

Research Article

Telescoping Circular Economy Awareness from the Perspectives of Fast Fashion Consumers and Local Policy in East Kalimantan

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Received 15 January 2023; Revised 28 July 2023; Accepted 1 November 2023; Published Online 15 November 2023

Abstract

Along with sustainability paradigms revolve among the global society, Circular Economy (CE) appears as a new economic model that is compatible with this paradigm. Globally, there have been numerous research related to Circular Economy, including replacing fast fashion with circular fashion. The fashion sector was responsible for approximately 2.1 billion metric tons of Green House Gas (GHG) emissions, amounting about 4% of the global total (Berg et al., 2020). Emissions are exacerbated by fast fashion due to the make-take-dispose system implemented at a rapid pace. Unfortunately, the issue of fast fashion remains underdeveloped, especially in the local context. This paper examines Circular Economy awareness from fast fashion consumers and local policy In East Kalimantan to provide a picture of the local context. The authors used open questionnaires to collect responses from fast fashion consumers and stores (H&M, Matahari, and Uniqlo) relating to the dimensions of the Circular Economy. To capture the local policy context, this research uses policy content analysis from the National Medium Term Development Plan (RJPMN 2020-2024) to the Regional Medium Term Development Plan (RJPMD) and its derivative regulations in East Kalimantan. This study found that there is a lack of awareness by fast fashion consumers, which can be seen from the reluctance of customers and stores adapting to CE dimensions. Circular economy has been internalized through national development planning harmonized regulation at the local level. East Kalimantan Development Planning emphasized more on economic growth by generating a creative economy instead of transforming the linear economy into a Circular Economy.

Keywords: Circular Economy; Fast Fashion; Local Policy; East Kalimantan; Consumer Awareness

Introduction

Since the Industrial Revolution in the 18th century, the “linear economy model” has been the most accepted version of an economic model (Rathinamoorthy, 2019). However, this model generates many externalities such as mass waste and pollution. The old paradigm of linear economy creates short life cycle products, also known as: from Cradle to Grave. Cradle is associated with the beginning of production activities, while Grave refers to products end at the waste disposal. Meanwhile, Circular

Economy tends to introduce a new paradigm of the product life cycle, which is from Cradle to Cradle, where the life cycle of products should be prolonged by any means. This research tries to capture the Circular Economy awareness from the perspective of fast fashion consumers and local policies in East Kalimantan. The research question posed in this study is essential because fashion is one of the five priority sectors of the Circular Economy Project in Indonesia that generates employment and contributes to 1/8th of the Indonesian GDP (Liu, 2020). The novelty lies in the local context of the Circular Economy, particularly in relation to fast fashion issues.

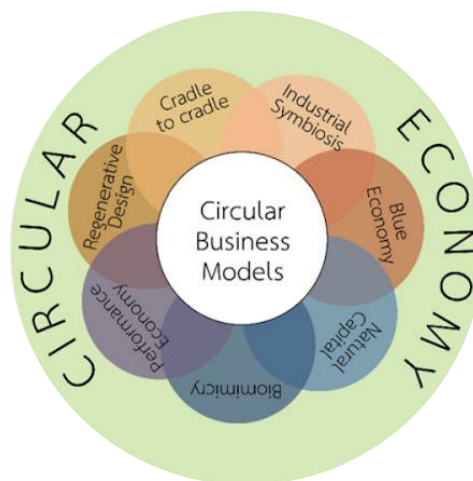
Based on the literature reviews and interviews, cloth consumption has been increasing on an annual basis. It is driven by the existence of fast fashion products with its massive marketing in East Kalimantan such as through the brand presence of H&M, Uniqlo and ZARA. This research also tries to capture how policy-makers respond to the issue of fast fashion trends that are actually contradictory to a Circular Economy. The fast fashion industry is characterized by short product life cycles, high impulse purchasing, and excessive production of clothing (Li, 2014). The fashion sector was responsible for approximately 2.1 billion metric tons of Green House Gas (GHG) emissions, about 4% of the global total (Berg et al., 2020). Despite all of the facts that fast fashion contributes to GHG emission, the issue of fast fashion remains underdeveloped in the local context. In 2018 alone, fashion industries are responsible for approximately 2.1 billion metric tons of Greenhouse Gasses Emission, and the Greenhouse Gas level is predicted to rise if the overproduction model is maintained (Berg, 2020). In the end, fast fashion brands consistently produce more inventory than they can realistically sell and this company behavior is contradictory to the Circular Economy.

