HOW A HYBRID FIRM IMPLEMENT INSTITUTIONAL LOGIC TO DEVELOP HOUSEHOLD WASTE ECOPRENEURSHIP

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Abstract: The objective of this research is to increase the understanding of the ecopreneurial actions. A single qualitative case study is used to investigate an environmental hybrid firm in implementing institutional logic to develop household waste ecopreneurship in Surakarta City. In addition, the data were analyzed using an interactive model which consisted of data reduction, data presentation, drawing conclusions, and verification. The research findings showed that the ecopreneur is implementing dual logics, combining ecological and economic logics into one business perspective. The commitment to dual logic implies on the ecopreneurial firm and how the hybrid firm deal with the complexity within and outside the organization. The ecopreneur also works actively to improve their circumstances, in terms of affecting the field to better prioritize the ecological logic by raising public engagement and developing eco-innovation product. Ecopreneur's commitment in dual logic was implemented in some business's strategy such as production, technology, human resources, marketing, and finance.

Keywords: binstitutional logic, hybrid firm, ecopreneurship, household waste

Abstrak: Tujuan penelitian ini adalah untuk meningkatkan pemahaman tentang tindakan ecopreneurial. Penelitian ini menggunakan metode kualitatif dengan jenis peenlitian studi kasus yang digunakan untuk menyelidiki sebuah perusahaan hibrida dalam mengimplementasikan logika kelembagaan untuk mengembangkan ecopreneurship sampah rumah tangga di Kota Surakarta. Analisis data yang digunakan adalah analisis model interaktif yang tediri dari reduksi data, penyajian data, penarikan kesimpulan, dan verifikasi. Temuan penelitian menunjukkan bahwa ecopreneur menerapkan logika ganda, menggabungkan logika ekologi dan ekonomi menjadi satu perspektif bisnis. Komitmen terhadap logika ganda menyiratkan pada ecopreneurial perusahaan dan bagaimana perusahaan hibrida menghadapi kompleksitas di dalam dan di luar organisasi. Ecopreneur juga bekerja secara aktif untuk memperbaiki keadaannya, dalam hal mempengaruhi lingkungan luar untuk lebih memprioritaskan logika ekologis dengan meningkatkan keterlibatan publik dan mengembangkan produk inovasi berorientasi lingkungan. Komitmen logika ganda ecopreneurial tampak pada strategi bisnis seperti dalam produksi, teknologi, sumber daya manusia, pemasaran, dan keuangan.

Kata kunci: logika kelembagaan, perusahaan hibrida, ecopreneurship, limbah rumah tangga

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INTRODUCTION

Household waste problems are one of the development problems faced up by Surakarta City. This is because the volume of household waste always increases every day. In 2017, the volume of household waste in Surakarta City reached more than 50% from the total waste, which is 62,255 tons or 171 tons per day. Therefore, it is necessary to recommend an effective household waste disposal mechanism to enhance sustainable development (Olalade et al. 2009).

Household waste management activities can provide opportunities in entrepreneurship and also provide space for innovation and investment prospects (Ndikumana & Habiyaremye, 2015). This entrepreneurial action will be carried out by a new generation of entrepreneurs who integrate the environment with an entrepreneurial spirit, as mentioned by Bell (quoted by Allen and Malin, 2008). This kind of entrepreneurial activity is known as ecopreneurship.

According to York et al. (2016), ecopreneurship is defined as "the use of both commercial and ecological logics to address environmental degradation through the creation of financially profitable organizations, products, services, and markets. Thompson et al. (2011) assert that ecopreneurship "investigates how environmentally relevant institutions influence entrepreneurial action by examining how individuals recognize, exploit, and create economic growth while simultaneously creating environmental benefits. In addition, ecopreneurs can be understood as "individuals who create, new, often for profit, ventures that help address environmental challenges (Lenox and York, 2011). Recognizing this nature of the ecopreneurs opens up enquiries into their micro practices and how these are intertwined with meso and macro levels of environmental politics (Galkina and Hultman, 2016).

