Development of TTG, Home Creative Industry, and Digital Marketing in the Framework of Bamboo Processed Product Innovation

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Abstract

Purpose: The purpose of PKM activities is to help increase production capacity and quality through technology transfer, home creative industry mindset, and improve the managerial ability of IRT Pring Makmur, including digital marketing in the context of innovating processed bamboo products. The main issue of IRT is the problem of production processes that are still semi-manual and still use traditional business approaches. These limitations cause IRT to be unable to meet market demand and business development is less than optimal.

Method: The service method applied combines mentoring, consulting, and training techniques by offering micro-business integrative solutions.

Practical Applications: Micro business integrative solution includes TTG Development, providing production equipment assistance in the form of dynamo cutting machines, training on growing home creative industry concepts, digital marketing training, and several other needed training.

Conclusion: This PKM activity has resulted in gradual changes in production, creativity and product innovation, marketing methods, product packaging, financial transaction management, and HR management.
Introduction

Processed bamboo is a form of natural resource utilization, and it is one of the mainstay types of products of the Indonesian creative industry subsector, namely crafts. The craft industry has more or less contributed to the economic recovery after the COVID-19 pandemic (Rofiah & Fitriani, 2022; Susanti, 2021). The presence of this industry can be a promising opportunity in the future, but it also demands a variety of creative and innovative ideas to produce various products.

At a time when the world economy was hit by a pandemic and almost all sectors experienced a crisis, the creative industry sector was considered to be a sector that was able to survive the phenomenon, including the Pring Makmur Home Industry (IRT) group located on Jalan Sukolilo RT 03 RW 01 Sukoanyar Wajak Village, Malang Regency. The pandemic stimulated various ideas to produce innovative bamboo processed products from the emergence of new micro-businesses mushroomed home-based culinary businesses (Chikmawati et al., 2021; Tenri Pada, 2023). The demand for processed bamboo products such as skewers has increased, due to other types of "satay" foods such as sempol, egg satay, cikok, fruit satay, and so on. With only six members, the average processed bamboo products (skewers and toothpicks) per week is less than 250 kilograms, even though the market demand per week is above 500-kilo grams of bamboo skewers. This condition will be resolved if IRT has and uses production machines, one of which is a bamboo-splitting dynamo machine (Hermanuadi & Putra, 2020; Widi et al., 2020).

Some of the main issues and challenges found in IRT-processed bamboo include a) the use of semi-manual and straightforward tools in carrying out the production process, b) management and business mindset that is still traditional, c) marketing products limited to the local area, and processed products displayed in storefronts, d) product types and product designs are not diverse or single products (skewers only), e) do not have attractive product packaging, f) recording financial transactions is still very simple, g) there is no business license or trademark, and h) limited ability of human resources to be able to accommodate production and business needs.

Based on the results of identifying issues through field observation and interviews, the purpose of this Community Partnership Program (PKM) is to increase production capacity and quality through technology transfer, home creative industry mindset, and improve the managerial capabilities of IRT Pring Makmur, including digital marketing to innovate processed bamboo products. In addition, this activity is also carried out to support the achievement of IKU 2 and IKU 5 universities. This program is the result of a situation analysis of several problems and challenges faced by local Home Industry (IRT) partners Pring Makmur Wajak Malang Regency who are in a position between the desire to meet market demand for the products they produce, and business conditions after the COVID pandemic.

As explained in the introduction, the COVID pandemic has given rise to the creativity of home-based culinary micro-businesses that require a lot of "skewers." For IRT Pring Makmur partners, this condition is a business opportunity. However, partners face difficulties in how this opportunity can be met so that market demand for processed bamboo products in the form of "skewers" can be met. In addition, if this opportunity can be taken, it will directly impact IRT's business conditions after facing a pandemic for more than two years and being able to get out of a crisis situation. The PKM team offers a micro business integrative solution, which connects several essential aspects to solve the issues mentioned above, including the development of TTG, the growth of HCI concepts, digital marketing, and other IRT managerial training (Chan & Sonaria, 2022; Suciati et al., 2023).

