

IS COAL ABLE TO SHINE? THE ROLE OF LEGAM IN SUPPORTING COAL JEWELRY-BASED SOCIAL ENTREPRENEURSHIP

Rakhman Priyatmoko^{1*}, Addin Maulana², Dini Oktaviyanti³, Yessy Febrina Usman⁴, Fauziah Khoiriyani⁵

¹Research Center for Area Studies, National Research and Innovation Agency (BRIN), Jakarta 12710, Indonesia

^{2,5}Research Center for Economics of Industry, Services and Trade, National Research, and Innovation Agency (BRIN), Jakarta 12710, Indonesia

^{3,4}Directorate of Strategic Research, Ministry of Tourism and Creative Economy, Jakarta 12770, Indonesia

*Corresponding author; Email: moko.budpar@gmail.com¹

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Abstract

As coal mining activities ceased in Sawahlunto, tourism, and the creative industry emerged as alternative avenues for the city's development. Legam is a player in the creative industry, specifically in the fashion sub-sector, specializing in coal-based jewelry production, a material abundant in Sawahlunto. Employing a narrative approach and conducting interview data collection, this research aimed to identify the role of Legam Jewelry in supporting social entrepreneurship. A social entrepreneurship approach served as the analytical framework, considering Legam Jewelry's unique business operations. Differences in the locations of raw material sources, workers' residences, and the business owner's domicile increased operational costs. It was interesting to comprehend Legam's motivation for maintaining this location difference between Bandung and Sawahlunto. The research findings indicated that Legam aligned its business processes with social entrepreneurship elements such as social value, civil society, innovation, and economic activities. Despite being deemed capable of fulfilling these social entrepreneurship elements, several critical points required attention in Legam's business processes. One such point related to the need for government support to facilitate physical exhibitions after the coronavirus disease (COVID-19) pandemic. In creating a massive social impact, efforts were necessary to encourage the emergence of similar entrepreneurs in Sawahlunto and other regions.

Keywords: Coal, Sawahlunto, Legam jewelry, social entrepreneurship.

Introduction

Jewelry refers to a tangible item adorned on the human body, including decorative pieces that might incorporate valuable gemstones, and is worn to enhance personal appearance (Versteeg, van den Hoven, & Hummels, 2016). Categories of jewelry include brooches, rings, necklaces, bracelets, earrings, body piercings, shirt cuffs, and other objects that exhibit a diverse range of forms influenced by technology, materials, fashion, culture, and personal preferences (Silina & Haddadi, 2015).

The jewelry industry makes a significant contribution to the Indonesian economy. The revenue in the jewelry segment reached US\$2.07 billion in 2023 and is estimated to grow annually by 3.92% (CAGR 2023–2026) (Statista, 2023). Moreover, during the Coronavirus disease (COVID-19) pandemic, this small and medium-sized industry-based sector saw a remarkable increase in its export value by 76%, rising from USD 1.47 billion in 2020 to USD 2.59 billion in 2021. The primary export destinations were Switzerland (35%), the United States (26%), the United Arab Emirates, and Hong Kong (each 11%) (Kementerian Perindustrian Republik Indonesia, 2022).

As an integral component supporting the fashion industry, the jewelry sector in Indonesia is linked to the creative industry. This industry holds substantial market potential due to the crafts workers' creativity in producing jewelry that aligns with market preferences. One relatively underexplored piece of jewelry is crafted from coal, an abundant raw material in Sawahlunto. Sawahlunto is a former coal mining town in the West Sumatra Province, Indonesia (Armis & Kanegae, 2020), which has transformed into a tourism and creative industry hub (Syafri, Nurdin, Sugandi, & Miko, 2021).

Post-mining tourism development in Sawahlunto is oriented toward creating a heritage-based tourist town (Armis & Kanegae, 2021). Concurrently, the city's creative industry development prioritizes performing arts, fashion, culinary, and crafts (Wahyuni & Khaidir, 2020). Sawahlunto achieved recognition as the best creative economy city by Sindo Weekly in 2016 (Wahyuni & Khaidir, 2020) and was designated a UNESCO World Heritage Site in 2019. Moreover, in addition to safeguarding the city's economy, this transformation has mitigated the environmental risks associated with mining activities (Syafri *et al.*, 2021).

The creative industry, including crafts, plays a crucial role in regional development and sustainable

growth, innovation, and the establishment of social capital (Klein, Gutowski, Gerlitz, & Gutowska, 2021). Several studies on the creative industry also highlight its contributions to the economy, particularly in employment generation, regional development, and urban dynamics (Caetano, 2017; Klein & Spsychalska-Wojtkiewicz, 2020). The contributions of the creative industry are tied to the framework of social entrepreneurship that prioritizes the community's well-being.

