

The Exploration of Co-Existence Between Environmental Sustainability and Business Profitability Amongst Young Restaurant Ecopreneurs

Etsa Astridya Setiyati

Entrepreneurship Department, BINUS Business School Undergraduate Program
Bina Nusantara University
Malang, Indonesia 65154
etsa.setiyati@binus.ac.id

Sunday Noya

Industrial Engineering Department
Universitas Ma Chung
Malang, Indonesia 65151
sunday.alexander@machung.ac.id

Abstract

Purpose – The paper aims to explore the co-existence between environmental sustainability and business profitability based on the Ecological Modernization Theory. The study seeks to reconstruct theory through inductive analysis. **Methodology** – This research uses a qualitative approach with grounded theory method. Data was collected through in-depth interviews with five young ecopreneurs engaged in the restaurant business sector. Data collection was done in Greater Malang region where most informants originate and live. The research subject or informants were selected purposively in which certain criteria have been determined previously by the researcher. After conducting a data validity procedure, the data was then analyzed by theme and interactive analysis technique. **Findings** – The results of this study strengthen the Ecological Modernization Theory. However, the research findings identify the significant role of Social Modeling. This study also formulates three important concepts related to “Influencing Factors, Inhibiting Factors, and Strategies” that underlie the co-existence of environmental sustainability and business profitability. **Research limitations** – Due to the chosen research approach, the research results may lack generalizability. Therefore, researchers are encouraged to test the proposed propositions further. **Practical implications** – The paper discuss implications for ecopreneurs in developing strategies to minimize waste while at the same time increasing business profit. **Originality/value** – This paper fulfills an identified need to investigate how entrepreneurial profit orientation could align with actions toward environmental sustainability in the context of restaurant industries in Indonesia.

Keywords

Ecopreneur, entrepreneurship, qualitative, Ecological Modernization Theory

1. Introduction

In Indonesia, the waste problem becomes one of a critical environmental issue that needs attention, since waste management has not been taken seriously. Data shows that there are 175,000 tons of waste per day produced by the Indonesian population, and only 7.5% can be recycled or made into compost (Sugiarti 2021). This means that 92.5% of the waste produced by the Indonesian population is still not managed properly. Garbage, which mostly ends up in landfills, can harm human health and environmental sustainability.

Several opinions summarized by McEwen (2013) consider human economic activity to be one of the main causes of waste problems and environmental degradation. This is because economic activity requires a very large amount of material and energy inputs, as well as producing a very large amount of waste. Economic business activities have an enormous responsibility to contribute to environmental saving. Volery & Thierry (2002) claim that in recent decades, economic development has been carried out without considering its impact on the environment. In the same direction,

the United Nations Environment Program in its report stated that economic development is one of the main causes of environmental degradation (Asnake, n.d.). In terms of entrepreneurship, it can be said that on one hand, the recent significant development of entrepreneurship is a positive driver for the development of the world economy, but on the other hand, the environment would be harmed if this economic growth is not accompanied by efforts to save the environment.

The Indonesian Ministry of Environment once stated that there are three largest waste-producing industries that are enforced to carry out better waste management. The three industry sectors are (1) the manufacturing sector that produces various products with plastic packaging, (2) the retail sector which includes supermarkets, and (3) the restaurant and hotel sector (Sudrajat 2018). Of the three sectors, restaurants get the most pressure for initiating environmental management since the waste generated in their business processes is not only plastic waste but also food waste, which even accounts for 44% of the total waste generated by this sector. During the Covid-19 pandemic, waste originating from the food industry sector has emerged to become a new environmental problem. Based on data from BBC Indonesia, the number of GoFood services increased by 20%, while GrabFood also increased by 4%; The LIPI survey also shows that in the period 20 April – 5 May 2020, the increase in online shopping activities also increased the amount of duct tape, plastic wrap and food wrappers (Darajat 2020). Reducing food waste has even become one of the priorities in the 2020-2024 National Medium-Term Development Plan (RPJMN) (Cahyadi 2021). Some people believe that the "environmentally friendly" aspect in business will increase costs and reduce profits. Kirzsner in Amatucci, Pizarro, & Friedlander (2013) argues that the environmental aspect of entrepreneurship has not been considered, this is because the majority of the literature believes that the main motive of a person in entrepreneurship is an economic motive and not an ethical one. On the other hand, there is another opinion from lean manufacturers which states that an eco-friendly business will cut costs. Ecological Modernization Theory also provides a rationale that it is possible to promote economic growth by giving a higher priority to the environment (McEwen 2013). Furthermore, Schumpeter's theory also provides a theoretical basis for environmental entrepreneurship. According to Schumpeter (1942), entrepreneurs are innovators and as society's needs develop, entrepreneurs provide innovation or "creative destruction" that gives people new ways to solve problems. Environmental problems inherently require innovation, as most are caused by the adoption of old, polluting, and inefficient technologies. Given that solutions to current environmental problems are not sufficient for sustainability, entrepreneurial action is needed to develop something new, in terms of production methods, technology development, product/service distribution systems, or even new forms of organization (Lennox & York 2011; Tillery & Young 2009).

