The Marketing Strategy of Waste-Processed Craft Product in Pontianak City

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Abstract

Pontianak city produced 400 tons of waste every day. The prevention of waste had been done in various ways; one of them was the utilization of waste by 8 waste banks to be used as craft products with an economic value. The aim of the research was to formulate alternative priority marketing strategies for processed waste craft products in Pontianak. The research method that used was descriptive qualitative methods, surveys and interviews with key informants to obtain SWOT criteria and alternative strategies. This research used primary and secondary data, primary data obtained from interviews and surveys that included waste banks data and respondent data, secondary data included waste production in Pontianak City, waste banks in Pontianak City. The data analysis used the combination of Analytical Hierarchy Process (AHP) and Strength Weakness Opportunities Threats (SWOT). The research results showed that the alternative priority for the marketing strategy of processed waste products was the strategy to improve Human Resources (0.462), such as product innovation, conducted comparative study with UKM (small-medium enterprises), made observations of products that people were interest in; information and technology improvement strategies (0.403), such as recruited and trained employees to understand information technology; institutional improvement strategies (0.135), such as upgraded and focused group discussions in the Waste Bank Forum, managed the requirements for marketing in supermarkets.
INTRODUCTION

The increase in the population of Pontianak City made activities more tightly, especially in terms of the waste problem in Pontianak City, it can be said to be in line with the existing population. The Department of Environment (DLH) of Pontianak City said that the production of waste in Pontianak City reached 400 tons per day; this waste was dominated by household waste (Wedya, 2019). The waste will continue to pile up if the 3R principle was not applied (Recycle, Reuse, Reduce), by applying the 3R principle, it will minimize a bit of waste production in Pontianak. The weakness of the waste itself was that it decomposed easily, so that air pollution occurred, and some cannot be converted into compost, thus air pollution occurred due to the burning of inorganic waste, in this case it was necessary to have assistance from creative parties in minimizing waste in Pontianak City.

The information from the Department of the Environment about the waste bank was that there were many positive contributions that had been made by the waste bank in dealing with waste into crafts products that have economic value. The waste processing as well reducing air pollution due to burning and the smell of waste itself, the positive contribution of the waste bank also opened job vacancies, so that it can help reduce unemployment in Pontianak City.

The data obtained from interviews with the Department of Environment and observations of 8 waste banks that have managed waste, were as follows: First, Rosella Siantan, whose address was at Jalan Gusti Situt Mahmud, had 1,850 kg of processed waste with types of organic and inorganic waste, the second was Selamat Sejahtera which was located at Jalan Darma Putra, processed waste was 1,580 kg with the type of organic waste, the third was Rosella Purnama which was located at Jalan Purnama VII, processed waste was 18,000 kg with the type of inorganic waste, the fourth was Borneo, which was located at Jalan Tanjung Harapan, processed waste of 1,730 kg with organic and inorganic types of waste.

The fifth waste bank was Bina Sejahtera which was located at Perumnas IV, processed waste was 24,000 kg with the type of inorganic waste, the sixth was Palm Asri which was located at Jalan Puskesmas, processed waste was 1,025 kg with organic and inorganic waste types, the seventh was Rumpit Hias which was located at Jalan Petani, the processed waste was 1,500 kg with the types of organic and inorganic waste, the eighth was Berkah Mendawai which was located at Jalan Imam Bonjol, the processed waste was 503 kg with the type of inorganic waste.

Source: (Observations and interviews with the Department of Environment in 2019).

The products produced by the waste bank were very diverse, ranging from flower pots, wallets, bags, jars, tissue holders, hats, vests, clothes and others. The products that had been produced by the waste bank must be ready to compete
with similar products with different materials, different styles and different price. In this case, of course a certain formula was needed to compete with competitors.

This research aims to (1) formulate alternative priority marketing strategies for processed waste craft products in Pontianak City, (2) provide formulations on upgrading the processed waste products in Pontianak City.

**RESEARCH METHOD**

The approach used in this research was a qualitative descriptive approach (Sukmadinata 2011). The research location was located in West Kalimantan Province, Pontianak City and was determined purposively with the consideration that only 8 Waste Banks have processed waste into various crafts. The type of data that used was qualitative data which collected through interviews with various respondents such as the Department of Environment, waste banks and consumers.