The pioneer of ecopreneurship who focused on household waste recycling in Surakarta City is Mrs. Siti Aminah. She is the director of CV. Bina Usaha Mandiri. Since 2010, through her environmental firm, she initiated and cooperated with around 60 waste banks which located in five sub-districts in Surakarta City.

In the context of ecopreneurship, as most research has focused on categorization and motivation of ecopreneurs (Jolink and Niesten (2015); Galkina and Hultman (2016)), the issue of environmental hybrid

firm in the institutional literature has received very little attention (Haigh and Hoffman, 2012). Consequently, an important aspect of how ecopreneurs can respond to the field's expectations and their understanding of environmental business practices is left out (De Clerq and Voronov, 2011). In this case, CV. Bina Usaha Mandiri is an example of how an environmental hybrid firm runs its business. By understanding ecopreneurs in the perspective of institutional logics, the objective of this research is to increase the understanding of the ecopreneurial actions.

METHODS

The location of this research is around Surakarta City where the CV. Bina Usaha Mandiri operating in daily basis. The study is conducted from April to September 2017. In order to answer the objective of the research, a single qualitative case study was conducted. As the research is not aiming for statistical generalization, the case has not been selected as a sampling unit. CV. Bina Usaha Mandiri was purposefully selected to fit with two criteria, the definition of ecopreneurship by York et al. (2016) and also fit to the hybrid firm of combining ecological and economic logics. The reason for case study design is to get deep and intensive information (Bryman and Bell, 2003). This research is also set to gain an understanding of the context and the actions of the ecopreneur, which promotes the usage of case study (Saunders et al. 2009).

The primary data was collected through interviews, which is the most important source of information in a case study (Yin, 2014). The interviews were semistructured using interview guide. A semi structured interview helps the participants to speak more freely and answer open-ended questions (Yin, 2014). To ensure a rich understanding of entrepreneurial actions, the founder or decision maker was chosen as the main respondent. The other respondents were the employees, and the waste bank manager. They are considered to have enough in-depth knowledge about the firm and the ecopreneurial environment related to the business. In addition, secondary data is data that has been processed by a particular party, so that when it is needed the data is available (Sarwono, 2012). In this study, secondary data was obtained from observation and document study. Both also were used as verification of what was said during the interviews and also a proof of the ecological practice of the firm.

The analysis of data gathered using interactive model by Miles and Hubbeman (2014) which consisted of data reduction, data presentation, drawing conclusions, and verification. The analysis of data started right after the interview. All interviews were transcribed and summarized then gathered into one. After that, all gathered data was reduce and display into categorize that were driven from research framework so the author will be able to make conclusion. In order to verify the data, the further interviews, observation, and document study were conducted to make sure that no relevant information was left out. The research framework presented in the figure below.

Applying institutional theory to ecopreneurs helps putting the ecopreneurs' work within a context of which they are part of (Hoffman, 2001). This is important not only to better understand the actions of ecopreneurs, but it will also partly contribute to the concern within the ecopreneurial literature on how to examine the success of the firms. Due to the habit of examining economic success as the main factor, the ecopreneurial businesses can easily be misunderstood (Linnanen, 2002).

RESULTS

In this research findings starts with the ecopreneur's commitment toward dual logic, followed by understanding what kind of complexity are facing by the hybrid firm, and then the organizational strategies to deal with those complexities. Hybrid organization can be described as having predominantly "business DNA" and use the market system as a tool to fix or drastically mitigate environmental and social problems (Hoffman at all., 2011). Another kind of hybrid organization is the mission-driven non-profit that aspires to financial sustainability through the use of business practices and market mechanisms. Financial sustainability is seen by people in these organizations as way to help the organization focus more on the mission and less on short term fundraising needs (Billis, 2010).