1.1 Objectives

The two different perspectives (economic motive versus environment sustainability motive in entrepreneurship) encourage the need for research to explore the coexistence between environmental sustainability and business profitability. The qualitative research also aims to explore aspects that encourage or hinder young restaurant entrepreneurs to manage environmental sustainability aspects in their business

2. Literature Review

2.1 Ecological Modernization Theory

Ecological Modernization Theory (EMT) was initiated in the early 1980s by several academics from the Free University and the Social Science Research Center in Berlin, consisting of Joseph Huber, Martin Jänicke and Udo E. Simonis. The theory was later developed more substantially by Arthur P.J. Mol, Gert Spaargaren and David A Sonnenfeld. EMT emphasizes the belief that environmental productivity, i.e. productive use of natural resources and environmental media (air, water, soil, ecosystems), can be a source of future growth and development in the same way as labor productivity and capital productivity (Mol et al. 2009). EMT states that it is possible to promote economic growth by giving higher priority to environmental sustainability (Tillery & Young 2009). In other words, there is no need to trade economic growth for environmental quality. EMT seeks to combine environmental awareness and conventional entrepreneurial activity to achieve entrepreneurial success. Ecological modernization needs to be carried out to encourage innovative structural changes. In this overall transition to a more sustainable business paradigm, Joseph Huber emphasized that entrepreneurs are the central agents of change in the transformation process to avoid ecological crises (McEwen 2013).

Various studies based on EMT have covered extensively the reshaping of environmentally oriented lifestyles, consumption patterns, control of demand-pull in supply chains, and industrial symbiosis (Knot et. al. 2001). As a strategy for change, some forms of ecological modernization seem to still be aligned with business interests because they fulfill the economic triple bottom line, people – planet – profit, which is believed can support sustainability. The government can be involved in various roles and capacities of this ecological modernization process, specifically: as a market driver that helps generate technological progress through competition; and as a regulator who forces the companies to 'take back' their various wastes and reintegrate them in some way into the production of new goods and services.

Nevertheless, some critics argue that EMT will not succeed in promoting environmental protection if it is not justified in a capitalist mode of economic production (Foster 2002). The critics question whether technological advances alone can achieve better resource conservation and environmental protection, especially if it depends on the practice of business self-regulation (York & Rosa 2003). The most environmentally friendly products or manufacturing processes, which are often also the most economically efficient, are not always automatically selected by self-regulating companies. Furthermore, EMT is considered to be limited in its scalability of implementation – only good if it is implemented in its home countries, Germany and the Netherlands. The theory does not say much about developing countries (Fisher & Freudenburg 2001). The strongest criticism is that ecological modernization is based on the idea of 'sustainable growth', and this is seen as impossible because growth requires the consumption of natural and human capital at great cost to ecosystems and society. Ecological modernization, its effectiveness and application, strengths and limitations, remains a dynamic and controversial area in recent environmental social science research and policy discourse. Despite the various pros and cons, this Ecological Modernization Theory continues to evolve. EMT argues that the relationship between economic activity and innovation in technology and government and community intervention is necessary to achieve best practices for environmentally sustainable management.

