

Motives And Green Innovation Performance in Indonesian Small and Medium Enterprises (Sme's) Batik - A Qualitative Case Study

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22 Motives And Green Innovation Performance in Indonesian Small and Medium Enterprises (Sme's) Batik - A Qualitative Case Study

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Abstract

Background of the study: Currently, SMEs are still facing various environmental problems so that they continue to receive special attention in the academic field. Furthermore, the role of the business world, society and government is needed to pay more attention to the environmental and social impacts on companies in order to increase efficiency and reduce risks to the condition of society and the environment.

Objectives: This study explores the positive influence of green motifs on the green innovation performance of Batik SMEs by examining three green motifs (instrumental motives, relational motives and moral motives). This qualitative research was conducted by analyzing data from interviews conducted with representatives of UKM Batik Pekalongan, Indonesia with samples in various regions in order to obtain data variations and data accuracy, so that the results can be generalized.

Finding: This study reveals the results that instrumental motives have the strongest influence on green innovation performance compared to moral motives and relational motives. But the three still have a positive relationship. Relational motives are generally the main motivation for companies to achieve green innovation performance.

Conclusion: This study describes the motives of batik SMEs in carrying out green activities (instrumental motives, relational motives, and moral motives). These three motifs have the opportunity to improve the performance of green innovation in batik SMEs. The conclusion of this finding is that companies tend to do something above the main goal, seek profit or prefer to produce something useful for the company and support something related to social activities.

Keywords: Green Motives, Instrumental Motives, Relational Motives, Moral Motives, Green Innovation Performance, Indonesian SMEs Batik.

1. Introduction

Due to various environmental problems that have occurred so far, people are increasingly aware and concerned about the environment (Chen, Lai and Wen, 2006). In ecologically conscious consumption behavior, it is very dominantly determined by external and internal factors (Setyanto, 2018), these two factors will affect the behavior of ecologically conscious consumption. The community believes that the products that are used are mostly derived from a process that may contribute to environmental damage. It happens also in Indonesia, which is alleged to be one of the countries with the third highest level of air pollution in the world (Adawiyah, 2018), including air pollution, water pollution that seems to be increasing (Triatmaja, Purwanto and Susanti, 2019).

The increase of public demand of environmentally friendly goods, companies have to integrate its sustainability, so that can achieve their social, environmental and economic goals,

especially in today's competitive global market. It seems that the role of the community and the government is needed to pay more attention to the environmental and social impacts on companies in order to increase efficiency and reduce risks to community conditions and environmental sustainability (Alonso et al., 2017), as well as each company activity that is expected to reduce energy consumption that leads to environmental pollution (Zhu et al., 2008).

One of the sectors which is playing the most important role in Indonesia's development is small and medium enterprises (SMEs). Most sectors of economic activity are engaged in small and medium enterprises, and are able to make a significant contribution to economic development, among others, play a role in employment, increase the local economy and increase the value of exports, it can be said that the existence of SMEs can make an important contribution to economic progress (Buzavaite & Korsakiene, 2019). As we know that the characteristics of SMEs are very inherent, including the infrequent renewal (innovation), lack of trust in

modern science, and the lack of knowledge about laws and regulations (Marbun, 1993).

Furthermore, it is crucial to always provide encouragement for SMEs to always use and produce environmentally friendly products (Jauhari, 2014), because it is a necessity in facing the challenges of today's business competition, in which a company must be able to survive and advance by making innovations that will have an impact on the environment. A successful GIP will be able to assist the company in achieving greater efficiency and be able to build and to strengthen the company's core competencies. When it happens, companies will be able to reduce risk, increase efficiency, develop green innovation, and create competitive advantage by adopting a green strategy (Esty and Charnovitz, 2012), therefore green innovation is very beneficial for company profits. This is in line with Fitriani's research (2017) that SMEs should continue to maintain the green manufacturing process in their production in order to increase GIP and ultimately be accepted by the global community, regarding process innovations have positive influences on marketing performances (Suliyanto et al., 2019).

