believe that environmentally friendly products and services will be a good combination of business opportunities and act responsibly towards the environment. Various business opportunities exist at the grassroots level for entrepreneurship and support ecopreneurs or focus on environmental

integrity concerns. Grassroots innovators need to realise the importance of commercialisation for their products and innovation to become sustainable.
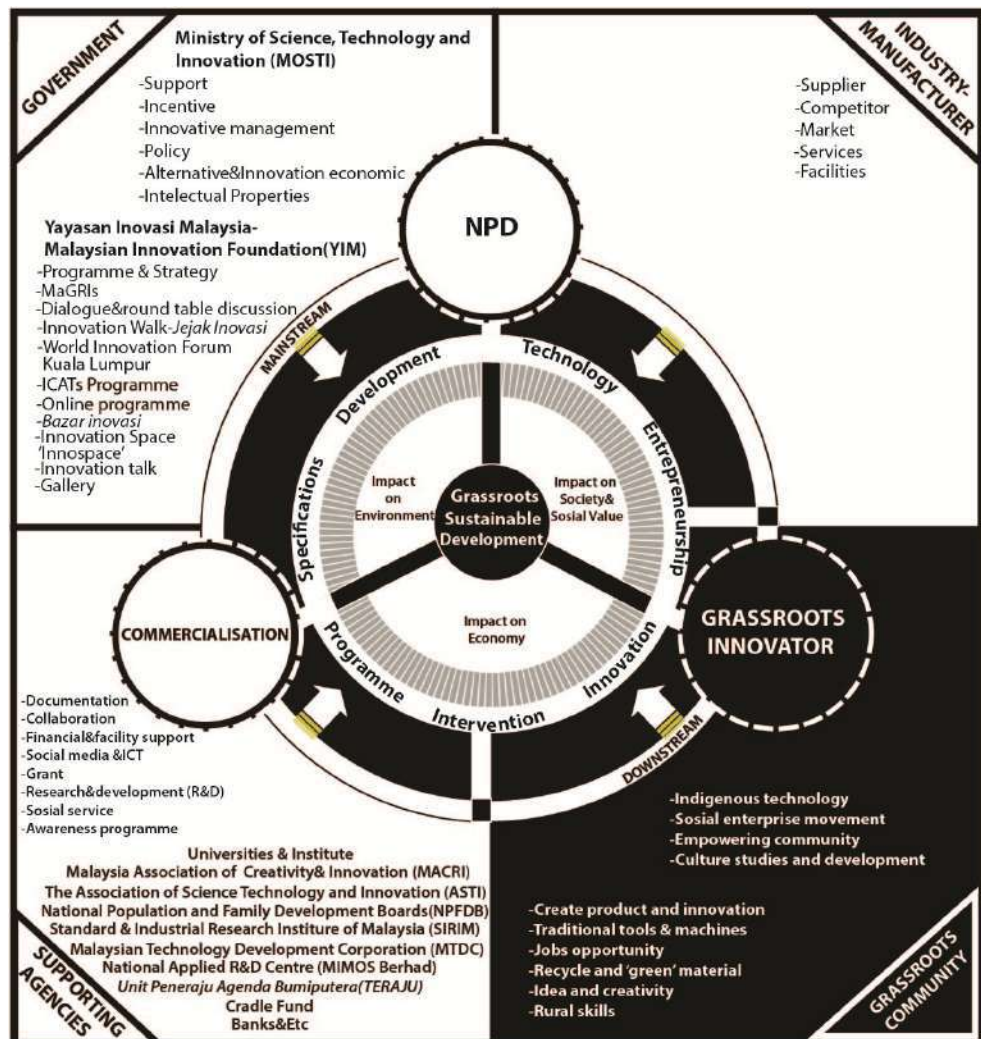
Figure 4: Conceptual framework linkages components among grassroots innovators in Malaysia and the NPD process towards commercialisation.

Figure 4, illustrates the conceptual framework with linkages between components of grassroots innovator, NPD process and commercialisation. Hence, the seven elements are the keywords affecting grassroots innovators on the NPD process, namely innovation, intervention, programme, specifications, development, technology and entrepreneurship. These elements are valuable indicators of grassroots sustainable development.

7. CONCLUSION

In conclusion, the elements of the NPD process in this study are closely related to the understanding of grassroots innovators attributes. They have the potentials to encourage improvement in product commercialisation. This study critically highlights the significance of the NPD process to determine the perfect balance between the innovators' role and the potential of product commercialisation. Local innovators and authorities should work together effectively and ensure that the innovations fulfil the requirements and specifications of market standards in producing products and innovations that meet consumers' needs. The theory of the NPD process demonstrates the balance between the grassroots innovation production process through broad business linkages. Sustainable grassroots development creates meaningful job opportunities, results in grassroots stable development, maintains local values, leads to a self-standing society, and creates high life quality within the environment.

REFERENCES

1. Adrian Smith & Gill Seyfang (2013). Constructing grassroots innovations for sustainability. *Global Environmental Change*, 23, 827–829.

2. Ahmed, A., & Al-Roubaie, A. (2012). Building a knowledge-based economy in the Muslim world: The critical role of innovation and technological learning. *World Journal of Science, Technology and Sustainable Development*, 9(2), 76-98.

3. Amue, G.J. & Kenneth C. Adiele (2012). New Product Development and Consumer Innovative Behaviour: *An Empirical Validation Study. European Journal of Business and Social Sciences*, Vol. 1, No. 6, pp 97-109, October 2012.

4. Andrian Smith, Mariano Fressoli & Hernan Thomas (2014), Grassroots Innovation Movements: Challenges and Contributions. *Journal of Cleaner Production*, Volume 63 (2014) 114-124.

5. Ahmad, R (2013, August 2011). Menjejak Inovasi Akar Umbi. *Utusan Malaysia.*

6. (Article YIM, 2018). Yim Magris, 23 April 2019. Retrieved April 28, 2019, from http://magris.innomap.my/.

7. Bhaduri, S., & Kumar, H. (2010). Extrinsic and intrinsic motivations to innovate: tracing the motivation of 'grassroot' innovators in India. *Mind & Society,* 10(1), 27-55.

8. Ebarefimia. U.S, (2014) New product development process and its impact on business performance in Nigeria. *The Business & Management Review*, Volume 4 Number 4.

9. Gill Seyfang & Andrian Smith, (2007), Grassroots innovation for Sustainable Development: Towards a New Research and Policy Agenda. *Environmental Politics*, Vol. 16, No 4,584-603, August 2007.

10. Hashim, H. (2012, 3 September 2012). Inclusive entrepreneurship for the rakyat, *New Straits Times.*

11. Hazal Gumus Ciftci & Stuart Walker (2017). Design for Grassroots Production in Eastern Turkey through the Revival of Traditional Handicraft. *Design for next 12th EAD Conference Sapienza University of Rome*-12-14 April 2017.

12. Innovation Walk (2011), Malaysia Innovation Foundation-Yayasan Inovasi Malaysia (YIM) & Ministry of Science, Technology and Innovation.

13. Innovation Walk (2012), Malaysia Innovation Foundation-Yayasan Inovasi Malaysia (YIM) & Ministry of Science, Technology and Innovation.

14. Julie Wagner and Dan Watch, (2017). Innovation Spaces: The New Design of Work, The Anne T. and Robert M. Bass Initiative on Innovation and Place making.

15. Mohd Faiz Hilmi (2012). Grassroots Innovation from the Bottom of the Pyramid. Universiti Sains, Malaysia. *Current Opinion in Creativity, Innovation and Entrepreneurship* Volume 1, Issue 2.

16. (MOSTI Annual Report, 2011) Minister of Science, Technology and Innovation-MOSTI, 2011.

17. Nadia Bhuiyan (2011). A Framework for Successful New Product Development. Concordia University (CANADA) JIEM Journal of industrial engineering and management. 2011 – 4(4):746-770.

18. (National Family Policy, 2010). National Population and Family Development Board (LPPKN)-Ministry of Women, Family and Community Development (2010).

19. Nurwahida Fuad, Abdul Manaf Bohari & Dr Cheng Wei Hin (2011), An Exploratory Study on Socio-Economic Status of Malay Women Entrepreneurs in Penang: A Case of ICT-based Business, *Jurnal Intelek* 6(2).

20. Omar Abdul Rahman (2013). The Essential of Science, Technology and Innovation Policy. Academy of Science Malaysia.

21. (Prosperity Vision 2030, 2019), Restructuring Malaysia Development Priorities, Ministry of Economic Affairs, 2019.

22. Mohamed Salleh,S& Mohd Daud, N, (2019). Probing the Influence of internet things (IOT) Usage on the Grassroots innovators' Sustainability: A Malaysian Perspective. *International Journal of Innovation, Creativity and Change*. Volume 7, Issues 4, 2019.

23. Mohamed Salleh,S& Mohd Daud, N,(2021). A New Model of the Framework for the influence of the Internet of Things (IOT) Usage on the grassroots innovators' sustainability. *ASM Science Journal*, volume 14, 2021.

24. Soumodip Sarkar & Mario Pansera (2017). Sustainability-driven innovation at the bottom: Insights from grassroots ecopreneurs. *Technological Forecasting & Social Change*, 114, 327-338.

25. Sustainable Development Goals (SDGs), (2015). Department of Economic and Social Affairs, United Nation.Retrieved April 28, 2019,from https://www.un.org/sustainabledevelopment/

26. (Vision 2020), Malaysia As A Fully Developed Country - One Definition, 23 April, 2019, Retrieved April 28, 2019, from http://www.wawasan2020.com/vision/p2.html

27. Yayasan Inovasi Malaysia (YIM), 2021. Yayasan Inovasi Malaysia Retrieved April 13,2021, https://www.yim.my/en/about/.

VISUAL EXPERIENTIAL IN DIGITAL DOCUMENTATION FOR RURAL TOURISM PROMOTION OF BA'KELALAN, SARAWAK

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This paper aims to share some research information based on the visual experiences during the field trip to Ba'Kelalan, Sarawak. Ba'Kelalan is a traditional village of the Lun Bawang community and is well-known as an eco-tourism area in Sarawak. All the experiences were documented using the digital documentation tools and have been recorded with reference to the formalistic artistic methods; in ensuring the visual effects have the best quality and high artistic value. The results will be discussed based on the implemented process and the impact of digital document preparation through experiential learning theory. Next, this article will provide new ideas and visual insights that can help data enhancement, especially in the promotion of the rural tourism sector.

Keywords: Visual Experiential, Digital Documentation, Rural Tourism, Ba'Kelalan, Lun Bawan

1. INTRODUCTION

Tourism has been a competition for many countries around the globe and variety of initiatives are being used in promoting their own uniqueness or cultures that will contribute to the local economic growth. According to Sarawak Tourism Board (2020), Sarawak has recorded growth on numbers of visitor to the state in 2019, about 4.6 million compared to the year of 2018 recorded 4.4 million visitors. As Sarawak currently is experiencing construction and development of infrastructure including for tourism, proven that it is one of the focuses that are being implemented to provide a better experience for visitors. However, achieving for the development of rural tourism is a challenge itself and more of necessity efforts in promotion as for the growth of the local economy (Mir, 2018).

It has been debated that tourism is having its own challenges specially to maintain the continuity of the liveness in the sector (Mechinda et al., 2010; Omerzel, 2006; Tubey & Tubey, 2014), and as well Ba'Kelalan is facing the pressure since it is also the attractions in Sarawak, Malaysia. The genre of rural tourism is a form of experience-oriented, the sources of the attractions are mostly from natural environment, displaying the lifestyle of local people and participating within the community (Khound, 2013). Such experiences are always being offered by the local and the sources of the attractions from the surrounding itself. To highlight such attractions, some action or appropriate approach should be considered in ensuring the promotion is working, for example photography, poster or video promotion that are created with art formalistic and consisted visual experiential in digital documentation that will help to enhance the rural tourism literation (Edensor, 2018, Edmonston, 1983; Kolb, 2014;). Besides, the place entitled as rural tourism is usually the place often known as 'countryside' (Aref & Gill, 2009; Liu, 2006; Khound, 2013).

Ba'Kelalan also is one of the rural areas in Sarawak, still having internet stability issue or tele-communication barriers as these places are far from the main city or town. As the case of Ba'Kelalan, a rural place that is known for its own eco-tourism, instability of online connectivity is a challenge especially as the mean to utilize digital platform in promoting their services. Ba'Kelalan are populated by the Lun Bawang community for generations and known for their agriculture activities such as paddy planting, as well salt-making production. The highland also provides various tourist sources of activities that involves nature, adventurous experience, and historical sites. The researchers took the initiative to conduct documentation at the site by experiencing the environment and as well participated in the tourist activities which is the significant in visual arts (Carneiro, Lima, & Silva, 2015; Edmonston, 1983).

2. PROMOTION OF BA'KELALAN BASED ON DIGITAL PLATFORMS

Most tourists that travel into Malaysia are known for their interest in cultural or heritage-based, and for the preserved natures or resources (Liu, 200; Carneiro, Lima, & Silva, 2015). The feature in rural tourism also involves the rural life, art, culture, and local heritage, which also includes interaction between the visitors with the local, as well with seasonal occasion or event that manifest the local's identity has been the main reason for the attractions (Aref & Gill, 2009; Khound, 2013). The community in Ba'Kelalan also offers similar features for their tourists, which is experiencing of the Lun Bawang's lifestyle and their heritage.

According to the study by Cheuk et al. (2017), in the case of Ba'Kelalan, the rural tourism businesses are not active in their business promotion and only few did utilize digital platforms such as social media, like Facebook, but rarely being updated (Andreopoulou et al., 2014; Król, 2018). Cheuk et al. (2017) also mentioned that most information was obtained by the visitors are through the blogs or websites that are mostly owned by the previous visitors who shared their experiences during their stays at Ba'Kelalan. Nevertheless, some visitors made direct contact to the homestay owners or the local tourist guides. The researchers also encountered similar experience to retrieve some information regarding Ba'Kelalan, through recommendations by the experienced visitors and the information obtained directly from the host.

Meanwhile, vlog (video log or video blog) in social media also the common ways on these days to find related information regarding tourist spots (Ge & Gretzel, 2018; Salim & Mat Som, 2018), and as the blogs or websites usually, information and attractions also being shared by the visitors through the highlight of their experiences as well (Ge, 2019; Król, & Zdonek, 2020). Such medium also works as a dummy or reference for the future visitors, to expose the uniqueness and travel exploration (Salim & Mat Som, 2018). The visibility of Ba'Kelalan is also exposed through the projects conducted by universities or organization since the highland is also known as a place of research interests especially in the domain of cultural heritage, biodiversity, and as well as historical events. Alliance of the Indigenous Peoples of the Highlands of Borneo (FORMADAT) with the World Wildlife Fund -Malaysia (WFF) used to conduct Ecotourism workshop to enhance the visibility of Ba'Kelalan as well (WWF, 2013).

Generally, Ba'Kelalan is mostly known based on the 'experienced-promotion' by the outsiders and the researchers understands that intensive promotion is not naturally significant among the community due to some barriers. The researchers also identified most visuals on official tourism websites, or any commercialized medias are often

staged or posed and did not clearly advertise the concept of rural-experience (Carneiro, Lima, & Silva, 2015; Zachry, Spinuzzi & Hart-Davidson, 2007). Visual should be the vital component that need to be part in promoting, considering the influence of art formalistic could enhance the representation since visual is the most comprehensive medium in marketing (Maying, 2019; Xiao, Fang & Lin, 2020). Ravar (2011) also mentioned promotion or marketing activities as well is essential as the mean to improve possibility growth of rural tourism in a longer period, to utilise visual is certainly a tactical in tourism business (Mihailović & Moric, 2012)

3. METHODOLOGIES

Initiating an effective promotion for Ba'Kelalan, the researchers performed visual experiential in digital documentation as the methodology to capture or record related visuals of the place. The implemented method was adopted from Kolb's experiential learning theory (ELT) that are focusing on concrete experience, reflective evaluation, abstract conceptualizing, and active experimentation. Through the conscience of art formalistic, the experiential learning being assimilated as the improvised approach for this research (Aman Leong, 2019; Maying, 2019). As shown on Figure 1, the cycle concept of visual experiential was introduced to highlight the process or approach to enhance the liberation of visual promotion. Visual experiential are the approaches that function as the compliment towards the existing digital documentation tools to document related subject matter or interest object (Kolb, 2014; Maying, 2019). Meanwhile, digital documentation are the tools like video cameras or digital camera to enhance the work of documentation, provides the possibility in extending the information as well potential in awareness during the process or interpretation (Edensor, 2018).
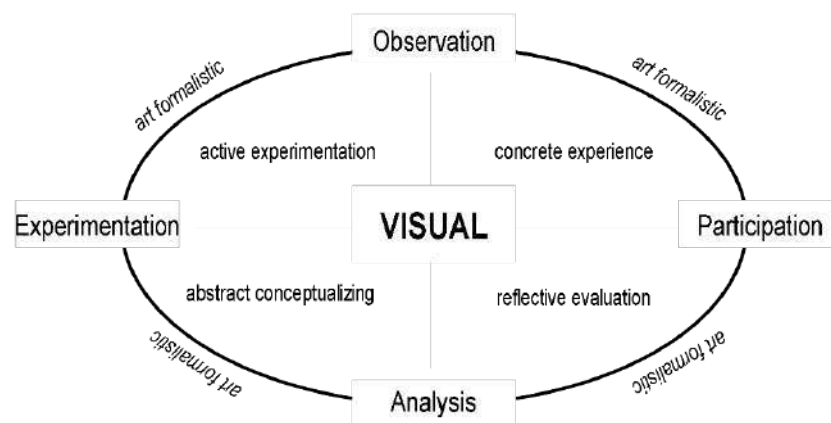

Figure 1. Cycle concept of visual experiential was inspired from Kolb's ELT

The researchers gathered all the experiences from Ba'Kelalan through the implementation of visual experiential and with the utilization of digital documentation. These methods of visual experiential consisted of the qualitative approaches such as observation, participation, analysis, and experimentation. Based on Kolb's ELT, the scope in experiential learning modified into general adaptation in research habits with the compliment of visual and art formalistic. Based on the cycle, visual experiential was conducted onto several sites at Ba'Kelalan such as Buaya Tanah, Batu Lan Upai Semaring, Buduk Nur's salt factory and few other historical places. The process of the documentation as shown in the table below (**Table 1**).

Table 1: The process of visual experiential in digital documentation processat Ba'Kelalan

Visual Practice	Kolb's ELT	Documentation Process
Observation	The researchers conducting observation through concrete experience which allowed the researchers to utilise visual interpretation towards subject matter. Through the observation, the researchers also conducted active experimentation in visual documentation with assimilation of art formalistic.	An observation was conducted to identify the form of Buaya Tanah, a cultural heritage site found at Ba'Kelalan
Participation	Since the rural tourism closely related to experience-based tourism, participation allowed the researcher to experience the site exploration and as well to perform tourist-based experience. The researchers also able to simulate on certain experience and local lifestyle. The participation also allowed the researchers to be reflective and made an active evaluation towards the subject interest.	The researchers took part in visiting historical sites to get physical understandings of the place in order to have actual descriptions of the past events, which is related to the confrontation years of Malaysia-Indonesia

Analysis	Besides being reflective in observation, through visual experiential the researcher was able to be more analytical in their visual evaluation and analysing the subject interest to create informative or effective documentation. Application of art formalistic in analysis did allow the researcher to develop the concept in documentation based on the subject context or character, including necessary additional data collection.	 The researcher conducting evaluation and discussing the best concept of documentation onto a dolmen, known as Batu Lan Upai Semaring
Experimentation	Through the reflection and evaluation onto subject interest, the researcher also conducted active experimentation for visual documentation. The documented visuals are captured or recorded based on the concept decided and as well following to the subject's character. Experimentation is required specially to produce variety of angles and perspectives, meanwhile art formalistic were used to produce interesting composition for visual representation.	 Experimenting with digital documentation tools to produce the best composition of visual and this process allowed the researchers to enhance their visual data

In as much, all the digital documentation executed with visual experiential has enhanced the researchers' understandings in gaining the visual data. The procedures that were shown on **Table 1** during the visual documentation has propelled the researchers to consider the etiquette in the execution of formalistic art approach. As developing firm meaning in visual representation, experience was conducted to enhance the deliverance of visual especially for purposes of promoting (Butler-Kisber & Poldma, 2010). Experience also allows deeper evaluation and active investigations, helped to wider the possibility to recover extending information and provides meaningful stories through visuals as well (Aman Leong, 2019; Spencer, 2010; Mengxi & Rui, 2019).

4. FINDINGS & DISCUSSIONS

Ba'Kelalan is a place that is offering rural tourism and the characteristics of rural tourism are dominantly experienced-based tourism which is suitable for the implementation of visual experiential approach. In every site, attractions, or lifestyles in Ba'Kelalan, the researchers used suitable approaches based on the direct space experience or engagement with subject of interest. As discussed in the methodologies, visual experiential is conducted for a better understanding and critically in disseminating information (Pennington et al., 2015; Maying et al., 2019). The purpose of conducting visual experiential in digital documentation are meant to enhance the visual representation especially in rural tourism promotion through the researchers' direct experience (Carneiro, Lima, & Silva, 2015). To have a definite approach or practical way for rural tourism promotion is important which most of the consequences benefiting for local employment, economy retention, lower migration rate, to establish more local products and encouraging preservation of local cultural heritage (Trukhachev, 2015).

Figure 1: Selected compilation of rural experience's representation around Ba'Kelalan

Through the conducted procedures of visual experiential, has allowed the documented visuals to be more sensible to represent rural experience (Mihailović & Moric, 2012). As shown on **Figure 1**, describing some of the constructed visuals from Ba'Kelalan, most visuals are collected based on the original setting or un-stage. Based the conducted visual practices as gown on **Table 1**, allowed the researchers to more critical or meticulous in constructing visuals during documentation process. Besides that, having art formalistic and artistic approaches also, helps to improvise visuals documentation which to produce a quality visualization. The effective approaches of visual experiential in digital documentation also making excellent liberation or interpretation of real event or description on rural tourism such as like Ba'Kelalan itself (Pennington et al., 2015). Augmentation of lifestyle or culture should be accurate or representative, and with the assimilation of art formalistic will allowed the visuals to 'speak' on behalf, specially as the mean for promotion. Since the utilization of social media platforms are often being used due to the friendly accessibility, employment of creative or artistic visuals should be prioritized. Providing impactful visuals not only enhanced the promotion, but also to benefit the local aspect such as rural economy, development and sustaining cultural heritage (Andreopoulou, 2014 et al.; Ivona, 2021).

Sample footage from Buduk Bui Salt Factory that are also employed artistic documentation and to record the related subject that can be part of representation

Sample of photo from historical sites, the camp sites during Malaysia-Indonesia's Confrontation. These photos were captured based on visual experiential conducted by the researchers.
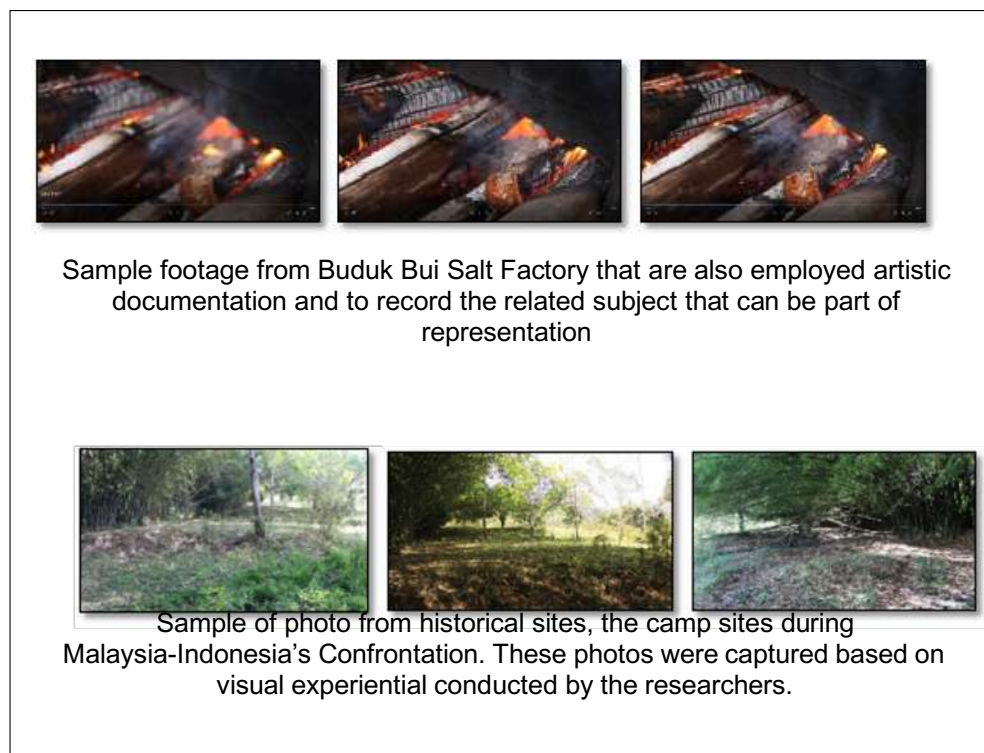
Figure 2: Visuals from the sites through visual experiential's documentation

Based on the experience performed during the research visit at Ba'Kelalan, the researchers identified that some attractions require critical attention and needed to be intensively visible for promotion. Through experience, the researchers received some additional information unintentionally. For example, several important historical events at Ba'Kelalan have been found unattended as a major part of Ba'Kelalan's identity (**Figure 2**). The researchers were also introduced towards two significant events related to religious miracles happening at Buduk Tudal in 1984; and another historical event during the Indonesia-Malaysia Confrontation (1963-1966) which the sites stay existed to these days (Hoskin, 2020; Meru, 2020; Sigar, 2020) and was visited as well by the researchers. 'Experiencing' the past events only 'manage' through the appearance of the remaining physical state, imagination- through space experience was able to be done at the sites. The rest of data was conducted through unstructured interviews with those who experienced both events (refer to **Figure 3** and **Figure 4**).

Figure 3:

An interview with Musa Sigar who witnessed and involved with the miracles at Buduk Tudal

Figure 4:

Further understanding by interview with a veteran involved in-confrontation years at Ba'Kelalan, Colonel Kim Hoskin

The results of the visual experiential during the documentation as well, witnessed the critically in producing visual for the subject of rural tourism promotion. Experiencing is the main paths to understand the surrounding and characteristic of rural tourism that are happening at Ba'Kelalan. The researchers discovered that based on the actual involvements also deepening the process in retrieving information with the creativity and comprehending the subject matter meticulously. Besides that, the researchers having the opportunity to have constructive exploration. Some part of experiential also working simulation-oriented visualization onto the information which helps the researchers to focus on the related factors such as setting-up documentation tools, organizing process and possibly orienting the representation (Maying et al., 2019; Trukhachev, 2015)

Conducting visual experiential, it is hoped to provide excellent liberation of visual representation. It is important that visual should be prioritised particularly to convey facts, information and purposely to facilitate understanding (Zachry, Spinuzzi & Hard-Davidson, 2007; Trukhachev, 2015; Yılmaz & Yilmaz, 2019). Besides that, as the mean for sustainability in tourism, alternative methods or approaches should be encouraged to evaluate the potentials in rural tourism (Ivona, 2021). Visual experiential also found to encounter any limitations at the research site at Ba'Kelalan, the researchers getting responsive, reflective, and manipulative towards the action to be taken on the site. Some digital documentation tools also are fully utilized and not limited into the fundamental function, but alternation through creative evaluation (Biggs, 2007; Roddy et al., 2019). Deliverance of meaning through visual also being able to augment the actual experience, representation of the real dimension will be assisted through the accommodation of art formalistic which is inviting the feeling and senses (Behrooz et al, 2018; Roddy et al., 2019).

5. CONCLUSION

The implementation of visual experiential in digital documentation has provided an alternative of being an effective approach in the mean of rural tourism promotion about Ba'Kelalan. The approaches have displayed the practice is providing sufficient assistant in pertaining related to Ba'Kelalan's attraction which the characteristic of tourism is experienced-based. These methods not only mean to document visual effectively as well but consisting of experience through the process provide richness of content (Edensor, 2018). Besides, the application also raising the attention toward the unpopular representation to be more appearing which also may contribute to promote the place such as Ba'Kelalan.

Meanwhile, the rural tourism is involving the local community and is a vital component in rural tourism, promotion is needed in contributing to the growth of local economy (Mir, 2018; Wani & Shafi, 2013). It is important to be more attentive towards documenting and sharing the information so it will be more affective in promoting (Mihailović & Moric, 2012). It is a hope that such enhancement will provide the improvement for the community in rural tourism activities and probably in the future the practices should be applies by the business owners, participant in the industry. Ba'Kelalan possessed many attractions of rural tourism that it could offer, some potential attractions that need to be introduced and sustained. As suggested, visual experiential in digital documentation is a part of it and there are many other possibilities in promoting excellently should be considered for future research interest in rural tourism.