2.2 Ecopreneur ship

Kirzsner in Amatuucci et al. (2013) argues that the environmental aspect of entrepreneurship has not been considered, this is because the majority of the literature believes that the main motive of a person in entrepreneurship is economic, not ethical motive. Based on this view, Amatuucci et al. (2013) called for actors in economic business activities to realize the great responsibility to contribute to saving the environment. There must be a new paradigm that non-economic motives such as environmental motives are also very important aspects for the sustainable development of the world economy. Furthermore, the actual need to reduce energy consumption, pollution and waste can be a new business opportunity for ecopreneurs who have innovation.

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There are several terms used to define environmentally sound entrepreneurial activities including "green entrepreneurship", "ecopreneur ship" and "sustainable entrepreneurship". In this article, the term used is "ecopreneur ship". Ecopreneur refers to the entrepreneurs who not only have economic motives and/or social motives in running their business, but also environmental motives. Ecopreneur will try to balance three motives. Further, Amatuucci et al. (2013) also argues that young people are deemed to be the most effective agents of change because of their very high sensitivity to social and environmental issues. Young people also have high innovation ability.

3. Methods

The approach used in this study is a non-positivist approach or better known as a qualitative approach. This approach was chosen to understand the domain of entrepreneurial behavior in business waste management. A qualitative approach is considered appropriate to seek meaning and understanding of how humans act. Following the understanding of human existence (existentialism), humans are individuals who have all self-entities independently. Human actions and decisions can only be understood in their context.

The method or type of research used in this study is grounded theory. This method is rooted in constructivism or a scientific paradigm that tries to reconstruct theory through an inductive analysis of a set of data obtained based on field observations. The ontology aspect in this research is to reveal the thinking underlying the coexistence between environmental sustainability and business profitability. The epistemological aspect in this study lies in the design of case study research, especially in data collection and analysis techniques. The axiological aspect in this study seeks to describe the values that underlie environmental sustainability management efforts and the process of transferring values to others in detail (thick description).

The data obtained in this study is verbal data (in words) from the research subjects. The data portray the experience and the understanding of entrepreneurial behavior of the research subjects. The data relating to what the informant said, shared/implanted, and carried out related to the business waste management domain. The data collection technique used is interactive techniques, in-depth interviews. This interview technique uses a semi-structured instrument and is carried out in-depth. Each subject was interviewed individually. The length of the interview is not limited by time, however considering the ethics and condition of the informant. The interview instrument was specifically designed, but in practice, the researcher made the interview atmosphere 'flow' and develop.

The research instrument was developed by researchers based on the researchers' tacit knowledge related to entrepreneurship and aspects of environmental management. The research instrument design is in the form of open-ended questions. The questions consist of identification questions and main questions. The identification question contains questions about the demographics of the informants, while the main question directs the interviewer to explore whether environmental sustainability management can run in line to get good business profits from businesses in the restaurant sector.

Prior to data analysis, researchers carried out the stages of the data storing method. Researchers use field diaries/notes to interpret what they think, feel and perceive at the time or shortly after data collection. Recordings are made using a digital recording device. The recordings are stored in the computer and given a name for each informant. This file is transcribed in word format.

The qualitative data were processed according to the analytical procedure through three stages as proposed by (Saunders, Lewis, & Thornhill 2019), namely open coding, axial coding, and selective coding (Figure 1). In the open coding stage, the data are grouped into concept units and given a code/label. Axial coding is the process of looking for relationships between categories obtained from open coding, then rearranging them in a hierarchical form. Its essence is to explore and explain a phenomenon (i.e., efforts to manage environmental conservation) by identifying what is happening and why, environmental factors that influence the phenomenon, how the phenomenon is managed, and what are the results of the actions to manage the phenomenon. The final stage, selective coding, is the process of compiling several main categories and connecting the subcategories that have been identified in the axial coding. This qualitative analysis technique will be used to analyze the factors that encourage and hinder young restaurant ecopreneurs to manage environmental sustainability aspects in their business. (Figure 1)