Social well-being emerges when creativity, innovation, and entrepreneurship are developed collaboratively, creating clusters of value that arise when multiple value chains are integrated and generate numerous job opportunities (Erro-Garcés, 2020). Creative entrepreneurship plays a crucial role in uncovering the potential for social innovation and talent within society. Additionally, creativity becomes an integral element in finding solutions to the complex social challenges faced by the world today (Gregory *et al.*, 2020).

Previous studies elucidated the transformation of Sawahlunto from a mining town into a tourist destination, as conducted by Armis and Kanegae (2020), Cheris, Repi, and Amalia, (2020), Armis and Kanegae (2021) and Syafrini *et al.* (2021). However, there is limited discussion on the city's transformation into the realm of the creative industry and the social impact it has generated, such as the shift in the community's professions from coal miners to crafts workers producing souvenirs and jewelry from coal. The transformation process in Sawahlunto has given rise to one coal jewelry producer, Legam jewelry (Legam). Noteworthy is the disparity in location between the business owner and the workers. The employees reside in Sawahlunto (West Sumatra), while the owner and the physical store are in Bandung (West Java).

The phenomenon is intriguing when examined through the lens of social entrepreneurship. Bandung and Sawahlunto are in different provinces and even islands. Instead of seeking local workers around Bandung, Legam's owner recruits and retains coal crafts workers in Sawahlunto as employees. Based on this background, this study aims to identify the role of Legam Jewelry in social entrepreneurship within the coal-based jewelry business.

The framework of social entrepreneurship comprises four elements: social value, economic activities, civil society, and innovative elements. The anticipated practical benefits include providing a role model for social entrepreneurs directly involved in social transformation and delivering tangible benefits to marginalized communities. The abundant potential of coal in Sawahlunto necessitates numerous creative ideas

and brilliant concepts to transform it into profitable products within tourism and the creative industry.

Concept and Definition of Social Entrepreneurship

Social entrepreneurship and social enterprise are gaining increased attention from academics in business management (Saebi, Foss, & Linder, 2019). Although these two terms are often used interchangeably, they represent distinct concepts, as not every enterprise is driven by an entrepreneur (Luke & Chu, 2013). Some closely related terms to social entrepreneurship include social entrepreneurs, social innovation, social exploration, venture philanthropy, and social-oriented business (Germak & Robinson, 2014). Social entrepreneurship has been affiliated with Ashoka (García-Jurado, Pérez-Barea, & Nova, 2021), a pioneering organization that emerged in 1980 to support social entrepreneurs. Social entrepreneurship has since become increasingly crucial as a catalyst for social change (Urban & Kujinga, 2017).

Table 1
Social Entrepreneurship Definitions

Definition	References
Social value creation occurs through the collaboration of individuals and organizations from civil society engaged in social innovation, typically involving economic activities.	(Hulgard, 2010; Utomo, 2014; Napsiah, 2019)
The shaping of social value involves combining existing resources in novel ways to discover and exploit opportunities.	(Renjana, 2017; Littlewood & Holt, 2018)
Efforts to address social issues are undertaken by combining business management skills and social sensitivity, thereby creating sustainability for the company in achieving financial and social benefits.	(Germak & Robinson, 2014)
Efforts in seeking solutions and resolving problems related to social situations that marginalize a group of individuals lacking resources or capabilities to attain a decent quality of life are achieved by establishing a company.	(Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016)
The process involves creating value by combining resources in innovative ways to explore and capitalize on opportunities. The primary goal is to generate social value by catalyzing social change or addressing social needs.	(Lepoutre, Justo, Terjesen, & Bosma, 2013); Puumalainen, Sjögrén, Syrjä, & Barraket, 2015)

A social entrepreneur is an individual who utilizes their leadership and innovative abilities to identify opportunities to create new products, services, or approaches to address pressing social issues (Okpara & Halkias, 2011). They strive to address social problems arising from market gaps and social welfare systems, aiming to create sustainable systemic change (Urban & Kujinga, 2017). This type of entrepreneur is mission-driven, seeking to effect environmental change by implementing sustainable business practices to generate social impact (Germak & Robinson, 2014).

