

Upcycled Creations Of Contemporary Crafts: Transformation Of Waste Wood And Aluminum To Improve Export Values

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Abstract: *Contemporary handicrafts have an important role in improving the nation's economy by creating new handicraft models as a trading commodity in export performance. This article aims; (1) describe the various processes and creative findings. (2) presenting the process of creating upcycled products from wood and aluminum has the potential to improve, (3) analyzing workmanship achievements that are displayed artistically in upcycling. This study uses a qualitative approach by exploring ideas, materials, and the process of forming upcycle craft art that combines wood waste and aluminum metal. Qualitative methods to analyze the art of craft in the development of creative arts. This study uses a qualitative approach by exploring ideas, materials, and the process of forming upcycle craft art that combines wood waste and aluminum metal. The conclusions are, (1) the upcycle process of wood and aluminum waste as technology transfer through artistic inventions to improve, (2) the process of creating craft from the upcycle process of wood and aluminum, (3) achievement analysis art creation and craftsmanship on upcycling waste which has economic value. The resulting contemporary craftsmanship has been absorbed by the American and European markets and has been tested through the JIFFINA 2021 export exhibition. This research can be a reference for patterns of making craft art and improving the SME economy and improving the Indonesian economy.*

Keywords: *Up-Cycle, Contemporary Craft, Wood, Aluminum, Export Product.*

Introduction

Upcycling is often considered a process in which waste materials are converted into something of higher value and/or quality in their second life. (Sung, 2015). It has been increasingly recognized as a promising means to reduce material and energy use. For example, Braungart and McDonough in Wohl (2002) pioneers of industrial upcycling (i.e., Cradle to Cradle), have advocated radical innovations for perpetually circular material reutilization as opposed to current recycling practices and helped several companies to incorporate upcycling in their businesses (Steelcase, Herman Miller, Ford). Szaky (2014) sees object upcycling as one of the most sustainable circular solutions since upcycling typically requires little energy input and can eliminate the need for a new product from virgin materials.

Industrialization, mass production, and global supply chains have resulted in a disconnection

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between people, places, materials, and design. Upcycling is the reuse of discarded materials that increases in 'value'. We discuss the potential for creative upcycling to reconnect people with materials and establish cultures and communities of making. The public reactions to the creative reuse of materials may vary amid a café structure made entirely from recycled materials. This provides the starting point to consider the contexts in which upcycling occurs, the motivations for (and barriers to) reuse and upcycling, the potential benefits of upcycling in the context of affluent Western 'consumer societies, and the scope for designers to imbue objects with the potential for creative reuse. We argue that designing to enable creative upcycling allows the future lives of objects to be contingent on context and culture, rather than being prescribed by the designer, with potential for widespread social, economic, and environmental benefits. (Bridgens, 2018).

Art Craft is needed in human life. Critics rarely discuss arts and Crafts activities. (Tressol, 2019). Man has pride in his ideas, creations, and innovations. (Koster, 2015). Re-engineering craft art design increases the power of innovation in craftsmen. Craft innovation affects the development of the sustainable handicraft industry. (Pu, 2020). In the future, the product of craft art becomes a model for developing a sustainable handicraft industry in other regions. (Joshi and Dhar, 2020).

Craft art is a work of artistic and unique art. The craft art sector has maintained and developed cultural and artistic traditions. (Gobar, 2019). In the 1950s, like a dress model in Ireland, blending old traditional art that combines linen and wool lace was much loved by the public. (Burke, 2018). Craft art becomes an essential part of fashion, home appliances, and home décor. The development of new craft art took its roots at a specific time of colonial culture (Craven, 2019). Indonesia has diverse cultural skills scattered throughout the archipelago. Identification is needed to preserve cultural heritage in developing products according to the community's needs. (Gobar, 2019). Social capital in the community becomes a potential economy that can accumulate and transform into other resources. (Zhyhlei, 2019). Natural materials such as waste wood and aluminum are derived from the environment. Wood waste can be utilized by combining other materials. (Berger, 2020). Wood waste can be obtained from wood pieces drifting in the river from around the forest. (Wohl, 2020). Aluminum is generally in a state of alloying elements or particles in liquid aluminum. (Biswas, 2020). Aluminum is about 8% the weight of the Earth's surface. It has good strength and durability properties (Krishnan, 2019).