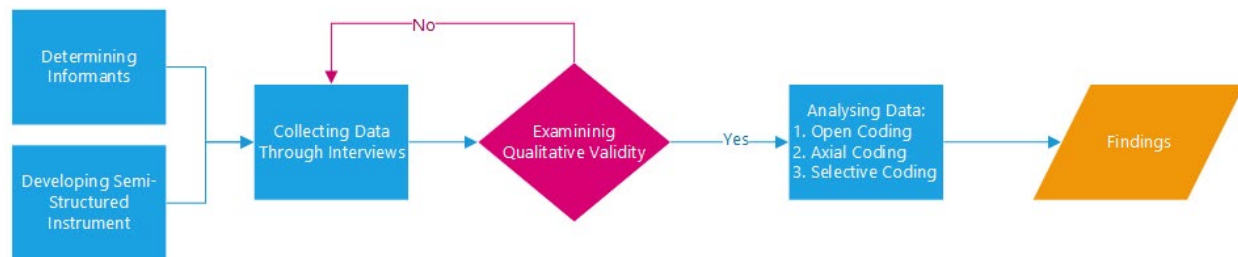


Figure 1. Research Process Diagram

4. Data Collection

Data collection was carried out by conducting in-depth interview with several entrepreneurs who implement environmentally friendly practices in managing their business. The data collection was carried out in the Greater Malang region, the domicile of the informants. Another consideration to select this research locus is the rapid growth of the restaurant business in Malang Raya (Ratri 2019). The location setting was not chosen in detail and rigidly, because the priority of this research is exploring how environment sustainability management practices have been carried out by young ecopreneurs that are engaged in the restaurant sector.

The research subjects or informants were determined using a purposive technique, the technique of determining the subject based on certain research criteria and objectives set by the researcher. The main criteria used to determine the informants are (1) young ecopreneurs who are in the age range of 25-35 years, and (2) have been managing a restaurant business for more than 5 years, with the consideration that business management experience that has been running for

more than 5 years is sufficient to provide a more comprehensive perspective. In addition, informants must also be willing to be informants in this study.

Giorgi (2008) recommends at least three participants because it will facilitate differences in individual experiences. This study uses five participants of young restaurant ecopreneurs. Potential informants were contacted and asked to fill out a willingness statement form. Previously, the researcher provided a cover letter containing an explanation of this research and the rights and obligations of informants and researchers. The rights of the informants are the right not to become informants, to stop being informants anytime he/she decides to, to listen to or read interview transcripts, to disguise their identities, and to approve the photos taken by researchers. To ensure the confidentiality of informants, in accordance with Daymon & Holloway (2008), when requested by the informant, the researcher disguises the informant's name (anonymity), does not provide data, conversation transcripts, photos and video to any other party (privacy rights). The willingness form consists of several types of forms. The first form is a form of willingness to be an informant. The second form is the willingness to be interviewed and photographed, also the choice of the informant to read the transcript

5. Results and Discussion

5.1 Results

The subjects in this study were five young ecopreneurs who were in the age range of 25-35 years and had managed a restaurant business for more than five years. Face-to-face (onsite) interviews were conducted from June to July 2021. Each informant was interviewed for about two to three hours. To maintain the confidentiality of the informants (according to the request of the informants), in this article, the informants will be labeled in alphabetical order (Table 1).

Table 1. Informants Profile

Label	Informant Profile
Informant A	Male, 29 years old. Has been managing a western cuisine and coffee restaurant for 8 years. The restaurant is located in Malang City
Informant B	Female, 31 years old. Has been managing an Indonesian cuisine restaurant for 6 years. The restaurant is located in Malang City.
Informant C	Male, 30 years old. Has been managing a restaurant that serves a variety of coffee drinks and meatballs for 6 years. The restaurant is located in Malang City.
Informant D	Male, 32 years old. Has been managing an East Javanese cuisine restaurant for 5.5 years. Restaurant located in Batu City
Informant E	Male, 35 years old. Has been managing a traditional Indonesian cuisine and tea restaurant for 6 years. The restaurant is located in Malang Regency

Table 2. Interview Result

No	Code	In-depth-interviews Result				
		Inf. A	Inf. B	Inf. C	Inf. D	Inf. E
1.	Sorting food and non-food waste			√	√	√
2.	Providing three separate types of trash cans				√	
3.	Selling (salable) inorganic waste to third parties	√			√	√
4.	Throwing away unsalable inorganic waste	√	√	√		
5.	Using organic food waste for compost				√	√
6.	Community acquaintances refer third parties that are willing to buy used cardboard, tetra pack, aluminum foil	√				
7.	A business friend shows an application that connects third parties who want to buy used cooking oil	√	√			
8.	Friends in the entrepreneur's association give an inspiration that trash can be a new source of revenue	√				
9.	Garbage is the new currency	√	√		√	√
10.	Garbage sales can be a new source of income	√	√		√	√