This study focuses on the GIP of Indonesian Batik SMEs in which the increasing progress of Indonesian SMEs has a positive impact on economic growth. Minister of Industry Agus also revealed that the achievement of batik exports in 2020 reached 532.7 million US dollars and batik exports for the first quarter of 2021 were able to penetrate 157.8 million US dollars.

"The batik industry has played an important role in the national economy and has succeeded in becoming a market leader in the world batik market," said Agus.

Through a green innovation strategy, SMEs will obtain GIP by developing various environmentally friendly programs (Chang, 2011; Chen, 2011; DeBoer et al., 2017). The development of SMEs also cannot be separated from the negative impacts caused to environmental sustainability, such as pollutants produced by various industrial activities which becomes an ongoing problem that results in environmental degradation. As an effort to overcome the problem of negative impacts from industrial activities, especially the batik industry which is the object of research, suggestion made by the Batik Initiative / CBI (2013) to do several strategies to support environmental sustainability, including requiring ownership of the final disposal of waste (Waste Water Treatment Plant/WWTP) and replace textile/chemical dyes by using natural dyes that are considered environmentally friendly. Given that one of the industries that is developing rapidly in Indonesia is the batik industry in which the development of this industry can be seen from its export value and the increasing quantity of its products (Sunarjo, Manalu and Adawiyah, 2011).

In addition, by integrating the literature, this study explores the effect of green motives on GIP, with three green motives studied: instrumental, relational, and moral motives (Aguilera et al., 2007; Paulraj et al., 2017). The researchers also investigate whether the green motives consisting of those three motives have different effects on GIP as an appropriate solution for company sustainability. In line with the expectations of SMEs who always pay attention to meet the consumer needs by making products according to the needs of batik SMEs by continuing to innovate. Innovation always appears from a high creativity of batik SMEs, one of which is by producing natural dyed batik through a series of environmentally friendly processes (Fitriani, 2017) in order to increase GIP.

2. Background

2.1 Green Innovation Performance (GIP)

Innovation is a means of survival, not only related to growth but also in increasingly fierce competition and uncertainty in the environment (Han, Kim and Srivastava, 1998). Innovation is an important element for knowledge ideas expansion (Shaw and Williams, 2009). In innovation activities, it is known that knowledge is the most important strategic source (Xie et al., 2016), in which innovation is done to reduce or avoid environmental damage.

Eco-innovation, according to (Oltra and Saint Jean, 2009) is defined as environmental innovation consisting of new processes or changes to processes, practices, systems and products that are beneficial to the environment which contribute to the environmental sustainability. Kemp (2006) stated that through the entire life cycle of green innovation, environmental improvements must be able to result in reduction of environmental risks, pollution, and other negative impacts from the resources used compared to relevant alternatives. As a result, green innovation is strongly needed for company business management in order to improve company performance (Chang and Chen, 2013).

In the current condition, research on green innovation is also an interesting subject in measuring GIP (Zhang et al., 2018; Soewarno et al., 2019). Companies need a strategy to attract consumers' attention by adopting the issue of using environmentally friendly production materials that are applied in the performance of green product innovation. Innovation activities related to the company's performance are expected to reduce energy consumption which leads to the reduction of environmental pollution (Zhu et al., 2008). Furthermore, it is also necessary to use green resources in achieving GIP optimization (Wu and Chen, 2014). In line with the findings (Nuryakin and Maryati, 2020) on green product innovation, batik SMEs are an important factor to achieve business growth, environmental sustainability, and a better life quality from the use of elements of the business environment.

Zhu et al. (2012) defined GIP as the use of green products and processes needed for business development. A successful GIP helps companies to achieve greater efficiency as well as to build and to strengthen their core competencies, also to enhance their green image, then these actions ultimately enable the company to achieve the best performance and higher profitability (Chen, 2008).