REFERENCES

1. Andreopoulou, Z., Tsekouropoulos, G., Koliouska, C., & Koutroumanidis, T. (2014). Internet marketing for sustainable development and rural tourism. *International journal of business information systems*, *16*(4), 446-461. https://www.inderscienceonline.com/doi/abs/10.1504/IJBIS.2014.063931

2. Aref, F., & Gill, S. S. (2009). Rural tourism development through rural cooperatives*. Nature and Science*, 7(10), 68-73. https://www.researchgate.net/profile/Sarjit-Gill/publication/305397865

3. Behrooz, M., Mobramaein, A., Jhala, A., & Whitehead, J. (2018). Cognitive and Experiential Interestingness in Abstract Visual Narrative. *In CogSci*. https://cogsci.mindmodeling.org/2018/papers/0047/0047.pdf

4. *Biggs, M. (2007). Modelling experiential knowledge for research. The art of research: Research practices in art and design. Retrieved from* https://uhra.herts.ac.uk/handle/2299/7434

5. Butler-Kisber, L., & Poldma, T. (2010). The power of visual approaches in qualitative inquiry: The use of collage making and concept mapping in experiential research. *Journal of Research Practice*, 6(2), M18-M18. http://jrp.icaap.org/index.php/jrp/article/view/197

6. Carneiro, M. J., Lima, J., & Silva, A. (2015). The relevance of landscape in the rural tourism experience: Identifying important elements of the rural landscape. *Journal of Sustainable Tourism*, 23(8-9), 1217-1235. https://doi.org/10.1080/09669582.2015.1037840

7. Cheuk, S. C. S., Atang, A., Lo, M. C., & Ramayah, T. (2017). Community Perceptions on the Usage of Digital Marketing for Homestays: The Case of Ba'Kelalan, Malaysia. *International Journal of Business and Society*, 18(S4), 775-782. http://www.ijbs.unimas.my/images/repository/pdf/Vol18-s4-paper15.pdf

8. Edensor, T. (2018). The more-than-visual experiences of tourism. *Tourism Geographies*, 20(5), 913-915. https://doi.org/10.1080/14616688.2018.1477172

9. Edmonston, P. (1983). Participant observation and visual documentation as modes of inquiry in the visual arts. *Visual arts research*, 9(1 (17), 78-87. https://www.jstor.org/stable/20715537

10. Ge, J. (2019). Social media-based visual humour use in tourism marketing: a semiotic perspective. *The European Journal of Humour Research*, 7(3), 6-25. https://doi.org/10.7592/EJHR2019.7.3.ge

11. Ge, J., & Gretzel, U. (2018). Social media-based visual strategies in tourism marketing. *International Journal of Semiotics and Visual Rhetoric* (IJSVR), 2(2), 23-40. 10.4018/IJSVR.2018070102

12. Hoskin, K. (2020, September 24). Personal Interview.

13. Ivona, A. (2021). Sustainability of Rural Tourism and Promotion of Local Development. *Sustainability*, 13(16):8854 https://doi.org/10.3390/su13168854

14. Khound, J. M. (2013). Constraints and prospects of rural tourism development: An overview of tourism in Shyamgaon of Titabor of Jorhat, District (Assam). *Journal of Tourism and Hospitality Management*, 1(1), 27-31. http://jthmnet.com/journals/jthm/Vol_1_No_1_December_2013/4.pdf

15. Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. New Jersey: FT press. https://books.google.com/

16. Król, K. (2019). Forgotten agritourism: abandoned websites in the promotion of rural tourism in Poland. *Journal of Hospitality and Tourism Technology*. Vol. 10 No. 3, pp. 431-442. https://doi.org/10.1108/JHTT-09-2018-0092

17. Król, K., & Zdonek, D. (2020). Visual Identification of Rural Tourism Facilities in Poland. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*, (149), 361-369.10.29119/1641-3466.2020.149.31

18. Leong, S. N. A., Rafee, Y. M., Maying, D., Siri, H., bin Awang Arshad, A. H., & Jussem, S. W. (2019). Kolb's Experiential Learning Model as a Conceptual Framework for Visual Research in Rural Tourism Sites: Batuh Narit Arur Bilit as a Case Study. *International Journal of Business and Society*, 20(3), 1149-1159. http://www.ijbs.unimas.my/images/repository/pdf/Vol20-no3-paper18.pdf

19. Liu, A. (2006). Tourism in rural areas: Kedah, Malaysia. *Tourism management*, 27(5), 878-889. https://doi.org/10.1016/j.tourman.2005.05.007

20. Maying, D., Rafee, Y. M., Leong, S. N. A., Arshad, A. H. A., Siri, H., Jussem, S. W., & Bala, P. (2019). The Effectiveness of Visual Research in Enhancing the Cultural Knowledge and Practices in Creative Industry. *International Journal of Business & Society*, 20(2). http://www.ijbs.unimas.my/images/repository/pdf/Vol20-no2-paper25.pdf

21. Mechinda, P., Serirat, S., Popaijit, N., Lertwannawit, A., & Anuwichanont, J. (2010). The relative impact of competitiveness factors and destination equity on tourist's loyalty in Koh Chang, Thailand. *International Business & Economics Research Journal*, 9(10), 99–114. https://doi.org/10.19030/iber.v9i10.643

22. Mengxi, Z., & Rui, W. (2019). Research on Brand Visual Image Design of Local Rural Tourism Scenic Spots. *Web of Proceedings*. DOI: 10.25236/CLLA.2019.031

23. Meru, E. (2020, September 22). Personal Interview.

24. Mihailović, B., & Moric, I. (2012). The role of marketing philosophy in rural tourism development. *Tourism and Hospitality Management*, *18*(2), 267-279. 10.20867/thm.18.2.7

25. Mir, S. R. (2018)). Community tourism and rural development in Kashmir. *International Journal of Tourism & Hospitality Reviews*, Vol 5 (1), 36-39. https://doi.org/10.18510/ijthr.2018.515

26. Omerzel, D. G. (2006). Competitiveness of Slovenia as a tourist destination. *Managing global transitions*, 4(2), 167-189. https://www.fm-kp.si/en/zalozba/ISSN/1581-6311/4-2.pdf#page=73

27. Pennington, K., Calico, C., Edgar, L. D., Edgar, D. W., & Johnson, D. M. (2015). Knowledge and Perceptions of Visual Communications Curriculum in Arkansas Secondary Agricultural Classrooms: A Closer Look at Experiential Learning Integrations. *Journal of agricultural education*, *56*(2), 27-42. doi: 10.5032/jae.2015.02027

28. Răvar, A. (2011). The importance of print and visual media in the promotion of hospitality enterprises. *Cactus Tourism Journal*, *2*(2), 93-98. https://www.cactus-journal-of-tourism.ase.ro/Pdf/vol4/11%20%20masterand.pdf

29. Roddy, E., MacBride, T., McBride, A., Douglas-Smith, N., McCaig, M., Orr, J., & Dewar, B. (2019). Visual inquiry: a method for exploring the emotional, cognitive and experiential worlds in practice development, research an education. *International Practice Development Journal*, *9*(1). https://doi.org/10.19043/ipdj.91.006

30. Salim, M. A. M., & Som, A. P. M. (2018). Shaping tourist destinations through language and visual elements on tourism websites: a tourism discourse perspective. *International Journal of Engineering and Technology*, 7, 364-369. http://repository.poltekparmakassar.ac.id/id/eprint/7

31. Sarawak Tourism Board (2020, March). Reinvigorating tourism in Sarawak. https://sarawaktourism.com/news/reinvigorating-tourism-in-sarawak/

32. Sarawak Tourism Board (2021, June). Bakalalan. https://sarawaktourism.com/attraction/bakelalan/

33. Schroeder, J. (2002). Visual consumption. *Routledge*, London. https://doi.org/10.4324/9780203471630

34. Sigar, M. (2020, September 23). Personal Interview.

35. Spencer, S. (2010). Visual research methods in the social sciences: Awakening visions. *Routledge*, London. https://doi.org/10.4324/9780203883860

36. Trukhachev, A. (2015). Methodology for evaluating the rural tourism potentials: A tool to ensure sustainable development of rural settlements. *Sustainability*, 7(3), 3052-3070. https://doi.org/10.3390/su7033052

37. Tubey, W., & Tubey, R. J. (2014). Resources and attractions for sports tourism in north rift region in Kenya. *Journal of Economics and Sustainable Development*, 5(23), 170-176. Retrieved from https://core.ac.uk/download/pdf/234646668.pdf

38. Wani, N. A., & Shafi, A. (2013). Rural tourism: An option for development of rural economy in Kashmir. *International Journal of Innovative Research and Development* (ISSN 2278–0211), 2(6). http://ischolar.info/index.php/IJIRD/article/view/145323

39. World Wild Life (2013, August). Ba' Kelalan Ecotourism Workshop With FORMADAT. https://wwf.panda.org/?209848/Ba-Kelalan-Ecotourism-Workshop-With-FORMADAT

40. Xiao, X., Fang, C., & Lin, H. (2020). Characterizing Tourism Destination Image Using Photos' Visual Content. *International Journal of Geo-Information*, 9(12), 730. https://doi.org/10.3390/ijgi9120730

41. Yılmaz, E., & Yılmaz, E. E. (2019). The role and importance of rural tourism on the development and promotion of cultural heritage tourism. *Conservation and promotion of heritage tourism* (pp. 108-126). IGI Global. DOI: 10.4018/978-1-5225-6283-2.ch005

42. Zachry, M., Spinuzzi, C., & Hart-Davidson, W. (2007, October). Visual documentation of knowledge work: an examination of competing approaches. *In Proceedings of the 25th annual ACM international conference on Design of communication* (pp. 120-126). https://doi.org/10.1145/1297144.1297169

THE DUSUN TINDAL RESIDENTS OF LASAU TINTAPON IN KOTA BELUD, SABAH, A TRADITION OF USING ARTEFACT *TAJAU*

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This research looked into the use of artefact *tajau* as one of the Dusun Tindal counting traditions. In addition, this report will clarify how this native used the term *tajau* a century ago. This research also employs a qualitative approach fieldwork method with sources being interviewed to gather evidence. The researcher was taken to the study site by an informant who is an expert and a traditional chief in the village. This approach is employed so that the researcher can analyze and comprehend the study's use of the *tajau* in greater detail. Futhermore, this research demonstrates that *tajau* has been used since the first war until the present century.

Keywords: tradition, *tajau*, use of *tajau*, evidence, history of *tajau.*

1. INTRODUCTION

This research is one of the results of common objects discovered prior to the outbreak of World War One in 1914. The tajau is owned by residents of Kampung Lasau Tintapon in Kota Belud, Sabah. According to Abdul Rahman (2019), tajau is a huge clay crock with various shapes depending on its use. This tajau has been used in a variety of ways in this village and has its own distinct characteristics and principles. This tajau is commonly used in death rituals, wedding ceremonies, and worship ceremonies. A tajau was one of the most valuable and important items for villagers in the late 1800s, both in terms of uses and materials. In the past, residents of this Kampung Lasau Tintapon worked as farmers and hunters. They make a living by growing rice, vegetables, and fruits, hunting animals, and catching fish. To avoid being abducted by Japanese troops, they often stayed in hilly regions far from the lowlands in ancient times.

However, to expand their agricultural land, the villagers have all moved to low-lying areas. Also visible are changes in the economy and population growth in line with global trends. Tribal chiefs (Huguan Siou), customary chiefs (Komohoingan Tangabaa), peasant communities, and women who participate in ceremonial (Bobolian) are the four types of chiefs for this tribe, with the 'Huguan Siou' being the highest of all. During this time, they work together to keep the village in harmony and safe from outsiders.

2. BACKGROUND

2.1 Kampung Lasau Tintapon

Figure 2: Jalan Lasau Tintapon
Resource: Field Research 2021

This study focuses on Kampung Lasau Tintapon, one of the villages near Kota Belud area, Sabah. This village is only 20 minutes away from the main district. This village is also full of fruits such as Cempedak, Durian, Rambutan, Nangka, Ubi Kayu, and others. This village was the largest producer of 'kunyit' and 'halia' in this district.

3. METHODS OF RESEARCH

For this analysis, actual details such as photos, the correct narrative, and so on are required. As a result, we used a qualitative approach to learn more about the origins and practises of the Dusun Tindal tradition by conducting a field study at Kampung Lasau Tintapon, Kota Belud, photographing real tajau and interviewing custom chiefs named Mr Banaas Bin Lantukan.

A qualitative methodology is a type of analysis that produces visible results (Lexy, 2007). This approach is being used to learn more about the Dusun Tindal culture's use of tajau. This is also to improve the tajau analysis and data. This journal is written after gathering all of the necessary data and facts, and relate it to other journals' theory and writing to further solidify the fact that this tajau exists. According to Marusic (2009), recent study findings are backed up by good and rigorous evidence, which demonstrates the research's reliability.

4. EMPIRICAL RESULTS AND ANALYSIS

4.1 Funeral Tradition

First, we took several photographs that can tell us many stories about the artefact, such as its history, hierarchy, tradition, and so on. The informant leads us to the old tomb where the tajau was kept. It was about 5 kilometres from the village and only accessible on foot. This grave is also built on a hill because the area used to be a village with many people.

Figure 3: Old Tomb
Resource: Field Research 2021

Figure 3 shows an old tribal chief's tomb (Huguan Siou). At the time, this tribal chief was the village's strongest man, and he also led the others around other villages. Due to the influence of this tribe chief, other tribes such as the Bajau, Iranun, Idaan, Suluk, and others fear this village and several villages below it. According to an informant, the tribe chief is a large and tall man with a strong body structure and adequate martial arts skills.

After that, in the 1990s, the tomb was built out of cement made by the villagers as a symbol of remembrance. A tajau was buried in cement at the end of the tomb. This tajau belonged to the tribe chief during his reign. It was also a gift from the villagers to repay him for his services. During that time period, this is an expensive gift. According to Muchlisin (2020), appreciation is one way to express gratitude to those who have helped others.

Figure 4: The Grave

Resource: Field Research 2021

This is a closer view of the grave. Modulung Kougun was the late tribe chief's name. The term 'Bantuga Lasau Tintapon' refers to the tribal chief of Lasau Tintapon. There is no date written on the stone because the informant claims that no one knows when he left, but it was most likely in the 1800s. This grave is also the first one you will see when you enter the cemetery because it honours the tribe's chief.

Figure 5: The Hierarchy

Resource: Field Research 2021

In this village, the hierarchy is one of the most respected. The more money you have, the more valuable your tajau is as an asset. Figure 5 shows a tajau in that village who belongs to a plutocrat. According to Wong (n.d.), the aristocracy and their relatives are ranked first in a social stratum table. Furthermore, this one belongs to the village's wealthy residents. The informant also mentioned that his great-grandfather bought the tajau, which originated in China, through a barter system in the 1840s. This tajau is extremely difficult to obtain, and it is only made to order by the Chinese merchants. As a result, the tajau is extremely expensive, and no one has ever been brave enough to remove it from the cemetery.

According to Zuraini (2012), the mechanism of buying goods is through the exchange of them for other things. It is also a very old way of doing business and a very old system in the world. According to Fatin (2015), this barter scheme was one of the earliest methods of trading commodities for services, predating the advent of currency. The informant's great-grandfather bought this tajau from China in the 1840s through a barter system in exchange for one adult Buffalo. At the moment, the cost was exteremely high, approaching thousands of dollars.

Figure 6: Pattern

Resource: Field Research 2021

A closer view of the tajau pattern can be seen in Figure 6. This dragon painting reflects Chinese culture, which was scarce in Malaysia at the time. Even after more than 200 years, the colour of the substance used has not faded, indicating that it is extremely valuable. This tajau is a dowry for his loved one, and after his wife died, the dowry and other belongings to her were placed on top of her grave, but it is now covered by long grass, just like the other graveyards. It has remained there for nearly 200 years. As of 2021, the villagers claim that anything that belonged to the dead at the cemetery was cursed, and that the spirit of the dead is still alive and stuck in the tajau and their belongings.

Figure 7: The Coffin

Resource: Field Research 2021

Tajau was commonly used as a coffin at the time. It not only costs a lot of money, but it also represents a well-off family. When someone dies, they are usually buried in an old style coffin made from a large tree called 'kayu balak,' which is also very heavy and time-consuming to construct. According to Shoanna (2019), they used wooden coffins in the metal age, which can be seen in the interior. Because they want to fit the corpse inside, this tajau is quite large, and this tradition is well-known throughout Sabah. The Sabah Museum has already displayed some of the tajau. The evidence can be seen in Figure 8.

Figure 8: Sabah Museum Exhibition

Resource: Field Research 2018

Figure 9: The Old Coffin

Resource: Field Research 2021

The old coffin using tajau is shown in Figure 9. More than a century has passed since this one was made. Even though it had been buried inside, it was still in the exact position.

Figure 10: Closer View of the Tajau

Resource: Field Research 2021

Figure 10 shows a closer view of the tajau. Although it is already empty, the structure and colour are in good condition.

Figure 11: Tombstone

Resource: Field Research 2021

This is how the villagers used to make tombstones in the ancient centuries. They make a tombstone out of a long shape of river stone. They will then place some ritual items, including a tajau, on top of the grave. This tajau is solely to honour the dead. The tajau is a common type that was once used as a water collector and is therefore quite small. The tajau will then be placed in the middle of the tombstone and other items.

Figure 12: The New Tombstone

Resource: Field Research 2021

In the beginning, the village only used a river stone to mark the grave for a tombstone. As time passes, they are now constructing a modern cemetery. The original tombstone was kept, but the old tomb was restored. According to a myth, "the tomb was their real house after they died due to their no religion". If the tombstone is moved, the spirit will be unable to return home and will disperse and hunt the villagers. Meanwhile, according to Ustadz Mahfudz (2018), the grave serves a purpose and is a holy place that is worshipped in accordance with its location and role.

Figure 13: New Graveyard

Resource: Field Research 2021

Figure 13 shows the old tomb after it has been restored. Most of the people in the village were Christians. Traditional values, on the other hand, have never been forgotten.

Figure 14: Water Collector

Resource: Field Research 2021

Figure 14 shows a tajau that has been used to collect water. Because of its size and shape, it stands out among the others. It's more likely to have a small head and an oval shape. Apart from that, this type of tajau is also used as a food storage container for rice, fruit, and other items. Tapai, Tumpung, Sinamu, Bosou, and other traditional foods and beverages can also be made with this type.

4.2 Marriage Tradition

Marriage tradition has been modernised in Kampung Lasau Tintapon, but old values are still practised. These are the few marriage values:

Surung

Surung is a wedding tradition for the newlywed couple. As a dowry addition, one adult buffalo or a single tajau was required. This action will be carried out by the groom's side prior to the wedding ceremony.

Nopung

Nopung is a process that people must go through before or after getting married. One buffalo is given to the bride's family for breeding purposes, and one tajau is required to complete the tradition values. The payment can be made in cash or by loans after or before the couple officially marries.

Ginantai

During the wedding ceremony, ginantai is performed. The groom's family will accompany the groom as he enters the bride's house, playing the 'Gong' as they walk inside. According to Osman (2020), the 'Gong' is not only a musical instrument and a part of many tribes' traditions, but it is also a source of income for Sabah's people. In several villages in Borneo, the gong is also given as a wedding gift. The 'Gong' for the wedding ceremony is shown in Figure 15.

Figure 15: Gong

Resource: Google Image

Pampang Ralan

When Dusun Tindal holds a wedding ceremony, one of their traditions is to perform Pampang Ralan. Villagers will gather at the bride's house early in the morning to assist in the slaughter of a lamb or pig for the ceremony. The bride's family and the villagers were shown respect through these activities.

Dowry For Bride Side: Tajau, Gong, A pair of shoes, Kain Sarong, Ring, Cash, and a set for girl's bath needs.

The used of tajau now and before

The icon represent :

Y = YES

X = NO

Table 1: Used of Tajau

Use as	Before	Now
water collector	Y	N
traditional food place	Y	Y
food container	Y	Y
coffin	Y	N
ornament	N	Y

The use of tajau before and after is shown in Table 1. Tajau has been used as a water collector for the past decade, but its use for water has decreased in this century due to current development and new inventions for a better place to keep their clean water. Besides that, many years ago, this tajau was used for coffins along with logs or hardwood, but the villagers no longer use it because they have their own religion, which is Christian. In this era, tajau has been used as a decorative item such as a flower pot, stationery, and other items based on size, but in ancient times, tajau was graded as an asset due to its value.

Next, tajau has been used as a traditional food container and a traditional food place. This refers to a variety of traditional Borneo foods such as Nonsom, Bambangan, Tapai, Lihing, and others. Because they maintain the tradition, the manufacturing

method has been used for a long time. The following table shows how to use the *tajau* as a food container:

Table 2: Used of Tajau for Food Container

Bambangan	
Material	- Bambangan - Salt - Bambangan seeds - Chili
Mode	- Cut the bambangan square - Cut the seed (Garus) - Mix all the ingredients - Put it in the *tajau*
Duration	7 days

Daat	
Material	- Fish (freshwater fish type only) - Panga - Rice - Salt
Mode	- Clean the fish - Mix all the ingredients - Put in the *tajau*
Duration	7 days

Tapai	
Material	- Rice (white/glutinous) - Sasad (Ragi)
Mode	- Cooked the rice (let it cool down first) - Mix with sasad - Put it in the *tajau*
Duration	- 2 week and above

Lihing	
Material	- Glutinous rice - Brown rice - Sasad (Ragi)
Mode	- Cooked the 2 type rice (let it cool down first) - Mix with sasad - Put it in the *tajau*
Duration	- 1 month and above

According to the table above, using tajau as a food container is highly recommended because the food can last much longer and stay fresh for a longer period.

5. CONCLUSION

To conclude, for the villagers of Kampung Lasau Tintapon, this tajau has always been the most valuable and expensive. Their status is also determined by the fact that they have a tajau as an asset. Because of its shape, size, and pattern, this tajau can be used for a variety of purposes. Tajau is an important part of the village's heritage, and it should be preserved for future generations to appreciate.

REFERENCES

1. Asdy. A. (2010). Asal Usul Bangsa Bajau. Retrieved from http:aeddy-alapbana.blogspot.com/2010/01/asal-usul-bangsa-bajau.html

2. Fatin, B. (30 July 2015). Sejarah Sistem Barter. Retrieve from http://www.fatinbella.com/2015/07/sejarah- sistembarter.html

3. Ghani, A, Z. (3 April 2012). Sistem Barter. Retrieve from https://www.slideshare.net/zurainiabdulghani/sistem-barter-12275338

4. Pensel, S. (2 February 2014). Masyarakat Dusun. Retrieve from https://www.slideshare.net/senyum92/masyarakat-dusun

5. Radio Rodja. (25 Jun 2018). Larangan Melangkahi Kuburan. Retrieve from https://www.radiorodja.com/31339-larangan-melangkahi-kuburan/

6. Riadi, M. (21 April 2020). Reward atau Penghargaan (Pengertian, Tujuan, Jenis dan Syarat). Retrieve from https://www.kajianpustaka.com/2020/04/reward-atau-penghargaan-pengertian-tujuan-dan-syarat.html

7. Sani, K. (4 January 2018). Analisa Kepercayaan Animisme Yang Masih Diamalkan Oleh Masyarakat- Islam di Malaysia. Retrieve from http://kamarulnizamsani.blogspot.com/2018zxb/01/analisa-kepercayaan-animisme-yang-masih.html

8. Shoanna. (21 December 2014). Keranda Kayu Balak. Retrieve from https://www.slideshare.net/Shoanna94/keranda-kayu-balak-42905995

9. Utusan Borneo Online. (2019). Kekalkan Adat Istiadat, Warisan Untuk Generasi Akan Datang. Retrieve from https://www.utusanborneo.com.my/201908/19/kekalkan-adat-istiadat-warisan-untuk-generasi-akan-datang

10. Banaas Bin Lantukan (58 years old). Ketua Adat and Bekas Ketua Kampung, Kampung Lasau Tintapon. Interviewed on 29 March 2021.

11. Marusic, M. & Marusic, A. (2009). The purpose of scientific journals: small is important. The Journal of Tehran University Heart Center 4, 143–147.

AWARENESS OF SOCIAL MEDIA BASIS AS A PROMOTIONAL MEDIUM FOR KULINTANGAN TRADITIONAL MUSIC OF SUNGAI TRIBES AT PAITAN

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This article discussed the awareness level of Sungai Tribes on using social media as a promotional medium for Kulintangan traditional music at Paitan. This study used a Quantitative approach through a survey of 377 people who expert in playing Kulintangan traditional music and owned various social media (Facebook, YouTube, Instagram, and WhatsApp). Based on the findings, the level of awareness of the Paitan cult on promoting Kulintangan via social media is moderate with a total average mean of 3.154 with a 1.302 standard deviation. The awareness of Sungai tribes on the usage of social media is more inclined to Whatsapp (ranking number 1 in overall mean and percentages) followed by Facebook, Instagram, and Youtube. Sungai tribes were also found to rarely share the Kulintangan music on social media account. Therefore, the SABAS and Sungai cult should increase the sharing of Kulintangan music via Whatsapp.

1. INTRODUCTION

Nowadays, the emerging of technology has influenced how people do things in life. The technological era also creates a new culture that brings large effects to everything in our daily lives especially when it comes to social media. The existence of social media has made human easier to communicate worldwide (Saad and Yusuf, 2019). According to Mustafa, Kasmani, Ariffin dan Mohd Noor (2020), they found that Malaysia's internet users started to grow since the implementation of the network in 1991 after local university research. Now, Malaysia has recorded 28.98 million users in 2019. For the overall media ranking, Facebook has the most users with 2600 million followed by Facebook Messenger, Wechat, Instagram, Tiktok, and others (Statista.com, 2020).

On top of that, social media has become the new platform to share learning experiences, culture, and creativity cultivation (Hu, 2020). Now, social media is also used to commercialize the local product, political ideology, sports (G-Sports and E- Sports), and cultural activity. Iqbal (2017) declares that a large number of users of social media makes it more suitable to promotes one culture to the world. Datuk Sri Hajah Nancy Shukri, Minister of Tourism and Cultural at Malaysiaaktif.com (2020) also encouraging people to use social media to promote the cultural and tourism industry. Therefore, social media can be used to promotes lots of cultural heritage traditions especially indigenous people in Sabah, Malaysia.

Sungai people are some of the indigenous people who live on the east coast of Sabah that is sheltered under the SABAS association which is the Sabah Association of Bangsa Sungai Sabah (Utusan Borneo, 2018). This people can be found around Sandakan, Kinabatangan, Pitas Kanibongan, Kota Marudu, Beluran and Paitan. Sungai people are categorized into 33 more sub-ethnic where there are a bit differences in languages, intonations, traditional costume, and their unique Kulintangan traditional music. The uniqueness of the Kulintangan of Sungai Tribe sound needs to be promoted as it started to be forgotten by the young generations, especially in Paitan.

Therefore, the increasing number of social media users and its various functions nowadays can be used to promote this traditional music to the young generation as they mostly into social media. However, a study needs to be implemented first to discover the awareness of Sungai people in using social media in promoting their Kulintangan traditional music. Thus, this study was implemented to discover the awareness of Sungai tribes at Paitan in using the social media chosen which are Facebook, Youtube, Instagram, and Whatsapp as the promotional mediums of their Kulintangan traditional music.

The research is based in Sabah where also known as Land Below the Wind one of the regions in Malaysia. The scope of the study is in a small district of Paitan, Beluran Sabah. Paitan was located deeply in the rural area of Beluran where the place surrounded by 50% of them are Palm Oil plantations, and 30% of forest reserved, and 20% (New Straits Times, 2020).

Figure 1. Paitan, Beluran from Sabah Map
Source: https://www.bikeandtours.com/en/sabah-map

2. LITERATURE REVIEW

The preservation and promotion of traditional music of Paitanic people started in 2006 by the member of parliament Beluran introduced one of the festivals named Pesta Tagunggu Paitan (Utusan Borneo Sabah, 2017). Pesta Tagunggu was implemented to

celebrate the festival but it is one of the attractions for local tourists to see for themselves the unique customs and culture of the river tribes in the area. Pesta Tagunggu is a good approach to promote the cultural heritage of the Sungai tribe in the state. The effort is also seen to attract tourists, researchers of music art, and traditional dance art from within and outside of the country. Besides, other activities such as Unduk Ngadau (Raraa Inuwung), Mutogunggu competition, Traditional Cottage competition, singing competition, and traditional food competition also implemented during the Pesta Tagunggu.

2.1 Sungai People within Malaysia

In Malaysia, there are various ethnic exist weather in the peninsula, Sabah, or Sarawak. In Sabah, 33 ethnicities of residence living. Some of them are Kadazan-Dusun, Bajau, Murut, Mandarin, and Rungus. Some of the minority ethnicities are Sungai People. This ethnic can be found in area of Sandakan, Kinabatangan, Pitas Kanibongan, Kota Marudu, Beluran and Paitan (Hussin, Shah, & Sansalu, 2012).

2.1.1 Traditional Music of Orang Sungai within Paitan

Here are several kinds of instruments in a complete set of music for Paitanic traditional music. The Kulintangan consist of 8 to 9 small Gongs that have different size and note. The famous instrument is Kulintangan and Gong which also can be found in the Kadazan-Dusun traditional music. Pugh-Kitingan (1992) in Batahong and Dayou (2002) research declare that the Kulintangan traditional music was made of copper that was introduced in Sabah about 200 years ago and this Kulintangan music instrument was ordered from Brunei and the Philippines. This traditional musical instrument is the main musical instrument of the Orang Sungai. The Kulintangan music of Sungai tribes is shown in Figure 1.
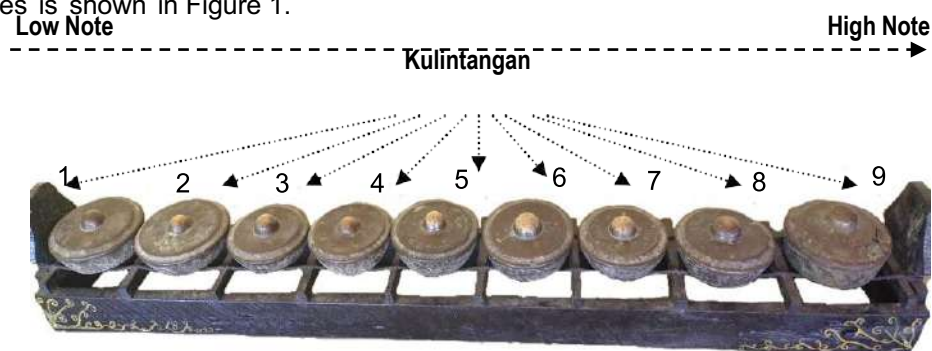

Figure 1: Kulintangan Traditional Music of Sungai Tribes at Paitan
(Source: Pn Jamalia Maijol, Kg Tawanan Paitan Beluran Sabah)

2.1.2 Preservation of Traditional Music of Sungai People

On 1999, an association formed called Persatuan Warisan Seni Anak Sungai (WARISAN) at Sukau village. The purpose formed this association to preserve the cultural heritage of the Sungai people. Besides, to increase teenage awareness to be involved in dance and traditional music. However, This Association faced some constraints in preserving their culture. Such as they were not invited to do performances, they also had issues of insufficient funds and cannot pay the dancers and musicians of WARISAN (Hussin, 2016).

Then, it continued by the Sabah Association of Bangsa Sungai (SABAS) by preserving the traditional heritage of this tribe by organizing an event and various competitions such as Pesta Damas 2017, 2018, and 2019, traditional music competition, and traditional clothes competition. However, the emerging of technology and globalization make them need to adapt to these technologies and utilize thisplatform by using social media to sustain the cultural heritage of the Sungai people because the internet as a form of social media provides an important community-based platform for sustainability of heritage conservation by providing open participatory in which community can play the active role more broadly stakeholders of different levels, races, genders, ages, that have an important role in important in collaborative planning and conservation (Liang, Lu, & Martin, 2021).

2.2 Social Media Today

Today, the increasing numbers of social media platforms and users are out of expectation. As we look back on 2010, the number of users of social media only 0.91 billion around the world. In 2020, it increases to 2.9 billion (Koukaras, 2020). In Malaysia, social media is also used mostly in today's culture especially the millennials because they have been exposed to it earlier.

According to Statista.com (2021), the most social media used in Malaysia is Facebook, followed by Instagram, Facebook Messenger, and Linkedin. In this

research, Facebook, Youtube, Instagram, and Whatsapp are chosen as it is the most popular social media among the Paitan society.

2.1.1 *Social Media Facebook*

Social Media Facebook falls under the category of social networking that is earlier introduced in February 2004. Since introduced, it has become the most users around the world until today (Mustafa, Kasmani, Ariffin and Noor, and statista.com, 2020) from previous research discovered that Facebook is usually used for social interaction and information sharing as it is fast and cheap (Hanafi dan Rahim, 2017).