There is numerous research that seeks various strategies in adapting to a Circular Economy. However, there are only a few of them talking about circularity in the global fashion industry. Therefore, this research tries to fill the gap by discussing Circular Economy from the perspective of fast fashion consumers and the existing local policy in the respective area. This research also tries to fill the gap of previous studies which highly emphasize how fast fashion industries transform their behaviors. Instead of on the behavior of the fashion industry. Our research aims to capture the awareness of fast fashion consumers at the local level (East Kalimantan, Indonesia) and how local policymakers respond to the Circular Economy model. There are a number of studies that discuss about how global fashion industries transform its behavior, for example a study by Brianna Wren, who made a comparative study of current best practices in fashion industries to address climate change (Wren, 2022). She found that H&M and Everlane use Sustainable Supply Chain Management to improve energy efficiency. A similar research done by Li et al. (2014) also highlighted how ZARA and Uniqlo as global fashion brands try to transform both external and internal governance in order to fits with the global norms of sustainability and circularity.

Circularity in the fashion industry and the cost of fast-fashion trends are most likely out of reach of the local government's attention. It can be seen through the local economic policy, agenda and strategies in East Kalimantan. None of them are highlighting the significance of Circular Economy in the context of the fashion industry. Therefore, this research is important as it might be an initial path to raise local governments' awareness and generate grassroots movement towards Circular Economy in East Kalimantan. The main finding of this research shows that both fast-fashion consumers and local policy at East Kalimantan do not see Circular Economy as a salient issue, especially in the fashion sectors. 12 out of 17 fast fashion consumers (consumers of Matahari Dept. Store, Uniqlo and H&M) are not concerned with the circular economy practices. They perceive circular economy practices such as reuse or sharing fashion products is not acceptable in their society's lifestyle. The local policy also does not adhere to the concept of Circular Economy. The local strategic plan emphasizes on the notion of Creative Economy without carrying Circular Economy principles (close loop of production). To provide a clear overview for this paper, the Result and Analysis are organized as follows: overview of H&M and Matahari business practices in Samarinda, fast-fashion consumer awareness toward Circular Economy and the Local Policy Context.

Literature Review

This study highlights two major literatures: 1. Literature about Circular Economy as a conceptual framework including CE practices in a broader context and 2. Literature about fast fashion issues. The Circular Economy is an economic concept that aims to create sustainable waste management by utilizing waste sources to become valuable products. The Circular Economy is greatly enhanced by the cyclical-loop system. Braungart & McDonough (2007), have published books regarding CE, namely “Cradle to Cradle: Remaking the Way We Make Things” and “The Upcycle,” respectively, in 2002 and 2013. A small number of thought leaders and scholars devised additional schools of thought around what Circular Economy is about. Professor (John T. Lyle) proposed the idea of regenerative design where all systems, from agriculture onwards, could be conceived and executed in a regenerative manner, that processes themselves renew or regenerate the sources of energy and materials that they consume. Michael Braungart and Bill McDonough have developed the Cradle-to-Cradle framework, which focuses on design for effectiveness in terms of products with positive impact. Industrial ecology is a man-made ecosystem that operates in a similar way to natural ecosystems, where the waste or by-product of one process is used as an input for other processes.



Source: Sawaros Thongkaew (STEAM Platform)

Technically, the concept of Circular Economy is driven by three principles (Balanay & Halog, 2019). Principle 1: Preserve and balance renewable resource flows. Principle 2: Optimize life used by circulating products, components, and materials, both technical and biological cycles. For example, sharing or looping products and extending product use cycles. Principle 3: Designing out negative externalities such as climate change; toxins; congestion; and negative health effects related to resource use. The power of circling longer is the main prominent idea of Circular Economy Model that can maximize the value of products. However, this model is not quite common in Indonesia, because many industries are still running by business as usual (linear model). The reason why Circular Economy is not a popular system is because it might reduce the company profits in a short period. However, this model might gain multiple benefits in the long term, both tangible and intangible.

Opportunities that can be provided are recycling-based business opportunities to increase employment investment, economic growth, reduce poverty, and increase per capita income (Kristianto & Nadapdap, 2021). Kristianto uses a Causal Loop Diagram to explain the various interrelated causes of the issue of unmanaged waste in the Bengkayang River, West Kalimantan. The Causal Loop Diagram (CLD-R) explains that business potential can increase if followed by increased environmental investment (Kristianto et al., 2022). Increasing environmental investment in the short term will reduce real income, but in the long term will provide social and health benefits for the community (Dercon, 2014).