No	Code	In-depth-interviews Result				
		Inf. A	Inf. B	Inf. C	Inf. D	Inf. E
11.	The restaurant interior design using recycled products actually provides an interesting artistic uniqueness				√	√
12.	Garbage turns out to be a source of income for street scavengers	√	√	√	√	√
13.	Feeling uneasy to produce too much non-decomposed waste		√	√	√	√
14.	Sorting waste out of compassion and do not want to trouble the street scavengers		√	√		
15.	Organic waste can be used as fertilizer for residential gardens around the business location				√	√
16.	Local residents in need may take used cardboard/sack for free		√	√		
17.	If there is a third party that can take large cardboard waste, it can save storage space.	√	√	√	√	√
18.	Sorting trash makes the restaurant cleaner	√	√	√	√	√
19.	If there is a third party who can take used milk packaging, it helps restaurants from bad smells.	√	√		√	
20.	Composting food waste can be used to fertilize vegetable fields				√	√
21.	Consumers often just mix leftover food with other inorganic waste	√	√	√	√	√
22.	Environmental licensing for restaurant businesses is perceived to be a formality, there was no appropriate instruction on waste processing.	√	√	√	√	√
23.	When studying business, I have never got a lesson on waste management, so I had to ask a lot of questions and learn from other people	√	√	√		
24.	I want to be able to compost waste but the composting box in the market is not large enough to accommodate my restaurant food waste	√	√		√	
25.	Feeling reluctant to create burden for employees with the additional task of sorting out waste	√	√	√	√	√
26.	Not providing plastic straws		√		√	√
27.	Not using styrofoam packaging	√	√	√	√	√
28.	Using <i>bese</i> (container from woven bamboo) as food packaging				√	√
29.	Using glass from sugarcane fiber for beverage packaging.				√	√
30.	Replacing plastic straws with water bamboo straws.				√	√
31.	Using recycled artistic furniture.				√	√
32.	Using used plastic bottles and cooking oil packaging for plant pots.				√	√
33.	Replacing table tissue with cloth napkins.				√	
34.	Providing discounts for buyers who bring their food containers for takeaway.				√	
35.	Processing waste is inspired by acquaintances who can turn waste into income.	√	√			
36.	Mother plays a big role in forming the habit of sorting waste at home, now it is applied in my business place.			√		
37.	The background as a mountain climber shapes me as a nature lover.		√		√	√
38.	Want to teach others to care more about environmental sustainability.	√	√	√	√	√

The keyword formulations listed in Table 2 are summarized from the results of data reduction and interview transcripts. The participants stated, implicitly, what things were being done to minimize the negative impact on environmental sustainability, but at the same time support business development. From the results of the formulation presented in Table 2, it is found that the classification of codes leads to the identification of themes related to the application of environmental sustainability management in the restaurant (Table 3).

Table 3 shows that there are five themes that can be formulated from the interviews, they are (1) business waste management strategies, (2) strategies for educating consumers, (3) community roles, (4) benefits, (5) constraints. Of

the five themes, there are three important concepts that are closely related to the co-existence of environmental sustainability management and business profitability:

- (1) **Driving Factors** (“Social Environment” – such as family, social community, and other ecopreneurs whose line of business in waste processing – and “Perceived Benefits”)
- (2) **Inhibiting Factors** (poor environmental management education, low involvement of the government, limiting waste processing innovation, low environmental awareness of the society)
- (3) **Strategy** (waste management strategy, consumers education strategy).