2.1.2 *Social Media Youtube*

Youtube is also known as the media sharing category was introduced in 2005 nowadays has become the main entertainment, learning, and business platform. Youtube is a social media that is used for video sharing, audio, and pictures widely. According to Yusof dan Tahir, (2017), Youtube nowadays have become top 3 most important platform that is used for the learning process as the teachers or lectures and student exchanges videos by a link in a creative way. For instance, different sites and web-based media channels, and YouTube permit Intangible Heritage to be shared internationally. The individuals who practice Intangible Heritage customs can now effectively record, perform, and advance their traditions. Individuals who aren't acquainted with the way of life would then be able to see how attributes of various societies are as yet present today (Sparks, 2020).

2.1.3 *Social Media Instagram*

Social Media Instagram was introduced on 6 October Media 2010 by Kevin Systrom (Blystone, 2020). It falls under the social networking category where it enables people to upload pictures or videos and interact with people worldwide online in real-time.

2.1.4 *Social Media Whatsapp*

Whatsapp was found by Jan Koum dan Brian Acton in Santa Clara California in 2009. Earliear it was launched under Iphone and later created for android, Windows Phone, Blacberry dan Nokia (Seufert, Hoßfeld, Schwind, Burger & Tran-Gia, 2016). The

developments now enable people to share documents, and links for easier use (Rahatri, 2019).

3. RESEARCH METHODOLOGY

This research was conducted using quantitative methods by developing questionnaires based on the research objectives and tested via 30 respondents of Paitanic people. The Chronbach Alpha Value for the pilot test has shown the reliability and validity of 0.934. 377 responders from a population of 29,100 according to Krejcie, Robert V., Morgan, Daryle W (1970) in determining sample size for research activities of the Paitan answered the survey that consists of 16 questions regarding the topic at table 1. The survey was distributed to many respondents to get broad and wide opinions. The data were analyzed using SPSS Version 26 using descriptive statistics of mean, standard deviation, and percentages.

4. RESEARCH FINDINGS

There are 157 (41.6%) male and 220 (58.4%) females involved, and most of the 140 (37.1%) are from middle age which is 23 to 30 years old, followed by the youth from 16 to 22 years 88 people (23.3%), 40 years and above a total of 78 persons (20.7%), 36 to 40 years a total of 44 persons (11.7%), and the least is the age between 31 to 35 years (7.2%). Both the most total of 140 persons (37.1%) involved in this study has PMR or PT3 and others where they do not have educations also have the same values. The following same numbers of 88 people (23.3%) is for those who have UPSR, and Degree. And then followed by those who have STPM with numbers of 44 people (11.7%). Most of them which are 201 people (53.3%) are married and the other 176 respondents (46.7%) are still single. Most of them which are 279 people (74%) do not have the traditional Kulintangan music instruments and only 98 persons (26%) mostly the elder owned the instruments. Of the 26% that owned the Kulintangan traditional instruments, only 82 persons (21.8%) know to play the instruments and another large number of 295 (78.2%) of the respondents do not play the Kulintangan instruments.

Table 1: Mean analysis and Percentages

No.	Item	Percentages (%)					Mean	SD	Level
		1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)			
B1	I owned Facebook account	4.5	10.5	2.9	30.5	51.5	4.14	1.166	High
B2	I regularly share pictures and video on Facebook	8.0	20.2	17.0	32.4	21.8	3.40	1.253	Medium
B3	I regularly see people sharing Kulintangan music at Facebook	13.0	26.5	25.7	21.5	13.0	2.95	1.235	Medium
B4	I regularly share picture and video about Kulintangan music on Facebook	18.3	31.3	25.7	13.3	11.1	2.68	1.235	Medium
B5	I owned Youtube account	8.8	16.4	9.8	25.7	38.7	3.70	1.362	High
B6	I regularly share pictures and video on Youtube	20.7	33.4	19.4	17.5	8.2	2.59	1.230	Medium
B7	I regularly see people sharing Kulintangan music at Youtube	19.9	27.9	17.0	18.0	17.2	2.85	1.388	Medium
B8	I regularly share picture and video about Kulintangan music on Youtube	22.5	32.6	22.3	12.7	9.8	2.55	1.244	Medium
B9	I owned Instagram account	9.8	23.1	14.3	20.2	32.6	3.43	1.397	Medium
B10	I regularly share pictures and video on Instagram	13.0	28.6	21.5	22.0	14.9	2.97	1.274	Medium

B11	I regularly see people sharing Kulintangan music at Instagram	17.8	32.4	27.9	14.1	8.0	2.62	1.163	Medium
B12	I regularly share picture and video about Kulintangan music on Instagram	18.6	30.0	24.7	10.9	15.6	2.75	1.313	Medium
B13	I owned Whatsapp account	2.9	3.7	3.4	27.1	62.3	4.51	1.750	High
B14	I regularly share pictures and video in Whatsapp	5.0	11.9	13.0	37.9	32.1	3.80	1.160	High
B15	I regularly see people sharing	18.6	28.6	19.1	20.7	12.7	2.80	1.310	Medium

|								
	Kulintangan music on Whatsapp							
B16	I regularly share picture and video about Kulintangan music on Whatsapp	22.3	28.6	19.1	15.1	14.9	2.72	1.359	Medium
Average Min For All Item		**3.154**						**1.302**	**Medium**

Table 1 indicates the mean and percentage analysis for the case study to measure the awareness level of the Sungai tribes at Paitan on the uses of social media Facebook, Youtube, Instagram, and Whatsapp to promote the Kulintangan traditional music.

5. DISCUSSION

Table 2: Total Overall Mean Comparison Awareness of Sungai Tribes of Paitan on Facebook, Youtube, Instagram, and Whatsapp as Kulintangan Traditional Music Promotional Medium

TOTAL AVERAGE MEAN COMPARISON		
SOCIAL MEDIA	**TOTAL AVERAGE MEAN**	**RANK**
Whatsapp	3.458	1
Facebook	3.293	2
Instagram	2.943	3
Youtube	2.923	4

Table 2 show the ranking for overall mean analysis of awareness level of Sungai tribes on using the social media as the promotional medium where Whatsapp is in the 1st rank with a total mean of 3.458 followed by Facebook on the 2nd rank of mean 3.293, followed by Instagram as the 3rd rank with a total mean of 2.943, and Youtube at the last rank with a total overall mean of 2.923.
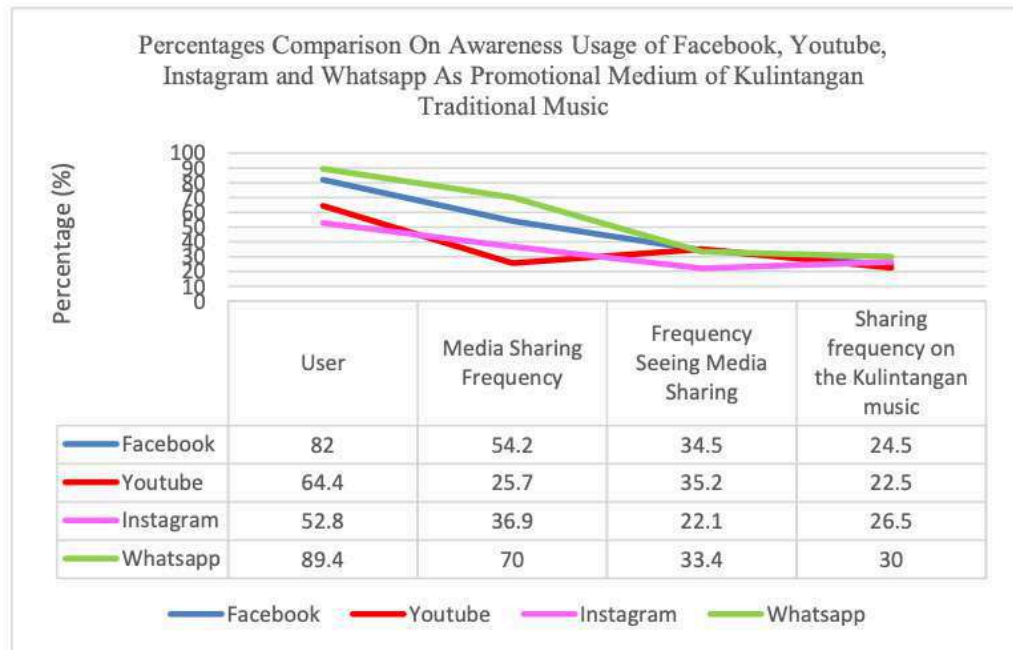
Graph Line 1: Percentages awareness on the usage of social media (Facebook, Youtube, Instagram, and Whatsapp as the promotional medium of Kulintangan Traditional Music

Graph line 1 shows the comparison of social media usage among the Sungai tribes at Paitan in percentages which also presents Whatsapp as the higher percentages for every item followed by Facebook, Instagram, and Youtube.

Based on Table 2 and Graph line 1, Whatsapp is the most influential apps tothe Paitan cult as every item recorded the higher percentage with rank 1st for the overall average mean (m=3.458) with 89.4% of them owned this social media which also 1st rank for the overall item of every social media and recorded (m=4.51, SD=1.750) in table 1. Therefore, they have more tendency to react to this social media. Besides, most of the respondents (70%) aware that Whatsapp has a media sharing function as they regularly share media through this social media (m=3.80, SD=1.160). However, media sharing for Kulintangan traditional music is still less withthe only responder 33.4% with (m=2.72, SD=1.359) and most of them (50.9%) not regularly see shares on the traditional music (m=.2.80, SD=1.310). These indicate that the level of awareness of Sungai tribes in using Whatsapp as the promotional medium is still less even though they are more aware of the uses of this application.

Facebook has the 2nd rank of overall total mean and has the second higher percentages for every item as seen in Graph line1 with 82% user of this social media

(m=4.14, SD=1.166) next to Whatsapp. Therefore, Sungai tribes at Paitan have more knowledge on this social app that has influenced the tendency of the answer given. Another 54.2 % of the Sungai tribes also regularly share media on this app (m=4.14, SD=1.166) proving that half of them are aware of the media sharingfunction. However, the number of means is decreasing to (m=2.95, SD=1.235) as most of them (39.3%) do not regularly see Kulintangan traditional music sharing higher than 34.5% that share the Kulintangan music. Therefore, the Sungai people also do not have the motivations to share traditional music on Facebook where only 24.5% with (m=2.68, SD=1.235) frequently share the Kulintangan traditional music through this app.

While Instagram is in 3rd rank for overall average mean with the lowest number of users 52.8% only among Sungai tribes at Paitan (m=3.43, SD=1.397). The number of users regularly sharing media is only 36.9% with (m=2.97, SD=1.274), and most of them (48.6%) are not sharing the Kulintangan music as they(50.2%) rarely seen the sharing of the Kulintangan traditional music through this social media (m=2.62, SD=1.163). Thus, it is barely seen that Sungai people at Paitan are vaguely aware of using Instagram as they Kulintangan traditional music as only half of them is owned this social media.

Sungai people at Paitan mostly not aware of using Youtube which recorded thelower rank of total average mean with the third large total number of users 64% from 377 respondents (m=3.70, SD=1.362). Youtube also has the lower score mean for overall items mean where B8 'I regularly share picture and video about Kulintangan music on Youtube' scores only 2.55 of a mean and standard deviation of 1.244 where only 22.5% of them have done so, followed by B6 item 'I regularly share pictures and video on Youtube' with a mean of 2.59 and 1.230 standard deviations where only 25.7% of them agreed on this. Hence, Youtube has the lowest tendency and influence on the Paitan cult regarding the promotional medium of Kulintangan.

6. CONCLUSIONS

In conclusion, the awareness usage of Sungai tribe at Paitan towards the chosen social media are mostly into Whatsapp as it scores the highest overall mean and percentages for every item. This indicates that Whatsapp has the most influence on the Sungai tribes at Paitan as it has a large number of users, and is mostly used to do media sharing regarding the Kulintangan traditional music followed by Facebook, Instagram, and Youtube. Besides, Sungai tribes at Paitan mostly do not regularly share informationabout Kulintangan traditional music on their social media account which makes them rarely see Kulintangan music on social media. Therefore, the organization SABAS that shelters these tribes should make use of the Whatsapp application to promote the traditional music of Kulintangan by encouraging Sungai people to build an officialWhatsapp group account for every village to share the Kulintangan music. This method will increase the interest of the young people to learn and inherit the traditional music and encourage them to share more on the traditional music with the world.

REFERENCES

1. Alman, J. H. (1961). If you can sing, you can beat a gong. *Sabah Society Journal*, No.2, 156-163.

2. Alhabash, S. dan Ma, M. (2017). A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat Among College Students? *journals.sagepub.com/home/sms,* 1-13

3. Batahong, R.Y. and Dayou, J. (2002). Kajian Kaedah Pembuatan Kulintangan. Borneo Research Council Seventh Biennial International Conference, UMS, Kota Kinabalu. 15-18. Retrieved from https://www.researchgate.net/publication/339390998_Kajian_Kaedah_Pembuatan_Kulintangan/link

4. Blystone. (Jun 6, 2020). Instagram: The Rise of the #1 Photo-Sharing Application. Retrieved from https://www.investopedia.com/articles/investing/102615/story-instagram-rise-1-photo0sharing-app.asp#history-of-instagram

5. Hanafi, K. dan Rahim, M. H. A. (2017). Penggunaan Media Sosial Dan Faktor-Faktor Yang Mempengaruhi Terbentuknya Gerakan Sosial Oleh Pemimpin Pelajar Universiti Di Bandar Pekan Baru, Riau, Indonesia. *Journal of Social Science and Humanities, 12*(2), 87-101

6. Hussin, R. Shah, J. M & Sansalu, D. (2012). Orang Sungai. Perpustakaan Negara Malaysia. Kuala Lumpur.

7. Hussin, R. (2016). Pengkomersialan Budaya Orang Sungai Melalui Ekopelancongan: Faktor Kejayaan dan Limitasi. Jurnal Kinabalu,18. Retrievedfrom https://jurcon.ums.edu.my/ojums/index.php/ejk/article/view/493

8. Iqbal, A. (2017). Use of Social Media To Promote National Culture Worldwide. Retrieved from https://www.researchgate.net/publication/324953404

9. Koukaras, P. (2020). Social Media Types: introducing a data-driven taxonomy. *Computing,102,* 295-340. Retrieved from https://doi.org/10.1007/s00607-019-00739-y

10. Leonard. A.PS. (2016). Penggunaan Media Sosial Sebagai Eksistensi Diri (Studi Deskriptif Kualitatif Penggunaan Media Sosial Untuk Eksistensi Diri Pada Mahasiswa Fisip UNS Tahun Ajaran 2015/2016). Tesis Sarjana Universiti Sebelas Maret. Surakarata.

11. Liang, X., Lu, Y., & Martin, J. (2021). A Review of the Role of Social Media for the Cultural Heritage Sustainability. *Sustainability, 13*(3), 1055. https://doi.org/10.3390/su13031055

12. Malaysiaaktif.com. (Julai 14, 2020). Manfaatkan Media Sosial Promosi Produk Pelancongan Negeri Retrieved from https://malaysiaaktif.my/77268

13. Malaysiakini.com. (Febuari 5, 2020). Sikap Tanggungjawab Dalam Penyebaran Maklumat. Retrieved from https://www.malaysiakini.com/letters/509590

14. Mustafa, M. Z. Kasmani, M. F. Ariffin, M. Y. dan Noor, K. M. (2020). Perhubungan Awam, Media Sosial, Etika Kerja Islam Serta Trend Penggunaan Media Sosial Di Sektor Awam Kementerian Di Malaysia. *Journal of Islamic Social Sciences and Humanities, 22*(2), 47-66

15. New Straits Times. (May 26, 2020). Paitan Needs Continuous Mobile Court Service, Development. Retrieved from https://www.nst.com.my/news/nation/2020/05/595453/paitan-needs-continuous-mobile-court-service-development

16. Rahartri. (2019). "Whatsapp" Media Komunikasi Efektif Masa Kini (Studi Kasus Pada Layanan Jasa Informasi Ilmiah di Kawasan Puspiptek). *Visi Pustaka, 21*(2*),* 147-156

17. Saad, M. Z. dan Yusuf, M. H. (2019). Adaptasi Budaya: Kesan Media Sosial Ke Atas Kegunaan dan Kepuasan. *Journal Of Techno Social*, *11*(1), 46-53

18. Seufert, M. Hoßfeld, T. Schwind, A. Burger, V. dan Tran-Gia, P. (2016). Group-based Communication in WhatsApp. Retrieved from https://www.researchgate.net/publication/309061837_Analysis_of_Group-Based_Communication_in_Whatsapp

19. Sparks, M. (2020, March 31). How Social Media Can Be an Asset for the Preservation of Intangible Heritage. Retrieved from Medium website: https://medium.com/thoughts-on-world-heritage/how-social-media-can-be-an-asset-for-the-preservation-of-intangible-heritage-666a7e3d7546

20. Statista.com. (2020). Global Social Networks Ranked by Number of Users 2020. Retrieved from https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

21. Statista.com. (April 7, 2021). Social Media Users as a Percentage of the Total Population Malaysia 2021. Retrieved from https://www.statista.com/statistics/883712/malaysia-social-media-penetration/

22. Hu. (2020). The moderating role of social media usage in the relationship among multicultural experiences, cultural intelligence, and individual creativity. *Information Technology & People, 30*(2), 265-281

23. Utusan Borneo. (April 12, 2018). Usaha Martabatkan Bangsa Sungai. Retrieved from http://eprints.ums.edu.my/19922/

24. Utusan Borneo Sabah. (August 11, 2017). Tonjol Budaya Muzik Tradisi Etnik Sungai. Retrieved from https://www.pressreader.com/malaysia/utusan-borneo-sabah/20170811/282419874531274

25. Yusof, M. N. M dan Tahir, Z. (2017). Kepentingan Penggunaan Media Sosial Teknologi Maklumat Dalam Pendidikan IPTA. *Journal of Social Science and Humanities, 12*(3), 1823-884

THE UNIQUENESS OF THE MOTIF DESIGN IN THE COMMUNITY OF UMA UKIT BELAGA, SARAWAK

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This article discusses the Uma Ukit Koyan community's unique motifs as well as the function of motifs using a qualitative method approach by conducting online interviews with residents of the Uma Ukit Koyan in Belaga, Sarawak. Based on the findings, it was found the motifs of Uma Ukit are inspired by natural elements of flora and fauna, as well as beliefs passed down through generations. Their motifs were known as *hudok*, such as *hudok sengiro*, *hudok Asok/asu*, *hudok pusung tubak*, and *hudok lino/kelunan*. These motifs can be found most prominently in *bukui* (traditional women's jewelry), *singau* (traditional hats), and *avet* (traditional carrying bag for baby). Most of the *hudok* created for royal descent even motifs *hudok senggiro* that created at avet is for babies of royal descent. The Community is also known by Ruai and has been called "*Weihago*" and "*Letikan*" that is created from rattan. One of the walls at Uma Ukit is inspired by the Sarawak vase. Finally, the motifs that inspired the Uma Ukit community were heavily influenced by aspects of their culture and life. This research is also very important in preserving the heritage so that it can be inherited by the next generation, as well as indirectly highlighting art in the world that is not limited to the Sarawak community.

Keywords: Motif art, Uma Ukit, hudok, royal descent,ruai.

1. INTRODUCTION

1.1 The State of Sarawak

According to Dick Lembang Dugun (2019), shows that the State of Sarawak has been known as "Bumi Kenyalang", is one of the 13 States (Selangor, Perlis, Pulau Pinang, Kedah, Melaka, Negeri Sembilan, Johor, Perak, Pahang, Kelantan, Terengganu, Sabah, and Sarawak) and 3 Federal Territories (Kuala Lumpur, Putrajaya and Labuan) in Malaysia. Sarawak is also the largest state in Malaysia and a place in the Borneo eastern part of Malaysia. The state of Sarawak is also divided into 12 divisions or districts such as Kuching, Sri Aman, Sibu, Miri, Limbang, Bintulu, Sarikei, Kapit, Kota Samarahan, Mukah, Serian and Betong. Sarawak also has the largest multi-ethnic population in Malaysia. This is because the state of Sarawak has recorded a total of 27 ethnic groups, each practicing their language, culture, and way of lif e. The ethnic groups in Sarawak are like Iban, Malay Sarawak, Bidayuh, and "Orang Ulu". Ethnicities are divided according to settlement areas such as coastal areas, river valleys, inland districts, and even upland areas. This situation has created each ethnic group that forms their respective cultural identity according to its environment. Sarawak or "Bumi Kenyalang" is famous for its unique, interesting, and harmonious ethnic diversity. The uniqueness and harmony that the state of Sarawak has provided as one of the most harmonious states without the emergence of racial problems in the various ethnic groups in the state. The harmony has also created unity and political stability that can stimulate good economic growth and improvement for the state of Sarawak.

1.2 The Community of Uma Ukit Koyan

The "Orang Ulu" or translated as "people of the interior" are made up of 26 different ethnic groups such as the Kenyah, Kayan, Kelabit, Kajang, Murut, Penan, Saban, Tabun, Ukit, Punan, and others. Therefore, the community of Uma Ukit or ethnic is one of the tribes under the "Orang Ulu" community in Sarawak. This ethnic group is also a community with a small minority. In 2019, this community consisting of about 650 residents and 79 households only and lives in Sungai Asap Koyan, in Belaga Sarawak (Sarawak energy, 2020). Belaga district is located in the upper reaches of Rejang and various international borders with North Kalimantan which is part of the territory of Indonesia. Belaga is a hilly and mountainous area (Roselind et al., 2015).

According to Astro Awani News (2019), titled "Mengangkat legasi Sarawak dalam perniagaan pakaian" stated the motifs are the main subject in a work of art that aims to beautify a work of art. Certain motifs are also applied to symbolize the identity of each ethnic group in the "Bumi Kenyalang" which is greatly influenced by environmental factors and their own beliefs. Every hand motif art that is produced so meticulously, delicately, and uniquely has made the motifs art produced by ethnic groups in Sarawak.

Sarawak also was named one of the best artworks in the world. Although, the community of Uma Ukit Koyan in Belaga, Sarawak is less known to the public.

The wealth of art produced by ethnicities has also produced a very proud art variation. If we look, the motifs art found in the weaving and carving of the Uma Ukit Koyan community in Belaga, Sarawak is indirectly able to ref lect the cultural aspects and beliefs of the community. Therefore, the uniqueness of the motif art produced by the community should be further highlighted to the general public so that the art produced by the community is better than their known art.

2. OBJECTIVES OF THE RESEARCH

1. To identify the types of motifs found in the Uma Ukit Koyan community in Belaga, Sarawak.
2. To analyze the function of motifs that available on Uma Ukit Koyan community in Belaga, Sarawak.

3. LITERATURE REVIEW

It is common knowledge that every state in Malaysia must have its art pattern or motifs that can symbolize a community or ethnicity. Sarawak is also one of the states in Malaysia which are well known as a state rich in artistic and cultural heritage. Sarawak has also produced many of its art patterns or motifs. Most of the arts such as motifs will be self-produced by the ethnic groups in Sarawak.

According to, Nasaruddin Stanley Kujat (2021), in Radio Television Malaysia (RTM) titled "Cerita Pagi Sarawak-Ruai Rotan Uma Ukit", stated perhaps a village for the Uma Ukit ethnic group is foreign to the outside community who do not know or are aware of the existence of the ethnic group. However, in the Sungai Asap area and the Belaga district, it is no longer unfamiliar with the ethnic group named Uma Ukit. Little information, this ethnic group is an ethnic group under the "Orang Ulu" community. However, this ethnic group is less known than the Kayan and Kenyah ethnic groups. This is because the Uma Ukit ethnic group is an ethnic group with a small population. Based on the news interview, the Uma Ukit Koyan ethnic group has a longhouse that has been decorated with rattan. This is because, in every part of the house wall, the chairs up to the pillars of their longhouse are all made using rattan. The use of rattan has attracted the attention of many with its uniqueness and special features displayed.

Not only that, but the walls of the ethnic longhouses decorated with rattan also show art motifs that can symbolize their culture and way of life. The relationship between the handicrafts of the "Orang Ulu" community and the Uma Ukit Koyan ethnic group in

Belaga, Sarawak does not show significant differences. The motifs in art produced are also almost identical. Raw materials such as rattan as well as the use of beads which are considered cultural are also used by the Uma Ukit ethnic group. It will be adapted (Kujat, 2021) on the products of bags, baskets, house walls, home decoration appliances, hats, etc. The mat is a very well-known production among the Ulu people, Sarawak. 'Bat/Pat' and 'Bat/Pat Dapit' is a reference among the Orang Ulu community to the mat used as a base for a bed or seat. The community will also refer to the mat as a dining paddy or other substances as a perceptionto avoid disrespecting the guests or incorrect use.

According to Salmah Omar, Philip Lepun, and Ribka Alan (2016) in the Journal of Society and Space, stated about Ethnicity and the Shaping of the Malaysian Cultural Landscape: The Art of Mat Weaving of the Ulu Sarawak People, the "Orang Ulu" community produces mats that are very important in their use because they are closely related to the order of degrees of hierarchy. The community also relates to ownership or preparation of mats in a family to avoid the incorrect interpretation of the Ulu community or others for those who visit the house to understand their culture. Besides, to illustrate the real-life that exists among the community or family in the Orang Ulu community, the pattern, and type of mat is an important indicator in society.

According to Lydia Patrick Padri, Intan Khasumarlina Mohd Khalid, and Harozila Ramil (2015), in the "Jurnal Seni dan Pendidikan Seni", and title of The Motifs of Kalong in Sarawak, stated the Kalong motifs in "Orang Ulu" community symbolizes something or carrying good symbols based on philosophy, tradition, legend, and history. The symbolic motifs produced have the mystical affiliation contained in the equation between the words specified in each object's name. As a result, each of the various motives chosen will follow aspects of the culture and trust of the "Orang Ulu" community in nature. In general, Kalong motifs among the "Orang Ulu" community are divided into four categories of humans and cosmos, fauna, and flora.

4. RESEARCH METHODOLOGY

The research methodology used by researchers in carrying out this research. It is intended to explain how this research is conducted, the data is obtained and analyzed to obtain accurate and authentic information and data. This research methodology is used to provide an approach on the specific method or way an issue or problem can be solved or can be answered to ensure that the information obtained is reasonable and supported by the data obtained. This is very necessary to form a methodology of good research, thus producing quality research. Therefore, research methods are an aspect

or a method that serves to solve every problem that exists in research done by a person or researcher.

Overall, in carrying out this research, the researchers used a qualitative method approach. Conducting qualitative research is a method where the researchers have to make observations down to the field study site and conduct interviews with residents in the selected area. Recognize and understand the Motifs in Art of The Uma Ukit Koyan Community in Belaga, Sarawak. Researchers conducted this research through online interviews with residents in the tribal village of the Uma Ukit Koyan in Belaga, Sarawak to obtain complete research information.

However, on the other hand, obtaining information in writing and orally, researchers will also obtain photographs related to art motifs that have been produced from the informants interviewed. Therefore, this situation can show more clearly the artistic motifs produced by the Uma Ukit Koyan Community in Belaga, Sarawak.

5. EMPIRICAL RESULTS AND ANALYSIS

The motifs art of the community Uma Ukit Koyan was known as Hudok. Most of the "Orang Ulu" from Uma Ukit uses Hudok as part of their culture. They often use the Hudok motif to wall decorations, bukui (traditional women's jewellery), singau (traditional hats), avet (traditional carrying bag), salung (tombs), etc. There are many motifs of hudok which are hudok sengiro, hudok Asok/asu, hudok pusung tubak, and hudok lino/kelunan. Most hudok motifs are mostly used by people of royal descent.

Furthermore, the Uma Ukit Koyan community has rattan decorations on their house walls that take six months or more to complete per block. If the house block is completed, they will complete a nomination to the Malaysian Book of Records. They have been appeared in RTM television channels because of their distinctive decorations, with each block creating a different design. Sir Belarek is the inventor of ruai rattan. Sir Belarek was the person who began ruai decoration with rattan and was initially placed on a ruai chair.

Figure 1: One of Uma Ukit motifs Resource: Informant Miss Shafinaz

Each block provides unique decorations for both the outside and inside of the house. This house belongs to one of them, Madam Suti Bawa, according to Figure 1, 2, and 3. Madam Suti Bawa was one of Uma Ukit's most important people. Madam Suti Bawa was the daughter of a village chief in the past, and her husband took over as village chief. The name of the village chief is Sir Maren Uma Ukit Ngaret Lijap. If an issue comes, madam Suti's home will be used as a gathering spot. According to sources, only the community of Uma Ukit creates wall decorations.

Figure 2: Sir Belarek House Resource: Informant Miss Shafinaz

The motifs of wall decoration are mostly inspired by flora and fauna, gong, parang, Sarawak vase, etc. One of the decorations at the informant grandmother's house named Unang Gasai was inspired by flora and fauna and eyes like Figure 12. Most decorations at their house were made by women of the Uma Ukit community while men will search for rattan. The cost of production per door 1 000 ringgit includes transport and decorations materials. The rattan was called "weihogo" or rattan "letikan".

Figure 3: Sir Belarek House, Eyes Motif Resource: Informant Miss Shafinaz

Figure 4: The Motif Sarawak Vase, one of community Uma Ukit Resource: Informant Nur Shafinaz

Figure 5: Unang Gasai Outside Decorations Inspired by Eyes Resource: Informant Nur Shafinaz

5.1   Hudok Sengiro

Figure 6: Hudok Sengiro Resource: Informant Madam Suti Bawa

Hudok Sengiro was also known as the lion motifs that rarely use by the Uma Ukit community that was made of beads and was called "dihei bukok". According to their beliefs, Sengiro was the king of the jungle and the Hudok Sengiro motifs cannot be used at will by other residents of Uma Ukit. Those motifs only can be used by someone of royal descent. The use of this hudok can be used as a place to put the baby. This

type of hudok sengiro was called "Avet", it is a kind of carrying bag. "Avet" is also used for children of royal descent.

According to informant Madam Suti Bawa, ordinary people cannot use this motif, and the completion time ranges from two to three months. However, "Avet" can be used by other Uma Ukit communities, but with different motifs and not motifs hudok sengiro. These motifs would be presented to members of other communities by people of royal descent. It was intended to convey their status as descendants of royalty.

These motifs are commonly seen during festive and "keramaian" occasions. The Uma ukit people's festival is known as "Alo bhuket."

5.2   Hudok Asok/Asu

Figure 7: Singau Hudok Asok/Asu Resource: Informant Madam Suti Bawa

Hudok Asok or Asu is another motif that can only be used by people of royal descent. According to Uma Ukit beliefs, using this motif or ordinary people using this motif may cause them to go insane. Hudok Asu, also known as the dog motif, was one of the motifs used for singau. Singau was a traditional hat worn by women or as a complement to other accessories. Most of Singau Hudok Asok or Asu are used as home decorations, such as hanging on the wall. Women in Uma Ukit would wear the usual and has no meaning Singau while gardening and harvesting. Singau has no meaning other than to demonstrate the creativity of Community Uma Ukit such as Figure 8.