2.2 Green Motives

Aguilera et al. (2007) mentioned that companies are driven by instrumental, relational, and moral motives to make positive social change. These three motives are able to encourage companies to pursue green activities (Paulraj et al., 2017). The form of green motives in batik SMEs is active and passive collective efficiency. It arises as a result of cooperation between business actors to form Batik UKM Community (KUB) including in the manufacture of natural color batik to encourage and to motivate business actors in using natural dyes. In addition, cooperation in the sale of batik patchwork is also done. It is done because there are business actors who do not have enough time to utilize the patchwork which is made into handicrafts.

The application of passive eco-efficiency is intended to develop the economy and environmental sustainability through saving resources and utilizing waste, so it will improve the quality of life. The activity of the batik cluster itself also helps to achieve the implementation of existing eco-efficiencies such as collective efficiency that shaped due to geographical proximity. One of the evidences of technology sharing which is done by

batik SMEs, such as the use of communal WWTPs that are already available for waste treatment before it is channeled into rivers.

2.3 Instrumental Motive

Instrumental motive is a form of involvement in environmental protection through activities that are aligned with self-interest to increase value or to enhance reputation (Reinhardt et al., 2008). Chang (2018) also revealed that instrumental motive drives the performance of environmentally friendly product innovations. Instrumental motives are driven by self-interest. To reduce costs, a company adopts environmentally friendly practices by reducing its waste in terms of materials and energy. Managers have the power to directly influence corporate involvement in green practice through developing corporate strategies and trying to improve financial performance (Liao and Long, 2018). There are more companies which are willing to follow sustainability guidelines to improve their reputations.

2.4 Moral Motive

Moral motive means the company goes beyond compliance with laws and regulations (McWilliams et al., 2006), in which the company can organize charitable activities or can do charitable activities whose contributions exceed societal expectations (Carroll, 1991). Moral motive can be a driving force for environmentally friendly product innovation performance (Chang, 2018). Moral motive is related to ethical standards and moral principles. It is able to encourage the integrity of the company to run well based on the laws and regulations to support sustainable development. Companies have an ethical obligation to contribute positively to the environment and society as well as to improve the world's future. Ethical policy refers to ethical behavior that not only involves obedience to conventional moral standards but also considering positive moral norms (Ferrell & Fraedrich, 2015).

2.5 Relational Motive

Relational motive is a form of company alignment with the interests of each stakeholder, especially those related to environmental sustainability (Testa et al., 2018). In his study, Chen (2018) stated that there is no positive association between relational motives and green process innovation performance. To survive in a competitive market, companies must adhere to stakeholder norms (Aguilera et al., 2007; Paulraj et al., 2017). When corporate stakeholders engage in environmentally friendly practices, companies must meet the stakeholders' needs and demands to communicate with them, so that companies can innovate with new ideas. Relational motive is related to the relationship between actors. Since stakeholder interests are diverse, companies must deal with the interests of each stakeholder. It is difficult for companies to find a balance between stakeholder interests (Testa et al., 2018). Thus, companies must establish social legitimacy to survive. Legitimacy is a relational motive because it concerns about how the company's actions which are seen through others' perspectives.

3. Theory

Eckersley (2007) argued that the green theory looks at environmental destruction as a form of global capitalism in which environmental issues are the constructions of developed countries, because those who get high pollution do not always be the side with benefit. In general, the synthetic definition emphasizes that environmentally friendly innovation is the

same as reducing the environmental impact which is caused by consumption and production activities (Fernando et al., 2014).

Chen et al. (2006) stated that green innovation as hardware or software innovation related to green products or processes involved in energy saving, pollution prevention, waste recycling, green product design, or environmental management company, while James (1997) argued that eco-innovation is "the form of new products and processes that provide value to customers and businesses, and significantly reduce their impact on the environment" (Bartlett and Trifilova, 2010). According to Kemp & Pearson (2008) "eco-innovation is the production, assimilation, or exploitation of a new product, production process, service, management, or business method for an organization (development or adoption) whose results are seen in the life cycle, reduction of environmental risks, pollution, as well as other negative impacts of resource use (including energy use) compared to relevant alternatives" (Schiederig et al., 2012).