Method

The method used in PKM combines mentoring, consulting, and training. The approach used to combine these methods is brainstorming, interviews, simple practices, and observation of IRT business processes to explore partner problems as material for situation
analysis, business needs analysis, and partner root cause analysis to provide appropriate solutions according to the circumstances and availability of resources prepared and needed (Figure 2). Mentoring activities, discussions, and interviews were conducted with the owner of the IRT, namely Mr. Sutrisno, and with the four workers there, including Mr. Sutrisno’s wife, the leading supporter of the IRT.

The steps to implement such methods include activities, shown in Figure 1 below:

**Figure 1. Stages of PKM Implementation**

1. Preliminary *survey*, which is an initial survey to analyze the situation and identify problems/issues and obstacles partners, including some necessary analyses;
2. Initial coordination of the PKM team;
3. Coordination and preparation of activities with partners;
4. Technology transfer through the provision of new machines and training in machine operation;
5. Trainings by the results of the identification of material needs;

Assistance and consultation on several aspects, both related to technical and managerial aspects, are carried out periodically according to the situation and conditions at that time.

**Figure 2. PKM Implementation Method**

**Result**

The PKM activities are carried out at the Pring Makmur Home Industry (IRT) on Jalan Sukolilo RT 03 RW 01 Sukoanyar Wajak Village, Malang Regency. The choice of location was based on the results of initial observations and analysis of the situation and the identification of partner problems around Wajak.
As explained in the introduction, IRT's position to bounce back after the COVID pandemic and the desire for the high demand for "skewer" products due to the proliferation of home-based culinary businesses that produce new snacks that use "skewers." In addition, sub-districts and villages in Malang Regency are also one of the service locations of PGRI Kanjuruhan Malang University. Therefore, how can Unikama contribute to sustainable community empowerment in the Wajak area and Malang Regency in general? The PKM Unikama team offers integrative solutions to micro businesses to help solve existing problems.

The PKM team involves lecturers in fields of science, namely Accounting, systems and information technology, and counseling guidance. This combination of teams strongly supports the solutions offered to solve existing problems. This program also involves three students. In addition to providing opportunities for them to contribute to society directly and foster an entrepreneurial spirit (Setiyowati et al., 2022), this program is also a form of realization of the MBKM curriculum in order to support the achievement of IKU 2 and IKU 5 universities.

The stages of implementing training, consultation, and assistance to provide specific solutions, according to partner problems, include activities:

a. The delivery of bamboo cutting machines is equipped with training on the use of new production equipment intended to increase production capacity to meet market demand for processed bamboo products;

b. Provide understanding through training activities and discussion of materials needed by IRT Pring Makmur, the development of IRT product innovation, one of which is by planning new types of product innovations;

c. The delivery of plastic press tools for product packaging is complemented by providing an understanding of the importance of product packaging and making product packaging designs (Muljani et al., 2020; Rahman & Anggalih, 2023);

d. Assistance and training on the growth of concepts and strategies for developing the home creative industry, to have an HCI mindset to produce creative, innovative, and productive ideas (Paramita et al., 2021), including optimization of the remaining production materials (Susanto et al., 2020);

e. Assistance and monitoring of digital marketing implementation both through social media and marketplace utilization so that business development is faster and market coverage is more comprehensive for existing business growth;

f. Assistance in recording and preparing simple financial statements according to Micro,
Small, and Medium Entities (EMKM) standards, including the use of forms or recording helper cards so that financial information can be supported by valid evidence and faster presentation of financial statements with the support of accurate and available data (Rosmayati et al., 2023; Soejono et al., 2020).

- Assistance in registering micro business licenses and trademarks to better compete with product quality assurance;
- Other HR development training required by IRT
Figure 7. Handover of Tools and machines

Figure 8. Bamboo Cutting with New Machine

Figure 9. Packaging Design

Figure 10. Training by the Team
Discussion

This PKM activity has gradually resulted in several changes in production aspects, product creativity and innovation, marketing methods, product packaging, financial transaction management and recording, and HR management.

The assistance of tools in the form of cutting machines has accelerated and expanded production capacity almost two to three times the previous capacity. As explained by Mr. Sutrisno, the owner of IRT Pring Makmur, the primary key is the cutting process. If the bamboo cut results are many, then the subsequent processing will also have an impact and greater yields. In addition, for the sale of 'skewers' which have been sending more products to collectors, they can now sell "retail" by having their brands and packaging, which will be registered IPR in the future.