Figure 8: Singau Uma Ukit Resource: Informant Madam Suti Bawa

5.3   *Hudok Lino/Kelunan*

Figure 9: Hudok Lino/Kelunan Resource: Informant Madam Suti Bawa

According to Madam Suti Bawa, Hudok Lino or Kelunan simply means "people." The hudok lino motif is f requently used by the community that is affordable and also has skills in weaving or carving. Hudok Lino or Kelunan is also commonly used as an accessory to "Orang Ulu" traditional attire, wall decorations, or even in beauty queen contests. Hudok Lino or Kelunan has also been used in Uma Ukit's "Alo Bhuket" festival.

5.4   *Hudok Pusung Tubak*

Figure 10: Hudok Pusung Tubak Resource: Informants Madam Suti Bawa

According to Madam Suti, Hudok Pusung Tubak has no special meaning but is commonly used as a decoration and to gather with other members of the community. The hudok pusung tubak motif was inspired by flora and fauna as well as hereditary inspiration. Rattan, tevangau leaves, parang, knife, silet, tui, tapak and aguk (self-made knife) are the materials used to make mats. They will use "weletikan" to thin the rattan. In the past, the Uma Ukit community used clay to colour the mat, but now they use dye. To make the rattan dark, tevangau leaves and clay will be boiled for 1 day and stored overnight.

Figure 11, Aguk

Resource: Informant Nur Shafinaz

Figure 12: Tapak

Resource: Informant Nur Shafinaz

Figure 13: Silet

Resource: Informant Nur Shafinaz

Figure 14: Tui

Resource: Informant Nur Shafinaz

Figure 15: Madam Suti Bawa with Nur Shafinaz Resource: Informants Nur Shafinaz

Figure 16: Nur Shafinaz wearing Pigon Resource: Informants Nur Shafinaz

6. CONCLUSION

To maintain the uniqueness of Hudok Motifs, the community must learn and re-apply the art of motifs that have been produced so that the value of its uniqueness does not disappear in the era of the country which is increasingly advanced with the existence of various advanced technologies. Maintaining the uniqueness that has been created in a society must be maintained to provide exposure to future generations so that something unique can be carried to the next generation. This situation can also be stated that if it has something so unique such as the Hudok Motif, it not only attracts the interest of the local community but will also be able to attract the interest of the community f rom abroad if maintained. With that, it can show something unique in this country. Therefore, stakeholders can also work with residents who produce Hudok Motifs in marketing each product that has been produced to a higher level to help introduce the motif to other communities.

REFERENCES

1. Abdullah, N. (2019, Disember 15). Terokai keunikan Bumi Kenyalang. Retrieved from BHonline:https://www.bharian.com.my/hujung-minggu/santai/2019/12/638824/terokai-keunikan- bumi-kenyalang

2. Ding, L. (2011). The Use of Rhinoceros Hornbill Birds in Orang Ulu Arts Penggunaan Burung Kenyalang Dalam Kesenian Orang Ulu. Kuching, Sarawak: Universiti Malaysia Sarawak.

3. Dugun, D. L. (2019, September 12). Sarawak contoh terbaik dalam perpaduan antara kaum. Retrieved from Sarawakvoice News: https://sarawakvoice.com/2019/09/12/sarawak-contoh-terbaik- dalam-perpaduan-antara-kaum/

4. Jau, M. I. (2004). Traditional Motives of The Kayan/Kenyah Community / Motif Tradisional Masyarakat Kayan/Kenyah. Kuching, Sarawak: Universiti Malaysia Sarawak.

5. Kujat, N. S. (2021, Januari 2). Cerita pagi Sarawak - Ruai Rotan Uma Ukit . Retrieved from Berita RTM: https://www.youtube.com/watch?v=xpyYz76zQ6I&t=2s

6. Lydia, P., Intan, K., & Harozila, R. (2015). The Motifs of Kalong in Sarawak. Jurnal Seni dan Pendidikan Seni, 3, 127-140.

7. News, A. A. (2019, Julai 18). Mengangkat legasi etnik Sarawak dalam perniagaan pakaian . Retrieved from Astro awani : https://www.astroawani.com/gaya-hidup/mengangkat-legasi-etnik- sarawak-dalam-perniagaan-pakaian-212978

8. Roselind, Wan., Sumathi, R., & Bromely, R. (2015). What is the point of us taking? Ethnic language and ethnic identity in northern Borneo, Malaysia. Journal of Humanities and Social Sciences, 04(01), 109-120.

9. Sahari, F. (2012). Sustainability of Orang Ulu Crafts. Kuching, Sarawak: Research Innovation for Malaysia, Borneo and Australia (RIMBA3).

10. Salmah, O., Philip, L., & Ribka, A. (2016). Etnik dan pembentukan landskap budaya Malaysia: Seni anyaman tikar Orang Ulu Sarawak. Journal of Society and Space, 10(12), 21-28.

11. Sarawak, E. (2020, September 30). Sarawak energy updates Bakun resettlement scheme community on social investment initiatives. Retrieved from Sarawak energy: https://www.sarawakenergy.com/media-info/media-releases/2020/sarawak-energy-updates-bakun-resettlement-scheme-community-on-social-investment-initiatives

12. Shafinaz, N., & Bawa, S. (2021, April 12). The Motif of Design in The Community of Uma Ukit Belaga, Sarawak. (N. H. Rosli, Interviewer)

THE DOCUMENTATION OF *SELAYAH KERINGKAM* EMBROIDERY PROCESS IN SARAWAK

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This study aims to investigate the process of *Selayah Keringkam* embroidery in Sarawak as well as understanding the intricacy of art and expertise in producing the *Selayah Keringkam* embroidery that is now becoming the status of Malay women in Sarawak. This study was conducted to examine several types and processing stages of *Selayah Keringkam*, thus, to understand expertise in producing *Selayah Keringkam* embroidery in more depth in order to maintain the uniqueness of *Selayah Keringkam* art for the people of Sarawak. The study involved Malay women in Sarawak who have experiences in processing and styling *Selayah Keringkam*. The information obtained in order to meet the objectives of this study was taken from websites and journals that have been published and studied further through research methodology and previous studies. Research data were analyzed and displayed quantitatively and qualitatively. From the findings of this study, there are various *Selayah Keringkam* embroidery processes that have been researched and recorded in archives, journals and articles related to *Selayah Keringkam*.

Keywords: *Selayah Keringkam Sarawak*, Process, Embroidery

1. INTRODUCTION

1.1. *Selayah Keringkam* in Sarawak

This study was initiated to introduce the Malay traditional clothes of Sarawak which is the *Selayah Keringkam Sarawak* and proceed by examining more in-depth on the *Selayah Keringkam* embroidery process in Sarawak, which includes evidence thatare already available by researchers. In addition, this study will be completed with a discussion and conclusion, in which readers are able to learn more and recognize the processes throughout the production journey of *Sarawak Keringkam*.

2. BACKGROUND

Selayah Keringkam Sarawak is a small, glamorous traditional veil that covers the head. *Selayah* is embroidered with neat and luxurious gold thread. The market forthis little head scarf was known to be highly exclusive. It was a must have item for a family of traditional Malay Sarawak. *Selayah Keringkam* is traditionally worn at weddings receptions, marriage ceremonies, and other formal events. The *Selayah Keringkam* is an invaluable legacy in every Malay household, handed down from generation to generation (Norseha Unin, 2012).

Nowadays, the traditional veil is often worn by Sarawak Malays at cultural festivals and special occasions. *Selayah Keringkam* Malay Sarawak is often seen in dark red, but presently, there are diverse color variations on *Selayah Keringkam* Sarawak as well as attractive embroidery that shows a variety of motifs. According to the Borneo Post (2018), the embroidery found in *Selayah Keringkam* is usually done on rare fabrics such as *kain pelikat*, *kasa rubia*, *kain kasa getah*, or organza silk witha special flat-shaped needle with two holes and a sharp point at the end. Therefore, this *Selayah Keringkam* embroidery process has various ways and needs to be investigated more carefully.

Figure 1: *Selayah Keringkam* used to cover the head
(Source: https://www.borneotalk.com/the-enduring-allure-of-sarawaks-keringkam-and-songket/)

3. LITERATURE REVIEW

3.1. The Documentation Process

Sudarsono (2017) says that the meaning of documentation varies depending on different angles. Awang (n.d) defines documentation as a written report that describes an invention, information and ideas in detail until a prototype is successfully produced. Awang (n.d) also said that documentation is crucial because it can be used as references for future needs. According to Aty (n.d), documentation is the work of recording an activity or an important situation to a person. For example, noting the equipment used and the process or stages that needed to be carried out toproduce *Selayah Keringkam* embroidery. Next, Herlindah, Ningsih and Prayetno (2019) explain that documentation is an attempt to explain how a system works by using various forms such as flow charts, diagrams as well as other narrative or writtenforms.

Hartono (n.d) defines a process as a sequence of execution or stages that must be carried out in preparing a job effectively and efficiently. In addition, processesare also defined as activities that are closely related to one another.

3.2. Selayah Keringkam in Sarawak

According to Salem (2012), the word *Keringkam* comes from the root word *kelingkam* which has the same meaning as *kerikam*. According to the fourth edition of *Kamus Dewan dan Pustaka*, the word *kerikam* means coarse thread coated with gold or silver thread which often used to create fabric embroidery work. Salem (2012), also explained that most likely the word *Keringkam* comes from a combination of two words namely *keling* and torn. The *keling* is a word that has been used by Malays even before the arrival of the Portuguese, Dutch and British in the Malay Archipelago.The word torn is believed originated from the Ancient Cambodian language which means a kind of cloth (Salem, 2012). However, the word torn or *kham* carries a different meaning in Thai which is gold or something that is unique and beautiful. Amri, Haron, Mutalid and Hamdzun (2019) say that the word *Keringkam* is taken fromthe name of the gold thread used to do embroidery work.

Amri, Haron and Saiman (2018a), *Selayah Keringkam* is a very unique handicraft in Sarawak because to produce it, extensive skills are needed in the art of embroidery. Formerly, *Selayah Keringkam* embroidery was popular for its exceptional beauty embroidered on the surfaces of *selayah* or head scarfs, *baju kurung* and *baju kebaya* (Amri, Haron, Mutalid and Hamdzun, 2019).

Rusyaidi (2010), explained that among the important equipment needed to perform *Selayah Keringkam* embroidery is gold thread or silver thread, cloth and special flat needles with two holes and wooden frames or better known as *pemidang* or *pedangan*. According to Josmani, Kibat, Halamy and Chan (2012), gold threads are at a high cost ranging from RM 75 to RM85. This is because the product was imported from the neighbouring country which is Singapore and then resold in retails that can only be found in Indian Street area of Kuching, Sarawak. This clearly proves that there are still a number of Sarawakians who still carry out this *Selayah Keringkam* embroidery work.

Amri et al. al. (2018$_a$) say that the second material is fabric. The fabric used is the *kain dasar* (base fabric) and *kain penghubung* (connector fabric). The base fabric is *kain rubia, kain bawal* and chiffon which are available in a variety of different fabric materials such as silk and cotton. *Kain penghubung* is the fabric used to be the connector to the *kain dasar* and the wooden frame *(pemidang)*. Josmani, Kibat, Halamy and Chan (2012), stated that the next piece of equipment is a needle or better known as a two-hole flat needle measuring 3 centimeters long and 0.3 centimeters wide. This needle is quite difficult to find and can only be found in some places, such as Sibu, Sarawak. The last piece of equipment is the wooden frame *(pemidang).* There are two types of *pemidang,* namely *pemidang berkaki tiga* and *pemidang berkaki empat*. This *pemidang* is made of *meranti* wood and serves to stretch base fabric to facilitate embroidery work.

3.3 Process of Keringkam Embroidery in Sarawak

Selayah Keringkam embroidery technique in Sarawak depends on the thread count and the wooden frame *(pemidang)* used to facilitate the embroidery process. The size of the fabric must be according to the correct measurement which is (5x5x10) centimeters. The embroidery technique performed should be repeated at least three times to produce high quality embroidery, neat and meet customer satisfaction (Salem, 2012).

Amri, Haron and Saiman (2018$_b$), explained that there are five stages that must be done to produce high quality *Selayah Keringkam* embroidery. The following are some of the stages that should be implemented (Amri et al., 2018$_b$; Salem, 2006):

1. The first step is to stretch the fabric to be embroidered. The connector fabric *(kain penghubung)* will be folded in half and then sewn at each end of the *kain rubia* to produce loops. A wooden frame *(pemidang)* will be inserted into each loop of the *penghubung* fabric. The last step of this first stage is to tie the ends of the wooden frame *(pemidang)* to obtain a satisfactory tension.

2. The second step is to create the pattern as well as carry out the basic embroidery which is known as tali air. This tali air embroidery is known to be made on every side of the rubia fabric.

3. The third stage is the renda berguntin embroidery. Renda berguntin is an embroidery that takes the shape of a mountain or a triangle and this embroidery are often seen on most traditional dresses from other ethnicities in Sarawak.

4. The fourth stage is where a high degree of patience is required compared to the other stages. At this stage, a rose pattern will be embroidered to fill the space of the rubia fabric that has been embroidered with renda berguntin. The second step of this stage is to create a flower-patterned embroidery called the strewn flower. This strewn flower is an embroidery motif such as stars, grass and tabor pelayang.

5. After all of the embroidery works are completed, gold thread will be used to make a layer on top of the rubia fabric so that the previously embroidered motifs are neat and of high quality. The second step of the final stage is called the renda berguntin. After being wrapped with gold thread embroidery, the rubia fabric will be separated from the wooden frame (pemidang) by cutting the penghubung fabric from the rubia fabric. The final step at this stage is to tidy up each stitch by trimming and discarding excess threads.

4. METHODOLOGY

Research methodology is the method used to collect, obtain and analyze appropriate information used to complete a study (Othman, 2019). According to Mohajan (2018), research methodology is a development of the process used to produce a theory that is a procedural framework in which the study is conducted. This study was conducted using qualitative methods. In obtaining data to complete this study, there are two types of data used, namely primary data and secondary data. This primary data includes conducting interviews with informant, Miss Khairunnisa Zain which ventured the *Selayah Keringkam* business since 2016 at Miri, Sarawak, as well as observations on the processes of producing *Selayah Keringkam* embroidery. This study was also conducted at Gallery *Songket* and *Keringkam* Kuching Sarawak. In addition to using primary data, researchers have also used secondary data to refer to and find information related to the title of the study by accessing several websites.

5. FINDINGS

5.1. Processes of producing Selayah Keringkam

From the findings of this study, the researcher found that the processes of producing *Selayah Keringkam* as well as the embroidery involved throughout the process occurred. The creation and embroidery video is available via QR Code provided by *Songket* and *Keringkam* Gallery in Kuching.

Figure 2: Types of fabrics and tools used to produce *Selayah Kering*kam
(Source: Researcher's photograph 2020)

Referring to figure 2 above, most embroiders will use the *rubia kasa* and chiffon. Besides that, canal motif *(tali air)*, mountain, bamboo shoots, scattered stars or *sisipan*, nuts, roses, cananga and orchids are also motifs of embroidery that is most popular.

Besides that, according to Miss Khairunnisa, the name of the tools that needed in the making of *Selayah Keringkam* are *Jarum Pipih* or known as needle with 2 holes, gold or silver thread for *Selayah Keringkam*, side thread which is round thread or thick thread, *rubia kasa*, chiffon and wooden frame (*Pemidang*).

Figure 3: Tools needed provided by informant (2 hole needles, gold thread, silverthread, *rubia kasa* and side thread)
(Source: Researcher's photograph 2020)

First, the fabric will be attached to the wooden frame. The fabric will be tied to the wooden frame on each side tightly to facilitate the embroidery process to achieve the neat *Selayah Keringkam* result.

Equipment such as gold thread, scissors, and special needles made of copper or silver are used to make *Selayah Keringkam* embroidery. Next, the gold thread used to produce the embroidery motifs on the *Selayah Keringkam* fabric such as the water rope motif and the sprinkle motif will be inserted into the needle hole repeatedly until tight. These are the findings that can be found in Gallery *Songket* and *Keringkam.*

Figure 4: Wooden frame (*pemidang*) used to produce *Selayah Keringkam*
(Source: Researcher's photograph 2020)

Figure 5: Process of attaching fabric to the wooden frame (*pemidang*)
(Source: Researcher's photograph 2020)

Figure 6: Processes of stretching the fabric on the wooden frame (*pemidang*)
(Source: Screenshot from QR Code at Galeri Keringkam Kuching, 2020)

Figure 7: Process of attaching gold thread to the needle
(Source: Screenshot from QR Code at Galeri Keringkam Kuching, 2020)

Figure 8: Embroidering the motif *Tali Air* (Canal Motif)
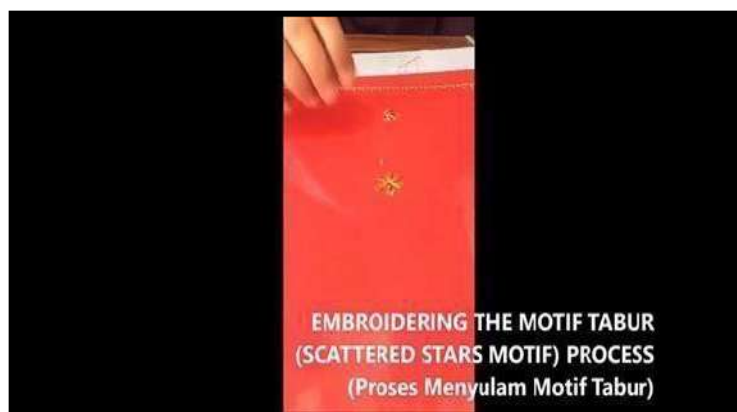(Source: Screenshot from QR Code at Galeri Keringkam Kuching, 2020)

Figure 9: Embroidering the motif *Tabur* (Scattered Stars Motif)
(Source: Screenshot from QR Code at Galeri Keringkam Kuching, 2020)

Furthermore, as mention by Miss Khairunnisa, patterns and motifs of *Selayah Keringkam* embroidery that will be produced must be prepared first for reference. The side part of *Selayah Keringkam* will be embroidered starting with the *Tali Air* embroiderytype and finished with the *Pucuk Rebung* side motif. After that, spread neatly the *rubia kasa* on a wooden frame and make sure the thread strand is being plug correctly.

Next, embroidery the fabric by two events which is according to the count of the thread strand or by *tikam tembus* technique which means it will start with 5 count, then another section will also be 5 count and do the motif using the reference provided. Lastly, to end the sewing of the *Selayah Keringkam*, use the side thread to sew the side of *Selayah Keringkam*, cut it from the wooden frame and tidy up the side of *Selayah Keringkam*.

An addition to that, famous embroidery as describe by her are *Pucuk Rebung* for side embroidery, *Kacang-Kacang* for inside embroidery, and for *tabor dalam* is *Bunga Pelayang*. But recently Miss Khairunnisa modernise the pattern in *Selayah Keringkam* and do not have specific name on it as adept sewing motif technique helps her to create her own patterns.

Figure 10: Process of inspecting the strand of the fabric
(Source: Screenshot from QR Code at Galeri Keringkam Kuching, 2020)

Figure 11 below is the result of *Selayah Keringkam* using gold thread. The market price offered for a piece of *Selayah Keringkam* reaches RM 4399 a piece depending on the motive desired by the customer.

Figure 11: The Gold Thread *Selayah Keringkam*
(Source: Galeri Keringkam Kuching, 2020)

Figure 12: The result of *Selayah Keringkam* using gold thread
made by MissKhairunnisa.
(Source: Galeri Keringkam Kuching, 2020)

6.   DISCUSSION AND CONCLUSION

Finally, the art of *Selayah Keringkam* embroidery which is available in variouspatterns and embroidered through several important processes, is now known as a textile embroidery art that is highly treasured and exceptionally valued in the state of Sarawak. Based on the findings of the study, several steps or processes to complete the *Selayah Keringkam* embroidery have been carried out. Among them is to provide all the equipment and materials used such as gold thread, two-hole flattenedneedle, cloth and even a wooden frame or known as the *pemidang*. Through the observations that have been carried out at the Gallery *Songket* and *Keringkam* Kuching, Sarawak, and by interviewing Miss Khairunnisa, the most important process is to attach the fabric on the wooden frame so that the fabric becomes taut and facilitates the embroidering process. Then, after the fabric is tightened, the gold thread is inserted into the needle hole repeatedly until the thread is tight so that the embroidery becomes more neat and precise. Once the thread is inserted into the needle hole, then the embroidery process can be continued to completion according to the motif chosen by the customer.

In conclusion, we hope that this study can aid researchers in expanding their knowledge on embroidery steps and also the embroidery motifs of *Selayah Keringkam* in Sarawak. Apart from being able to gain the knowledge of the researchers themselves, we also hope that this study can be used as reference material for future researchers and also the Sarawak community who read it. Finally,our hope is that these embroidery works will not be forgotten in this era of modernization and also in the future. Therefore, to prevent the extinction of *Selayah Keringkam* embroidery art, this exceptional art must be exposed and applied in the younger generation today at their tender ages. As the saying goes, *"melentur buluh biarlah dari rebungnya"*.

REFERENCES

1.   Amri, N. H. Z., Haron, H., & Samian, A. L. (2018[a]). The art of kelingkan embroidary as a catalyst for the development of creative industry. *International Journal of Civil Engineering and Technology, 9(*5), 25-30.

2.   Amri, N. H. Z., Haron, H., & Samian, A. L. (2018[b]). Application of the kelingkan embroidery process in Malaysia. *International Journal of Mechanical Engineering and Technology, 9*(5), 524–530.

3.   Amri, N. H. Z., Haron, H., Mutalib, N. A., & Hamdzun, S. N. H. (2019). Reinventing tradition through kelingkan embroidery handicraft in Malaysia. *International Journal Mechanical Engineering and Technology, 10*(09), 128-133.

4.   Aty,   Y.   (n.d).   *Metode Dokumentasi.*   Retrieved   from https://www.poltekkeskupang.ac.id/informasi/download/category/8-

mkjk.html?download=33:doku

5. Awang, M. N. (n.d). *Bab 8 Pendokumentasian*. Retrieved from http://anyflip.com/xdwde/lmku/basic

6. Galeri Songket dan Keringkam (2020). Keringkam. Kuching, M.Y.

7. Hartono, F. (n.d). *Bab iii PEMBAHASAN. 3.1 Pengertian Proses*. Retrieved from https://docplayer.info/88189753-Bab-iii-pembahasan-3-1-pengertian-proses.html

8. Herlindah, I., Ningsih, T. Y., & Prayetno, D. (2019). *Sistem Teknik Dokumentasi.* Retrieved from https://www.researchgate.net/publication/332719197_SISTEM_TEKNIK_DOKUMEN TASI

9. Ibrahim Z (2020). *Melestari Seni Sulaman Keringkam*. Retrieved from https://www.kosmo.com.my/2020/12/15/melestari-seni-sulaman-keringkam/

10. Josmani, D. S. A., Kibat, S. A., Halamy, S., & Chan, V. S. L. (2012). Selayah keringkam, the traditional embroidery of the Sarawak malays. *PSU – USM International Conference on Art and Sciences,* 554-562

11. Mohajan, H. K. (2018). *Aspects of Mathematical Economics, Social Choice and Game Theory*. Dicapai dari https://www.researchgate.net/publication/321964409_Research_Methodology

12. Norseha, U. (2012). *The Keringkam Veil of Sarawak.* Retrieved from https://www.researchgate.net/publication/331382303_The_Keringkam_Veil_of_Sara wak

13. Othman, R. (2019). *Contoh Metodologi Kajian.* Retrieved from https://www.coursehero.com/file/45608831/CONTOH-METODOLOGI-KAJIANdocx/

14. Rusnan M. (2018), *Memartabatkan seni warisan songket dan keringkam Sarawak*. Retrieved from https://www.utusanborneo.com.my/2018/10/27/memartabatkan-seni-warisan-songket-dan-keringkam-sarawak

15. Rusyaidi, M. (2020). *Keringkam's Starter Kits*. Retrieved from https://issuu.com/st.contrast95/docs/keringkam_s_starter_kit_manual

16. Salem, K. (2012). *The Sarawakiana Series - Culture & Heritage Sarawak Malay Culture: Tudung Keringkam*. Retrieved from https://www.pustaka-sarawak.com/document_uploaded/1547616065.pdf

17. Sepini, A. R., Arif, A. H., & Abdullah, N. (2019). *Motif & Design Patterns of Keringkam Embroidery for The Sarawak Malays*. Retrieved from http://www.journal.pktm.org/index.php/ijtvet/article/download/8/6/

18. Sudarsono, B. (2017). Memahami Dokumentasi. *Acarya Pustaka, 3*(1), 46-65.

THE STUDY OF MATERIAL CULTURE OF THE IBAN COMMUNITY IN SARAWAK: *NGEPAN*

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Cultural identity is a specific word that refers to individuals and communities in distinguishing themselves from others. One of the most dominant identities in a community culture is traditional clothing. In Sarawak, the traditional dress for the Iban is commonly known as *Ngepan Indu*. The *Ngepan Indu* is often worn during the Gawai Dayak celebration season as well as several other ritual ceremonies such as the *Miring* ceremony (Offerings) and *Melah Pinang* (Marriage). The Iban community believes that the *Ngepan* Iban is an identity and cultural icon in today's customs. Apart from that, *Ngepan Iban* is one of the treasures and legacies of *Petara* (God) who inhabited a kingdom called *Panggau Libau, Tinting Gawai Gasing Gerah Layang* so that Iban always remembered *Petara* and the origin of *Iban's* ancestors. This paper aims to analyze and understand the *Ngepan Indu* in the context of the custom and culture of the Iban community by using the qualitative research method based on the collective memory of the Iban cultural experts in Sarawak. Through this research, it is expected to have an effective and progressive impact to regenerate the spirit of Iban culture to continue persistently preserve the *Ngepan* Iban as a cultural heritage from the ancestors of the past, so that it will continue to be preserved for the future.

Keywords: Culture, costume, identity, Iban, *Ngepan*, heritage.

1. INTRODUCTION

Identity is a characteristic to introduce or to distinguish one thing from another. For the name that was given to each human being is one a sign that to distinguishes from the others. (Yussof, 2006: 13) stated that the word identity carries a more comprehensive meaning than the word individuality. Individuality in the context of identity is interpreted as self-strength based on the inherited tradition or authenticity that is within oneself. The identity referred to in the context of this discussion refers to self-strength which is expressed based on a symbol, icon, or a sign for society and culture. In addition, (Ennaji, 2005) said that cultural identity refers to feelings or attitudes that indicate that an individual belongs to a certain community and ethnic group. At the same time, this cultural identity becomes part of the individual's self-perception which includes language, religion, culture, social status, heredity, and culture. The similarity of these aspects makes the individual feel part of the community by sharing these characteristics.

1.1 Definition of Cultural Identity

Cultural expert (Hall, 1990) said that in general, the concept of cultural identity is formed from history and past experiences. This culture has formed equality in society. However, the cultural identity that has been formed has the potential to change or survive through the influence of the media in this era of globalization. Hall's statement is supported by (Fong and Chuang, 2003: 76) that historical factors play an important role in shaping the cultural identity of a group of people and in the end, it will produce shared characteristics. Although cultural identities have succeeded in forming unification between groups of people, however, the characteristics that come from these historical factors have the potential to change over time. The transformation that occurs in this cultural identity has an impact on changes in community groups in the context of cultural heritage, mother tongue, norms, religion, beliefs, and so on. This is also stated by (Bernadette and Elmhurst, 2008: 5-7) who said that apart from history, geographical factors are also a factor in the formation of indigenous culture through culture, music, dance, and way of life.

1.2 Definition of Traditional Costume

According to the (*Kamus Dewan Bahasa* III, 1994) traditional costume is a complete and beautiful custom clothing containing jewellery. While traditional is a word related to nature or according to traditions or people who practice this way of life from generation to generation. (Sholikhah, 2017) also supported that ethnic clothing is referred to as traditional clothing, which is a regional dress that has been worn from generation to generation, which is one of the identities and can be proud of by most supporters of certain cultures. Traditional clothing includes a symbol of identity, social status, way of

life, and technology skills to shape society. The identification of the races in this world, apart from being identified through physical and way of life, the style of dress is also one of the special characteristics in introducing people's abstract identity. For example, people in China are known to wear *Cheongsam* and Indians wear *Saris*, while the Dayak Iban in Sarawak and Kalimantan is known to wear the *Ngepan* Iban.

2. LITERATURE REVIEW

Iban is one of the largest sub ethnics in Dayak community living in Sarawak (a part of Borneo Island). Sarawak were famous with epithet as the land of hornbills. Sarawak is a state located in northwest of the island of Borneo and overlooks the South China Sea. With an area of 124,450 square kilometres, Sarawak became the largest state in Malaysia. The extent of Sarawak covers about 48,000 square miles with a beach area. The topography of Sarawak consists of mountainous areas in the southeast and lowlands in the northwest of about 500 miles long and has altitude of between 2,500 to 4,000 feet above sea level. Sarawak border with Kalimantan, Indonesia, Brunei and Sabah (Ismail and Noor, 2019).

The early migration of the Iban community can be identified based on oral traditions and historical sources. They believed that the Iban people migrated more than 600 years ago from Kapuas, Kalimantan. But referring on (Simonson et al, 2011) genetic research, early human migration across the Sunda land route connecting the land of Southeast Asia has occurred about 45, 000 to 50, 000 years ago. Evidence of genetic sampling suggests that the theory of Austronesian society originated in southern Taiwan is unlikely. Recent research based on DNA analysis has concluded that migration from mainland Southeast Asia only occurred in the same range. It is predicted that several lineages associated with the prehistoric migration of the last ice age have created a wave of migration through the ISEA coastline. The Iban community believed to be among those involved in the early migration. This fact is based on the discovery of primitive human fossils that have been excavated near the modern settlement of the Iban community longhouses in Niah cave, which is in Miri Sarawak. It is widely believed regarding the Iban existence in that period. As time move on, the Iban people had spread to the northern part of Borneo and identify a suitable settlement and established their ethnicity based on their surrounding nature. However, the migration progress does not halt. The mobilisation of the Iban was carried out for several generations to find suitable location to be inhabited. There are various factors that caused to the migration of the Iban community. Initially, it was for the purpose of searching fertile soil. After the culture of the Iban community is more developed, they migrate with the aim for the head-hunter expedition with the purpose of expanding power, custom and their legacy.