See the definitions of social entrepreneurship in the Table 1. Key terms that connect these definitions include social value, innovation, social change, social issues, transformation, and needs. Social value stands as the primary distinction between social entrepreneurship and conventional entrepreneurship. Social entrepreneurship prioritizes social mission achievement (Arasti, Zarei, & Didehvar, 2014) and the creation of social value (Mair & Martí, 2006; Puumalainen *et al.*, 2015). This differentiation distinguishes social entrepreneurship from corporate social responsibility (Puumalainen *et al.*, 2015).

The Elements of Social Entrepreneurship

Among the definitions of social entrepreneurship, the one presented by Hulgard (Hulgard, 2010; Utomo, 2014; Napsiah, 2019) is quite interesting as a framework for analysis. This definition involves four key elements of social entrepreneurship: social value, economic activity, civil society, and innovation. This research analyzes Legam's activities using these elements (see Table 2).

Table 2
Elements of Social Entrepreneurship by Hulgard

Elements	Description
Social Value	Create tangible social benefits for the community and the surrounding environment.
Economic Activity	Balancing between social activities and business activities.
Civil Society	Initiative and participation by the individual or a group to enhance the utilization of existing social capital within the community.
Innovation	Utilize innovative solutions to address societal issues by creating products, services, or something novel and distinct while maintaining social responsibility.

Source: Hulgard, 2010; Utomo, 2014; Napsiah, 2019

In another definition, Okpara and Halkias (2011) articulate the elements of social entrepreneurship,

including innovation, leadership, opportunity, profitability, value creation, and social benefit. From the author's perspective, the elements conveyed by Okpara and Halkias share conceptual similarities with those elucidated by Hulgard. For instance, profitability aligns with economic activities, while value creation and social benefit resonate with the concept of social value. Thus, the author employs Hulgard's approach as the analytical framework in this study.

Research Methods

This research employs a qualitative approach with data collection conducted through interviews. The method is considered suitable for exploring the experiences and journey of Legam in running the business. How Legam balances entrepreneurial activities, not only in terms of economic profit but also in striving to be involved in social transformation, is an enthralling phenomenon to be explored.

The primary interview was conducted with the owner of Legam, who is the initiator of the coal craft business. To obtain more valid data, interviews were also carried out with crafts workers working at Legam and local government officials in Sawahlunto responsible for tourism and creative industry. The interview with the owner of Legam took place face-to-face in Bandung in July 2022, while interviews with crafts workers and local officials were conducted online in January 2024. Interviews aim to identify the role of Legam in supporting social entrepreneurship. The collected data was then analyzed using the descriptive approach outlined by Miles and Huberman, consisting of three stages: data reduction, data presentation, and conclusion drawing.

Results and Discussion

Legam's Role in Creating Social Value

Social value holds significant meaning in creating tangible benefits for society and the surrounding environment (Hulgard, 2010), distinguishing social entrepreneurs from business entrepreneurs (Okpara & Halkias, 2011). This concept adopts social objectives in business activities and connects commercial entrepreneurs with activities that benefit the community (Ratten, 2020). To create social value, companies need to pay attention to social objectives that align with societal expectations, allowing the business model to balance human, environmental, and profit aspects by generating social value (Ratten, 2020).

The emergence of Legam originated from the owner's ability to recognize the potential possessed by

the artisans they encountered. While in Sawahlunto conducting coal research, the owner met and observed the coal carvers. The owner of Legam assessed that these artisans had excellent skills in carving coal. Indeed, they could create large sculptures with various shapes and characters, showcasing good and detailed carvings. Unfortunately, creating large sculptures took considerable time, resulting in a prolonged sales cycle.

The owner of Legam then demanded the artisans to create smaller-sized craft products, falling into the jewelry category, using the same coal material. Leveraging their skills, the artisans crafted products according to the desired designs. As a next step, the owner of Legam decided to establish the Legam Jewelry brand and recruited coal carvers from Sawahlunto as workers.

The crafts workers' expertise in transforming coal into jewelry is passed down through generations. These ornaments require metal fastenings (silver or gold) to become a piece of complete jewelry. The crafts workers in Sawahlunto lack the skill to produce the fastenings, so crafts workers from other regions in Indonesia carry out the crafting of rings or other fastening forms. In this regard, Legam collaborates with gold and silver crafts workers from Bali as suppliers.

The establishment of Legam has a social impact on a small segment of the Sawahlunto community, namely the transformation of livelihoods for some individuals, from former coal miners and statue carvers to jewelry crafts workers. This change in livelihood provides a solution to the economic challenges of the crafts workers due to the cessation of mining activities. This conclusion finds support in the statements of the crafts workers,

"For the community around the crafts workers' environment, the presence of Legam brings about a positive impact. Legam not only actively promotes the beauty of the surrounding natural environment but also plays a role in enhancing the economy of crafts workers in Sawahlunto. The relationship between the crafts workers and the surrounding community has also improved as a result of creating job opportunities." (Interview, 2024).