Craft art became the world's trade commission. Craftworks exist to be part of the life of the nations of the world. The craft art sector focuses on significant growth opportunities for exporters in the global market. (Jamir, 2020). Improving the quality of export products must be prioritized through new products, especially for countries with lower and upper-middle incomes. (Dogan, 2020). The development of craft art absorbs the number of human and natural power, skilled labor, quality raw materials, design, and market. (Thu, 2019).

The potential for the creation of new craft in Indonesia has good prospects. Indonesia's natural resources and creative-innovative energy are relatively widely available. Providing an integrated perspective on art by exploring semi-new craft products from the work of individuals and teams. (Hu, 2019). But the making of craft art still depends on the order of the buyers. There have not been many new craft art creations created by craftsmen who use wood and metal wastematerials.

It takes the creation of new craft art of Indonesian characters to enter and increase Indonesia's export market. A pattern of inspiration is needed for other craft art workers. Craft art makes something new from materials and techniques that have not existed before (Alberti, 2018). Performance of micro and small businesses (MSEs) that export craft art. As a reference framework for future creation in business networking, entrepreneurial development, and export trade. (Kazungu, 2020). This Upcycle with creation offered new craft art applying assembling

techniques of wood and metal materials.

Method

Research creation by qualitative method, in the form of exploration of craft art-making by combining wood and metal materials. Qualitative method to analyze craft art in the growth and development of art creation. (Ogutu, 2020). Development of creativity with a fundamental approach to design and aesthetics with social, economic, and cultural perspectives. Art creation is creativity, so the result should reflect something different (better, creative, and innovative) than it already is. The design of artworks emerged from various experiments through brain imaging work interacting the value of art and confidence. (Koster, 2015). So, the result should reflect something different (better, creative, and innovative) than it already is replication with developing a proven innovative art product.

First, the main point that needs to be dissected into the material of creation analysis is the concept of craft art creation in a particular environment and the availability of existing materials. Second, how the process of creation and embodiment of the work. Third, distribute works through trading activities. Industrial society is the dominant concept of the object that stepped on the art of craft and manufacturing. These concepts are differentiated by the nature and sustainability of the environment and the craft technology industry. (Judge, 2020).

Result and Discussion

It started with creating new craft art for export acceleration and still rarely made contemporary craft art. New craft art shows that the effect of proactive market orientation. (Munawar, 2019). The idea came up to create craft art made of wood and metal. Supported by the abundance of wood and aluminum waste to analyze and experiment in creating new craft art products. The processing of materials and technical work of wood and metal is formed into a new craft art object for export.

New products and packaging are precisely designed, engineered, manufactured, and marketed; yet from the moment of purchase, their monetary value drops. Virtually all products ranging from cars to mobile phones and clothing are released at the point of purchase into a roller coaster value ride as tastes change and fashions are dropped or re-invented (Chapman, 2013). In this article, we focus on product packaging as an exemplar of material objects that, whilst carefully designed and manufactured, in affluent societies have very short life spans and little status as objects of value in themselves. (Bridgens, 2018).

Domestic material resources, including waste packaging and discarded household objects, are regularly discarded at 'household waste recycling centers. Upcycling remains a niche activity (Sung, 2015), and greater adoption of upcycling will require a 'shift in cultural perceptions' (Richardson, 2011).

Principles in craft art determine material composition and techniques applied that form the arrangement of lines, shapes, colors, dark light, proportions, and character of objects. (Sari, 2020). Population in creation is a potential type of materials and manufacturing techniques. Waste as a sample of craft art products in the form of teak and aluminum wood, because it has weather resistance and is easy to find. Craft art has a lot of demand for environmentally friendly and renewable products (Mamilla, 2019). Source materials are essential aspects of the environment (Feriancová, 2020). Sustainability, information efficiency, and the material supply chain can increase trade opportunities (Khan, 2019).