According to (Sutlive, 1992), the Iban community is a branch of the Dayak ethnic group inhabited the Borneo archipelago for a long time. During the British colonial era, they were recognised as the Sea Dayak and famous for head-hunting tradition to defend their territory. In addition, (Payne, 1986) explained the socio-cultural community of the Iban people inhabit the riverbank area and carried out their activities to mature. Based on (Pringle, 1970), before the colonisation, the Iban community did not have specific term for identifying themselves like the current Iban community. However, the Iban will self-introduction themselves based on river they are currently settle in. For example, kami ari Skrang (we are Skrang) or kami ari Undop (we are Undop) even they will refer to "We of this area". If this method of identification still practices in the modern era by the Iban community in Sarawak. Now Ibanic group can be classified in two groups based on political geography: the first Ibanic who settled in Sarawak, Malaysia, namely Balau, Remun, Sebuyau, Lemanak, Skrang, Undop, Saribas and Ulu Ai. Second is referring to Ibanic in West and East Kalimantan, Indonesia, namely Mualang, Seberuang, Bugau, Kantu, Desa, Sebaruk and Banyur. However, there are three main theories about the arrival of the Iban community in Sarawak. The first theory established the arrival of the Iban people is from Tanjung Datu in Lundu. The second theory is also by referring to (Sandin, 1967: 3-26). The theory concluded the Iban migrated through Merudu Hill located near Brunei, and the third theory is the widely accepted in Iban community. The theory suggested that the Iban migration was from the Kapuas valley into Sarawak through the Kumpang area. This theory is based on the Iban community's oral traditions told from generation to generation with the journey of Aki Lang Sengalang Burong (God). Aki Lang Sengalang Burung had migrated from Tampun Juah and stopped in the area stated above.

The culture inherited in the Iban community has existed for hundreds of years created by their ancestors. The culture was shared by many in order to form their identity as the Iban people. The Iban people believe that the culture they practice today is a gift from the God called Petara. Based on the Iban oral tradition, the Iban explains that once upon a time the Iban people and Petara communities lived together in a place called Tembawai Tampun Juah. The relationship between the Iban and Petara was temporary. The separation between mortal and divine happened as the result of conflict. Although the Iban have been taught the method of living through Petara (gift) way of life. Therefore, the legacy left by Petara and the information gained by the oral source earlier. These two components have become the essence and identity of the Iban community until now.

3. RESEARCH METHOD

This research is in the form of ethnography based on the cultural material of the Iban community in Sarawak. According to (Hanson and Creswell, 2005), an ethnographic study is a qualitative study to describe, analyze, and interpret the forms of culture sharing in a group such as behavior, belief, languages, economy, political structure, interaction, life, and relationship styles. Besides, (Darmawan, 2008) stated that ethnography is a field of study that focuses on descriptive studies, cultural analysis, linguistic that among others describe and analyze language codes. Ethnography is also an observational field study which is often used in the sociological and anthropological studies and referred to as natural scientific research (Marican, 2005). Hence, the data findings described in this paper are the thesis data of researchers which are obtained through three methods of data collection, namely field observation, interviews, and documentation.

Observation involvement of the field is a qualitative method conducted by the researchers to the Iban community settlement area. According to (Jasmi, 2012), the observation method through the involvement comes from the field of anthropology, which is the study of the community of life. Researchers usually engage with the target community to understand an issue clearly. The reason behind the usage of observation involvement technique to the field, according to (Moleong, 1989), the observation allows the researchers to see, feel, interpret the world along with various social events and social symptoms in it, as the subject sees, feels, and interprets it and the observation allows the formation of knowledge between the researcher and his subject (intersubjectivity). Three main districts have been identified in this research which are Rumah Liam, Rantau Kembayau, Manis Lubok Antu, Rumah Kunjang, Etawa Asal, Undop, Sri Aman, and Rumah Bujang, Rantau Kiran, Nanga Medamit, Limbang to conduct research method observation by community involvement.

Besides that, this research also applied a documentation method to archive the *Ngepan* Iban. According to (Lund et al, 2008) defined documents as the result of human effort to say, give instructions, show, teach, or perform, document briefly using specific tools and methods. Moreover, (Buckland. 2017) believed that documentation is a method of collection, selection, processing, and storage in the field of knowledge and the provision or display of shreds of evidence such as photographs, newspapers, and other data sources. The notion of documentation has evolved into more complex in describing human social events through its activities. Hence, it is used in this research to draw the cultural artifacts of the Iban community that are considered sacred in their beliefs and practices in Sarawak.

The last method of data collection is the interview. It is divided into two target groups. The first target group used the focus group interview. Where the researchers have interviewed a group of informants living in longhouses related to history, the process, the taboo of sacred artifacts in Iban society. The second target group is the Iban community who has the expertise and proficient in Iban culture. The informants were interview (in-depth interview) based on their skills and knowledge in detail about the customs, skills, and beliefs of sacred artifacts. Collective memory technique is used as the data collection method which is consist of an individual interview (in-depth interview) and a focus group interview.

Collective Memory is a memory which is referred as a rearrangement of the past and adjusts the images, beliefs, and experiences of the present (Mead, 1929). Besides, according to (Olick, 1999: 337), Collective Memory is an action that includes collective representational factors (symbols, meanings, narratives, and rituals that exist in a society), cultural structures, and individual memories that are formed personally and socially. culture. According to Barbara (Misztal, 2003), human memory can be expressed in various forms, namely, (**i**) Reflective memory is a person's memory that involves interaction with the people around him. (**ii**) Generational memory is a memory that is passed down from the older generation to the successor or the younger generation so that the memory will continue to live in the culture. This memory causes events to continue and regress if forgotten and (**iii**) Traditional memory is static memory, past-oriented and conservative. Moreover, memory is resistant to change and as a tool to integrate past and present until there is balanced development. Where the informants who have been interviewed are a group of experts in Iban culture. The data collection method used to obtain data used the Collective Memory technique, namely individual interviews (in-depth interviews) and focus group interviews.

4. RESEARCH FINDINGS

Today, Ibanic speaking can be grouped into two categories. First Ibanics that live in Sarawak, Malaysia namely Balau, Remun, Sebuyau, Lemanak, Skrang, Undup, Saribas, and Ulu Ai. The second refers to Ibanic that lives in West and East Kalimantan, Indonesia, namely Mualang, Seberuang, Bugau, Kantu, Desa, Sebaruk, and Banyur. The identification is broken down into several races which are classified according to the river, which is the settlement of the Iban community like Iban Saribas, Iban Batang Ai, Iban Batang Lupar,Iban Batang Rajang, Iban Sebuyau and Bilak Sedik.

4.1 Ngepan Indu Iban is based on the Myth of Kumang.

The history of Ngepan Indu Iban cannot ascertained, since when did the Iban people start wearing it, but according to informant (Edmmund Langgu, 85 years) said that, Ngepan Indu Iban was closely related to the Dayak Iban Goddess named Kumang. Kumang (Goddess Kumang) is considered as a famous Iban legend figure, till the point that before the Gawai Dayak, there will be a beauty competition called Kumang Gawai as a sign to remember Kumang. The figure of Kumang was described as an ideal Iban woman and has various advantages such as good at weaving cloth and pua. She also has a polite personality and a beautiful face that comes from Gelong Batu Nakong, who then married to Dewa Keling (God Keling) and moved to Menua Panggau Libau.

According to (Gavin, 1991), the Iban believes that Kumang will often manifest in Iban women's dreams by giving them directions to weave motifs and patterns. The Iban woman that was chosen by Kumang through the dream must then perform a Ngar ceremony to fulfill the wishes of the people in Panggau Libau. The figure of Kumang has not only to help the Iban women, but she also helps the Iban men who want to go to war. Therefore, the Iban people have learned and imitated the way of dressing based on Urang Panggau (Elysium) life. Generally, Ngepan Iban is not only a traditional dress, but as an identity so that Petara (god) will recognize them during the ritual ceremony

4.2 Type Ngepan Indu Iban

According to informant (Janet Rata Noel, 50 years), the curator of the Tun Jugah Foundation said that clothing, or what is known as Ngepan is the identity of the Iban community in Sarawak, but there are some special characteristics and differences that exist in each of these traditional clothes. In the Iban culture, several types of Ngepan Iban have been identified, namely Ngepan Saribas (Betong, Paku and Krian), Ngepan Kuas (Undop, Semanggang and Lingga), Ngepan Batang Rajang (Kapit), Ngepan Batang Ai (Lubuk Antu, Lemanak and Engkelili)) Ngepan Ringgit (Skrang) and the general Ngepan Iban (used by all the Iban). This identification is based on the name of a residential area or river close to the Iban in Sarawak. The existence of differences among the Iban communities is influenced by factors of migration and cultural adaptation to the natural surroundings. The types of Ngepan Indu Iban are as follows:

4.2.1 Ngepan Iban Saribas

Based on an interview with Informant (Maria Liban, 79 years old) Ngepan Saribas is Ngepan used by the Iban who domiciled in Betong, Paku, Krian, and Layar. This Ngepan has its distinctive characteristics, namely using a Rawai Tinggi (corset made from silver) which is made from silver or rattan and shaped into a circular shape

according to the cut of the woman's hips, then decorated with silver coins. Ngepan Iban Saribas is usually combined with a Kebat cloth (Iban weaving that has a water spiral pattern), Lampit Perak (silver lampit), Sugu Tinggi (high comb/headdress), a pair of silver earrings, Kalung Perak (silver necklace), and a complete set of Tumpa Pirak (silver arm bracelet). Meanwhile, the legs will be covered with a set of silver anklets that have bells and the hands will be tucked in a white lacy handkerchief while holding the Buah Pauh as additional decoration.
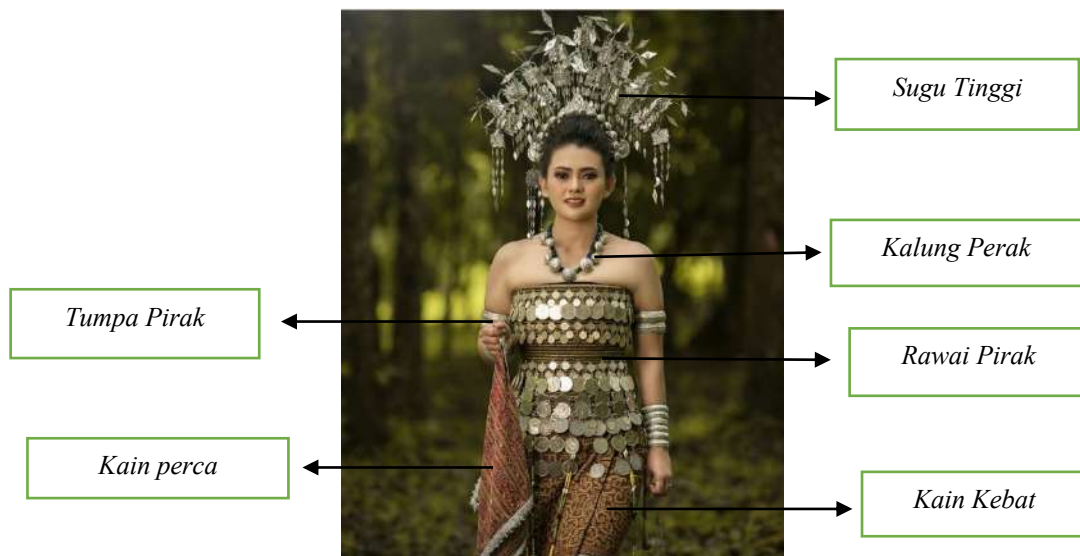

Figure 1: Ngepan Saribas (Photo by: Urai Lidum, 2019)

4.2.2 Ngepan Batang Rajang

According to informant (Janet Rata Noel, 50 years old), Ngepan Batang Rajang or Dujung Marik is Ngepan for the Iban who live in the Batang Rajang River refer to the Kapit, Song and Balleh area. Dunjung Marik, which means a large pile of beads is made following the Ngepan characteristic, with the predominance of beads of various colors and high quality. Meanwhile, Baju Marik clothes are made using bead embroidery techniques of various colors and categories such as glass beads, blue barrel beads, straw beads, buah pelaga (fire agate), brass bells, and cowrie shells. To complement the Ngepan Dunjung Marik style, accessories such as dunjung (headdress made of beads and paper flowers), burie cloth (cloth embroidered with snail beads), tumpa bulu (bracelet made of rubber trees), and gerunung siong will be added as a hand accessory. It is believed that the Ngepan Iban in Batang Rajang received influences from the Urang Ulu (Kayan, Kenyah, and Kelabit) culture as well as the Embaloh ethnic who were the early settlers on the Rajang River before they migrated to the highlands of Bario and Ba'kelalan

Dunjung Marik

Baju Ujan

Tumpa Bulu

Figure 2: Ngepan Batang Rajang (1997) (Photo by: Kapit Bulletin, 2019)

4.2.3 Ngepan Batang Ai

Ngepan Batang Ai or Ngepan Lampit Besusu refers to the traditional dress of the Iban who lives around the Lemanak, Engkelili and Lubok Antu areas. According to (Jusy Sambai, 2018), based on his research, Ngepan Batang Ai's complete costume are Sugu Tinggi (headdress), Lampit, Tumpa Bentuk, Tumpa Rangkup Pandak, Pandak Pirak Rawai, Kain Sungkit (woven cloth), Gelang Kaki (anklets), Tali Leka Peria (silver ropes), Sementing Ringgit and Buah Pauh (hand accessories). Physically, Ngepan Batang Ai is almost identical to Ngepan Iban from Skrang area, but there are still significant differences that can be seen clearly. One of the examples is the use of tenun sungkit (woven textiles). According to informant (Sima Jang, 70 years old), said that the Iban in Batang Ai is more likely to produce tenun sungkit weaving than Kain Kebat (weaving fabrics). This is influenced by the kain sungkit (woven fabrics) textile which is more colorful and has more distinctive motifs than other Dayak Iban woven fabrics. Besides, the uniqueness of Ngepan Batang Ai is that its usage of lampit (Silver Belt) as the main accessory to cover a woman's chest.
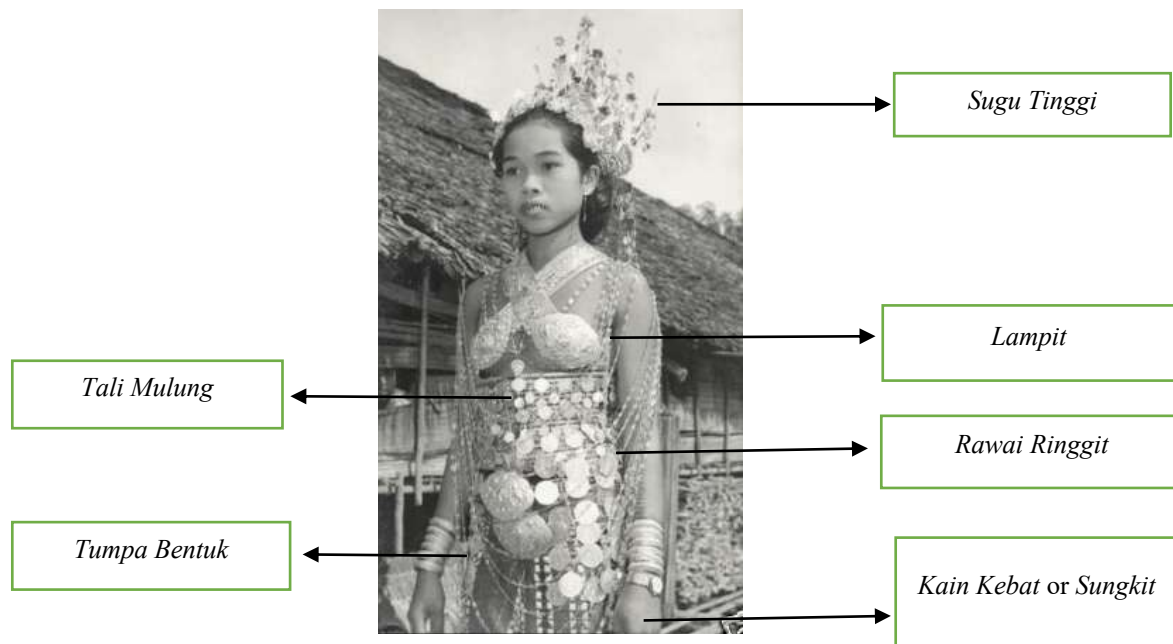
Sugu Tinggi	
Lampit	
Tali Mulung	Rawai Ringgit
Tumpa Bentuk	Kain Kebat or Sungkit

Figure 3: Ngepan Batang Ai (1891) (Photo by Sarawak Museum, 2019)

4.2.4 Ngepan Skrang

Ngepan Skrang, also known as Ngepan Ringgit, is a traditional costume of Dayak Iban who lives in the Skrang area. According to informant (Beol Dingin, 80 years), Ngepan Ringgit from Skrang generally uses a Sugu Tinggi (headdress), Baju Ringgit, Rawai, Kain Kebat (weaving fabric), and accessories such as Lampit Ringgit, Tumpa Pirak, Simpai Pirak, Buah Pauh, and Gerunung Kaki (bell anklet) in the arrangement of traditional clothes. The specialty of the Ngepan Ringgit is the use of silver coins from Europe as a characteristic of the Ngepan Skrang in accentuating the identity of the Iban traditional dress in Skrang. The usage of the name Ringgit was inspired by the ringgit currency in Malaysia, although the basic material for the traditional Ngepan Skrang clothing uses silver coins from Europe.
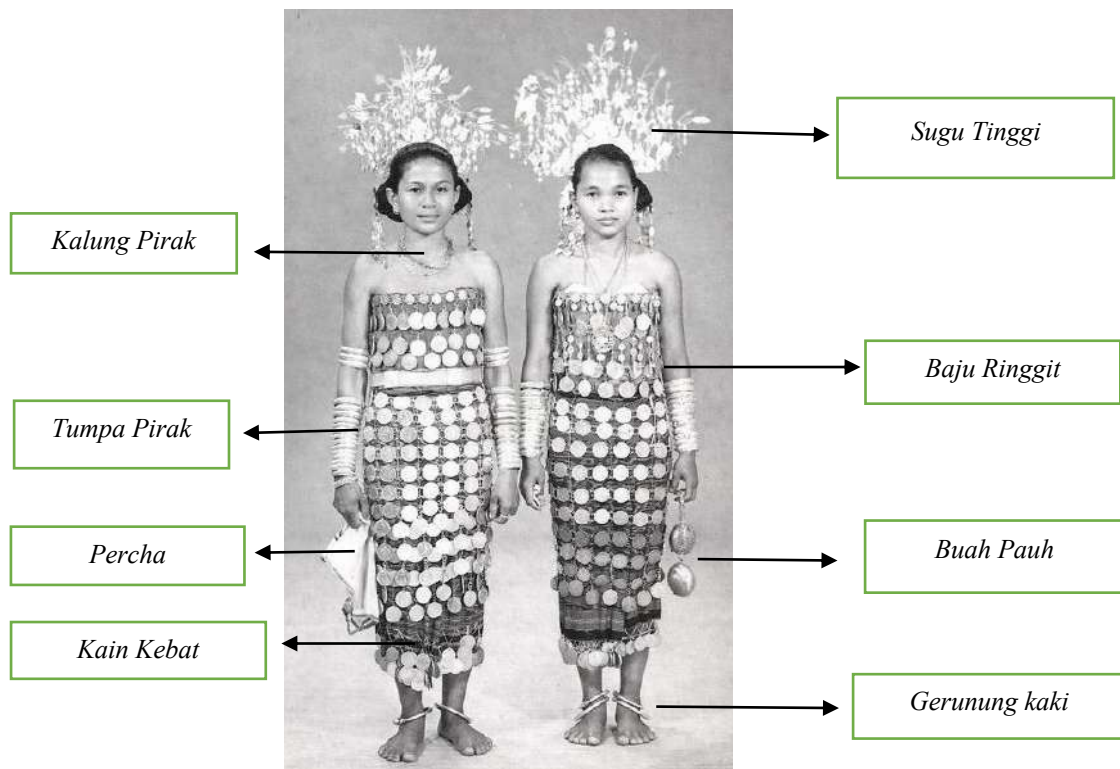
Figure 4: Ngepan Skrang (1891) (Photo by Sarawak Museum, 2019)

4.2.5 Ngepan Iban in General

Ngepan Iban, generally refers to the traditional costume that is identical to the Iban in Sarawak, even in Kalimantan. This type of Ngepan is not specific to a single area like the other Ngepan Iban as above. Moreover, the general Ngepan Iban is an inheritance from a the Iban family that will be passed down from generation to generation by grandmothers, mothers, parent-in-law, or spouses. According to informant (Chermai Iri, 68 years) Ngepan Iban, which is always arranged by Iban women in the Gawai Ceremony, consists of Sugu Tinggi, Tali Mulung, Rawai, Buah Pauh, Bentuk Tumpa, Gerunchung Kaki, Lampit, Sementing Ringgit, Selampai, and Tango. This type of ngepan is widely used by the Iban community as a sign of their identity to differentiate themselves from other Dayak ethnicities.
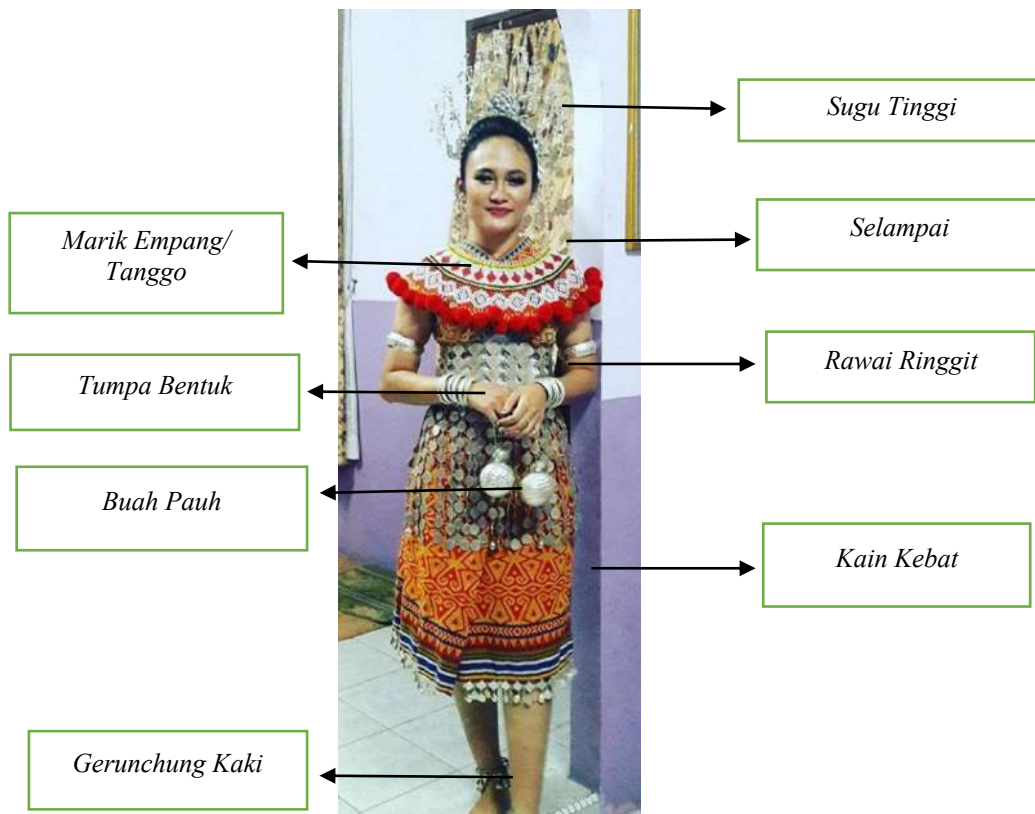
Figure 5: Ngepan Iban during Gawai Dayak (2019) (Photo by: Durasima Namieng, 2019)

5. DATA ANALYSIS AND DATA INTERPRETATION

Efforts to introduce and elevate Ngepan Iban as a symbol of the Iban identity to the national level began with an Iban Women's Organization in 1950. It is located at Kuching, Sarawak which is also known as Serakup Indu (Iban Woman Associates). The organization is led by Ms. Barbara Bay who has gathered the Iban women with basic education such as reading, writing, and counting from all over the Sarawak such as Lundu, Lubuk Antu, Betong, and Simanggang (currently known as Sri Aman). The objective of the establishment of this association is to improve the quality of life of the Iban, especially women in terms of education, health, economy, and socialization, especially in Iban cultures such as holding a Ngajat dance and Pua Kumbu weaving class. However, the initial effort to preserve Ngepan Iban only happened in a group of women who are involved in the association only due to a lack of skilled manpower in administering the association.

On September 25, 1964, a year after the formation of Malaysia, an Iban female political figure, the late Philomena Tra Jemat or also known as Dato Sri Tra Zehnder Jemat along with other Dayak ministers, fought for the Pesta Gawai Dayak to be held as a

national festival to celebrate the Dayak in Sarawak especially the Iban and Bidayuh. The special declaration was given by the state government to allow Gawai Dayak Festival to be celebrated every 1st June by the Dayak community has provided a culturally friendly landscape and perspective in introducing the Iban Dayak cultures and lifestyle in general to the national level. Through the Gawai Dayak Festival, Ngepan Iban has been promoted indirectly as the identity and icon of Dayak Iban traditional clothing until these days.

The beauty of women who wear Ngepan Iban is often expressed in Leka Main Iban (Oral tradition) such as Sugi, Pantun Puji, Ramban, and Ganu. Examples of compliments that are often sung by the Iban men to admire the beauty of a woman in wearing Ngepan Iban are such:

Table 1: The Metaphor of Iban Beauty

Iban Language	English Translation
Rarat betis, baka lais patis ikan laban	straight and long calf section resembling the shape of fish
Lengan baka ripan buluh lalang	the small sleeves are shaped like pointed bamboo items
Buk baka kemidin dunjang	hair that is combed and worn with Sugu Tinggi likened a crown
Kuyu pelu-pelu baka telu kepayang	round cheeks are shaped like an oval egg
Idung baka puncung tersabut tunsung	pointed nose likened to the top of a high hill
Dada nyala baka gaya duyung telentang	the virgin chest part likened to a mermaid's chest
Pejalai baka selali daun lalang	slow and beautiful way of walking likened to blown weeds wind

According to (Lemambang Abang Entrey, 81 years old) through the metaphor of the language, the beauty of a woman is reflected through the elements of flora and fauna within their settlement. Apart from that, the Iban also depicts the beauty of a woman through sacred figures such as Mermaid. It is not only interpreted in linguistics but also applied in the art of the Iban community as in the motifs found in Pua Kumbu and bemban weaving. In the social tradition, Ngepan is a legacy and inheritance bequeathed by a woman in a the Iban family. The inheritance process is done for generations from grandmother to mother, then to daughter or daughter-in-law and the practice takes place continuously. Indeed, Ngepan Iban has a high aesthetic value in the Iban culture. Ngepan Iban is a form of activity that involves traditional ceremonies and rituals. It is used in traditional ceremonies and rituals. For example, Gawai Tanju, Bedara, or Begawai Umai (Harvest Celebration). Apart from that, Iban women wear Ngepan Iban to welcome the return of their husbands who have returned from the Ngayau expedition. The Iban woman will wait for her husband, or the Iban man at the front of the stairs then greet the enemy's head that was obtained during the Ngayau expedition using the Pua Kumbu which has a bali belumpung or melting fire motif.

The Iban women in ancient times did not care if they became widowed at a young age when their husbands went on the Ngayau expedition, this was because they were more concerned with name and family status when their husbands returned from Ngayau (head-hunting). When carrying out the Miring (offering ceremony), the use of Ngepan Indu is mandatory, especially for Indu Piring, which is the woman who prepares and manages the equipment for the Miring (offering ceremony). It proves to Petara (God) that the Iban are serious in carrying out the ceremony to ask for help and assistance. For ordinary people who do not use Ngepan Iban, it is advisable to stay away from the offering ceremony for fear of being exposed to spiritual forces that can cause illness and lead to death. The Iban believes that during the Miring ceremony, Petara (God) and Urang Panggau (Elysium) will come to listen to the Iban requests. The shrilling sound of a Kain Tating (Iban fabric) decorated with coin ornaments will produce a melodious sound like an Emping Aling bird. It will attract the attention of a the Iban man to choose his future wife candidate. In the past, the Iban, especially mothers who intend to find a daughter-in-law, paid close attention to the perfection of Iban women who wear Ngepan Iban, especially unmarried Iban women. The complete use of the Ngepan Iban will symbolize the status of the wearer and her family.

There is a significant difference in the enrichment of Ngepan Iban who lives in Batang Rajang and other the Iban areas. Whereas the Iban in the Batang Rajang area tends to use beaded ornaments as a special characteristic in celebrating their traditional costume compared to the Iban who lives in the Saribas, Skrang, and Batang Ai areas who prefer silver accessories as the main ornament in enriching the traditional costume. This is due to cultural assimilation between the Iban tribe in Batang Rajang and the Urang Ulu tribe who tend to use beads as the main decoration in their culture. In the past, apart from cultural objects such as ceramics, beads were also very valuable assets for the indigenous people on the Borneo Island, they obtained these beads from traders who sailed from China to Borneo through the barter system, where they would exchange rice for goods. Other essentials from China such as ceramics, beads, and textiles.

As for the Iban people who domicile in the Saribas, Skrang, and Batang Ai areas, they are fond of silverware, so they have adapted using silver in innovation and cultural object creation. For the Iban, apart from ceramics, objects that are produced from silver are a status symbol of wealth and pleasure. The more silver collections a family have, the higher their rank in social status in the longhouse. Therefore, in ancient times it was not surprising why the Iban people liked to grow hill rice on a large scale, the aim was to buy, and own objects made of silver as an heirloom and a symbol of wealth status. They will also feel embarrassed when talked about by another the Iban if they do not own or borrow the Ngepan Iban. These factors motivated the Iban to diligently cultivate rice and expand their power through the Ngayau expedition to obtain items such as tajau (vase), gongs, and silver accessories so they would not sag in front of other Iban communities.

There are some significant changes that can be clearly seen in the aesthetic value of Ngepan Iban especially in terms of manufacturing materials and application practices among the Iban especially in terms of manufacturing materials and application practices among the Iban today. In ancient times, the material for making Ngepan Iban accessories was using pure silver specially forged by the Memaloh ethnic, they learned silver forging techniques from traders from China. Therefore, every forged accessory has a high value, weight, and durability to be stored as an inheritance for a long period of time. Apart from that, the Iban also produces natural-based textile weaving to make Kain Kebat as the basis of Ngepan Iban. Natural ingredients such as Engkerabai leaves will be used as dyes to produce red and brown colors, while taya will be used as yarn for the process of weaving the kain kebat. The process of making Kain Kebat is very taboo and full of customs. The Iban believes that Pua and Kain Kebat is an introduction to Petara and was raised as a sacred cultural artifact in the Iban ceremonies and rituals.

Before producing weave, the Iban women should wait for a good and happy dream from Petara (God). This intended to get blessings from Petara (God) and to ensure the weaving process will run smoothly.