Primary data was obtained from the results of interviews with various respondents such as the Department of Environmental, Waste Banks and consumers to identify the internal and external environmental conditions of the Waste Bank. Secondary data was obtained from journals, theses, internet, and from related institutions. Literature was obtained from journals, books and theses as well as the internet, while data from institutions was obtained from interviews. The collection technique that used was the interview, documentation and observation methods. The observations were made on 8 Waste Banks in North Pontianak Sub-district, South Pontianak Sub-district, East Pontianak Sub-district and West Pontianak Sub-district, interviews were conducted with various respondents, including the Department of Environment, 8 Waste Banks, and consumers, this documentation included photos and recordings interview.

The explanation of variables from the Strength, Weakness, Opportunities, and Threats sub-criteria, such as: 1. Strength Sub-criteria (a) the waste bank had received a decree from the Department of Environment, the Decree that issued by the Department of Environmental was the power of the waste bank in operating and producing. This sub-criteria was included in the institution of product category in the theory of marketing mix. (b) The products produced were durable in terms of shapes that were not easily damaged and colors that did not fade easily if they were not exposed to direct sunlight. This sub-criteria was included in the quality of the product category in the theory of marketing mix 2. Weakness Sub Criteria (a) Motives and product shapes were still ordinary or can be said to be monotonous, the lack of innovation from product motives made people less interested in buying, therefore there was a need for innovation in colors, shapes and motives of the product. This sub-criteria was included in the product diversity in the product category in the theory of marketing mix. (b) Lack of promotion through the internet was indeed justified by the waste bank, because the resources still did not know much about the world of technology and information that currently available. This sub-criteria was included in sales promotion in the promotion category in the theory of marketing mix.

The next variable (c) the marketed place for the product was far from the city center, the access that taken by prospective buyers was still far from the city center, so offline marketing was not effective. This sub-criteria was included in the
location in the place category in the theory of marketing mix. 3. Opportunities Sub Criteria (a) Products can be used as souvenirs for tourists whose visiting Pontianak if there had been many changes in terms of shape, color and motives of the products, so it created tourist attraction, tourists usually visit places that were the icons and history of Pontianak City such as the Equator Monument, Kadariyah Palace, West Kalimantan Museum, Radankg House etc. This sub-criteria was included in direct marketing in the category of promotion in the theory of marketing mix. (b) Promotions during certain festivals can be a place to expand market share, such as the City Government Expo that held at the Pontianak Convention Center, and opening stalls during Car Free Day. This sub-criteria was included in direct marketing in the category of promotion in the theory of marketing mix. (c) The availability of online promotional media was a breakthrough nowadays. Social media had developed a lot and can be used to expand the market share of processed waste products, included Instagram, WhatsApp, Facebook, Line etc. This sub-criteria was included in sales promotion in the category of promotion in the theory of marketing mix. 4. Threats Sub-Criteria (a) the places for marketing competitors’ products which were located in supermarkets, places where competitors’ products were marketed were close to the city center and were located in modern markets with more visitors. This sub-criteria was included in the location in the place category in the theory of marketing mix. (b) The price of products from competitors was cheaper, materials and production that processed on a large scale made competitors more efficient in producing goods. This sub-criteria was included in the price list in the price category in the theory of marketing mix.

The data analysis in this research used the integration of AHP and SWOT or commonly called A’WOT, which combined a hierarchical structure with SWOT criteria, so that it can determine alternative strategic priorities (Kangas et al 2001; Imelda et al 2019; Kurttila et al 2000).

The stages of data processing by using AHP-SWOT analysis were described as follows: (1) Formulating the goals to be achieved, such as the marketing strategy of processed waste craft products in Pontianak City. (2) Determining the criteria by using variables from SWOT (Strength, Weakness, Opportunities, Threats) that obtained from interviews with key information and observations. (3) Determining the sub-criteria, such as the strategic factors of SWOT. The determination of quality used pairwise comparisons, was analyzed based on the assessment of key informants by using a questionnaire. (4) Determining and selecting strategic priority alternatives by using AHP (Analytical Hierarchy Process); (Kangas et al 2001; Imelda et al 2019). The determination of alternative strategies based on interviews with key informants and field observations. There were 3 alternative strategies submitted, such as, Information and Technology, Human Resources, and Institutions Imelda et al (2019). The data processing on this research was done by using Expert Choice 11 software. The hierarchical process can be seen in Picture 1.
RESULT AND DISCUSSION
Identification and Determination of Strategic Priority Alternatives

The results of the SWOT criteria analysis that assessed by key informants showed that the main priority was the strength factor, the second priority was the opportunity factor, both factors were used to overcome the weakness and threat factors in the marketing of processed waste craft products in Pontianak City Imelda et al (2019), the review referred in Table 1.