Table 3. Code Classification and Theme Identification

Code	Theme Identification
Sorting food and non-food waste	Business Waste Management Strategy
Providing three separate types of trash cans	
Selling the salable inorganic waste to third parties	
Throwing away the unsalable inorganic waste	
Using organic food waste as compost	
Not providing plastic straws	Consumer Education Strategy
Not using styrofoam packaging	
Using <i>beseek</i> (container from woven bamboo) as food packaging	
Using glass from sugarcane fiber for beverage packaging	
Replacing plastic straws with bamboo straws	
Using recycled artistic furniture	
Using used plastic bottles and cooking oil packaging for plant pots	
Replacing table tissue with cloth napkins	
Providing discounts for buyers who bring their own food containers for takeaway	
Community acquaintances refer third parties that are willing to buy used cardboard, tetra pack, aluminum foil	Role of Social Environment
A business friend shows an application that connects third parties who want to buy used cooking oil	
Friends in the entrepreneur's association give an inspiration that trash can be a new source of revenue	
Processing waste is inspired by acquaintances who can turn waste into income	
Mothers have a big role in forming the habit of sorting waste at home	
Background as a mountain climber shapes me into a nature lover.	
Willingness to teach others to care more about environmental sustainability.	
Garbage is the new currency	Benefit (Financial, Moral, Social, Operational)
Selling garbage can be a new source of income	
Interior design from recycled products provides an interesting artistic uniqueness	
Garbage turns out to be a fortune for others	
Feeling uneasy to produce too much non-decomposed waste	
Sorting waste out of compassion and do not want to trouble the street scavengers	
Organic waste can be used as fertilizer for residential gardens around the business location	
Residents in need can take used cardboard/sack for free	
If there is a third party that can take large cardboard waste, it can save storage space.	
Sorting trash makes the restaurant cleaner	
If there is a third party who can take used milk packaging, it helps restaurants from bad smells.	
Composting food waste can be used to fertilize vegetable fields	
Consumers often mix leftover food with other inorganic waste	Constraints
Environmental licensing for restaurant businesses is perceived to be just a formality, there was no appropriate instruction on waste processing.	
When studying business, I have never got a lesson on waste management, so I had to ask a lot of questions and learn from other people	
I want to be able to compost waste but the composting box in the market is not large enough to accommodate my restaurant food waste	
Feeling reluctant to create burden for employees with the additional task of sorting out waste	

This finding adds a new component to Ecological Modernization Theory. The role of Social Modeling in the implementation of environmental sustainability management can be considered as the new component in this theory. This finding is also in line with the concept of Social Cognitive Theory which was coined by (Bandura, 2005) that a person's behavior can influence and be influenced by personal factors and the social environment. Humans (in the context of this research are the entrepreneurs) can learn through observing and imitating the behavior of others (the ecopreneurs), even without reinforcement. However, when this observation (learning by watching what other people do) is combined with reinforcement (feeling the benefits of changing behavior), then the power of learning is getting stronger.

In addition, these findings also show negative results regarding the role of the government as a regulator. However, the research findings show that even though the government's role is seen as not optimal, environmental sustainability management practices can continue if there is a contribution from society, the benefits are felt, and there is a clear strategy. The social environment involvement can be in the form of showing examples or becoming a partner. The results of the study also identify the importance of enriching learning content on environmental management and maintenance by educational institutions, especially institutions that teach business/entrepreneurship. Incentives to encourage inventions and innovations in waste treatment need to be enlarged and become a priority in the development of the national economy.

This study also highlights the importance of formulating a clear strategy from two parties, from the ecopreneur side regarding waste management, and from the consumer side, who needs to be educated to increase their awareness and concern for the environment. If there is an imbalance of strategies (only one of them works), then the management of environmental sustainability and business profitability cannot run in harmony, they cannot support each other.

5.3 Proposed Improvements

Since the scope of this research is specific to the context of restaurant business, the research findings cannot be generalized. Further studies are needed to investigate whether the co-existence of environmental sustainability management and business profitability persists in different industrial context, and different cultural communities.