Nowadays, in line with the development of globalization, the material in the manufacture of Ngepan Iban accessories have existed in various variations. Ngepan Iban accessory material that was once made of pure silver has been replaced with aluminium sheets as an alternative in producing more modern Ngepan Iban accessories due to the cheap market price factor and easy to shape according to the taste of the owner. Besides, the manufacture of Kain Kebat is also modernized using yarns that are available in the market and come in a variety of colours. Indirectly, the Iban is no longer rely entirely on natural resources to produce their woven textiles as their ancestors have done in the past. The practice of the belief in sacred power in the process of weaving Kain Kebat is fading among the younger generation of Dayak Iban due to the new belief factor that they adhere which is Christianity. Indeed, the impact of globalization has an impact on the authenticity of Ngepan Iban especially in terms of its material use and aesthetic practices. Thus, to ensure the authenticity and value of Ngepan Iban tradition continues to be preserved, Tun Jugah Foundation, Dayak Chair Foundation together with public institutions such as University Malaysia Sarawak must actively strengthen the Iban awareness through workshops, seminars, and academic discussions to increase understanding and awareness on the upkeep of Ngepan Iban in the future. So, its sustainability remains relevant in the Iban culture in Sarawak.

6. CONCLUSION

In conclusion, until to this moment, the the Iban still preserve and maintain Ngepan Iban as their identity and icon in Iban culture. Although Ngepan Iban has undergone significant changes in terms of originality in the enrichment of materials and clothing as a result of various factors such as cultural assimilation, changes in globalization, and even cultural modification, however, the Iban themselves still have a passion to preserve Ngepan Iban as an important cultural heritage in Sarawak. Therefore, through this research, it is expected to have an effective and progressive impact to regenerate the spirit of the Iban culture to continue persistently preserve the Ngepan Iban as a cultural heritage from the ancestors of the past, so that it will continue to be preserved for the future.

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REFERENCES

1. Bernadette P.R & Elmhirst.R .2008. *Gender and Natural Resources Managment:Livehoods Mobility and Interventions.* London: United Kingdom: International Development Research Center.

2. Buckland, M. K. 2017. *Before the antelope: Robert Pagès on documents. Proceedings from the Document Academy, 4*(2), 6.

3. Darmawan, K. Z. (2008). *Penelitian etnografi komunikasi: tipe dan metode.* Mediator: *Jurnal Komunikasi, 9*(1), 181-188.

4. E.T, Hall.1990. *Understanding Cultural Differences.* Massachusetts: Intercultural Press, Inc

5. Fong. M Chuang.R. 2003. *Communicating Ethnic and Cultural Identity*. Maryland: Rowman & Littlefiled Publishers.

6. Hanson, W. E., Creswell, J. W., Clark, V. L. P., Petska, K. S., & Creswell, J. D. (2005). *Mixed methods research designs in counseling psychology. Journal of counseling psychology, 52*(2), 224.

7. Jasmi, K. A. 2012. *Metodologi Pengumpulan Data dalam Penyelidikan Kualitatitif in Kursus Penyelidikan Kualitatif* Siri 1 2012 at Puteri Resort Melaka on 28-29 Mac 2012. Or-ganized by Institut Pendidikan Guru Malaysia Kampus Temenggong Ibrahim, Jalan Datin Halimah, 80350 Johor Bahru, Negeri Johor Darul Ta'zim

8. Jusy Sambai Anak Javeril. 2018. *Ngepan Batang Al (Iban Women Traditional Attire) Presentation Through Light Painting Photography.* Kota Samarahan: University Malaysia Sarawak.

9. Kamus Dewan Bahasa, Edisi III .1994. Kuala Lumpur: Dewan Bahasa dan Pustaka.

10. Lund, N. W., & Buckland, M. 2008. *Document, documentation, and the Document Academy: introduction.* Archival Science, 8(3), 161.

11. Marican, S. 2005. *Kaedah penyelidikan sains sosial*. Kuala Lumpur: Prentice Hall/Pearson Malaysia.

12. Mead, G.H. 1929. '*The Nature of the Past', in J.Coss (ed.), Essays in honor of John Dewey* .New York: Henry Holt.

13. Misztal, B. 2003. *Theories of social remembering*. McGraw-Hill Education (UK).

14. Moha, E. 2005. *Multilingualism, Cultural Identity and Education in Morocco*. International *Journal of the Sociology of Language*, 4:1-7.

15. Moleong, LJ. 1989. *Metodologi Penelitian Kualitatif*. Bandung: Remaja Rosdakarya.

16. Payne, Robert.1986. *The White Rajah of Sarawak*. Singapore: Oxford University Press.

17. Pringle, R. 1970. *Rajahs and rebels: the Ibans of Sarawak under Brooke rule, 1841-1941.* Universiti Malaysia Sarawak.

18. Sandin, B. 1967. *The Sea Dayaks of Borneo before white rajah rule*. London, Melbourne.

19. Sholikhah, R. 2017. *Pengembangan Modul Interaktif Busana Daerah sebagai Media Pengenalan Budaya Indonesia. TEKNOBUGA: Jurnal Teknologi Busana dan Boga, 5*(2):10-21.

20. Simonson, T. S., Xing, J., Barrett, R., Jerah, E., Loa, P., Zhang, Y., ... & Mowry, B. (2011). Ancestry of the Iban is predominantly Southeast Asian: genetic evidence from autosomal, mitochondrial, and Y chromosomes. *PloS one, 6*(1), e16338

21. Sutlive Jr, V. H. 1992. *Tun Jugah of Sarawak: Colonialism and Iban Response*, Kuala Lumpur: Fajar Bakti SDN.

22. Tahir, A., & Mohd Noor, A. (2017). Visual Operasi Menghapus Serangan Lanun di Nusantara Dari Laporan The Illustrated London News, 1845-1872*. SEJARAH: Journal of The Department of History, (2)*:22.

23. T, Gavin. 1991. Kayau Indu: The Warpath of Women. *Sarawak Museum Journal, XLII*, 5-10.

24. Yussof, W. A. 2006. Identiti Budaya Melayu dalam Pembangunan Industri Budaya. *Jurnal Antarabangsa Pengajian Melayu* (pp. -). Kuala Lumpur: Universiti Malaya.

HYPOTHESES TESTING ON THE VALIDITY OF EFFECTIVE COMMUNICATION AND COMMON MOTIF OF *SELAYAH KERINGKAM*

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This paper is to deliberate the subjects of the effective communication channel in delivering common motifs in *Selayah Keringkam* by assessing the local and International tourists' preference. It is to evaluate the hypotheses Testing On validity of Effective Communication and Common Motif of *Selayah Keringkam* Towards the communication channel. The finding of this paper is to enhance the implications on developing a significant way to disseminate *Selayah Keringkam* as a heritage product in Sarawak. This paper will expose a substantial relationship between the independent variables (Common Motif of *Selayah Keringkam*), the dependent variables (Channels of Communication) and the mediator (Supplement of Effective Communication) as a new framework to the body of knowledge. This research involved 384 respondents with 5 relevant authorities related to answering research questions. The data collected from the fieldwork were analysed using SPSS version 24. The measures used in this article are methodically deliberated using factor analysis and correlation analysis. Lastly, the results of the regression analyses testing on hypotheses and summary of hypotheses assessments are presented.

Keywords: *Selayah Keringkam*, communication channel, common motif, heritage product

1. INTRODUCTION

Selayah Keringkam is a treasure for ethnic Malays Sarawak which must be preserved and retained so that it is become visible and capable of being aspect in the development of cultural tourism and heritage in traditional textile Sarawak same as other ethnic groups in Sarawak. Disregarding this embroidery can be the cause of the loss of one of the treasures of Sarawak so it must be conserved by ensuring that every tourist can recognize and understand entire beauty of traditional textiles in Sarawak in depicting the magnificence of heritage in Sarawak locally and internationally. This valuable product can be cooperating in the Sarawak tourism industry and indirectly capable to boost the identity of ethnic Malays in Sarawak (Ling.S, 2018). The concern of this study rendering to Said, 2019 mentioned that, consistently people in Sarawak tend to emphasis on main cultural heritage in Sarawak like *'Pua Kumbu'* from Iban textile plus acclimatizing the motif all around Sarawak to present Sarawak however there is another cultural heritage product that is lack of attention specifically the Malay ethnic Sarawak heritage namely *Selayah Keringkam*.

2. LITERATURE REVIEW

2.1. The Literature Reviews Three Main Aspects Such as Selayah Keringkam, The Motif in Selayah Keringkam, And Communication Channels.

- *Selayah Keringkam*

Keringkam, a gold thread embroidery done on veils is a traditional head cover worn by the Sarawak Malays for weddings, engagements, cultural festivals or other special occasions. Traditionally, the *Keringkam* veil or *Selayah Keringkam* made by the Sarawak Malays are always of a deep red color and play a significant role in their weddings (Daud, 1999, p. 124). This is because, the intricacy of the products depends on the refinement and motif of the pattern used with gold and silver layered metal threads (Jaini, 2019). The motifs used specify the individuality of the people in their particular places (Suhana Sarkawi, Norhayati Abd Rahman, 2016).

- The Motif in *Selayah Keringkam*

The motif that embroidery create based on the nature found in the area near the embroider itself. Although the motif is the same but the motif embroidered according to the skill of the embroiderer to name a motif on the *kain Keringkam* (Su'ut, 2019).

- Communication channels

Appropriate channel is important to successfully deliver the context of message. In the basic communication process, a sender delivers a message in words and transmits it to a receiver who interprets the message. Communication channel is the medium that sender used to transmit the message (Flatley, 2019). According to (Kaushik, 2011) Communication need to fulfill the 4Cs characteristic of the message to make it more acceptable by receivers. The 4Cs is comprise of 'comprehension' that giving a message short and clear to make receivers understand the main message easier, second is 'connection' which is not only communicate idea or message to the audience, but it is also resonates with them, which usually triggers a positive or negative emotional response like frustration, excitement, anger, passion, joy, happiness, sadness based on the content in the messages. Third is 'credibility', it is vital because the audience needs to believe who is the sender, what is being said, and how it is being said. So receivers can fully understand and even connect with the message of a sender through few level of emotional effects which basically is about trust and accurate source of the message, comprehensible transmission of visual messages from artwork together with those obtained from visual realism to individuals is the key point. It takes place through a difficult process of aesthetic involvement and aesthetic transmission in which emotional and rational mechanisms are swapped. Lastly is, 'contagiousness', refer to the message given spread by receivers to others and they memorize the message given.

3. METHODOLOGY

Data analysis is a significant part in research methodology to allows the researcher to cultivate a strong body of evidence from the gathering of data. Analysis of the data will lead researcher to interpret data more competently. On the other hand, the findings of the questionnaires were examined using five-point Likert Scale and the Version 24 software of Statistical Package for the Social Sciences (SPSS). For the preliminary study, the researcher interviewed five producers and 52 Sarawakian. The reason behind only choosing few respondents from related authorities is because they are experienced and knowledgeable to recognize about common motif of *Selayah Keringkam*, to verify the first line of data regarding problem issue found, although this research's main aim is on tourist preference of right communication channel and make it effective for cultural and heritage products like *Selayah Keringkam*, but only the producer or related authorities know details about *Selayah Keringkam*. While for questionnaires, this study has successfully distributed to 384 respondents in order to achieve the research objectives. According to (Krejcie, R.V. & Morgan, D.W., 1970) a

population more than 1000000 will have 384 total of sample size that refers to the total of respondents for this study.

3.1 Population and Sampling Method

Sampling is a technique that is part and parcel of a behavioural research since studying the total population is not possible and not practical (Singh, 2006). Sampling is about selecting a subset of individuals from a population to represent an estimate the characteristics of the whole population. The sampling method used in this study is the non-probability sampling, specifically the convenience sampling. The convenience sampling is based on the assumption that the members of the target population are homogenous (Ross, 2005). Questionnaires had been distributed around tourists' area in Kuching, Sarawak that involved *Songket* and *Selayah Keringkam* gallery, museum textile, and Sarawak Cultural Village (SCV). The arrangement of fieldwork aims to allocate the questionnaires were planned by the researcher.

There are 384 chosen respondents which involved the local and international tourists. This study practices Krejcie and Morgan's sampling method to set the numbers of respondents. Sampling needed to prepare printed survey questionnaires to be distributed among tourists as selecting a subset of respondents from the entire population as an implication to the whole population in Kuching, Sarawak. The population of the study was determined preceding sample size can be calculated.

Table 1: Sampling calculation (Source: Lee, 2014)

Size of total population	Sampling error of 5% with a confidence level of 95% Size of Simple population	Sampling error of 1% with a confidence level of 99% Size of sample population
50	44	50
100	79	99
200	132	196
500	217	476
1,000	278	907
2,000	322	1,661
5,000	357	3,311
10,000	370	4,950
20,000	377	6,578
50,000	381	8,195
100,000	383	8,926
1,000,000	384	9,706

After searching for the total of tourist population in Sarawak in five few years, the researcher calculated the total of respondents by the formula below. According to (Krejcie, R.V. & Morgan, D.W., 1970) a population more than 1,000,000 will have 384 total of sample size that refers to the total of respondents.

Table 2: step of sampling calculation

X ÷ Y = Z	23264782 ÷ 5 =
X: Grand Total of Tourist	4652956.4
Y: Year	X: 23264782
Z: Overall	Y: 5
	Z: 4652956.4

3.2 Pilot Test

A pilot test was carried out using the items in the questionnaires. According to (Baker, 1994), pilot study be able to equally like pre-testing of a specific research implement. One of the key parts of leading a pilot study by giving advance caution about where the main research project may possibly fail if the research protocols are not well conducted or inappropriate methods are too complex. A pilot test was conducted among 45 respondents before the main data collection was disseminated to 384 respondents. 45 respondents were randomly chosen around Kuching area to test the validity of the questionnaires. The analysis result of the pilot test using SPSS based on Cronbach's Alpha value are shown as shown below:

Table 3: Reliability Test Result

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.833	.847	33

3.3 Factor Analysis (FA)

FA is used to discover patterns in the correlation between variables. Patterns are used to cluster the variables into a groups, and we call them as factored. The factor can be treated equally new as a composite variable, Paul (2007). Factor analysis can be used to search patterns among any set of correlated variables. FA were used when the analyst is identifying a fewer number of components, in the factors Gaur (2009).

There are two broad categories of factor analysis: *Exploratory Factor Analysis* (EFA) and *Confirmatory Factor Analysis* (CFA) Paul (2007). EFA focuses on finding structures (Patterns) of correlations in the data. It is used most regularly in the early stages of research in an area to construct measurement scales.

CFA is a key component of structural calculation modelling. In this study there are three variables which are known as independent variables, mediator and dependent variables that were used for data analysis in the factor analysis.

Independent variable is the common motif in *Selayah Keringkam* and will be analyse using the EFA. However, 4Cs model of Effective communication as mediator will be analyse using CFA and dependent variables, next communication channel divided into

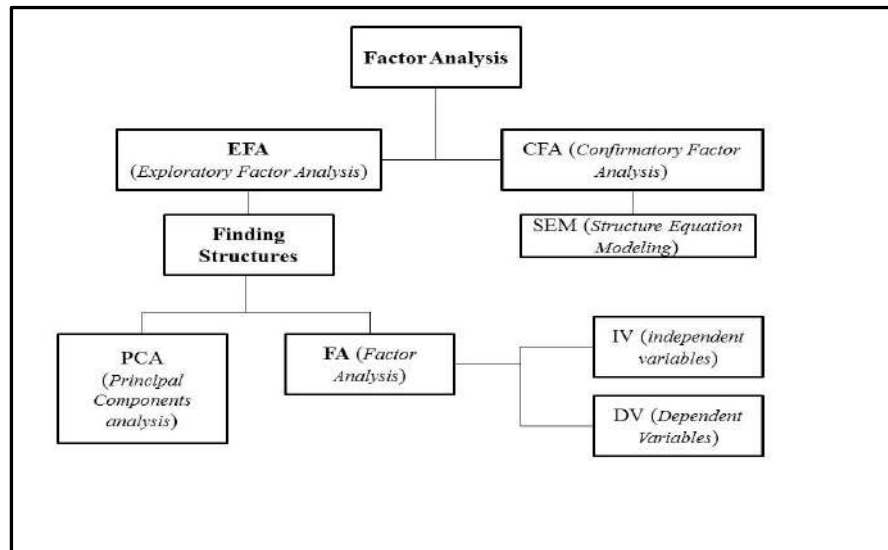two, first is In-Personal communication channel and second is Non-Personal communication as components in EFA.

Figure 1: The process of data analysis using Factor Analysis
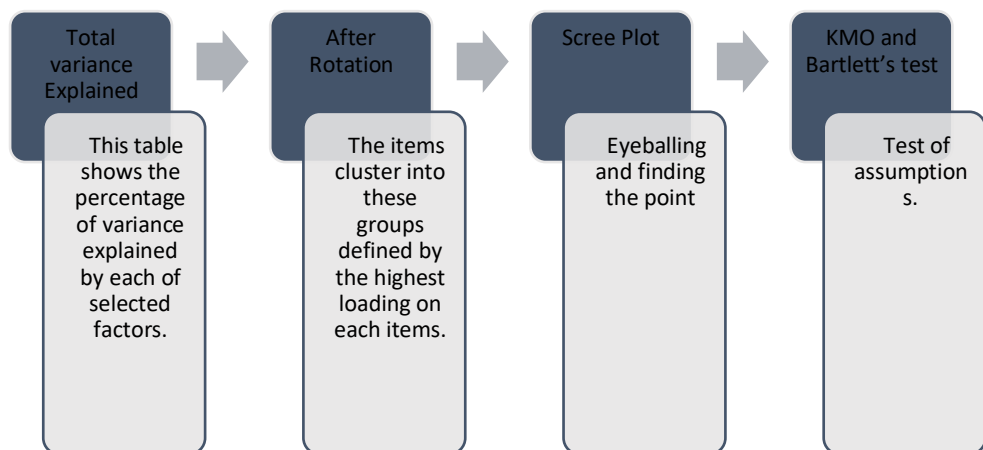Sources: Paul (2007)

Figure 2: Flow of Factor Analysis Report

The data collected were analysed by means of descriptive analysis, factor analyses, regression and frequency analysis. The analysis was conducted based on the data tabulated in SPSS. Referred to Krejcie and Morgan in (Lee, 2014) table for defining sample size used to get appropriate sample size for the study and deliberated as part of the design of the study as well as a sample of the study, data collection method and data analysis method.

4. HYPHOTHESES

4.1 Statement of Hypotheses

The principle of art communication with selected samples is based on research learning, as well as the liberty of creative interpretation. Goodarzparvari, P. and Bueno Camejo, F. (2018) Communication with heritage on the sequence of fine arts is also a chance, history progression is also a decent opportunity to communicate with the desired topic through preference platform of communication by receiver for example *Selayah Keringkam* topic. In some case, the clarification on the culture and its heritages would be introduced by a sender of the messages who would provide the supporting material to discuss with receiver about the message as a role of the mediator of certain known knowledge, story and context of *Selayah Keringkam.* Delivering a message with the right communication medium by attempt to surge the competencies of the receiver of the message, by putting them in the situation of thinking about the value of heritages and conveying with them, it is conceivable to inspire artistic knowledge together with cultural knowledge Goodarzparvari, P. and Bueno Camejo, F. (2018).

There are four hypotheses statements have been created in this study such as below based on the literature found in Goodarzparvari, P. and Bueno Camejo, F. (2018):

Table 4: Hypotheses Statements

H$_1$ High knowledge of *Selayah Keringkams'* common motif by tourists will effect a high difference preference of In-personal communication medium.
H$_2$ High knowledge of *Selayah Keringkams'* common motif by tourists will effect a high difference preference of Non-personal communication medium.
H$_3$ Practice of significance supplement of effective communication will mediate high familiarity of common motif in *Selayah Keringkam* and impact In-personal Communication medium preference by tourist.
H$_4$ Practice of significance supplement of effective communication will mediate high familiarity of common motif in *Selayah Keringkam* and impact Non-personal Communication medium preference by tourist.

In order to test the hypotheses by accepting or rejecting the hypotheses, regression analysis was used to test the hypotheses. From the correlation analysis, it is found that the common motif of *Selayah Keringkam* as independent variable is related and can be incorporated into 4Cs Effective Communication as mediator and In-personal communication channel together with Non-personal communication channel as it shows in tabular below the significant value with .000 and .003 below than 0.05 that displays significance value, conferring to Pallant (2005), "if the significance value is less than .05 for instance, .01, .0001, etc., then the variable is making a significant unique contribution to the prediction of the dependent variable'. Values above .05 can

be reckoned that the variable is not making a significant unique contribution to the independent variables in the model (Pallant, 2005).

In accordance with that, regression analysis was further employed to test if these independent variables can result in a better outcome of mediator also dependent variable as per the hypotheses. H_1 was firstly analysed to see the influence of the independent variables with the dependent variable. H_2 was then be evaluated to regulate the influence of the mediator (4Cs Effective Communication) towards common motif of *Selayah Keringkam* as independent variables and preference communication channels as dependent variables

Table 5: Correlation Analysis

Correlations		Common Motif	4Cs Effective Communication	In-Personal Communication Channel
Independent Variables: (Common Motif of *Selayah Keringkam*)	Pearson Correlation	1	.232**	.394**
	Sig. (2-tailed)		.000	.000
	N	384	384	384
Mediator: (4Cs Effective Communication)	Pearson Correlation	.232**	1	.227**
	Sig. (2-tailed)	.000		.000
	N	384	384	384
Dependent Variables 1: (In-Personal Communication Channel)	Pearson Correlation	.394**	.227**	1
	Sig. (2-tailed)	.000	.000	
	N	384	384	384
**. Correlation is significant at the 0.01 level (2-tailed).				

| Correlations		Common Motif	4Cs Effective Communication	Non-Personal Communication Channel
Independent Variables: (Common Motif of *Selayah Keringkam*)	Pearson Correlation	1	.232**	.152**
	Sig. (2-tailed)		.000	.003
	N	384	384	384
Mediator: (4Cs Effective Communication)	Pearson Correlation	.232**	1	.153**
	Sig. (2-tailed)	.000		.003
	N	384	384	384
Dependent Variables 2: (Non-Personal Communication Channel)	Pearson Correlation	.152**	.153**	1
	Sig. (2-tailed)	.003	.003	
	N	384	384	384
**. Correlation is significant at the 0.01 level (2-tailed).				

5. HYPOTHESES 1
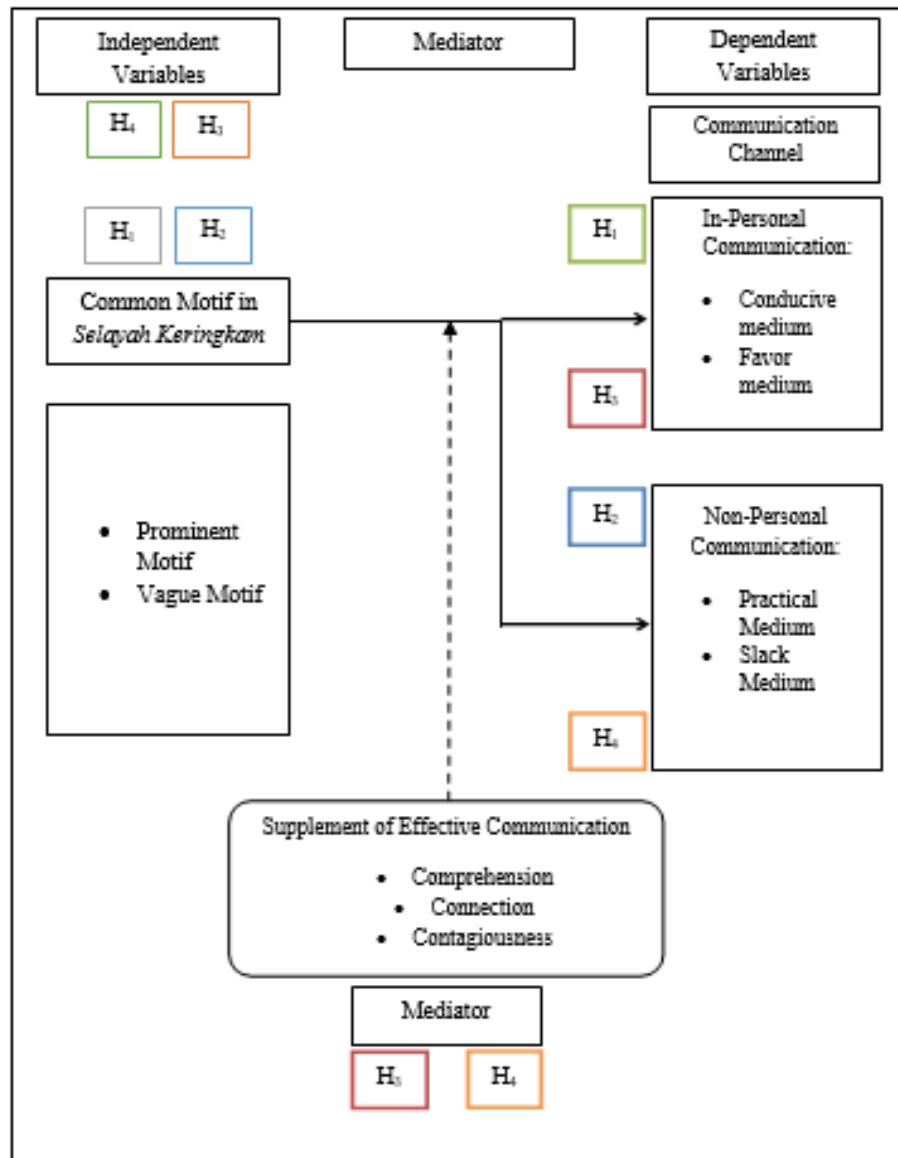
Figure 3*: Framework of Hypotheses Testing*

- High knowledge of *Selayah Keringkams'* common motif by tourists will effect a high difference preference of In-personal communication medium.

To test the hypotheses as stated above, a regression analysis had been employed for independent variables (Common Motif) with dependent variables (In-Personal communication channel) to regulate hypotheses formed whether it can be accepted. This part of the hypotheses answers the objective to analyse the preference of communication channel among tourist to deliver the common motif in *Selayah Keringkam* prospects.
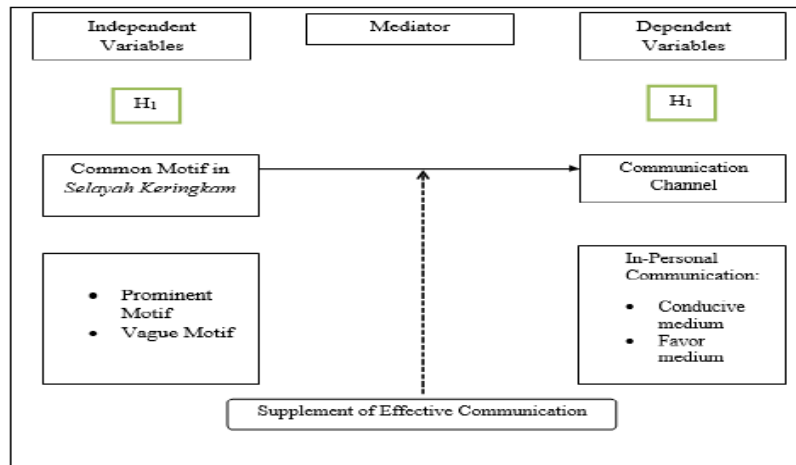
Figure 4: Connection between independent variables towards dependent variables

Figure 4 shows the summary on the relationship of independent variables (Common Motif of *Selayah Keringkam*) and dependent variables (Communication Channels). The Independent variables comprise *Tali Air, Kacang-Kacang, Bunga Tabur, Pucuk Rebung/Gunung, Bunga Ros, Lada Tumpah* as prominent motif of *Selayah Keringkam* while vague motif is *Bunga cengkih*. Dependent variables 1 consist In-personal communication channels contain over telephone and email as conducive medium and exhibition or booth as favor medium. The table 6 below displays model summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables (In-personal communication channel) which the value of R Square is 0.155 which mean 15.5 of the variance in the common motif on influence by communication channels and the value of Durbin-Watson is 1.504 which is displayed as a positive value, according to Chen Y (2016) the Durbin-Watson statistic will always have a value ranging between 0 and 4. A value of 2.0 indicates there is no autocorrelation detected in the sample. Values from 0 to less than 2 point to positive autocorrelation and values from 2 to 4 means negative autocorrelation.

Table 6: Summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables (In-personal communication channel)

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.394[a]	.155	.153	.53895	1.504
a. Predictors: (Constant), Independent Variable (common motif of *Selayah Keringkam*)					
b. Dependent Variable: DV1 In-personal communication channel					

Table 7: Coefficients of hypotheses one (H[1])

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.886	.129		22.413	.000
Independent Variable	.310	.037	.394	8.383	.000

Table 7 above displays the results of coefficient hypotheses one, which is between the independent variables (Common Motif in *Selayah Keringkam*) and the dependent variables (In-personal communication channel). Based on table 7 shows above, largest standardized coefficients beta is 0.394 satisfactory contribution between the common motif of *Selayah Keringkam* as independent variables and In-personal communication as dependent variables. The significance also shows a great value of 0.000 for both variables which is hypotheses is accepted. According to Pallant (2005), "if the significance value is less than .05 for instance, .01, .0001, etc., then the variable is making a significant unique contribution to the prediction of the dependent variable'. Values above .05 can be reckoned that the variable is not making a significant unique contribution to the independent variables in the model (Pallant, 2005).

6. HYPOTHESES 2

- High knowledge of *Selayah Keringkams'* common motif by tourists will effect a high difference preference of Non-personal communication medium.