Table 1 showed the criteria for the first priority strengths, second priority opportunities, third priority threats and fourth priority weaknesses.

The next stage was to analyze the SWOT sub-criteria that had been assessed by the respondents, the results of the SWOT sub-criteria analysis can be seen in Table 1.
Table 1. SWOT Criteria Priority Matrix

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strenght</td>
<td>0,576</td>
</tr>
<tr>
<td>2</td>
<td>Weakness</td>
<td>0,089</td>
</tr>
<tr>
<td>3</td>
<td>Opportunities</td>
<td>0,242</td>
</tr>
<tr>
<td>4</td>
<td>Threats</td>
<td>0,093</td>
</tr>
</tbody>
</table>

Inconsistency Ratio = 0,04

Source: Processed result of Expert Choice (2020)

Table 2. Priority Matrix of Strenght, Weakness, Opportunities and Threats Sub-Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Sub-Criteria</th>
<th>Value</th>
<th>IR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strenght</strong></td>
<td>Waste Bank has got decree</td>
<td>0,229</td>
<td>0,00</td>
</tr>
<tr>
<td></td>
<td>Long lasting product</td>
<td>0,771</td>
<td></td>
</tr>
<tr>
<td><strong>Weakness</strong></td>
<td>Ordinary motif and design product</td>
<td>0,309</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Product marketing place far from main city</td>
<td>0,356</td>
<td>0,01</td>
</tr>
<tr>
<td></td>
<td>Lack of internet base promotion</td>
<td>0,335</td>
<td></td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>Product can be tourist souvenir</td>
<td>0,580</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promotion at certain festivals</td>
<td>0,174</td>
<td>0,02</td>
</tr>
<tr>
<td></td>
<td>The availability of online media promotion</td>
<td>0,246</td>
<td></td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td>Competitor product marketing place at supermarket</td>
<td>0,522</td>
<td>0,00</td>
</tr>
<tr>
<td></td>
<td>Cheaper competitor product</td>
<td>0,478</td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed result of Expert Choice (2020)

Table 2 showed the priority order of the strength sub-criteria including: (1) **Long lasting product**, the products classification that can last a long time in this case means in terms of design, they were not easily damaged and colors were not easy to fade if not exposed to direct sunlight where the manufacture of these processed craft products used inorganic and organic waste that can last a long time, of the intended classification, certainly this material was very good if used and processed properly. This type of material was durable, then lightweight, and can be reprocessed into a new design and remains cheap Putra and Yuriandala (2010). (2) **The waste bank has received a decree**, the legality which had been issued by the Pontianak Environmental Institution, provided flexibility in operating and producing processed waste products and made it easier to administer business licenses to market the products broadly. Business legality was a standard that must be met by business actors. Micro, Small and Medium Enterprises (MSMEs) were required to meet these requirements in order to compete in the free market era. The permission from the government allowed MSMEs to obtain four (4) benefits. First was the legality of business, second was the ease of obtaining capital, access to business assistance from the government, fourth was the opportunity to obtain assistance from the government Kusmanto and Warjio (2019).

Table 2 showed the priority order of the sub-criteria weaknesses (weaknesses) including: (1) **The product marketing place was far from the main**
city, because marketing was performed offline, then the marketing place was the production place of the processed waste products, certainly the place of production was performed far away from the main city, even the access taken was still quite complicated because it entered the alleys. Therefore, it was necessary for marketing to be placed in the main city such as supermarkets, in addition to busy visitors; the access was also very easy. The form of a modern market that was well known by the public and was often visited was supermarkets. Supermarkets were currently increasing in demand by the public, because the goods they wanted to buy were available in large types and quantities Rantini (2014); (2) Lack of internet base promotion, due to several factors such as very rarely updated posts, human resources who were less literate with existing technology and social media, indeed there was a need for guidance on human resources regarding the use of social media in marketing products online, so that market share increasingly widely. The media was a source of information, entertainment, scientific knowledge, and various other types of information, this made the media have an important role in the process of meeting the information needed Kurnia et al. (2018); (3) Ordinary motif and design product, this occurred from the lack of ability to modify the product, so that the product motif looked monotonous. People will buy if they feel suitable. Therefore the product must be modified as lovely as possible that in accordance with the wishes or needs of the buyer, so product marketing was successful. In other words, product manufacture was better oriented to market desires or consumer tastes Riyono and Budiharja (2016).