Zainea, Toma, Marinescu, and Chițimiea (2020) confirm that social entrepreneurship, through its social values, can address unemployment through various means, such as providing employment opportunities, developing new skills for workers, and generating new types of jobs through social innovation. By creating job opportunities, Legam indirectly promotes social change by stimulating the creativity of craft workers in

the area. Working as jewelry craft worker, the community earns a livelihood and generates income beyond mining activities.

The presence of Legam benefits not only coal crafts workers but also the community members who are not engaged in craftsmanship. According to Legam crafts workers, the surrounding community is involved in the production process as collectors or suppliers of coal raw materials and receives compensation based on the quantity of coal supplied. Thus, even though the primary occupation of the community supplying raw materials is not crafts workers, the community also derives benefits from Legam's jewelry production activities in Sawahlunto.

One of the economic impacts of social entrepreneurship on communities is evident in its approach to addressing significant social and environmental challenges. Social entrepreneurs can pioneer the development of new markets and boost demand for their products and services. Consequently, this can lead to the creation of more jobs and increased economic activity. In this matter, Legam's are successful in creating employment opportunities. It comes from the commitment to retaining crafts workers from Sawahlunto despite the differences in their residential locations. The business owner resides in Bandung (West Java), while the crafts workers live and stay in Sawahlunto (West Sumatra). The business incurs operational expenses due to this commitment, and it is considered one of its social values. Legam's owner stated as follows,

The process is intricate due to the distance between us. During my visits to Sawahlunto, I don't take stones directly from the crafts workers; instead, I pick up already carved products. They are the skilled individuals responsible for the carvings. As the crafts workers are in Sawahlunto, I typically make about four trips a year, especially when I have new designs. Communication is challenging since they don't have cell phones, making it impossible to send pictures via WhatsApp. Consequently, during the pandemic, I had to resort to mailing the design ideas (Interview, 2022).

The owner understands that this working relationship pattern is less efficient from a business perspective because it requires substantial operational costs for interaction and communication. Furthermore, the owner of Legam elaborates,

Few tourists visit Sawahlunto due to its challenging accessibility, unlike the more accessible destinations like Padang or Bukittinggi. Even reaching Sawahlunto from Padang requires a six-hour journey

via public transportation. Back in 2016, the signal was poor; one had to go to the government office for a reliable connection. Presently, both the residents and the crafts workers depend on mobile phones provided by Esia Hidayah, highlighting the constrained technological infrastructure in the area. The restricted access and outdated technology contribute to the low interest in vacationing in Sawahlunto (Interview, 2022).

The quote indicates that there are still challenges in terms of communication and accessibility in Sawahlunto, affecting the number of tourists willing to vacation or explore the city. The owner of Legam understands the operational costs arising from these communication constraints. However, the owner of Legam expresses that the goal of recruiting crafts workers is not solely for economic profit. Another objective is to empower former miners and coal carvers in creative industry activities. It is one of the reasons why this working relationship pattern is still maintained.

To sum up, Legam Jewelry fulfills social values by providing employment opportunities to sculpture crafts workers in Sawahlunto and maintaining the workers despite differences in domicile. The presence of Legam also contributes to addressing social issues faced by the Sawahlunto community by providing alternative employment options aside from coal mining or sculpture carving.

Economic Activity: Balancing Profit and Social Purposes

In social entrepreneurship, there is an effort to balance social and business activities, where economic benefits also play a crucial role in enhancing the quality of life for the community. Social entrepreneurship aims to provide financially sustainable solutions (Rey-Martí *et al.*, 2016). In other words, despite having a social mission, they also seek profitability (Rey-Martí *et al.*, 2016). In this context, they strive to balance social benefits and the success of the business endeavors (Puimalainen *et al.*, 2015), either on the communities that are involved in the activity or on the entrepreneurial organization itself (Hulgard, 2010).

Legam's economic activities not only yield profits for the company but also benefit its employees and the surrounding community. One of the most noticeable economic advantages experienced by the workers is the improvement in their income upon joining Legam. A crafts worker conveyed, "Joining Legam results in an increase in income for the crafts workers compared to when still selling sculptures" (Interview, 2022).