A change in mindset has also been seen, namely, thinking about how to make the remaining production materials more economical and not just thrown away. One example is selling bamboo weevils to ashtray craftsmen. Initially, there was only one buyer; now, they are

looking for other potential buyers. In addition, shaved waste can also be collected to be sold to brown sugar producers as fuel for making sugar (Jombang, 2014).

With training and understanding of the importance of financial records, they are now using transaction recording helper cards, both buying, selling, and producing transactions at every stage of the process. Previously, they only used old calendar paper mounted on the wall near the production process. Reports become neater and more informative. Likewise, training and understanding the importance of technology-based marketing approaches by utilizing social media, or even marketplaces. The PKM team will gradually teach how the digital marketing approach is carried out (Artaya & Purworusmiardi, 2019; Setiawan & Fadillah, 2020).

However, several obstacles arise, among others, in the HR aspect. Most workers are "old" and are reluctant to record the administration of production and materials in an orderly manner. Their focus is more on producing large quantities of output so that it will financially impact them. Therefore, the PKM team gradually mobilized and helped show the importance of recording in small or micro-scale business activity.

PKM activities have been running under the goals to be achieved. PRING Makmur IRT partners have been able to implement science and technology-based IRT by applying TTG to support a more modern production process through the acceptance of production equipment, namely bamboo-cutting dynamo machines. Partners will also get product designs to get varied product inputs and packaging designs to attract sales. In addition, changes in HCI-based business mindsets have begun to emerge by optimizing bamboo waste to make it more commercial and economical. Using digital-based marketing by optimizing social media and marketplaces has increased sales turnover because the market coverage is much more comprehensive. Product and trademark licensing registration will be part of the development that will be carried out. In addition, administrative aspects such as increasing competence in Financial Management and Human Resources have slowly and gradually been running. Overall, the picture of the results of PKM activities is shown in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Problems</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production capacity cannot meet market demand</td>
<td>Combination of the use of manual tools and simple machines</td>
<td>Dynamo bamboo cutting machine</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Production capacity increased 2-3 times</td>
</tr>
<tr>
<td>2</td>
<td>Traditional business management and mindset</td>
<td>A traditional business mindset</td>
<td>Training on the concept of home creative industry concept to be able to innovate and be creative in developing products according to current demands</td>
</tr>
<tr>
<td>3</td>
<td>Product marketing is limited to the local area</td>
<td>Processed products are simply stacked at home</td>
<td>Digital marketing training such as website creation or marketplace management training</td>
</tr>
<tr>
<td>4</td>
<td>Product types and product designs are not diverse/single product</td>
<td>Product: skewers only</td>
<td>Making product designs is not only one type of skewer, but there are also sempol skewers, cikol etc., and snacks that use bamboo skewers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Problems</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Retail sales have no attractive product packaging</td>
<td><img src="image1.png" alt="Image" /></td>
<td>Manufacturing of product packaging design</td>
</tr>
<tr>
<td>6</td>
<td>Recording financial transactions is still very simple,</td>
<td><img src="image2.png" alt="Image" /></td>
<td>Simple financial management training and preparation of EMKM financial statements, as well as the use of simple cards</td>
</tr>
<tr>
<td>7</td>
<td>No trademark yet</td>
<td><img src="image3.png" alt="Image" /></td>
<td>Trademark management</td>
</tr>
<tr>
<td>8</td>
<td>Limited HR capabilities</td>
<td><img src="image4.png" alt="Image" /></td>
<td>Training on various topics to support IRT activities</td>
</tr>
</tbody>
</table>

Source: Processed by the Author, 2023.

**Conclusion**

PKM activities at IRT Pring Makmur located on Jalan Sukolilo RT 03 RW 01 Sukoanyar Wajak Village, Malang Regency. IRT, chaired by Mr. Sutrisno, is the choice of community partnership program partners as a form of empowerment efforts by universities. With this program, the problems faced by partners have been resolved, both in terms of implementing TTG to increase production capacity, strengthening managerial aspects, and changing the mindset of better and more competitive IRT management. The final results of PKM have been achieved as the targeted outputs include: 1) provision of new tools/machines, 2) videos of service activities uploaded on social media, 3) increasing the competence and creativity of partners, mainly processed product innovations, changes in the mindset of HCI-based business management with digital marketing optimization, and simple financial recording 4) publication of activities in online media, 5) publication of articles, and planned to obtain 6) National patents.

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Reference