Table 2 showed the priority order of the opportunity sub-criteria including: (1) Products can be used as tourist souvenir, a very high chance if tourists visit Pontianak and buy handicrafts products processed by waste. The number of tourist visited West Kalimantan in 2019 was 58,148, a definite increase of 6,845 from the previous year Central Bureau of Statistics (2019) this had the opportunity to expand market share abroad with processed waste craft products; (2) Availability of various online promotional media, this was familiar to the millennial, various social media had been very booming and should be used properly, such as media for promoting waste-processed craft products. Social media that can be used for promotion included Facebook, Instagram, WhatsApp, Line etc. Social media was a place for interacting, communicating, sharing, viewing and visiting links that contained information about products, and can also be used as the most effective and efficient marketing media Solekhan and Winarso (2016). (3) Promotion at certain festivals, such as exhibitions and expos held by the Pontianak City Government in order to expand marketing and socialize craft products from processed waste.

Table 2 showed the priority order of the threat sub-criteria (threats) including: (1) competitors' product marketing places located in supermarkets (weight), competitors who have done marketing in supermarkets, of course, get the more opportunities in attracting consumers. Supermarkets were markets that had many visitors compared to markets that were located in the same place as the production place, attractive and elegant competitor products made supermarket visitors interested, therefore there was a need for product updates contained in the weakness variable. Purwanto (2019); (2) Cheaper prices of competitor products, the importance of marketing strategy was the more tough competition faced by
companies in general, competitors will continue to innovate to outperform their rivals with various innovation and improve the quality of the product, as well as lower product prices. The new competitors in entering the industrial world will display higher quality products, lower prices, and good resources, despite the obstacles for new competitors to entry Normaladewi (2018).

The Selection of Strategy Alternatives

This alternative strategy was chosen based on the research results from Imelda et al (2019) because of the conditions similarity in the field, interviews with key information and observations, such as alternative human resources strategies, alternative institutional strategies, and alternative technology and information strategies. The determination of alternative **human resource** strategies was based on trying to maximize the criteria for strengths and opportunities, such as utilized the legality of waste banks to make it easier to manage business license requirements and market products widely, utilized durable products and strategic locations that commonly visited by tourists and utilized social media as a market share expander for processed waste products (S1, S2, O1, O2 and O3) to minimize the criteria for weaknesses and threats, such as reduced monotonous product motifs so the product was not much in demand by the public, minimizing marketing that conducted at the production place, because it was ineffective, (W1, W2 and T1). The determination of alternative **institutional** improvement strategies was based on trying to maximize the opportunity criteria, such as utilized strategic locations that commonly visited by tourists and utilized festivals such as the Expo in Pontianak (O1 and O2) to minimize the criteria for weaknesses and threats, such as minimized marketing that conducted at the production place, because it was ineffective and suppressed competitors' products through innovation of motifs, design, colors, quality and prices so that the processed waste products were superior (W2 and T1). The determination of alternative strategies for improving **technology and information** was based on trying to maximize the criteria of strengths and opportunities, such as utilized durable products, utilized strategic locations that commonly visited by tourists, utilized festivals such as the Expo in Pontianak and utilized social media as an expanding market share of processed waste product (O1, O2 and O3) to minimize marketing that conducted far from the main city and reduced prices from competitors through efficient and effective production and marketing (W2, W3, T1 and T2).

<table>
<thead>
<tr>
<th>No</th>
<th>Strategy</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Human Resource Improvement</td>
<td>0,462</td>
</tr>
<tr>
<td>2</td>
<td>Institutions Improvement</td>
<td>0,135</td>
</tr>
<tr>
<td>3</td>
<td>Technology and Information Improvement</td>
<td>0,403</td>
</tr>
</tbody>
</table>

Source: *Expert Choice Processed Result* (2020)
Table 3 showed that the main priority alternatives that must be realized were increasing human resources, followed by technology and information improvement, then finally institutional improvement.

The first alternative priority strategy was to improve human resources, human resource development was a factor that must be considered in an industry, because the purpose of human resource development was to improve the abilities, skills and attitudes of employees, so that they were more effective and efficient in achieving program goals Khanifah et al. (2018). Creative and innovative human resources were the capital for business and community economic development Ananda and Susilowati (2017). The expertise and creativity of human resources affected a product Boon et al (2019). Human resources with guidance from MSMEs will contribute to the improvement of MSMEs, Adresi and Darun (2017).