When working as sculpture sellers, crafts workers earn income upon the sale of their sculptures, while Legam implements a monthly wage scheme at specified intervals for its workers. As discussed in the context of social value, the economic benefits of Legam are also experienced by the community partnering as coal suppliers, as they receive compensation for their activities. The community, acting as partners, is well-versed in identifying high-quality coal suitable for jewelry processing. Therefore, Legam relies on the assistance of this community.

In addition to providing economic benefits to craftsmen and workers, Legam also engages in economic activities to sustain the company. By generating profits, the company can persist and continue to provide social benefits to the community. Legam's economic activities, geared towards generating economic profit, are centered on producing and selling jewelry. To support these economic efforts, Legam utilizes both physical and online stores. Online, Legam leverages its website, Instagram, and WhatsApp messaging application. They have chosen not to sell products through online marketplaces. Instagram serves as a social media platform for sales, utilizing features like Instagram Shop that directly link to the WhatsApp application, enhancing online selling capabilities.

Customers can access information regarding Legam and its product variants through these social media channels. Meanwhile, Legam currently operates one physical store in Bandung. In addition to its independently managed store, Legam employs a consignment method in cooperation with other stores. The owner describes the price range of Legam's products in the following statement.

If in the past, before we changed our metal raw materials, we only offered palladium, silver, and gold. We used to have brass, which was more affordable, typical for regular jewelry, priced around IDR 300,000 to IDR 500,000. As for the current products made of silver, the price range is approximately IDR 400,000 to IDR 2,500,000, while gold ranges from three to seven million rupiahs (Interview 2022).

In addition to owned stores, Legam actively promotes and sells its products through various exhibitions organized by government agencies, state-owned enterprises, and corporations. One positive impact of these exhibitions is the increase in sales figures. For instance, Legam once received a request for 2000 product items from potential buyers in China who discovered the products through an exhibition. Unfortunately, they could not fulfill the demand due to

the capital, workforce, and production capacity. Product inquiries also come from countries such as Singapore, Thailand, Taiwan, and even buyers from Europe, including the United Kingdom and Poland, showing interest in Legam's products. The restrictions on large-volume orders aimed to maintain product quality, as mass production can impact quality negatively.

Legam engages in economic activities by selling products and generating income from these actions to sustain the company. In sales activities, Legam establishes appropriate prices by considering market conditions, the purchasing power of the community, and production costs. This strategy allows them to generate sufficient income to achieve social and financial goals. Businesses operating within the framework of social entrepreneurship have demonstrated positive impacts on the community's economy.

Legam expands its product reach through website promotions and social media exhibitions, actively participating in trade fairs. Fitriani, Wahjusaputri, and Diponegoro (2021) suggest that trade exhibitions can save promotional costs while increasing revenue. Promotions through social media and websites could be an effective way to promote a business.

What needs to be emphasized regarding Legam's economic activities is that Legam exclusively conducts the promotion and sale of products through offline stores located in Bandung or via an online platform. Consequently, Sawahlunto merely serves as a production site and raw material acquisition location. So, the economic benefits in Sawahlunto are predominantly experienced by crafts workers and the surrounding community in the form of wages as workers or suppliers. Meanwhile, the company gains economic benefits through both offline and online retail channels.

The Role of Legam as a Civil Society Initiative

The distinguishing criterion between social entrepreneurship and social activities in the private commercial sector and the public sector is civil society (Hulgard, 2010). Civil society refers to the initiatives and community participation in optimizing the social capital they possess (Rey-Martí *et al.*, 2016). In social entrepreneurship, social entrepreneurs play a crucial role in taking initiatives to drive social transformation by leveraging this social capital, thereby addressing social issues and meeting community needs.

Civil society agencies can stem from individuals or communities that provide resource support such as financial aid, infrastructure, and specific expertise. The existence of civil society raises awareness of social entrepreneurship initiatives and relevant social and environmental issues. In the context of Legam, the owner

plays a role as an actor initiating change by leveraging the existing social capital in the Sawahlunto community. This social capital is the collective skill of the community in carving coal into jewelry, supported by the abundant coal resources in the region. The owner stated as follows.

During my time there living with the crafts workers (in 2016), there were PT Bukit Asam and Ombilin, which were no longer active, leaving abundant coal waste. So, it's like mining became the main livelihood of the local community. Due to regional autonomy, there were mass layoffs, most of the people there migrated, so many people are no longer in Sawahlunto (Interview, 2022).

As a civil society initiative, Legam provides financial resource support, starting from researching the potential of coal as jewelry to the production process and business operations. The financial resources come from the owner's funds and the cash flow generated when the business runs. Legam's initiative indirectly supports the transformation efforts of Sawahlunto from a mining town to a tourism and creative industry-based city. The owner of Legam identifies the social capital held by the former mining community and optimizes it in creative industry production activities. This kind of initiative is crucial in a community undergoing transition.