Kammerer (2009) supported and strengthened the idea which identified that green innovation is "all types of innovation that produce benefits for the environment, including all organizational changes and novelties that seek to reduce their environmental impact." (Wagner, 2009). Furthermore, Foxon & Pearson (2007) linked green innovation with sustainability innovation and defined it as "innovation that leads to more sustainable technological and institutional systems, as well as processes that are broadly understood as systems in which resources are used and waste production is at environmental limits, according to the level of economic prosperity and social justice" (Fernando et al., 2016). In order to summarize some of the definitions put forward, basically they come from four main ideas, such as "green", "eco", "environment" and "sustainability".

4. Method

Research can be classified using a deductive way of thinking based on an assessment of theory and literature at the beginning of the research process. The theory studied becomes the basis for conducting research, then the literature studied becomes a variable as a guide in finding and analyzing data (Moleong, 2006). The location selection was based on the potential about inefficiency in Pekalongan batik SMEs. After selecting the location, it was followed by data collection through field observations, interviews, and document review. The data obtained played a role in doing the analysis process identified in line with the research variables that have been determined.

There were primary and secondary data in this study. They were obtained using interviews, field observations, and document studies. In this study, interviews were intended to determine the condition of the cluster and the form of in-depth eco-efficiency application to the resource or informants who are cluster management, government, and business actors. This research was a qualitative research, with an approach to investigate contemporary phenomena in depth and in real-life contexts, especially when the boundaries between phenomena and contexts were not clearly visible. This research was done by answering how or why questions, the qualitative method further explored the respondents' experiences and gained deep and meaningful insights into real-life situations. In addition, the very specific context of the study showed that single case study was appropriate for studies (Yin, 2009) identifying extreme and unique case as the rationale for single case in research. Unlike quantitative studies, in which sampling logic is commonly used, criteria regarding sample size were somewhat irrelevant in the design of a single qualitative case

study (Marshall et al., 2013) (Marshall et al., 2013; Yin, 2009).

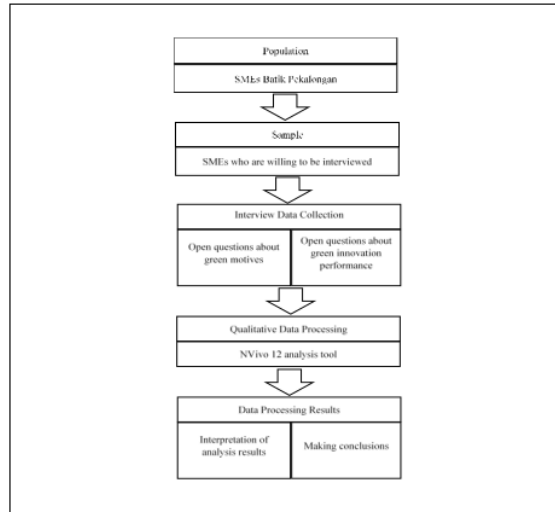


Figure 1: Research Hierarchy

(Source: Authors' model developed for the study)

The analysis tool used was NVivo to import text, audio, video, images, news articles, spreadsheets, online surveys, web content and social media from various sources into a simple and intuitive interface (di Gregorio, 2020; McNiff, 2016). For this study, NVivo was used to help organize and analyze interview data. The responses obtained from the participants were evaluated using the Nvivo software which provides a computer system with the help of coding, including a qualitative analysis of the interview responses. For example, similar terms, related words, and phrases used to describe concerns and opinions during the interview were collected to identify emerging themes. The stages in content analysis: (1) import: import document text into NVivo, using transcription; (2) manage: code organization, coding text and code generation; applied coding lines and highlights; used cases with classifications and attributes; and (3) explore: explored questions; implemented code and matrix queries; and illustrations with visualizations such as matrix coding, hierarchical charts, and word clouds. Hierarchy diagrams were used to describe code hierarchies and to define areas reflecting the number of coding references.