The next stage was to identify efforts that can be implemented in implementing alternative human resource strategies. Based on information collected from key information, observations and literature review, the recommended efforts were: (1) Managed business requirements/licenses in order to more convince the public that waste-processed craft products were indeed fit for use/wear and can enter supermarkets. An industry must have the legality of business activities, so that in conducting their business activities safely, an industry and consumers will get legal protection for their business Hakim and Oktaria (2018) (2) Utilized the product durability by promoting at festivals, promotions on historical places such as the Kadaryah Palace, the Equator Monument, Museums, Traditional Houses, as well as online promotions (facebook, instagram, line, whatsapp, twitter). (3) Maximized employee talent development through training, so that the products produced were more varied and of high quality (Khanifah et al 2018; Fatmawati and Suseno 2018).

The second strategic priority alternative was the improvement of technology and information, nowadays the problems faced in technology was related to the ability of the research field to develop new technology (machinery/equipment), procurement of technology (machinery/equipment), and the application and development of new technology by small entrepreneurs Fatmawati and Suseno (2018). Product marketing was now turning to the internet, this can increase the market share growth of an industry Raldianingrat and Wuryanti (2014). E-commerce was a technology that must be owned and developed by an industry in conducting transactions with consumers. The use of e-commerce technology can be felt by consumers as well as by business people Mumtahana et al. (2017). The digital platform that used in marketing had an effect on the efficiency and effectiveness of the company Rouver et al (2018).

The efforts that can be performed to improve technology and information based on the results of interviews, observations and library research were: (1) Conducted online marketing, with the aim of expanding the market share of processed waste craft products that made it easier for business actors as well as potential consumers. The design of industrial e-marketing was able to market products more broadly, sellers can interact and transact with buyers. Buyers used social media more for transactions than traditional systems, marketing through the internet can improve the industrial economy Susanti (2018), (2) Applying technology and information to business actors, such as applying plastic chopp
machines, publications in online media (instagram, facebook, whatsapp, twitter, line) should also be implemented Sholihah et al. (2019). (3) Providing guidance in the use of technology and information to be more focused in the production process and marketing of processed waste craft products by parties who understand. These technological advances had an effect on marketing, thus almost every company continued to improve the quality of technology to achieve the goals Grewal et al (2020).

The third priority alternative strategy was institutional improvement. Institutions had a role in implementing the waste reduction system and determining the right waste recycling model Astari and Warmadewanthi (2010), there were 6 aspects that need to be considered in an industry, such as technical, ergonomic, socio-cultural, effective, efficient, and contribute to conserve the environment. These six criteria will be used by the management of the plastic waste recycling institution Nasution et al. (2018).

The efforts that can be performed to improve institutions based on the results of interviews, observations and literature reviews were: (1) Promoting by participating in craft exhibitions held by agencies or others, so that products were more known by all groups, this can increase the growth industrial economy, so that the institutional performance of the waste bank will increase Raldianingrat and Wuryanti (2014), (2) doing marketing at supermarkets that located in the main city because supermarket visitors were very crowded, (3) cooperating with investors to strengthen business capital and expand market share Imelda et al. (2019). (4) Intensively coordinating among waste banks, to share experiences, both in improving human resources as well as technology and information.

CONCLUSION

The result of AHP and SWOT integration analysis, obtained alternative priority marketing strategies for processed waste craft products in Pontianak City including: (1) increasing human resources, (2) improving technology and information, (3) improving institutions.

RECOMMENDATION

The implementation of alternative human resource strategies, in which waste banks, can update products, as well as it shapes, color, quality and motifs, conducted waste bank human resource training by doing a comparative studies with other SMEs in West Kalimantan, especially Pontianak City, waste banks must frequently conducted observations on competing products and products that were of interest to the local community. The implementation of alternative technology and information strategies was to find waste bank employees who not only understand the craft of processed waste, but also understand information technology, so that they can utilize online marketing and expand knowledge sourced on the internet. The third alternative was institutional, where the waste bank institution must always be upgraded and often conducted focus group discussions in the Waste Bank Forum, so that there were always creative ideas to develop waste banks in Pontianak City, managing the requirements in conducting marketing in supermarkets, so that the product was published in the city.
REFERENCES