As a business that started from individual initiative with personal financial support, Legam has several limitations, such as in production scale. The limited number of workers also affects the production process. Meanwhile, on certain occasions (e.g., exhibitions), there is a demand for products in large quantities. The owner of Legam expresses.

While participating in a China exhibition, I received an offer that demanded a large quantity. However, as a solo entrepreneur in the early stages of team building, I couldn't fulfill it. I am actively seeking local crafts workers for empowerment, though it's a work in progress. Capital constraints occasionally impede our progress, particularly as we've shifted from ordinary brass to more expensive materials like gold and silver (Interview, 2022).

The statement explains that Legam faces challenges in meeting demands in large quantities due to capital limitations. Additionally, the current high prices of raw materials such as gold and silver add to the difficulty, unlike when they used brass alone. This situation makes Legam hesitant or unable to fulfill large-scale orders. Large-scale product demands are not constant, occurring mainly during specific exhibitions that Legam participates in. Nevertheless, this indicates that Legam has a potential and promising market.

Legam's role as a civil society took the groundbreaking step of initiating a coal jewelry business using personal capital, a venture unheard of at the time. One of the creative industry's local officials supports this by stating, "No one has implemented a jewelry business using personal capital before, and no one has implemented a jewelry business model that utilizes raw materials from coal, as done by Legam Jewelry." (Interview, 2022). This move not only launched a jewelry business but also pioneered an incubator for socially entrepreneurial ventures. The initiative leverages social capital, imparts self-reliance and efficiency, champions sustainability, and actively contributes to social welfare. This initiative offers the utilization of social capital, teaches self-reliance and efficiency, advocates sustainability, and supports the improvement of social welfare.

Legam in Innovation Aspect

Innovation is crucial in social entrepreneurship (Lepoutre *et al.*, 2013; Choi & Majumdar, 2014; Puumalainen *et al.*, 2015). Social entrepreneurs themselves are individuals who exhibit innovativeness by creating breakthroughs, developing new models, and adopting existing ideas into novel situations (Okpara & Halkias, 2011). Innovative products and services contribute to the success in achieving the mission of social entrepreneurship (Puumalainen *et al.*, 2015). Innovation involves the use of inventive solutions to address social issues, the development of new products and services, as well as the exploration of new business models. It encompasses product innovation, process innovation, marketing innovation, business model innovation, supply chain innovation, and organizational innovation (Kahn, 2018). In the fashion industry, societal developments influence the innovation processes to create uniqueness in the products.

Legam's innovation began with the creation of the jewelry business model. The distinctive feature of this model lies in its empowerment of the indigenous Sawahlunto community, utilizing coal as the primary raw material for jewelry production and it gives a competitive advantage over other jewelry companies. According to Sawahlunto Tourism Department workers, "No one has implemented a jewelry business model that empowers indigenous communities and uses coal like Legam jewelry" (Interview, 2022).

Legam's innovation focuses on product creation and promotion. In production, the innovation lies in transforming coal into jewelry, which also serves as the uniqueness of this venture. The innovative ideas in Legam products stem not only from the owner's

initiatives but also originate from crafts workers through a process of discussion. A crafts worker stated, "Through collaboration with Legam, new innovations emerge in creating a product" (Interview, 2022).

Sawahlunto is part of the Ombilin Basin, renowned for its high-quality coal known as anthracite (Yuniantari & Harini, 2021). This anthracite became the raw material for jewelry. This type of coal can be categorized as a gemstone, although not as a high-end one. The coal adds value to Legam's jewelry, given its affordable price, easy availability of raw materials, and its rarity in the jewelry industry. The manager explains the idea of creating jewelry from coal as follows.

We utilize the B2 layer, classified as anthracite coal, distinct from other layers primarily used for combustion due to its lower calorific value. Typically, this B2 layer is discarded, as other layers, such as black sill, are preferred for burning. However, further research discovered that the B2 layer, having transitioned into anthracite, is notably harder and more suitable for crafting souvenirs (Interview, 2022).