To test the hypotheses as stated above, a regression analysis had been employed for independent variables (Common Motif in *Selayah Keringkam*) with dependent variables (Non-personal communication) to regulate hypotheses formed whether it can be accepted. This part of the hypotheses answers the objective to analyse the preference of communication channel among tourist in delivering the common motif of *Selayah Keringkam*.
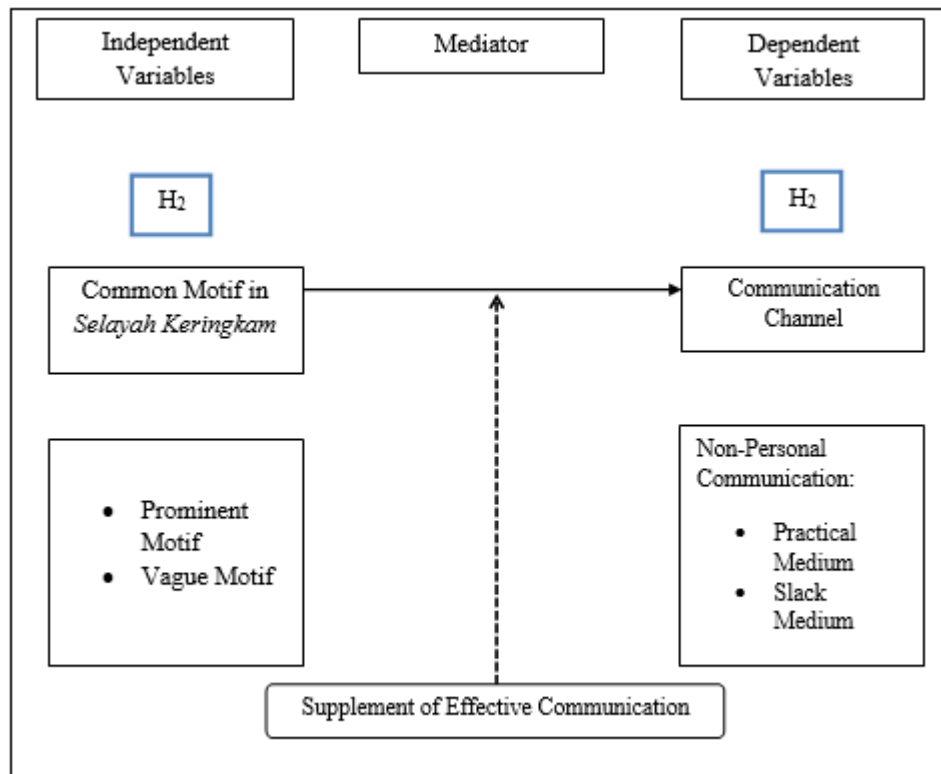
Figure 5: Connection between independent variables towards dependent variables 2

Figure 5 above shows dependent variables 2 contain Non-personal communication channels incorporate with practical media consists print media, broadcast media and online media while for slack medium only include display media. Rendering to Chen Y (2016) the Durbin-Watson statistic will always have a value ranging between 0 and 4. A value of 2.0 indicates there is no autocorrelation detected in the sample. Values from 0 to less than 2 point to positive autocorrelation and values from 2 to 4 means negative autocorrelation. Table 8 below shows model summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables (Non-personal communication channel) in that the value of R Square is 0.023 and the value of Durbin-Watson is 0.952 which are similarly displayed as a great value means the hypotheses is accepted.

Table 8: Summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables (Non-personal communication channel)

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.152[a]	.023	.021	.56281	0.952
a. Predictors: (Constant), Independent Variable (common motif of *Selayah Keringkam*)					
b. Dependent Variable: DV2 Non-personal communication channel					

Table 9: Coefficients of Hypotheses two (H_2)

Coefficients[a]					
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.401	.134		25.296	.000
	Independent	.116	.039	.152	3.009	.003

Table 9 displays the results of coefficient hypotheses, one which is independent variables (common motif) between dependent variables (Non-personal communication channel). Based on table 9 above display coefficients of hypotheses two (H_2), the largest standardized coefficients beta, which is 0.152 that means the contribution between the common motif of *Selayah Keringkam* as independent variables and Non-personal communication as dependent variables is satisfactory. The significance also shows a great value of 0.000 and 0.003 for the variables and the hypotheses is accepted because in confirming with Pallant (2005), "if the significance value is less than .05 for instance, .01, .0001, etc., then the variable is making a significant unique contribution to the prediction of the dependent variable'.

7. HYPOTHESES 3

- Practice of significance supplement of effective communication will mediate high familiarity of common motif in *Selayah Keringkam* and impact In-personal Communication medium preference by tourist.

To test the hypotheses as stated above, a regression analysis had been used for the independent variables (Common motif of *Selayah Keringkam*) and dependent variable (In-personal Communication) together with the mediator (Supplement of effective communication) in determining either the hypotheses can be accepted or rejected.
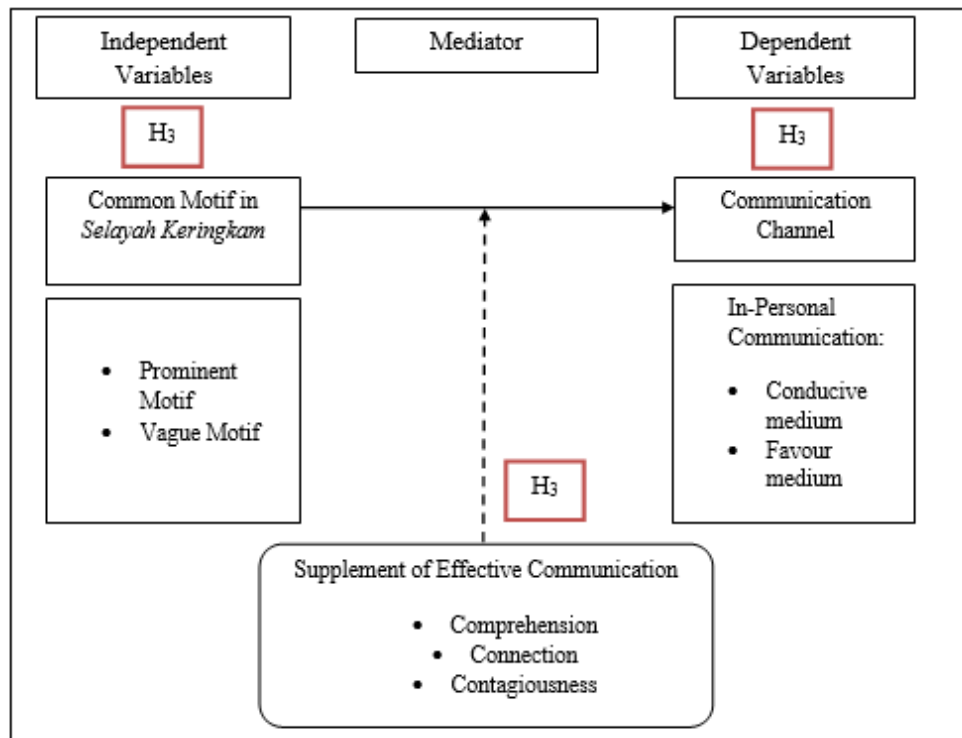
Figure 6: Relationship between independent variables and dependent variables with mediator

Figure 6 above shows the summary on the relationship between the independent variables (common motif of *Selayah Keringkam*) and the dependent variables (In-personal Communication medium) with the mediator (Supplement of Effective Communication). The independent variables consist of aspects such as *Tali Air, Kacang-Kacang, Bunga Tabur, Pucuk Rebung/Gunung, Bunga Ros, Lada Tumpah* as prominent motif of *Selayah Keringkam* while vague motif is *Bunga cengkih*. Dependent variables 1 consist of in-personal communication channels that contains over telephone and email as conducive medium while exhibition or booth as favor medium. The mediator (Supplement of Effective Communication) incorporates three aspects such as comprehension, connection, and contagiousness.

Table 10 below shows summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables 1 (In-personal communication channel) with mediator (supplement of effective communication), model summary of Supplement of Effective Communication (Mediator) and In-personal communication (dependent variables) identified in R Square is 0.52 while Durbin-Watson is 1.278. Common Motif and In-personal communication relationship contribution R Square is 0.155 then Durbin-Watson is 1.504, it is significant value for positive autocorrelation in

between variables as show in the results of the value in model summary in table 10 below.

Agreeing to Chen Y (2016) the Durbin-Watson statistic will always have a value ranging between 0 and 4. A value of 2.0 indicates there is no autocorrelation detected in the sample while values from 0 to less than 2 point to positive autocorrelation and values from 2 to 4 means negative autocorrelation, clearly the hypotheses is accepted.

Table 10: Summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables 1 (In-personal communication channel) with mediator (supplement of effective communication).

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1 (SEC-IPC)	.227	.052	.049	.57113	1.278
2 (CM-IPC)	.394	.155	.153	.53895	1.504
*SEC-Supplement of Effective Communication, *IPC-In-personal communication*, CM-Common Motif					

8. HYPOTHESES 4

- Practice of significance supplement of effective communication will mediate high familiarity of common motif in *Selayah Keringkam* and impact Non-Personal Communication medium preference by tourist.

To test the hypotheses as stated above, a regression analysis had been used for the independent variables (Common motif of *Selayah Keringkam*) and dependent variable (Non-personal Communication) together with the mediator (Supplement of effective communication) in determining either the hypotheses could be accepted or not.
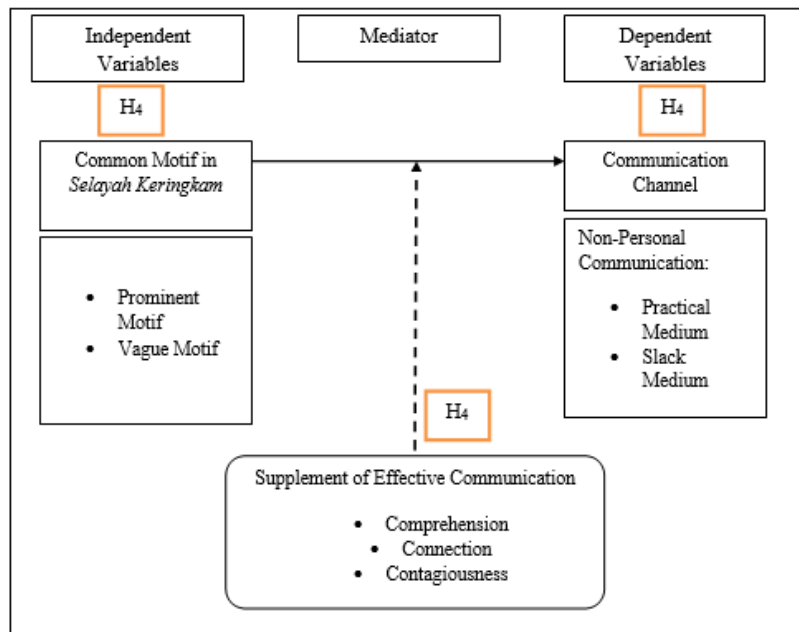
Figure 7: Relationship between independent variables and dependent variables with mediator

Figure 7 above shows the summary on the relationship between the independent variables (common motif in *Selayah Keringkam*) and the dependent variables (Non-personal Communication) with the mediator (Supplement of Effective Communication). The independent variables consist of aspects such as *Tali Air, Kacang-Kacang, Bunga Tabur, Pucuk Rebung* or *Gunung, Bunga Ros, Lada Tumpah* as prominent motif of *Selayah Keringkam* while vague motif is *Bunga cengkih*. Dependent variables 2 consist of Non-personal communication channels contain print media, broadcast media and online media as practical medium and display media as slack medium. The mediator (Supplement of Effective Communication) incorporates three items such as comprehension, connection, and contagiousness.

In table 11 below displays model summary of Supplement of Effective Communication and Non-personal communication that identified R Square is 0.23 while Durbin-Watson is 0.908. Common Motif and Non-personal communication relationship contribution R Square is 0.23 then Durbin-Watson is 0.952, it is acceptance value for positive autocorrelation in between variables as shows in table 11 below. Supportive by Chen Y (2016) that Durbin-Watson statistic have a value ranging between 0 and 4. A value of 2.0 indicates there is no autocorrelation detected in the sample while values from 0 to less than 2 point to positive autocorrelation and values from 2 to 4 means negative autocorrelation, clearly the hypotheses is still accepted with the range of the value stated.

Table 11: Summary of relationship of independent variables (common motif of *Selayah Keringkam*) and dependent variables 2 (Non-personal communication channel) with mediator (supplement of effective communication).

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1 (SEC-NPC)	.153	.023	.021	.56277	.908
2 (CM-NPC)	.152	.023	.021	.56281	.952
*SEC-Supplement of Effective Communication, *NPC-Non-personal communication*, CM-Common Motif					

8. SUMMARY OF HYPOTHESES TESTING

After analysing the data, table below summarizes the result of the Hypotheses testing. All the hypotheses are supported based on the acceptable value number as display in the body of article.

Table 12: Supported Hypotheses

H_1	High knowledge of *Selayah Keringkams'* common motif by tourists will effect a high difference preference of In-personal communication medium.	Supported
H_2	High knowledge of *Selayah Keringkams'* common motif by tourists will effect a high difference preference of Non-personal communication medium.	Supported
H_3	Practice of significance supplement of effective communication will mediate high familiarity of common motif in *Selayah Keringkam* and impact In-personal Communication medium preference by tourist.	Supported
H_4	Practice of significance supplement of effective communication will mediate high familiarity of common motif in *Selayah Keringkam* and impact Non-personal Communication medium preference by tourist.	Supported
*H_1-Hypotheses one *H_2-Hypotheses two * H_3-Hypotheses three *H_4-Hypotheses four		

10. SUMMARY

As a result, the supplement of effective communication as mediator that allied to independent variables as common motif in *Selayah Keringkam* and dependent variables as communication channels data was analysed and discussed accordingly. From the component of communication to ensure the effectiveness of message delivering on *Selayah Keringkam* to be well-known to others especially among tourist as this study concerned.

Factor analysis and rotated components in the variables clearly explains to answer the objective which is to identify the most preference communication channels of Sarawak Malay traditional *Selayah Keringkam* prospects. There are seven common motifs of *Selayah Keringkam* that include *Tali Air, Kacang-Kacang, Bunga Tabur, Pucuk Rebung/Gunung, Bunga Ros, Lada Tumpah* and *Bunga cengkih*. After the rotated components there are new framework identified. New framework shows that common motif of *Selayah Keringkam* as independent variables have two categories namely prominent and vague motif.

Similarly, after the analysis was conducted novel mediator name 4Cs Effective Communication as mediator, consist four items namely comprehension, connection, credibility and contagiousness were modifying when rotated analysis been done. There are only three items identified in mediator classification as supplement of effective communication in new name in framework that only consists of comprehension, connection, and contagiousness that advantage in delivering common motif among tourists effectively. Dependent variable 1 consist In-personal communication channels become two components contain over telephone and email as conducive medium while exhibition/booth as favor medium. Correspondingly, dependent variable 2 become two components which involves of printed media, broadcast media and online media as practical medium then only display media as slack medium.

As a final point, the hypotheses also clarify and confirmed to be supported that significance supplement of effective communications as mediator in this study will influence level of the familiarity of common motif in *Selayah Keringkam* (independent variables) and ultimately contribute positive impression towards communication medium preference by tourists to certify them be acquainted with *Selayah Keringkam.*

REFERENCES

1. Chen, Y. (2016). Spatial Autocorrelation Approaches to Testing Residuals from Least Squares Regression. *PLoS ONE Journal*, *11*(1). https://doi: 10.1371/journal.pone.0146865

2. Daud, M. (1999). *Glimpses of Malay Life in Sarawak*. Kuching, Sarawak: Yayasan Budaya Melayu Sarawak.

3. Flatley, M. E. (2019). *Encyclopedia of Business and Finance* (*2nd ed.).* Retrieved from Communication Channels: https://www.encyclopedia.com/finance/finance-and-accounting-magazines/communication-channels

4. Gaur, A., & Gaur, S. (2009). *Statistical Methods for Practice and Research: A Guide to Data Analysis. (2nd ed).* Los Angeles, London: Business books from Sage

5. Goodarzparvari, P. and Bueno Camejo, F. (2018). Preservation of Cultural Heritage via Education of Children, Utilizing Visual Communication: Persepolis as a Case Study. *Creative Education*, 9, 141-151. https://doi 10.4236/ce.2018.92011.

6. Jaini, M. (2019). *Pesona Warisan Songket dan Keringkam Sarawak*. Retrieved from MalaysiaAktif : https://malaysiaaktif.my/59246

7. Kaushik, R. (2011). Effective Communication and Marketing. *IJCEM International Journal of Computational Engineering & Management*, 129-130.

8. Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities*. Educational and Psychological Measurements*, *30*(3), 607-610.

9. Lee, A. (2014). *Event Management Knowledge Domains as the Antecedents for Successful Cultural Event in Malaysia.* Kuala Lumpur: PhD Thesis, Universiti Teknologi Mara.

10. Ling, S. (2018, March 16). *Making Keringkam shine again*. Retrieved from Star Online: https://www.thestar.com.my/metro/metro-news/2018/03/16/making-Keringkam-shine-again-project-launched-to-preserve-sarawak-malay-traditional-embroidery

11. Pallant, J. (2005). *SPSS Survival Manual (2nd ed.).* Sydney: Allen & Unwin. Australia.

12. Paul, K. (2016). *Management concepts and organizational behavior*. Retrieved study material from https://www/ddegjust.ac.in

13. Ross, M. J. (2005). *A critical analysis of problem solving perception as reported by special event*. Florida: PhD thesis, College of Education, Universtiy of central Florida Orlando.

14. Said, S. (2019, July 17). *Preliminary Interview*. (N. B. Mansor, Interviewer)

15. Singh., R. & Chan, Y, F. (2006). *A comprehensive guide to writing a research proposal*. Selangor: Venton Publishing (M) Sdn. Bhd.

16. Suhana Sarkawi, Norhayati Abd Rahman. (2016). Jejak Sulaman Kelingkan di Malaysia dan Indonesia. *Jurnal Pengajian Melayu*, 27.

17. Su'ut, N. (27 November, 2019). *Preliminary Interview*. (N. B. Mansor, Interviewer)

CHALLENGES OF HANDICRAFT PRODUCTS MARKETING AND PROMOTION AMONGST IBAN ENTREPRENEURS IN SARAWAK

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The main objective of this study was to examine challenges faced by handicraft marketing in implementing product promotion strategies amongst Iban entrepreneurs in Sarawak. This study specifically focused on strategy, the effectiveness of the strategy, and the challenges in implementing the promotion strategy. Fieldwork was carried out at several locations in Kapit and Song district. The data were collected through open-ended questionnaires by email and followed by face-to-face interviews with the respondents. The result showed that personal selling is the effective strategy and the other promotion strategies through public relations. Social media like Facebook, WhatsApp, Instagram, personal selling, and trade fairs are not commonly applicable. Government negligence, exploitation, lack of training, lack of financial support, lack of promotion assistance from stakeholders, expensive working tools, and lack of ownership to the working places were the most critical challenges these marketing strategies face, especially in the rural area. The study recommends that the government come up with support or policies that would create an environment for all stakeholders, including financial institutions, training institutions, and NGOs, to lend a helping hand in promoting skills development in the area.

Keywords: entrepreneurs, handicraft, Iban, rural development, marketing strategies

1. INTRODUCTION

Small industries, particularly handicraft productions, are a significant form of employment, and in every nation, it constitutes a substantial part of their export economy. Observers in the handicraft sector predict that the escalating number of small businesses turning to handicraft production is unlikely to decline significantly in the future. Artisans have been identified as the second-largest sector of rural employment after agriculture in many regions of the world (Rutashobya and Jaenssson, 2004).

The Sarawak Handicraft Industry, especially amongst Iban people, is based on traditional products and traditional processes. It is also based on the comparative advantage of a rich and readily available supply of quality raw materials. In the Iban community, the most popular products are non-timber such as baskets, mats, and textiles (weavings). There is a strong link between tourism and handicrafts of East Malaysians. There is also an interest in contemporary design products and more functional purposes (e.g.: kain burie).

Almost all inputs present a problem: skilled human resources, finance, raw materials, machinery/spare parts, and sometimes information. The long distances involved in distribution, prohibitive transport costs (due to extremely high prices for fuel and spare parts, and the deplorable state main roads), and complex communications have led to ever-higher black-market prices. As the cost of living has sky-rocketed, the purchasing power of the people has declined, thus creating market problems for all industry including Small Scale Industry (SSI).

The small-scale of activities itself results in poor competitiveness because, for instance, bulk buying of required raw materials at reasonable prices is not possible. The labour skills are often focused on only one person, the owner, instead of the workers specializing in specific production steps. Furthermore, production methods and techniques are often obsolete and result in higher costs and lower quality products. Finally, the entrepreneur appears indifferent to market dictates, being more strongly influenced by culture and environment. SSIs are noted for making products according to the entrepreneurs' wishes, skills, and standards rather than market wishes (Hay, 2008).

The survival and success of handicraft marketing largely depend on the promotion strategies that enable the sellers to make the buyers aware, attract and retain buyers for the crafts. Thus, successful results are achieved with more effective promotion strategies, and attractive financial earning is realized. Handicraft marketing is one of the businesses lagging by the lack of proper promotion strategies to attract buyers.

Promotion for handicrafts is passive as sellers, primarily in the Iban community far away from town, tend to rely on word of mouth and wait for buyers to come (Grobler,2005).While recognizing these problems, the areas of intervention by donor agencies can rest on the following three main pillars; policy framework formulation for artisan craft promotion and preservation, institutional capacity building for implementing the support programmes and activities, and strengthening the managerial and production capability of craft producing companies. Also, improve the technical skills of craftspeople (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000). The contribution of the handicraft industry has little impact as a result of no full recognition. Perhaps the key challenges and effective measures have not yet been determined. Thus, the new study expects to develop the most crucial challenges facing the handicraft marketing industry.

This study will facilitate society members in dealing with challenges faced by handicraft promotion, especially in Iban handicraft products. Specifically, handicraft businesses will get knowledge on strategies established for promoting handicraft businesses, hindering handicraft marketing in promoting their products, and then applying good alternatives in promoting handicraft businesses. For instance, academicians and policymakers will use the study as the source of references while dealing with handicraft businesses' challenges in promoting their products in the Kapit and Song district, including conducting more research and establishing policies and programs. Meanwhile, the study will facilitate a review of measures taken to promote handicraft marketing products in Sarawak.

2. METHOD

In the census 2000, Kapit Division recorded a total population of 98,841 people, which constituted only 4.9% of the total population in Sarawak (2,009,893). Population by district is Kapit: 56,709, Song: 19,236 and Belaga: 22,896 meanwhile population density is 2.5 (person per sq km). About 88.4% of the population settles in rural areas, and 57.4% resides in Kapit District. The Iban are the largest ethnic group in Kapit, at 67.4%. The rest are Orang Ulu (18.7%), Chinese (6.7%), Malay (3.4%), and Melanau (1.2%).

Based on these populations, Kapit and Song districts were chosen as most Iban handicraft entrepreneurs are found here, and some are far from town. A case study is an in-depth study that allows a researcher to examine a particular issue or problem involving an individual, program, or event in detail concentrated within a certain period (Ahmad et al., 2014). The case study design collects the information among craftspeople in the Kapit and Song districts in this study. Using the case study design

allows the researcher to study the background and organization through an in-depth interview by focusing on an individual and others.

The research technique will use the in-depth interview to conduct this study. According to Ahmad et al., (2014), in qualitative methodology; the interview is one of the popular research techniques. It allows the research to have a direct conversation with the informant to provide the answer. The in-depth interviews can be face-to-face, telephone interviews, and open-ended questionnaires can be used to collect data. In this study, the researcher used open-ended questionnaires through email followed by face-to-face interviews with all informants. Demographic information of informants will be collected as well. The open-ended questionnaires are divided into two parts. Part one is warming up questions asking for informant condition today. Part two is situating questions which as briefly about their general knowledge on handicrafts. Part three was the central question for the informants to write down their perception of problems or challenges and explained more detail during face-to-face interviews based on the objective question. At the same time, the last part is the demographic information of informants, which is also the informant's background.

3. DISCUSSION AND FINDINGS

Interview on handicraft production is part of the overall socio-economic and environmental study in rural areas of Kapit District. Twelve respondents were chosen based on quota sampling and consultation with Kapit and Song Resident Office and Serakup Induk Dayak Sarawak (SIDS), Kapit Branch. All informant's real names, gender, and age are kept confidential to preserve their identity.

Table 1: Number of Respondents

The number of Respondents	Actual No. Respondents
Kapit District	8 (66.7%)
Song District	4 (33.3%)
Total	12

Source. Fieldwork Data

Table 1 presents the distribution of respondents by district location of their businesses. A total of 12 valuable informants chooses for conducting an in-depth face-to-face interview with are expert handicrafts products and well established. Two district centers were involved Kapit and Song Districts with 12 respondents.

Table 2 present the distribution of respondents by district location of their businesses. A total of 12 helpful in conducting semi-structured in-depth interviews with a marketing expert of the handicrafts industry. Two district centers were involved Kapit and Song Districts with 12 respondents.

Table 2: Respondents and their Handicraft Products

District	No. Respondent	Type of Handicraft Products	Product Samples
Kapit	Informant 1	Rattan basket and bemban mat	
Kapit	Informant 2	Rattan, plastic basket	
Kapit	Informant 3	weave textile (tenunan)	

Kapit	Informant 4	Weave textile, beads, burie	
Kapit	Informant 5	Mat, weave textile, beads,basket	
Kapit	Informant 6	Weave textile, beads, basket	
Kapit	Informant 7	Mat, weave textile, beads, basket	

Kapit	Informant 8	Weave textile, beads	
Song	Informant 9	Weave textile, beads	
Song	Informant 10	Weave textile, beads,	
Song	Informant 11	Weave textile, beads	

Song	Informant 12	Weave textile, beads	

The main reason for continuing the tradition includes interest, way of life and self-consumption, seeking additional income, killing time, and upholding handicraft products as part of their identity and culture heritage. Many of the informants I studied were making and selling handicrafts of textile, beads, *burie* and basket and mats made of *bemban (Donax canniformis)* and rattan (*Calamus).*

Table 3: Reason for pursuing handicraft production, challenges, and marketing strategies

District	Informant	Reason for pursuing handicraft production	Challenges to sustaining handicraft production	Marketing Strategies
Kapit	1	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: *Facebook, Instagram,* and *WhatsApp's*
Kapit	2	Additional income, interest, identity, and	Marketing and access to hard-to-find and expensive natural raw	Advertising and booth

		cultural heritage	material	
Kapit	3	Additional income	Marketing and access to hard-to-find and expensive natural raw material	Advertising and booth
Kapit	4	Additional income	Marketing and expensive raw material odder from China and Indonesia	Older, tourist, promoting by family and friend
Kapit	5	Additional income and interest	Marketing and access to hard-to-find and expensive natural raw material	Older, tourist, promoting by family and friend
Kapit	6	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: *Facebook, Instagram,* and *WhatsApp*
Kapit	7	Way of life and self-consumption. Additional income	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: *Facebook, Instagram,* and *WhatsApp's*
Kapit	8	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: *Facebook, Instagram,* and *WhatsApp's*
Song	9	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: *Facebook, Instagram,* and *WhatsApp's*
Song	10	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: Facebook, Instagram,

				and WhatsApp's
Song	11	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: Facebook, Instagram, and WhatsApp's
Song	12	Additional income, interest, identity, and cultural heritage	Marketing and access to hard-to-find and expensive natural raw material	Advertising and promotion by social media. Example: Facebook, Instagram and WhatsApp's

Source. Fieldwork data

Many informants stated that they work on these handicrafts because they are descended from their ancestors, interested in filling the free space, and increasing family income. Today, the demand for original handicrafts, especially in Iban Crafts, is very high, and the income benefits them. However, getting raw materials such as rattan and bemban in the forest is very difficult. Also, yarn which is used in weaving is very expensive and the material to produce burie cloth must be imported or bought from neighboring countries such as Indonesia and China.

The majority of the Iban handicraft entrepreneurs do not have a specific marketing strategy. Some wait for tourists and visitors to buy their product to exchange for cash. Besides, some of them ask their family member to advertise and promote their crafts on social media. Being the active members in handicraft production, a stable demand certainly encourages the producers to invest more in buying the raw materials and incentives for more entrepreneurs to participate in handicraft production and businesses actively. Nevertheless, the main challenges are related to the price and the difficulty of obtaining raw natural materials such rattan, yarn, and beads for the handicrafts, improper platform to market the products—lack of interest by the younger generation to continue the product's tradition. The lack of marketing channels for producers was also a concern as many producers place heavy reliance on the local tourist trade in their area.

4. CONCLUSION

The study results show that Iban handicraft products in rural areas, especially Kapit and Song District, are based on personal selling; thus, the marketing mix lacks. There is sufficient awareness of the other be concluded that to the extent that unique selling strategy is applied, it is effective. However, the overdependence on personal selling

has resulted in low sales with vast handicraft stocks, un-employed. Eventually, it may lead to the demise of the handicraft sector. Moreover, the industry faces many challenges, mainly from the lack of government and other stakeholder involvement, lack of training, lack of financial assistance, lack of service in promotion, etc.

The Sarawak Handicraft Council and Malaysian Handicraft Development Corporation Sarawak Branch, Tours Operator, and NGOs should give support by advertising and promoting handicrafts. The handicraft sector needs collective effort of national and international stakeholder to break the vicious cycle of these challenges and bail them out of world economic doldrums by offering education in particular ICT, a leadership seminar to enable them to re-organize, offer training for the artists, especially among the young generations to enable them to acquire formal knowledge to evolve with culture to retain and attract more handicraft customers.

REFERENCES

1. Ahmad, R., Usop, H., Ismail, A., Bujang, S., & Abu Mansor, N.N. (2014). Conducting research in social and management studies. Malaysia:RS Publishing HouseJ. Clerk Maxwell, *A Treatise on Electricity and Magnetism*, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.

2. Awuah, E. (2011). The Craft Industry and its Challenges, Business Guide Newspaper. Available at http://www.businessguideghana.com/p35

3. Belch, G. and Belch, M. (2007). Advertising and Promotion: An Integrated Marketing Communication Perspective. 5th Edition. Boston: Irwin/McGraw-Hill.

4. Chamhuri, S., Ahmad, M. Z., & Abdul, H. J. (1990). Peranan Industri Desa dalam Pembangunan Industri. Jurnal Ekonomi Malaysia, 21 & 22: 265 – 304.

5. Charles, W. L. H., & Gareth, R. J. (2001). Strategic Management an Integrated Approach Theory Annual Update. South-Western: Cengage Learning.

6. Churchill, G. (2006). Basic Marketing Research. 3rd Edition. Orlando Florida: The Dryden Press.

7. Grobler, A.T. (2005). Product development for community-craft projects in Mpumalanga. An unpublished Masters dissertation,University of Pretoria.

8. Hay, D. (2008). The business of craft and crafting the business: Strategies for success in the rural craft sector.

9. Kedit, P. M. (1989). Iban Cultural Heritage: An Overview of Iban Traditional Cultural Values and Social Norms, and Their Implications for Contemporary Sarawak. Sarawak Museum.

10. Khoo, S. H. (2007). Usaha Sarakraf Pavilon dalam Mengkomersilkan Produk Kraftangan Manik Orang Ulu di Kuching, Sarawak. Sarawak: Universiti Malaysia Sarawak.

11. Nasir, A. H., & Wan Teh, W. H. (1997). Warisan seni bina Melayu. Penerbit Universiti Kebangsaan Malaysia.

12. Nor Adila Binti Mohammad. (2013). Strategi peningkatan potensi pelancongan warisan budaya yang efektif di kawasan Batang Ai (Doctoral dissertation, Universiti Malaysia Sarawak).

13. Rasid, M., & Raman, N. (2015). Penyelidikan Peringkat Sarjana: Pendekatan Kualitatif Sebagai Alternatif. Kota Kinabalau: Universiti Malaysia Sabah.