Understanding the ecopreneurs commitments towards ecological and economic logics is important as this sets the foundation for the strategies and actions of the firm. The commitment itself cannot make the ecopreneurs meet their dual goals; however the commitment can create clearer directions that will be expressed in the

business strategies and actions (Ardby, 2018). The finding shows that ecopreneurs are committed to dual logics.

"I was inspired by my own experience as garbage collector that most of people has a low awareness about household waste management. We are in this firm believed and driven by our vision to add value to something that people consider as not useful thing. We see opportunity by recycling it into something that has economy value and also reduce the negative impact of household waste".- Founder of CV. Bina Usaha Mandiri.

The commitment to the dual logics can be generative, either through that the economic logic helps the ecological or the opposite (Ardby, 2018). In the case of CV. Bina Usaha Mandiri, it shows that the economic logic helps the ecological. From this perspective, the ecopreneur are pursuing the ecological agenda in the business context, where the economic logic is created through economically viable business.

Regarding its commitment to dual logics, the ecopreneur have to identify a series of hybridity complexity that describe as elements surrounding the firm that influence its business process. According to Ardby (2018), the ecopreneur has to clearly indicate a difference between external and internal (organizational) reasons for complexity. The field has an important effect on the tension that firm has to deal with. The reason why it is interesting to separate the two sources of tensions is partly because it is easier to understand the strategies and responses from the firm.

The complexity from external field

The commitment of dual logic leads ecopreneur to understand the operating environment of its business which involves many parties. According to De Clercq and Voronov (2011), institutional logic captured the field-level highlights the relationship of ecopreneur not only with buyers, suppliers, and competitors, but also with other important factors that can put pressure on the ecopreneur (e.g. governments, NGOs). The external field can be addressed by understanding the field structure which related to the household waste management in Surakarta City. The Figure 1 shows the household waste management in Surakarta City.

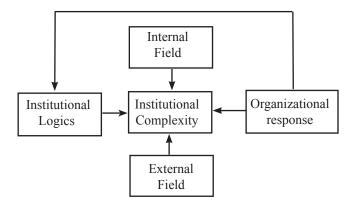


Figure 1. Research framework

From the figure above, it shows that household waste collection in Surakarta is conducted in three ways, namely: 1). Collection of household waste by neighbourhood officials; 2). Collection of household waste using a container or via polling stations around the community's residence; and, 3). Household waste collection managed by the community using the 3R method (Reduce, Reuse, and Recycle).

Furthermore, the transfer of household waste is carried out using the indirect transfer method. Household waste is collected first at the polling station, and then it is transported to Putri Cempo's Final Disposal Site. This garbage transportation is carried out from various Temporary Disposal Sites (TPS) by using the TPS Mobile for waste collected by neighbourhood officials and transported by the Dinas Lingkungan Hidup using trucks for waste collected in containers / TPS and waste managed by the community.

The final household waste disposal system will end at Putri Cempo landfill. The system applied at Putri Cempo Landfill is an open dumping system, where waste is only collected and no waste sorting process is carried out. The collection of garbage will be converted into electrical energy.

The household waste management in Surakarta City shows that there is lack of partnership between government, community, and the hybrid firm to manage the household waste into recycling. We gained data from the Dinas Lingkungan Hidup in 2017 shows that the percentage of household waste managed through 3R is only 29% of the total household waste generated every day in Surakarta City. This situation can be a tension for

the firm since they need to cooperate with community to be the supplier of household waste. The government should address more effective approach in managing household waste instead of focusing only on collecting, transporting, and disposing of household waste without involving the active role of the community and other parties in managing household waste.

The complexity at internal field

The internal complexities also come from the consequence of dual logic of ecopreneurship. It related to organizational attributes and affects how the ecopreneur manages resources in the organization. The Table 1 shows the ecopreneur's commitment in organizational level. It was clear that much of the complexity experienced by the ecopreneur came from the field both external and internal. These complexities push the environmental hybrid firm to deal with some tensions. In order to cope with those complexities, CV. Bina Usaha Mandiri has been developing some organizational responses, as following.