Figure 1. Legam jewelry product

Source: Author's Documentation (2023)

One of Legam's innovations in the production process involves crafting wedding rings made from coal. This product has garnered interest from buyers due to its affordable price, unconventional materials, design, and limited availability compared to gemstone wedding rings. During the pandemic (2020–2021), the number of wedding ring orders at Legam reached 8–15 items per month. Some customers requested to replace the coal element in the product, but Legam continued to strive to maintain it. Legam does not just sell jewelry but also conveys the values and stories encapsulated in Sawahlunto's coal itself. This shows that it is necessary for SMEs to focus more on the unique resources that exist in their social network relationships (Zaato, Ismail, Uthamaputhran, & Owusu-Ansah, 2020). To address concerns, Legam took the

initiative to combine coal with other types of stones like amethyst, ensuring that the coal element remains a part of the design. Figure 1 illustrates examples of Legam's Jewelry product variants.

In terms of marketing, Legam does not target a particular segment. However, most of its customers are jewelry enthusiasts. Legam is bridging the gap for individuals seeking aesthetic jewelry at a more affordable price to gemstone-based jewelry. The owner expressed as follows.

The primary allure lies in the novelty of our coal innovation. While many jewelry items commonly feature amethyst and diamonds, Legam stands out as a pioneer and sole proprietor of coal jewelry. Our uniqueness stems from the use of discarded waste, emphasizing sustainability. By repurposing waste materials, we contribute to environmental well-being, actively avoiding harm to the Earth by transforming discarded materials into something valuable (Interview, 2022).

The statement explains that Legam's presence has also changed the public perception of coal as a geological product only suitable for fuel. Legam has conducted research and transformed coal into aesthetic products with market value. Legam's coal products are safe for use and have obtained certification from geological experts.

The marketing aspect implemented a narrative about Legam's background on each product packaging. The narrative is written in Indonesian Language (Bahasa Indonesia) as follows, "*Dari tanah yang melimpah ruah, budi dan daya berhasil mengolah, merubah pekat menjadi benderang, merubah yang sekedar menjadi berkadar*" (From the bountiful land, skill and effort successfully processed, transforming density into luminosity, turning the ordinary into extraordinary).

This sentence carries a philosophical meaning, signifying the transformation of something previously not valuable into something valuable economically and socially. It is consistent with the earlier statement that one of Legam's values is utilizing waste from coal combustion to create commercial products, which is also a form of innovation. Legam also receives numerous reviews and comments from customers on social media, using them as feedback to create better products and services.

Several points influencing Legam's innovation include creativity, design, and collaboration. In Legam, creativity is crucial for generating solutions to address social and environmental issues. Mitchell and Walinga (2017) add creativity insight, enabling the resolution of social and environmental problems and enhancing

sustainable, systemic, and integrative solutions needed to tackle sustainability challenges.

In addition to creativity, the design of Legam's jewelry products is also a critical element in innovation. It helps enhance user experience and attract consumer interest. The aesthetic design serves as an extrinsic signal that aids people in evaluating quality, shaping price expectations, and influencing purchase intentions, especially for new products or brands (Shi, Huo, & Hou, 2021).

Lastly, collaboration among designers, coal crafts workers, and metal crafts workers is also a crucial factor. Legam combines expertise and experiences from various fields to create superior products. Collaboration also aids Legam in developing a broader business and marketing network. The likelihood of success for a business increases when companies utilize collaboration to support innovation efforts (González-Benito, Muñoz-Gallego, & García-Zamora, 2016).

Critical Aspect of Social Entrepreneurship

Table 3 shows the role of Legam in supporting social entrepreneurship. The social value element is the strongest and the primary distinguishing factor compared to conventional entrepreneurship, in contrast to other elements such as economic activity, civil society, and innovation. Legam's social value represents an effort to balance profit with the social benefits obtained by the community, particularly the crafts workers from Sawahlunto.

The four elements of social entrepreneurship are crucial components of this concept. However, like any concept, each element has its shortcomings. The social value element is related to the primary goal of social entrepreneurship, which is to create a positive social impact. A challenge here is how to measure social impact objectively and effectively. It can be difficult to quantitatively measure how a social entrepreneurship initiative has affected the community or the environment. There is a potential conflict between prioritizing social impact and ensuring financial sustainability. Measuring social benefits based on the extent of its social reach reveals limitations. Legam only recruited six crafts workers from Sawahlunto, which is only a fraction of the city's population. Even compared to the overall population of crafts workers, the number is few.

However, this should not be considered a failure. The fulfilling social values are also related to other elements, such as financial resources, which are undoubtedly different from those of a giant corporation. Therefore, it is not reasonable to attribute broader social impact solely to one entrepreneur. The

crucial step is to cultivate new entrepreneurs to expand the social impact on the entire population of Sawahlunto. Legam can serve as a role model or best practice.