14. Tugang, N. (2011). Tembikar Dalam Budaya Iban di Sarawak. Sarawak. Malaysia: Universiti Malaysia Sarawak.

15. Tugang, N. A. (2011). Ritual Kain Pua Dalam Budaya Iban di Sarawak (Doctoral dissertation, Universiti Malaya).

SARAGUVRA : PEMETAAN VISUAL REALITI MAYA 360° SECARA KREATIF MENERUSI TEKNOLOGI DIGITAL

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Artikel ini khususnya mengetengahkan kebolehgunaan visual realiti maya 360 darjah (360°) yang dihasilkan melalui pemetaan visual secara kreatif menerusi teknologi digital, yang dapat memudahkan urusan navigasi atau merasai pengalaman penerokaan lokasi pelancongan secara maya oleh pengguna dalam kehidupan masa kini. Penyelidikan ini mengkaji keupayaan teknologi digital yang berupaya mengubah elemen fotografi, videografi dan grafik menjadi data serta visual secara kreatif melalui eksplorasi pemetaan lokasi yang dijalankan di Taman Negara Bako dan Teluk Melano, Sarawak. Teknologi digital melalui kaedah pemetaan yang menjana visual kreatif menerusi sentuhan elemen interaktiviti dalam memaparkan lokasi maya dapat mewujudkan gambaran kehadiran dan beradaan secara nyata pengguna di persekitaran yang belum dilawati secara fizikal. Hasil dari eksplorasi visual kreatif menggunakan pelantar teknologi digital, model percubaan pemetaan visual reality maya 360° dengan nama SaraGuVRA (*Sarawak Guided Virtual Reality Assistant*) telah diterjemahkan bagi dirujuk oleh penyelidik untuk tujuan navigasi reality maya secara digital pengguna dalam maklumat awal berkaitan dengan lokasi yang ingin dituju menerusi pemetaan visual reality maya 360° secara kreatif yang dapat digunakan untuk tujuan pelancongan oleh mereka jika hasil penyelidikan iaitu navigasi ini berjaya direalisasikan.

Keywords: *pemetaan visual realiti maya 360°, teknologi digital, kreatif, pelancongan*

1. PENGENALAN

Perkembangan teknologi digital berlaku dengan pantas. Destinasi pelancongan tidak terkecuali menggunakan teknologi pintar, kerana teknologi telah memberikan kesan ketara dalam pelbagai sudut (Jeong, M., & Shin, H. H., 2020). Tambahan pula dengan kemunculan teknologi baharu dan canggih seperti teknologi multimedia, realiti maya (VR) dan realiti berperantara (AR) telah menjadi alat utama untuk mempromosi, memasarkan dan membangunkan industri pelancongan (Iacovino, A., De Paolis, L. T., & Ndou, V., 2020). Perkembangan ini membuka ruang dan peluang kepada agensi pelancongan lebih kreatif dan inovatif untuk memudahkan pengguna, iaitu pelancong sebelum atau semasa melawat ke destinasi.

Senario dan situasi yang berlaku sejak akhir-akhir ini di mana seluruh dunia berdepan ledakan maklumat yang menjadikan kehidupan bergantung kepada teknologi digital, ditambah pula dengan wabak pandemik COVID-19 yang merencatkan kehidupan normal dan ini menguatkan lagi kebergantungan kita kepada teknologi digital untuk mendapatkan maklumat tersebut. Teknologi digital merupakan suatu alatan berbantukan visual yang mempunyai keupayaan menawarkan penyelesaian kepada bakal pengguna dalam mendapatkan dan berkongsi maklumat seperti petunjuk destinasi, penyediaan rancangan perjalanan, dan penyediaan peta statik untuk menuju ke tempat tarikan yang ingin dilawati, penginapan dan kemudahan untuk pelancong (Pranita, D., 2018). Oleh itu, penggunaan imej fotorealistik 360° telah disyorkan untuk tujuan meningkatkan kualiti pelancongan (Marasco, A., 2018). Secara tidak langsung, ia dapat membantu mereka mendapat maklumat awal bagi menelusuri keinginan untuk melancong secara maya.

1.1. Kepentingan Kajian

Pengalaman penjelajahan lokasi yang ingin dilawati dan menelusuri perjalanan secara maya merupakan kaedah yang amat berguna dan luar biasa kepada pelancong sebelum mereka merasai suasana sebenar jika telah berada di tempat tersebut. Sehubungan dengan itu, penggunaan aplikasi berbantukan realiti maya 360° menerusi teknologi digital merupakan alatan yang penting dalam kehidupan manusia mengembara secara maya masa kini. Tambahan, aplikasi sebegini masih baru di negara kita walaupun ramai amat biasa dengan pengalaman permainan video maya masa kini. Adalah diharap dengan mengetengahkan kajian sebegini, ia akan menjadi pemangkin kepada penghasilan kajian-kajian baharu di negara ini mengenai realiti maya 360° berteraskan teknologi digital yang dapat memanfaatkan khalayak ramai, bukan sahaja dalam bidang pelancongan dan permainan video maya, malah bidang-bidang lain seperti pendidikan, perubatan dan sebagainya.

1.2. Objektif Kajian

Kajian ini dijalankan untuk mengenalpasti kaedah rakaman fotografi dan videografi yang bersesuaian dalam menterjemahkan visual realiti maya 360° secara kreatif lokasi terpilih. Kajian ini juga untuk mengeksplorasi kebolehgunaan visual realiti maya360° yang dihasilkan melalui pemetaan visual secara kreatif menggunakan teknologi digital yang dapat memudahkan urusan navigasi atau merasai pengalaman penerokaan lokasi pelancongan secara maya oleh pengguna masa kini. Objektif yang terakhir adalah untuk mencadangkan produk pemetaan visual realiti maya 360° secara kreatif yang menggunakan teknologi digital melalui eksplorasi kebolehgunaannya bagi dijadikan alat navigasi pelancongan pada masa hadapan.

2. KAJIAN LEPAS

2.1 Teknologi Virtual Reality (Realiti Maya)

Teknologi zaman kini memainkan peranan yang penting dalam semua aspek seperti pendidikan, permainan video, pelancongan, pengendalian mesin dan pelbagai lagi. Ia juga dapat dikolaborasikan dengan bidang seni untuk dijadikan sebagai elemen di dalam sesebuah karya. *Virtual Reality* (VR) atau realiti maya merupakan salah satu teknologi yang semakin diguna ramai dalam pendidikan dan permainan sama ada permainan di pusat hiburan mahupun permainan atas talian. Teknologi ini membolehkan kita menyelami dunia buatan manusia yang boleh dunia ini sepenuhnyaatau hasil ciptaan semula manusia (Elmqaddem, N. (2019). Ia juga dipanggil sebagai dunia alternatif yang dipenuhi dengan imej yang dijana oleh komputer dan bertindak balas manusia (Greenbaum, P., 1992).

Realiti maya yang dicipta hasil gabungan unsur-unsur visual, kinetik, dan audio, dalambentuk 3D yang merupakan simulasi elektronik persekitaran yang dialami melalui alatan khas mata *stereophonic* dipasang pada kepala, sarung tangan gentian optik danpakaian berwayar yang membolehkan pengguna berinteraksi dalam situasi tiga dimensi secara realistik (Coates, G., 1992). Ia merupakan simulasi persekitaran yang menghidupkan deria dudien yang hadir dalam sekeliling secara fizikal yang dihasilkan secara interaktif digital yang membolehkan audien mengalami pengalaman sebenar dengan menggunakan *head mounted display* (HMD) iaitu salah satu peranti realiti maya (Hobson, J. S. P., & Williams, A. P., 1995). Antara teknologi yang pertama dalam sejarah fenomena realiti maya yang menggunakan HMD adalah "*Sensorama*" (Figura1) merupakan prototaip visi Morton Heilig dari 1957 yang bertajuk *Cinema of the Future*. Pada tahun 1965, Ivan Sutherland menjadikan konsep realiti maya menjadikan dunia maya seakan nyata, termasuk bunyi dan rasa serta maklum balas sekitarnya terhadap pengguna juga realistik (Mandal, S., 2013).

Figura 1: *"Sensorama"* oleh Morton Heilig tahun 1957

Menurut Guttentag, D. A., (2010) realiti maya dapat dikategorikan kepada dua iaitu realiti maya imersif dan realiti maya bukan imersif. Realiti maya imersif mempunyai dua bahagian iaitu realiti maya imersif penuh yang memberi audien pengalaman yang paling dekat dengan realiti melalui kualiti grafik yang tinggi, prestasi yang lengkap dan tiada gangguan rangsangan yang tidak berkaitan dan realiti maya separa imersif menggabungkan perisian prestasi tinggi dengan visi stereoskopik, tindak balas audien serta merasai pengalaman yang lebih mendalam. Realiti maya bukan imersif merupakan peranti kurang canggih untuk aplikasi realiti maya kerana tidak mencapai penggunaan teknologi yang tinggi dan tidak memerlukan persembahan yang hebat.

Oleh kerana penggunaannya yang meluas, keupayaan komputer dan peranti sebagai alat penyokong telah menjadi medium yang penting dalam konteks pendidikan, pemasaran, perubatan malah digunakan dalam industri. Kesimpulannya, realiti maya merupakan simulasi yang dihasilkan untuk menyediakan pengalaman sintetik yang diolah menerusi visual dan audio bagi meningkatkan penghayatan dalam merasai, penglibatan dan interaktiviti dalam dunia secara maya yang dicipta semula dengan bantuan teknologi digital.

2.2 Pelancongan Di Sarawak, Malaysia

Sejak penubuhannya pada tahun 1972, pelancongan di Malaysia telah berkembang pesat dan telah memainkan peranan penting dalam arena pelancongan antarabangsa. Didorong oleh aspirasinya untuk mempromosikan Malaysia sebagai destinasi pelancongan di rantau ini, pelancongan Malaysia terus memacu industri ke tahap yang lebih tinggi. Takrifan yang diberi oleh Lee K., (2012) tentang destinasi pelancong adalah lokasi pusat yang mempunyai tarikan yang menyediakan

kemudahan dan perkhidmatan yang dapat membantu para pelancong. Tambahan pula oleh Pestana, M. H., (2009) ia merupakan tempat para pelancong terlibat dalam aktiviti-aktiviti pelancongan.

Hari ini, industri pelancongan Malaysia telah menjadi penyumbang kepada kedua terbesar bagi ekonomi negara dan telah menerima sebanyak 25.8 juta pelancong pada tahun 2018 dan meningkat kepada 26.1 juta pada tahun 2019 (Annual Report Malaysia Tourism Promotion Board, 2019) menjadikan Malaysia antara 15 negara yang paling kerap dilawati (Annual Report Malaysia Tourism Promotion Board, 2018). Sektor pelancongan Malaysia bukan sahaja berkembang dengan sendirinya, malah ia memberi impak yang mendalam kepada bidang berkaitan seperti sektor hospitaliti, sektor makanan, sektor katering, sektor pelancongan, dan sektor swasta (Inam, G., Ullah, I., Singh, J., & Arumungam, T., 2020). Kebanyakan tujuan melancong di Malaysia adalah untuk bercuti dan pelancong gemar melakukan aktiviti membeli belah 98.5% dan 94.6% mengambil peluang untuk bersiar-siar serta melakukan aktiviti rekreasi.

Sarawak merupakan negeri terbesar di Malaysia dan menjadi antara lima negeri yang kerap dilawati di Malaysia oleh pelancong domestik sebanyak 19.4%, selain daripada Selangor 30.2%, Sabah 20.4%, Wilayah Persekutuan Kuala Lumpur 19.2 dan Pahang sebanyak 18.1% (Annual Report Malaysia Tourism Promotion Board, 2018). Tempat pelancongan seperti monumen, muzium, taman tema, pantai, resort, dan taman semula jadi telah dipilih kerana ia mempengaruhi tarikan destinasi (Pestana, M. H., 2009). Pelancong juga memilih destinasi pelancongan rekreasi kerana mereka lebih meminati aktiviti luar dan aktiviti reakreasi (Mahika, E. C., 2011). Dari Sarawak Tribune News, seperti yang dikutip oleh Karim (n.d), Taman Nasional masih merupakan destinasi kegemaran pelancong dari dalam dan luar negeri di Kuching kerana kepelbagaian biodiversiti, landskap estetika dan unik serta pelbagai jenis hidupan liar. Kuching, Sarawak kaya dengan kepelbagaian etnik dan budaya serta keindahan alam semula jadi seperti gua Niah terbesar di tengah hutan tebal di Borneo, gua batu kapur di Mulu dan Bau, rumah panjang di sepanjang tepi sungai, gunung-ganang yang boleh didaki seperti Gunung Santubong, beberapa Taman Negara yang masih dijaga dengan baik seperti Taman Negara Bako, Rizab Semula Jadi Semenggoh, Kuching Waterfront, Muzium Kucing, dan Muzium Sarawak.

2.3 Penggunaan Teknologi Realiti Maya Dalam Pelancongan
Kemajuan terkini dalam teknologi dan aplikasinya telah memberi impak kepada industri pelancongan. Kemajuan dan inovasi teknologi telah berkembang bertahun-tahun bagi memudahkan sektor pelancongan. Guttentag, D. A., (2010) mencadangkan bahawa realiti maya perlu digunakan dalam enam bidang berkaitan pelancongan utama iaitu

perancangan dan pengurusan, pemuliharaan warisan, pemasaran, aksesibiliti, pendidikan, dan pencapaian, dengan penyediaan maklumat komersial. Peranannya boleh digunakan untuk membantu pelancong dengan menyediakan pengalaman yang membolehkan para pelancong untuk mencari destinasi pelancongan (Huang, Y. C., 2016). Selain itu, teknologi realiti maya mampu mengurangkan kecemasan atau risikonya dengan membiasakan mereka terhadap destinasi atau hotel yang tidak dikenali sebelum berada di destinasi yang ingin dilawati (Lee, O., & Oh, J. E., 2007).

Cadangan Guttentag, D. A., (2010) juga dalam dilihat dalam kenyataan Stanley, A., (2017) yang menyatakan teknologi membantu para pelancong akan melihat dari segi keselesaan tempat kediaman yang dipilih sebelum membuat keputusan untuk melawat. Jung, T. H., dan Tom Dieck, M. C., (2017) juga mendapati bahawa penggunaan pelancongan realiti maya yang berkesan dalam destinasi warisan budaya menyediakan nilai kreatif dalam pengalaman di kawasan pelancongan. Huang, Y. C., (2016) menekankan bahawa penggunaan teknologi realiti maya dalam sektor ini memudahkan para pelancong untuk membayangkan serta merasai pengalaman ketika berada di sesebuah tempat yang berpotensi tinggi seperti Disneyland yang merupakan salah satu destinasi pelancongan terkenal. Pengalaman melancong secara unik seperti ini serta dapat menggunakan perkhidmatan segera yang boleh dialami secara maya menjadikan pengalaman itu lebih bermakna (Inam, G., Ullah, I., Singh, J., & Arumungam, T. 2020).

Selain daripada banyak membantu para pelancong ia juga membantu agensi pelancongan dapat mengembangkan perniagaan pelancongan mereka dengan lebih luas dan mudah dicapai (Jung, T., Claudia, M., Lee, H., & Chung, N., 2016). Kedua-dua pihak yang mendapat keuntungan serta manfaat daripada penggunaan teknologi ini menjadikan penggunaan teknologi lebih luas, berkembang dan meningkat (Disztinger, P., Schlo gl, S. & Groth, A., 2017). Perkara ini disokong oleh Tavakoli, R., dan Mura, P., (2015) menyatakan bahawa permintaan untuk pelancongan realiti maya kini lebih meningkat daripada penggunaan teknologi realiti maya.

Oleh itu, sektor pelancongan perlu seiring dengan perspektif dan teknologi terkini, memandangkan penambahbaikan atau evolusi perkhidmatan yang ditawarkan mempengaruhi peningkatan gaya hidup dan industri pelancongan (Guttentag, D. A., 2010). Dengan itu, terdapat keperluan penyelidikan mengenai penyesuaian ciri- ciri ini untuk aplikasi realiti maya yang optimum sebagai alat pelancongan kerana menerusi teknologi, industri pelancongan akan mencapai peningkatan dan daya saing yang diperlukan untuk menghadapi persaingan antarabangsa.

3. METODOLOGI KAJIAN

3.1 Lokasi Kajian

Kerja lapangan di Kampung Teluk Melano telah dijalankan sebanyak dua kali iaitu pada 19 hingga 21 Disember 2018 dan 3 Mac 2019 serta Taman Negara Bako pada 14-15 Februari 2020, yang melibatkan aktiviti rakaman video dan fotografi secara realiti maya 360°, penentuan lokasi menerusi aplikasi satelit peta, serta temubual bersama dengan penduduk kampung. Dapatan daripada hasil kerja lapangan ini telah diterjemahkan menerusi suntingan digital menerusi komputer berupa imejan Realiti Maya Interaktif 360° dengan menggunakan kaedah penghasilan berupa aplikasi dipacu oleh peranti pintar. Hasil dapatan ini merupakan dua pertiga daripada lokasi yang menjadi kajian. Taman Negara Bako juga dipilih kerana ia merupakan destinasi popular yang mengetengahkan keindahan alama semula jadi yang menjadi tarikan utama pelancongan di negeri Sarawak. Pemilihan lokasi-lokasi ini akan menjadi penentu dalam mengukur keberkesanan aplikasi yang bakal dibangunkan, merangkumi keupayaan penjejakan navigasi lokasi secara stabil dan tetap, penyaluran sumber maklumat serta data yang mudah divisualisasikan dan diaktifkan melalui paparan di skrin peranti pintar, dan keupayaan visual fotografi secara realiti maya 360° berfungsi memberikan pengalaman seakan sebenar kepada pengguna sebelum mereka tiba di lokasi atau destinasi sebenar.

Figura 2: Pemandangan Kampung Teluk Melano yang merupakan bahagian hujung negeri Sarawak daripada pandangan atas (2019)

Figura 3: Pemandangan Kampung Teluk Melano yang mempunyai tempat rehat dan gerai menjual makanan untuk penduduk kampung dan pelancong yang datang (2019)

Figura 4: Pemandangan Taman Negara Bako daripada atas. Perjalanan ke Taman Negara Bako dengan menaiki bot memberi pengalaman yang menarik kepada para pelancong (2020)

3.2 Cadangan Pembangunan Aplikasi - SaraGuVRA

Produk prototaip pelancongan di Kampung Teluk Melano dan Taman Negara Bako secara Interaktif Realiti Maya 360° dengan nama SaraGuVRA (*Sarawak Guided Virtual Reality Assistant*) menerusi Aplikasi Peranti Pintar Android dan iOS telah dibangunkan. Produk prototaip ini dibangunkan bagi mengenalpasti keberkesanan penggunaannya sebelum diketengahkan kepada khalayak umum. Ini amat penting bagi memastikan produk ini bersesuaian dengan penggunaan aplikasi peranti pintar, mudah dicapai walau berada di kawasan yang agak sukar ditembusi rangkaian internet (boleh beroperasi secara mod luar talian), serta dapat memberikan pengalaman sebenar bagi mereka yang ingin meneroka destinasi yang ingin dituju

secara realiti maya. Setelah kesemua kriteria dapat dicapai, maka peringkat penyelidikan seterusnya adalah membangunkan produk Interaktif Realiti Maya 360° secara nyata bagi diguna dan dimanfaatkan sepenuhnya oleh pengguna.

Kampung Teluk Melano (*2°1'5"N, 109°38'19"E*) dan Taman Negara Bako (*1°41'43"N, 110°27'25"E*) dipetakan mengikut koordinasi GPS sebenar bagi memastikan penentududukan arah tepat untuk pengguna. Kuching (*1°33'28"N, 110°21'10"E*) dipilih sebagai titik pusat kepada penentududukan arah dua lokasi atau destinasi terpilih di atas memandangkan kebanyakan pelancong mahupun pengguna menjadikan Kuching sebagai tempat transit pertama sebelum menuju ke destinasi seterusnya. Pengguna akan dapat mengetahui arah kedudukan sebenar destinasi mengikut arah kompas yang ditunjukkan. Secara tidak langsung, mereka akan mengetahui keberadaan lokasi tersebut dari tempat mereka menavigasi aplikasi.

Antarmuka yang dimasukkan ke dalam aplikasi ini akan menyalurkan maklumat tentang tempat-tempat menarik di persekitaran yang boleh dilayari untuk pemaparan maklumat, seterusnya dapat dirangkaikan dengan pautan-pautan interaktif yang akan memaparkan imejan realiti maya 360° pilihan sama ada Kampung Teluk Melano mahupun Taman Negara Bako untuk diteroka secara realiti maya.
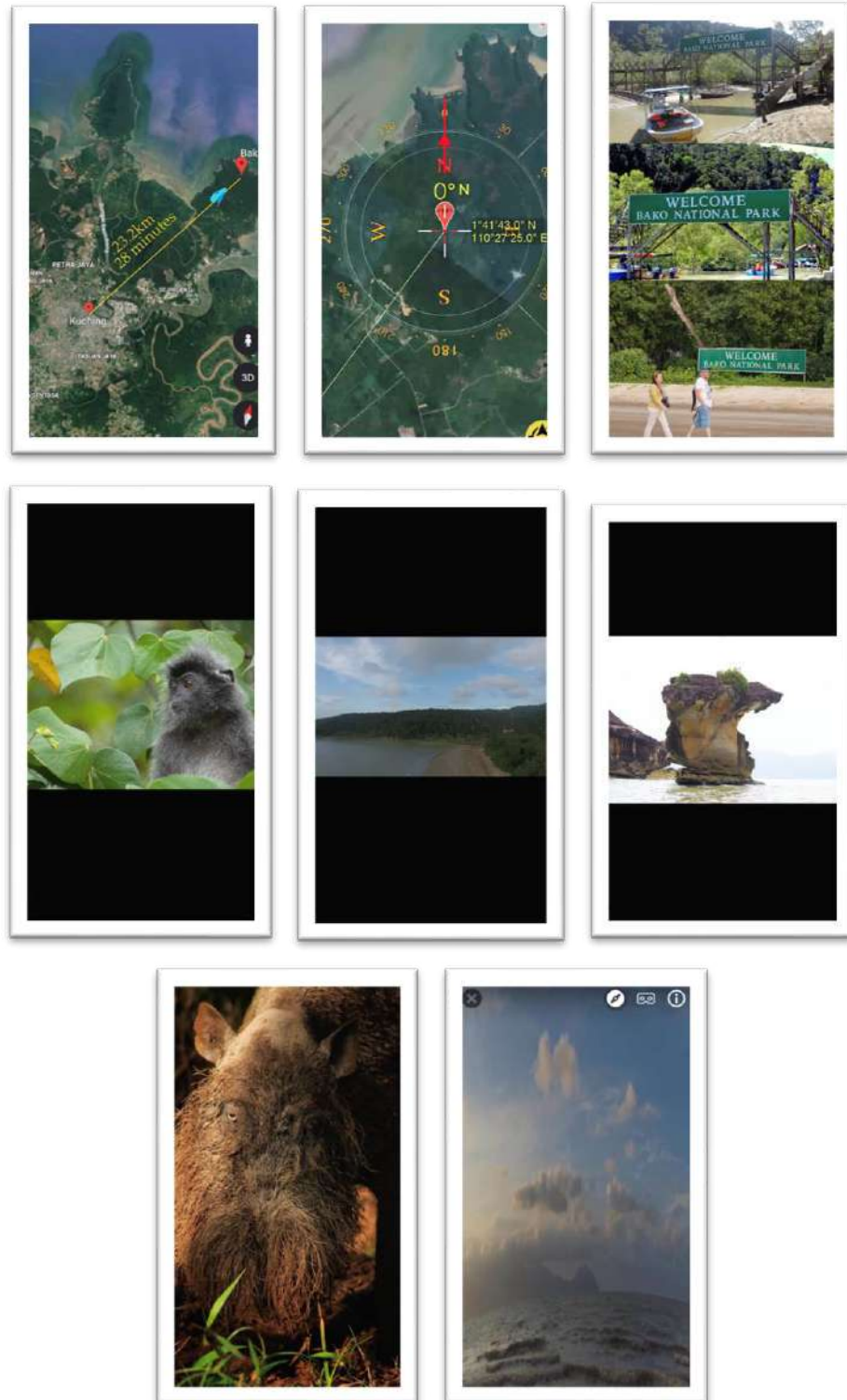
Figura 5: Antara antarmuka produk prototaip *SaraGuVRA* yang dihasilkan mengandungi informasi seperti maklumat am mengenai tempat yang ingin dituju, koordinat untuk mengetahui lokasi serta imej yang berkaitan yang boleh diakses secara terus 2020

Figura 6: Antara imejan setiap tempat yang menjadi lokasi tumpuan pelancong dalam bentuk VR yang boleh dilihat oleh pengguna

Hal ini bagi memastikan aplikasi ini dapat diakses dengan mudah dan digunakan sepenuhnya oleh khalayak umum sama ada masyarakat tempatan mahupun luar negara. Hasil penyelidikan yang menggabungkan keilmuan bidang seni, sains dan teknologi ini secara tidak langsung dapat memberikan impak positif terhadap industri pelancongan di Sarawak khasnya dan Malaysia secara amnya.

4. KESIMPULAN

Teknologi realiti maya pada masa kini adalah lebih meluas berbanding dengan pada masa dahulu serta kemudahan yang diberi dalam penggunaan teknologi ini dapat memudahkan para pengguna. Kajian ini lebih memperincikan terhadap penggunaan realiti maya di dua lokasi tumpuan iaitu Kampung Teluk Melano dan Taman Negara Bako, iaitu destinasi pelancongan berdekatan dengan bandaraya Kuching, Sarawak. Dengan menghasilkan aplikasi realiti maya interaktif ini, diharap ia dapat meluaskan pengetahuan tentang teknologi realiti maya dan dapat diaplikasikan dalam navigasi destinasi dan tarikan pelancongan di Sarawak, Malaysia. Walaupun penggunaan teknologi sebegini di Malaysia masih belum berada di tahap yang memuaskan seperti di negara lain namun, ia berpotensi untuk dibangunkan dengan penambahan elemen lain yang lebih menarik seperti teknologi AR terutama membantu pelancong ke destinasi yang ingin dilawati. Aplikasi yang dicadangkan ini juga harus dicuba dan dinilai keberkesanannya oleh pelancong sebenar yang belum pernah ke Kampung Teluk Melano dan Taman Negara Bako untuk mendapatkan maklumbalas yang lebih terperinci mengenai keberkesanan dan keupayaannya bagi ditambahbaik pada masa hadapan.

RUJUKAN

1. Coates, G., (1992). Program from Invisible Site—a Virtual Show, a Multimedia Performance Work presented by George Coates Performance Works, San Francisco, CA, March, 1992

2. Greenbaum, P., (1992, March). The Lawnmower Man. Film and Video, 9 (3), pp. 58-62.

3. Disztinger, P., Schlo gl, S. & Groth, A., (2017), "Technology acceptance of virtual reality for travel planning", in Schegg, R. and Stangl, B. (Eds), Information and Communication Technologies in Tourism 2017 Proceedings of the International Conference in Rome, Italy, 24-26 January, Springer, Cham, pp. 255-268.

4. Guttentag, D. A., (2010). Virtual reality: Applications and implications for tourism. Tourism Management, 31(5), 637–651. doi: 10.1016/j.tourman.2009.07.003

5. HEILIG M. L., (1962), Sensorama Simulator – US Patent Office, Retrieved: http://www.mortonheilig.com/Sen- soramaPatent.pdf [accessed Sep 23 2018]

6. Hobson, J. S. P., & Williams, A. P. (1995). Virtual reality: A new horizon for the tourism industry. Journal of Vacationn Marketing, 1(2), 124–135.

7. Huang, Y. C., Backman, K. F., Backman, S. J., & Chang, L. L. (2016). Exploring the implications of virtual reality technologyin tourism marketing: An integrated research framework. International Journal of Tourism Research, 18(2), 116–128.

8. Jung, T. H., & Tom Dieck, M. C., (2017). Augmented reality, virtual reality and 3D printing for the co-creation of value for the visitor experience at cultural heritage places. Journal of Place Management and Development, 10(2), 140–151.

9. Jung, T., Claudia, M., Lee, H., & Chung, N., (2016). Effects of virtual reality and aug-mentedreality on visitor experiences in museum. In A. Inversini, & R. Schegg (Eds.). Information and communication technologies in tourism (pp. 621–635). Wien, New York: Springer International Publishing.

10. Lee K., (2012), Augumented Reality in Education and Training, Tech Trends, vol.56, no. 2, University of Nortern Colorado, Retrieved: https://www2.potsdam.edu/betrusak/566/A ugmented%20Reality%20in%20Education.pdf [accessed Sep 23 2018]

11. Lee, O., & Oh, J. E., (2007). The impact of virtual reality functions of a hotel website on travel anxiety. Cyberpsychology and Behavior, 10(4), 584–586.

12. Marasco, A., Buonincontri, P., van Niekerk, M., Orlowski, M. and Okumus, F. (2018), "Exploring the role of next- generation virtual technologies in destination marketing", Journal of Destination Marketing & Management

13. Sutherland I. E., A Head-Mounted Three-Dimensional Display, Retrieved:

http://90.146.8.18/en/archiv_files/19902/E 1990b_123.pdf [accessed Sep 23 2018]

14. Inam, G., Ullah, I., Singh, J., & Arumungam, T. (2020). Digital Tourism: A Possible Revival Strategy for Malaysian Tourism Industry after COVID-19 Pandemic. *Electronic Journal of Business & Management*, *2*, 1-17.

15. Iacovino, A., De Paolis, L. T., & Ndou, V. (2020, September). Technologies to Support Tourism Innovation and Cultural Heritage: Development of an Immersive Virtual Reality Application. In *International Conference on Augmented Reality, Virtual Reality and Computer Graphics* (pp. 3-14). Springer, Cham.

16. Jeong, M., & Shin, H. H. (2020). Tourists' experiences with smart tourism technology at smart destinations and their behavior intentions. *Journal of Travel Research*, *59*(8), 1464-1477.

17. Pranita, D. (2018). Digitalization: The way to tourism destination's competitive advantage (Case study of Indonesia marine tourism). *KnE Social Sciences*, 243-253.

18. Elmqaddem, N. (2019). Augmented reality and virtual reality in education. Myth or reality?. *International journal of emerging technologies in learning*, *14*(3).

19. Mandal, S. (2013). Brief introduction of virtual reality & its challenges. *International Journal of Scientific & Engineering Research*, *4*(4), 304-309.

20. Pestana, M. H., Parreira, A., & Moutinho, L. (2020). Motivations, emotions and satisfaction: The keys to a tourism destination choice. *Journal of Destination Marketing & Management*, *16*, 100332.

21. (2019). Annual Report Malaysia Tourism Promotion Board di laman web https://www.tourism.gov.my/files/uploads/annual_report_2019.pdf

22. (2018). Annual Report Malaysia Tourism Promotion Board di laman web https://www.tourism.gov.my/activities/view/tourism-malaysia-2017-annual-report-1

23. Mahika, E. C., (2011). Current trends in tourist motivation. *Cactus Tourism Journal*, *2*(2), 15-24.

24. Stanley, A., (2017). Virtual reality experiences becoming big part of tourism campaigns. *Retrieved January*, *19*, 2018.

25. Tavakoli, R., & Mura, P., (2015). 'Journeys in Second Life'–Iranian Muslim women's behaviour in virtual tourist destinations. *Tourism Management*, *46*, 398-4

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