1. Empowering housewives through waste banks. In an effort to get a source of household waste as raw material for recycled products, the ecopreneur empowers housewives in Surakarta City to form waste bank in their neighbourhoods. Ecopreneur starts empowering activities by socializing the importance of solid waste management and its positive impact on the environment. The local head of neighbourhood was appointed as the head of the waste bank and one resident was appointed as the trash treasurer. Ecopreneur provides assistance in the form of scales and notebooks to be used in the process of weighing and recording household waste that has been sorted and collected by each household each month. The garbage will be purchased by CV. Bina Usaha Mandiri and enter the accounts of each citizen. The amount of revenue from the waste collection will be given after one year or according to the agreement with the residents. Next, the collected waste will be transported by CV. Bina Usaha Mandiri towards the Central Waste Bank owned by CV. Bina Usaha Mandiri. The Figure 3 shows the waste bank management in neighbourhood level conducted by CV. Bina Usaha Mandiri.

Table 1. Ecopreneur's commitment in organizational level

Internal tensions	Quote
Production	Household waste that can be processed is only in the form of plastic waste, used paper, and packaging containing aluminium foil. Our company must compete with other collectors. But there is one household waste that is not bought by collectors, namely packaging containing aluminium foil. We see this as an opportunity to be developed into a new eco-innovation product.
Technology	Technology is a new thing for us. Recycle can be done manually with human creativity but we want to use technology as an innovation in the processing of household waste and increasing the value of the product, especially products produced from aluminium foil packaging.
Human Resources	There is stigma in society if work related to waste is still seen as a less prestigious job. In addition, there is still a lack of knowledge and ability of the community to be empowered in processing household waste into marketable products.
Marketing	So far, most of the products recycled by household waste are handicrafts. We try to innovate with aluminium foil packaging products that have never been on the market. The hope is to open up a wider market segment. In general, these recycled products compete with new products imported from China. Some consumers consider it better to buy new products than recycled products because of their new value.
Finance	From the start, business capital came from personal capital because there was no access to get financial assistance from the government.

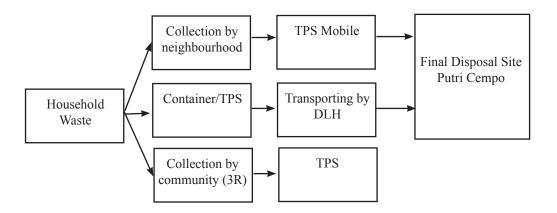


Figure 2. Household waste management in surakarta city

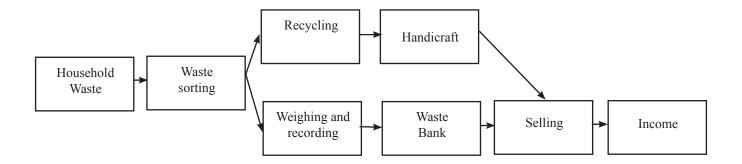


Figure 3. Waste Bank Management in neighbourhood level

Community involvement is not only limited to cooperation between the ecopreneur and community as supplier of household waste but also the ecopreneur provides technical assistance to every waste bank to recycle a portion of the waste they collect themselves. The training provided is related to recycling household waste into crafts. Until now, CV. Bina Usaha Mandiri has cooperated with 60 waste banks spread in every sub-district in Surakarta City.