5.4 Validation

The criteria used in qualitative validity and reliability, according to Daymon & Holloway (2008), include relevance or transferability, credibility (trustworthiness), authenticity (confirmability), and dependability. Relevance/transferability refers to external validity. This research must be able to answer the question: is this research useful for solving the informant's problem. The transferability criteria are obtained from the ability of the results of this research to be related to the academic literature and the wider context, specifically entrepreneurial behavior. Authenticity can be achieved when this research is carried out fairly and away from researcher bias. The researcher's bias was tried to be minimized by epoche and bracketing approach, that is to leave all assumptions and knowledge possessed by the author and act carefully in carrying out the research. Confirmability can be achieved if the research findings can answer the research objectives that have been determined. Dependability of qualitative research refers to the clarity of analytical procedures that are consistent and can be used by subsequent researchers. Credibility/trustworthiness refers to internal validity. Validity is an effort to check the accuracy of research results. Validity in qualitative research is carried out during and after the research results are obtained. The validity of data in qualitative research emphasizes more on the process, not on verification as used in quantitative research (Creswell 2013). Furthermore, Creswell provides 8 validity strategies and states that at least researchers can use 2 of 8 strategies which include: prolonged engagement and persistent observation, triangulation, peer-reviewed, refine working hypotheses, clarifying researcher bias from the outset of the study, member checking – participant checking, rich and thick description, external audits. In this study, the validity of qualitative research was carried out using member checking and peer review.

6. Conclusion

The results of this study strengthen the Ecological Modernization Theory which states that it is possible to encourage economic growth by giving a higher priority to environmental sustainability, as co-existence. The research findings identify the important role of Social Modeling in the effort to harmonize environmental sustainability and business profitability. The role of the social environment in giving an example, can inspire and ignite changes in entrepreneurial

behavior to be more concerned with environmental sustainability, and bring forth ecopreneurs with new environmental technology innovations.

This study also formulates three important concepts related to “Pushing Factors, Inhibiting Factors, and Strategies” that underlie the co-existence of sustainable management and business profitability. The driving factor consists of the role of the social environment and the perceived benefits in the form of financial, operational, social, and moral benefits. Inhibiting factors include poor environmental management education, low involvement of the government, limiting waste processing innovation, low environmental awareness of the society. Therefore, for encouraging social movements toward environment sustainability, entrepreneurs are suggested to implement both waste management strategy as well as consumer education strategy in managing their business. Universities are also encouraged to raise awareness toward environment sustainability in their entrepreneurship curriculum. It is of high importance to highlight that economic and environmental performance should go hand in hand in managing business sustainability.

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Biography

Etsa Astridya Setiyati is a senior lecturer at Entrepreneurship Department, Bina Nusantara University (BINUS). She serves as the Head of Entrepreneurship Department since 2019. She earned her bachelor's degree in management at Brawijaya University and received her master's degree in commerce at Curtin University Australia. Etsa has been teaching for 18 years in Marketing and Entrepreneurship, she is a Certified International Supply Chain Professional and a Certified Entrepreneurship Coach. In 2016, she and Sunday Noya have received community development grants from the Ministry of Education and Culture to develop entrepreneurship program for higher education students for three consecutive years. From 2012 to 2019, Etsa and her team have received numerous research grants from the Ministry of Education and Culture for her research in social marketing, ecotourism, entrepreneurship, SMEs capacity building and innovation.

Sunday Noya is a senior lecturer and researcher at Universitas Ma Chung, Indonesia. He completed his undergraduate education in Mechanical Engineering at Sam Ratulangi University in 2003 and his master's degree in Process Management at Curtin University Australia in 2007. His master study was supported by the Australia Development Scholarship (ADS) Program. Currently teaching subjects in Product Design & Innovation, and Industrial System Design at the Industrial Engineering Study Program of Universitas Ma Chung. Have an interest in research fields regarding entrepreneurship, innovation, and the application of industrial engineering strategies and methods to increase the competitiveness of Small and Medium Enterprises (SME). In the last 12 years, he has succeeded in obtaining various research and community service grants from the Ministry of Education, Culture, Research, and Technology Republic of Indonesia (formerly the Ministry of Research Technology/BRIN, Ministry of Research Technology and Higher Education, and the Ministry of National Education), through Competitive Grants Research Schemes, Excellence Higher Education Institution Fundamental Research Scheme (PDUPT), Excellence Higher Education Institution Applied Research Scheme (PTUPT), and Science and Technology Community Service for Entrepreneurship Scheme (IbK) for various research projects and studies on SME, development of SME competitiveness, innovation, and entrepreneurship development. He is a Certified Entrepreneurship Coach by Indonesian Professional Certification Authority and Certified International Supply Chain Professional by PASAS Institute Singapore. He has served as reviewer in some national journals in Indonesia