Engineering of forming craft casts aluminum and assembly techniques by combining aluminum and wood. Assembly techniques are done specifically with observed patterns by combining wood and aluminum materials. (Bian, 2019). Craft art-making that is primarily a combination of various things can make a good impression on consumers. (Sihombing, 2020). The process

of craft art creation begins with the emergence of ideas, materials, time, shapes, techniques, and characters. Craft art-making can be identified from the material according to individual taste. (Balaswaminathan, 2018).

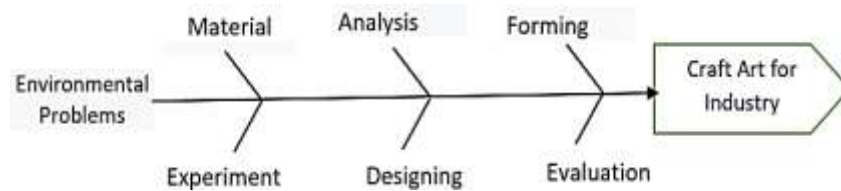


Figure 1. The Process of Creating Craft Art, ranging from environmental problems to industrial craft art or export

In this applied research, the work is designed by combining mixed medium material. Mix media processing has the artistic and economical edge, especially in the manufacturing industry, to have good competitiveness. (Biswas, 2020). Creation by comparing the work of others, the formulation of this work is more complete. So two things complement each other in terms of inspiration expressed as anxiety about the desire to process waste materials to solve environmental problems, which are used as material forming works.

Craft art has just started from a source of inspiration as the first step to anxiety about environmental conditions. Craft art is related to the idea of past creations with self-anxiety such as handmade art craft and cultural heritage and its business efforts. (Jamir, 2020). It was as a trigger that gave rise to the Craftsman's idea as an easier to produce work, as reflected in his mind. Inspiration is defined as an exploration of ideas for the need for joy. It is essential to fulfilling physiological expectations with effort-in the work (Brischke and Alfredsen, 2020). Happiness is the most intrinsic virtue in the activity of contemplation (Negoița, 2020).



Figure 2. Explore forms as alternatives, numbers 1,2,3, and 4. Sketch number 4 is an option (Sketch: Timbul Raharjo, 2020).

Anxiety can be manifested in visual form as anxiety itself. Thus, existing sketches can be a representation of pressure. Sadness is a physical thought of loneliness, sadness, and inner restlessness. (Schlegl, 2020). Visually existing forms can describe several things, human motives, helplessness, surrender. In reality, literacy has found submission in the real world through imagination and imagery as a counterweight to the truth. (Rajabi, 2020).

Craft art represents a drawing design. The working image uses the comparison scale in the actual image scale size. The active image's function is a two-dimensional model or a substantial size and shape plan. The essential State of drawing work can show the work to be carried out. (Niitsuma, 2020).



Figure 3. Working image no. 1 front view, no. 2 side view (Picture: Timbul Raharjo, 2020)

The formation of this craft artwork leads to several stages. The first stage seeks to make a definite reference form. Forms in the modeling stage can be quickly evaluated in case of miss-fitting form errors. Sometimes the plan in the design of the working image makes a difference when visualized in three-dimensional form. The prototype is the finished form to ensure response in product conformity assessment with consumers. (D'Errico, 2020). Second, making the mold to record the shape of the model is used to reprint the master form made of resin and then printed casted aluminum. In the last stage, the application of teak wood reduces some parts of the work and affixing with teak wood.



Figure 4. Craft art, titled Wooden Rice Doll Combine Aluminum (Picture: Timbul Raharjo, 2020)

Materials determine as the part that is valued, many anti-art objects are made with relatively expensive materials. The level of expensive materials is divided into three, namely very expensive, expensive, and cheap. Gold, diamonds, and crystals are classified as expensive items, the value of these goods will always change according to world market prices, so the assessment also considers inflation fluctuations. However, since the aspects of artistic value

and acquisition dominate, generally only very expensive materials affect. (Raharjo, 2020)



Figure 5. Creation’s 2020 Copyright letter, title “Wooden Rice Doll Combine Aluminum.”