The series of research activities (see fig 1) after receiving the research sample, then obtaining a selected sample who was willing to be the object of research. After that, researchers conducted observations and interviews openly to all respondents. The results of the interviews were analyzed to obtain results, then conclusions were drawn.

Out of the 15 batik SMEs that would be the samples, only 7 SMEs were willing to take the time to be interviewed. All SMEs reported that business ownership was independent or self-owned, so all respondents were batik business owners. There were 2 women and 5 men in total. 2 people were 35-40 years old, 4 people were 55-60 years old, and 1 person was more than 60 years old. One person had master degree as the highest education, 2 people had bachelor degree, 2 people graduated from high school, and 1 person had the lowest education. From the 7 batik SMEs, 2 of them said that their batik business had been established for 1 to 5 years, 1 SME had been established for 10 to 15 years, 3 recorded SMEs had been established between 20 to 25 years and the remaining 1 was SME that had been established for more than 40 years.

All SMEs had different number of employees, the range was between 5 to 35 people. There were 5 batik SMEs which did not have contract employees in producing their batik, while 2 SMEs recruited contract workers (see table 1). The reasons why it is difficult to get employee were there was difficulty of getting batik employees who want to work full time and the difficulty of getting workers who have quality standards. As a result, it is common for batik SMEs to give the production process to the women who work as contract workers for creating written batik which are done from their homes. This is a proof of the importance of regenerating written batik craftsmen, which now are only generally done by women who are not young anymore.

No.	Respondent	Gender	Age Range	Education	Business Length	Labor
1.	R1	Female	>60 years	Senior High School	> 40 years	30
2.	R2	Male	55-60 years	Master	10-15 years	7
3.	R3	Male	55-60 years	Senior High School	20-25 years	35
4.	R4	Male	35-40 years	Junior High School	1-5 years	5
5.	R5	Male	55-60 years	Bachelor Degree	20-25 years	25
6.	R6	Male	35-40 years	Bachelor Degree	1-5 years	10
7.	R7	Female	55-60 years	Junior High School	20-25 years	12

Table 1: Demographic data.

(Source: Authors' calculation)

Based on the purpose of this study, the questions were formed in open-ended questions to get the respondent's perception. Respondents' responses led to evaluations and themes that emerged in several categories. It was important to note that the themes explained by the respondents were **2** early comprehensive. In general, respondents continuously used different words to describe this theme during the interview, regardless of the topic discussed. From personal discussions about green motives (instrumental, moral and relational motives) and GIP, respondents' responses continued to revolve around this main theme, which respondents both described using closely related words.

5. Result

3 Content analysis was illustrated using matrix coding, word cloud, and column charts as visualizations. The results of the **3** analysis based on the problem have been shown in figures. Each word contained in the word cloud (Fig **3**) reflected the number of coding references. The numbers in the column chart (Figure 2) reflected the number of coding references as a percentage. There were top information top **3**s about green activities in batik SMEs. Furthermore, it also be seen that the top information was instrumental motives and the lowest information was relational motives.

5.1 Green Motives

Respondents generally explained the picture that had been done regarding green motives that could reduce pollution and production waste. It assumed that all respondents had tried to apply the green concept in the context of environmental conservation, although it could not be said that the whole process of batik SMEs was focused on the green concept. It was described in the following green motives;

5.1.1. Instrumental motives

Respondents generally described the company's description of implementing eco-efficiency in line with the WBCSD's (2000) recommendation regarding the ease about how business actors could implement eco-efficiency, including: re-engineering processes to reduce resource use, to reduce pollution, and to prevent risks that may arise. Then, business actors could also revalorize by-products through collaboration with other parties to implement zero-waste since sometimes waste could still be reprocessed into products which had economic value for other business actors.