Table 3
The Role of Legam in Social Entrepreneurship

Aspects/Elements	Roles
Social Value	<ul style="list-style-type: none"> - Creating new job opportunities for the Sawahlunto community. - Employ former sculpture crafts workers from the community as jewelry crafts workers. - Exclusively utilizing local crafts workers from Sawahlunto and preceding artisans from other regions, even if it reduces the business profit.
Economic Activity	<ul style="list-style-type: none"> - Increase the income of crafts workers and the surrounding community - Implementing a monthly salary scheme so that workers' income is more stable. - Utilize both online and offline channels to sell products. - Employ exhibition media for sales and promotional purposes.
Civil Society	<ul style="list-style-type: none"> - Initiating a jewelry crafting business using coal as the primary material. - Use personal funds to start the business. - Harness the community's expertise in jewelry making to sustain themselves. - Leverage the abundant natural resource of coal waste in Sawahlunto.
Innovation	<ul style="list-style-type: none"> - A business model that empowers indigenous communities and uses coal as raw material for jewelry. - Process coal waste into aesthetically pleasing and marketable jewelry products. - Integrate coal with other components such as gold, silver, and other gemstones like amethyst. - Create wedding ring products with non-gemstone materials as a form of product diversification and market segment expansion. - Utilize social media for promotion and sales.

In economic activity, it is critical to create a sustainable business model. Legam has weathered the crisis storm that impacted all types of businesses, namely the COVID-19 pandemic, and successfully adapted by creating products that became preferences

during the circumstances. For instance, the idea to produce wedding rings was inspired by the decrease in community income due to the pandemic, leading them to seek more affordable wedding ring options. Legam also did not intend to engage in large-scale production processes, as it was concerned that it could compromise product quality. The sole concern arises when a demand for a large quantity of products is difficult to meet, resulting in a significant loss of economic potential. However, the economic advantages of such transactions can sustain community empowerment in Sawahlunto and other regions.

The civil society element highlights the importance of community participation in addressing social issues. It is how to ensure that social entrepreneurship initiatives genuinely involve the affected community. There is no issue with what has been done by Legam in this aspect. The previous chapters have explained the owner's initiatives. The challenge lies in increasing awareness among existing entrepreneurs in the region (Sawahlunto) or even in Indonesia to take the initiative to build a company with a social concept and fulfill the civil society initiative element.

Social entrepreneurship seeks to address social issues in new and innovative ways. However, the challenge of innovation is that not all new ideas are guaranteed to succeed. The ideas take time to be accepted by society or may face legal or regulatory obstacles. In the context of Legam, this element is not a problem either because Legam has innovated in product creation and marketing. Some innovative products have also been well-received in the market.

To sum up, among the four elements of entrepreneurship utilized in the analysis, the social value element requires further attention as it is a distinguishing factor from ordinary entrepreneurship. This element also plays a crucial role because it is essential to consider the extent to which it can reach communities in need of social and economic assistance. The sustainability of achieving social goals is also related to the issue of regeneration. According to Legam, the younger generation in Sawahlunto tends to be consumers of jewelry rather than producers.

Conclusions and Implications

Legam plays a role in supporting social entrepreneurship, although there are critical aspects related to the expected social impact. In addition, limited capital, and higher raw material prices due to the pandemic act as limiting factors. Tremendous efforts are needed to promote the emergence of comparable entrepreneurs in Sawahlunto and other areas. With an increased number, the demand for products, both

domestically and internationally, can be met without compromising the quality. The social entrepreneurship's civil society aspect necessitates further elaboration as the initiatives are inherently personal.

Though Legam brings positive benefits, the development of social entrepreneurship in the jewelry industry cannot rely on its existence to achieve significant social transformation. Massive social change requires collaboration from various parties, including the government and local authorities. Later, after the COVID-19 pandemic, an increase in the number of government-supported exhibitions is expected.

This research holds theoretical implications by enriching the literature that depicts the collaboration between businesses and local communities. Additionally, it contributes to understanding how such synergy can create positive social impacts. From a managerial perspective, this study guides jewelry companies involved in businesses related to coal resources. In practical terms, the research findings can assist other small and medium-sized jewelry enterprises and other stakeholders in implementing programs that support the empowerment of local communities. While concurrently fostering economic development and social responsibility. The achievements of Legam are an inspiration for other entrepreneurs in transforming coal mining waste into creative products. This research has limitations as it exclusively incorporates perspectives from the owner and employees of Legam, and only utilizes one theoretical framework from Hulgard. Future research should explore the perspectives of other coal jewelry business stakeholders to obtain more comprehensive data. The incorporation of alternative theories is also necessary for the development of the research analysis framework.

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