The aluminum models are made using processed soil, cast in rectangular containers whose global shape is from the body of parts made from resin models. The box for printing there are two parts, the first part serves for the inside of the work, and the second print part is used for the work’s surface. So between the two molds were inserted models made of resin. Once inserted, it is combined into one and locked. Filled with soil, compacted, and trampled continuously to make it denser. Once stable, molten aluminum is introduced to the sand mold.

PROFORMA INVOICE
NO. : 0000000000/000/000000
DATE : AUGUST 18, 2020

KUSTOMER	ACECON ENTERPRISES BINA, PTY. LTD WOWSCAPE, 136 FUNGUS, VIP ROAD 3377 RAIPUR WISATA PROVINSI CHHATISGARH INDIA GST NO. : 22AAICA6432F NOMOR : 0000000000	BARANG	PT. TIMBUKI KAWAN TETEL, DE OLUKANGKAWAN, KAWAN BUKIT, D.E. KOKANAPAL, 1000 0000000000
PRICE	FOB SEMARANG TANJUNG MAS	CONTAINER NO.	1
PROBES	INSPEKSI CREDIT	SET NO.	1
PRODUCTION TIME	1 WEEK AFTER RECEIVING SET UP	DELIVERY DATE	DECEMBER 31, 2020
DELIVERY TIME	ASAP IN BALANCE		

NO.	PIKETS	DESCRIPTION OF GOOD	QTY	UNIT	PRICE	T. PRICE	WARRANTY	UNIT	T. CMB
1		Wooden Rice Doll Combine Aluminum	1000000	PCS	2.200,00	2.200,00	12 MONTH	PCS	2.200,00
		TOTAL				2.200,00			2.200,00
		TOTAL AFTER DISC				2.190,00			2.190,00

BANTU, AUGUST 18, 2020

PT. TIMBUKI

Figure 5. Proforma Invoice, customer Acecon Enterprises PTY. LTD Wowscape, 136, VIP Road City Raipur Province Chhatisgarh India, GST No. 22AAICA6432F, FOB Semarang Tanjung Mas Indonesia.

Art Kriya has obtained National intellectual property status, and Copyright is a severe problem to protect its creator’s rights. (Murugan, 2019). Copyright is a creativity license that enables the use of business, production, and distribution. (Eboeime and Thomas, 2020). Copyright

registration is postulated at the Ministry of Law and Human Rights of the Republic of Indonesia. At least domestic impersonation may not occur.

The market trial was conducted at the Jogja International Furniture & Craft Fair Indonesia exhibition in 2020 in Yogyakarta. At the test at the collection, it got a trial order. Dealing directly with art practices and international art market practices must of course take into account the contemporary social and cultural changes that affect it. Rusnoto Susanto (2019: 779) states that contemporary culture is a narrative of novelty achieved through a continual process of repetitions.

Conclusion

Craft art that has a metal and wood character and visually unique are suitable for export markets, especially the America-Europe markets. Through the exploration of materials and formation techniques from the exploration of individuals obtained new craft artworks. Become a pattern of creation for Craftsman in creating craft artworks. Craftsmen realized that new designs and new forms improve their business activities' performance, enhancing the desertion of craft art in the export trade, which is beneficial for the State's economic development.

The creation process with some design transformation processes, models, and the achievements of artistic techniques relies on efforts to upcycle wood and aluminum waste. It impacts the increasing aesthetic and economic values of the craft art products produced. One side of the problem of waste management can be overcome, not only by recycling waste into functional objects. However, creators focus on upcycle activities that have an impact on changes in product form, product value, economic value, and aesthetic value that can contribute directly to the welfare of various parties. Moreover, the resulting contemporary craftwork is given the protection of intellectual property rights (Copyright-HKI). The economic impact is most pronounced when the product is oriented as an export commodity.

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