- 2. Technology is an inseparable thing in recycling household waste. Starting from simple technology such as garbage chopping machines, it is necessary to produce a quality product. Armed with the opportunities captured by the ecopreneur to recycle aluminium foil packaging waste, the ecopreneur asks for help from universities to create recycling equipment. After a study and experiment, the ecopreneur was able to process the waste into a creative product which was then named PROSKAF (a processed product of aluminium foil packaging waste). This product can be used as a substitute for plywood in the future. This product cannot be developed massively considering the limited funds in developing tools and technology that require a substantial investment.
- 3. Ecopreneur invites the closest family and surrounding community to help with the hybrid firm's business activities. It chosen by considering the limited human resources who interested in joining this business. By involving them it will make the communications in workplace become easier and more open.
- 4. Besides PROSKAF which is an eco-innovation product from CV. Bina Usaha Mandiri, the company also markets recycled handicraft products in the form of Bags, Boxes, Vases, Lamp Shades, and Furniture. Product marketing is promoted through websites and facebook. In addition, it is also carried out by participating in eco-business competition and creative product expo. These strategies are carried out by ecopreneur not only as a business marketing strategy but also to build awareness of the public and stakeholders that household waste can be processed into economic value goods. In this context, the ecopreneur try to influence the regulation by raising issue about the importance of household management and its opportunity to be developed through recycling. According to Nugroho (2015), recycling is the best, cheapest and most environmentally friendly solution for waste

- management. However, to make recycling more a habit for city residents, it should be introduced at the neighbourhood and community levels. Establishing environmental-conscious behaviour in society could take years, as it involves a change in regulation and culture. Furthermore, another marketing strategy conducted by the ecopreneur is establishing networking with parties who share the same concerns in the environmental field by participating in environmental exhibition or expo. The obstacle faced up by the ecopreneur in selling its product comes from the perception of some consumer that recycled products have lower quality than the brand new one. The consumer tends to consider a lower price strategy for any eco-green product. In some circumstances, it pushes the ecopreneur to offer the fair price even though there are certain products that require considerable creativity and processing time. In addition, the onslaught of new imported products, similar to, and at more affordable prices, is also a challenge for this household waste processing business.
- 5. The initial capital of this business is the equity of the ecopreneur. Through the networking from business expo, ecopreneur gets investors who want to develop PROSKAF. Until now, the collaboration is still in the negotiation stage for technical implementation. In addition, to meet the operational costs of this business, ecopreneurs become spoke person or trainer by collaborating with various institutions such as educational institutions or industrial services and also companies that need assistance with the remaining waste produced by their businesses. Business profits are not only derived from the sale of recycled products in the form of crafts, but also from services offered as waste processors from companies from other districts or cities spread across Central Java and neighbour province.

The findings reveal organizational or hybrid firm response towards complexity, where the ecopreneurs are having intention to affect the fields. The ecopreneur are trying to raise the idea of how to solve the environmental problem so she can stimulate the creating of public awareness and affect the regulations. In addition, Ardby (2018) suggests that building awareness amongst the fields and the society as a whole is an important factor for the ecopreneur to succeed with their goals of having a financially sustainable business and create positive environmental value. In other words, by doing

this active role, the ecopreneur is making the ecological logic to be more salient in the future while trying to make the economic logic viable too.

Managerial Implications

The ecopreneurs see her as the potential bridge between the ecological and economic logics, where she comes with several strategic choices through ecopreneurial. The ecopreneur is making ecological logics more salient through being an educator of the environmental challenges both towards the public, government, and private sector to find more suitable businesses model. This is important findings as they show how the ecopreneur interacts with the field, which is often left out both within entrepreneurial literature and institutional theory (Hoffman, 2001).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

First and foremost, it can be concluded that the ecopreneur is implementing dual logics, combining ecological and economic logics into one business. Secondly, the commitment to dual logic implies on the ecopreneurial firm and how the hybrid firm deals with the complexity within and outside organization. The ecopreneur also works actively to improve their circumstances, in terms of affecting the field to better prioritize the ecological logic by raising public engagement and developing eco-innovation product. Ecopreneur's commitment in dual logic implemented in some strategic to run the business such as production, technology, human resources, marketing, and finance.

Recommendations

By understanding the ecopreneur from its commitment to dual logics and how she is working to meet its dual goals, it becomes clear that it is not only the business itself that should be taken into consideration but also the environment outside of the business' actual offer. Multi stakeholder collaborations is urgently needed to solve an environmental challenge, changing people's behaviour to make ecological logic more salient within fields and being an inspiration for others in terms of creating ecological hybrid firms.

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