Therefore, cooperation was needed to increase the effectiveness of the use of resources, so that business actors could create products with high value but use minimal resources. All respondents said they had done instrumental motives, so that instrumental motives became the driving force in motivating batik SMEs in achieving GIP.

5.1.2. Moral motives

In term of explaining moral motives, respondents referred to the formation of pro-green attitudes and behavior as well as support government programs on environmental sustainability. Information from each respondent was almost the same. They are strongly supported the environmental sustainability program implemented by the government, especially for batik SMEs. This was the evidence of the moral motives that have been done by many SMEs were also the driving force in achieving GIP.

All respondents explained that they belonged to the

community, especially the batik community. From all respondents, 4 of them were not only joining the batik community and other communities, but also involved with communities related to environmental concerns. Their participations were not forced but they were willing to do it. They really wanted to support environmental conservation, especially the environment around batik SMEs which was felt to be concerning because it was affected by the flood disaster. So that efforts as part of an environmental care community could motivate and hopefully could be an example for other batik craftsmen who have not joined the environmental care community.

5.1.3. Relational motives

The results of the interview found that 3 out of 7 SMEs engaged in relational motives by joining green communities, such as Warlami (Indonesian Natural Color Association), Flood Charity and other similar green communities. Meanwhile, other SMEs only join the community of batik entrepreneurs and the creative economy.

a. WWTP Ownership

17 The results showed that more than half of the respondents or four batik SMEs already had independent WWTPs, two of them already had WWTPs that fulfilled the standardization for batik SMEs and the other two had simple WWTPs, considering the amount of production waste that was not too much. Those owned were deemed to be able to manage waste properly, especially waste from independent WWTPs which was also still being channeled to communal WWTPs in the area around the company.

The expected result was the amount of waste was reduced. Furthermore, other respondents or the other three companies had not yet had independent WWTPs, but all of them had tried to separate liquid and solid waste from their production, thereby reducing environmental pollution. One company even focused on the production of natural dyed batik, so it only had very minimal pollution even though it did not have an independent WWTP.

b. Collaboration

All respondents explained about the cooperation with various parties (stakeholders), including collaborating with the government, universities, and with fellow batik SMEs in the fulfillment of raw materials and products that consumers need. Those fellow batik SMEs were helpful especially when they were having difficulties in the fulfillment of consumers' need.

5.2 Green innovation performance

Respondents generally described what they had been done to achieve the GIP. Each respondent explained how the company's GIP was formed, in line with Widodo (2013) who stated that a business has the opportunity to increase its GIP with eco-efficiency so that the products do not have a negative impact on the environment by using fewer polluting materials and using less polluting materials which is easy to recycle.

Some innovative business actors not only redesign their products but also try to find the needs of buyers by reshaping the demand and supply for the goods they produce or what is called a re-think market. Usually, business actors think that the buyer's need is an item or material, but that is not necessarily the case. Business actors have the opportunity to **19** provide services in exchange for selling their products so as to reduce the intensity of the use of materials and energy.

Batik SMEs tend to increase GIP other than as a form of

(Source: Authors' model developed for the study)

6. Discussion

Many batik SMEs had confirmed that in real conditions many of them have implemented GIP. The findings confirmed Widodo's (2013) research from two sides, (1) the production process: reuse of collection of wax droplets, reuse of liquid dyes, colet coloring innovation, replacing wood fuel with gas for smoke reduction, tub washing with a rolling system to save water, also in the drying area, a roof is added so that during the rainy season the fabric could dry on time considering that in drying process, it uses natural sunlight, and lastly, utilizing the patchwork to create handmade accessories to increase the selling value and (2) production output: making natural dyed batik, and in addition to batik fabric, they also produced ready-to-wear variants of batik products such as; bed sheets, bed covers, tablecloths, curtains, and some of them also produced using natural dyed batik to increase the selling value and tend to attract foreign tourists. Lastly, creating batik packaging from environmentally friendly raw materials.

The results of this study showed that instrumental motive was the most influential in GIP, then moral motive also had an influence in encouraging GIP although it was not as strong as instrumental motive. Meanwhile, relational motive tended to have less influence on GIP in batik SMEs. The results of this study were in line with (Paulraj et al., 2017) which revealed that relational and moral motives were the main drivers, and that companies that showed a high level of moral obligation tend to outperform those who were primarily driven by immoral considerations.

6.1 Theoretical implications

This study described the motives of batik SMEs in pursuing green activities which were divided into three motives: instrumental, relational, and moral motives. These three motives had the opportunity to increase GIP in batik SMEs. In general, this research's findings showed alignment with previous research, that relational motive was a factor that did not support GIP in batik SMEs (Aguilera et al., 2007), where companies did things by pursuing more profit for the company than collaborating with stakeholders to support social responsibility on environmental sustainability. On the other hand, this research provided information that batik SMEs had made various efforts to achieve GIP.

These efforts were done through both passive and active eco-efficiency efforts. Passive eco-efficiency such as the use of communal WWTPs, energy savings and pollution reduction in companies; and active eco-efficiency, such as joining the batik SME community, participating in environmental care communities, producing natural dyed batik, making independent WWTPs, and collaborating in the utilization of the batik production materials waste to make them more useful (Widodo, 2013).

6.2 Managerial implications

The findings of this study contributes to various research literatures that support environmental sustainability in batik SMEs. The results can also be a reference for stakeholders in supporting batik SMEs to implement green motives. The local government can review the batik SME community whether the community is running well by continuing to motivate batik SMEs who are involved in doing activities aimed to have environmental sustainability, strengthening collaboration between stakeholders in supporting GIP which will have a positive impact on batik SMEs, opening opportunities for stakeholders to be able to deliver more detailed information

(Source: Authors' model developed for the study)

about by increasing active eco-efficiency activities, batik SMEs in the future will have a positive impact on improving the economy.

7. Conclusion

The study provides better understanding green motives and green innovation performance in batik SMEs. This field study in line with the phenomenon that occurred in the study (Aguilera, et al., 2017) in which the relational motive in companies belonging to industrial groups, sometimes more concerned with instrumental motivation. In other words, companies did something on the basis of the goal of achieving profit or more, they chose to do something that generates profits for the company rather than collaborated with stakeholders to support social responsibility for environmental sustainability.

The theme of this research was consistent with the deontological theory, companies with moral motives need to be involved in green activities because it was crucial to be more effective in protecting the environment. Although in the end, it was not the moral motive that became the main driver in the GIP, as a study conducted by Chang (2018) revealed that the moral motive was much stronger than the instrumental and relational motives. This study also determined that instrumental and moral motives had positive effects on the innovation performance of environmentally friendly products.

Furthermore, this research has important recommendations including, it is hoped that the currently developing industry, especially the batik industry, will sincerely change its activities to be pro green for the sake of environmental sustainability. assistance or easy access for the development of the batik industry that has produced environmentally friendly products and those that carry out the production process in an environmentally friendly manner. Finally, it is necessary to fulfill the needs of the batik industry in minimizing final waste disposal, such as making communal WWTPs in several important locations and providing training on the correct understanding of eco-efficiency for the batik industry.

7.1 Limitations

In the findings, an increase in active eco-efficiency is needed as the efforts of batik SMEs in order to improve performance. There is still lack of active eco-efficiency effort due to the lack of information obtained by batik SMEs about environmental insight. Lastly, the limitation is SMEs tend to be willing to do all forms of green activities only that have a direct impact on improving the company's economy.

7.2 Future research

Future research needs to examine in depth about the GIP such as about what are the basic reasons for the relational motive problem, whether there are obstacles when doing it, such as establishing cooperation between stakeholders for environmental sustainability, so that there will be solution in increasing relational motive in Indonesian batik SMEs. If necessary, future researchers may do research expansion with mix methods or do sample expansion.

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