Fast fashion brands produce a huge amount of petroleum-based garments that contribute to high levels of emission and textile waste. According to Wren (2022), fashion industries have developed in a more rapid way. The fashion industry used to produce its design in four scheduled seasons - winter fashion, summer fashion, autumn fashion, and spring season. However, today's global fashion industries have transformed its operations to become a weekly, and even daily fashion (Wren, 2022). This means that the pace of production is getting faster, and to some extent encourages people to consume more often. This type of overproduction leads to environmental degradation. Unlike luxury or high-end brands, fast fashion relies on petroleum-based synthetic materials such as polyester and nylon. Fast fashion is a major contributor to growing environmental issues. In addition, (Wren, B 2022) research shows how Levi's launched their resale site named "Levi's Secondhand" to cope with the circular policy.

Material recycling at the end of a product's lifetime also provides opportunities to promote a circular fashion industry. Many forms of textile recycling exist for both pre-consumer and post-consumer waste based on mechanical and/or chemical and thermal recycling processes (Niinimäki et al., 2020). Access-based consumption models offer one such approach towards circularity. These models are centered on rentals and peer-to-peer sharing systems, which currently exist in occasion, formal, and designer wear. However, in Indonesia, particularly in East Kalimantan, fashion rentals have not traditionally been viable for many consumers, due to barriers in availability and hygiene. One of the most difficult challenges going forward will be to change consumer behavior and the meaning of fashion. Consumers must understand fashion as more of a functional product rather than entertainment (Niinimäki et al., 2020). Some literature also connects purchasing behavior with hedonism. Hedonism is seemingly entrenched in modern-day culture as a right to engage in pleasure and immediate gratification (Gabriel & Lang, 2006). Both production processes and consumption attitudes therefore need to be changed. In doing so, it requires the involvement of all stakeholders, including local policymakers, to modify legislation. Thus, this research also tends to conduct FGD among local policymakers to respond to such issues.

While global actors from corporations to policymakers are well-acquainted on the importance of circularity for fashion industries, local policymakers do not consider it as a salient issue. They integrate sustainable policies throughout the supply chain by focusing on two points: reducing indirect impact and reevaluating garment design. The research conducted by Wren (2022) tries to unpack the fashion industry practices in innovating greener supply chain. Wren used Sustainable Supply Chain Management as an analytical tool. Fashion brands take on various risks when implementing SSCM, especially when working with suppliers in developing countries. The main prominent problems are a lack of external verification on sustainable claims, and weaker environmental regulations in suppliers countries. Both fashion leaders such as H&M and Everlane have implemented SSCM to some capacity. These two brands shared common backdraws, such as failure to engage with upstream partners in a sustainable initiative, lack of transparency along the supply chain and a focus only on short-term reward rather than long term improvement. Both of them failed to commit to transparency, and both of them failed to report an estimate of the overall impact of their value chain. As the climate change issue is progressing at an alarming rate, it is necessary for fast fashion industries to recognize their contribution to global emission and landfill waste. Fast fashion can incentivize more sustainable consumer behavior through recycling, rental, repair and resale.

Another research done by (Yongjian Li et al, 2014). examines the impact of corporate social responsibility behavior on the sustainable performance of local companies in fast fashion supply chain. ZARA, H&M, GAP & Uniqlo are the global fashion brands that use green marketing to affect consumers. However, this research also examines the policy for sustainable supply chain and not only on technology or greener materials (Li et al., 2014). The findings of this research suggest that the paramount of corporation supply chains should be strengthened by internal governance and external stakeholders. Those actors should collaborate to achieve sustainability governance throughout the chain. Since the Industrial Revolution, we have been living in a linear economy. Our consumer and "single-use" lifestyles have made consumption based on "take, make, dispose" system (Esposito et al., 2018). The fast fashion consumer

awareness is still an under-researched area, and the full spectrum of local policy is still unexplored. Thus, this research will be executed based on this concern.

Methods

This paper uses qualitative methodology by analyzing fast fashion consumers and local policy awareness toward Circular Economy. Triangulation methods were used as data collecting techniques that are interviewing key informants, open questionnaires and participative observation. To probe the data related to consumers awareness, we collect them through open questionnaires for fast fashion consumers and interview the supervisors of fast fashion brands in Samarinda. Meanwhile, to analyze the local policy context, we selected the Regional Medium Term Development Plan (Rencana Pembangunan Jangka Menengah Daerah) of East Kalimantan and its derivative regulations related to economy aspects. Qualitative content analysis was executed to interpret the East Kalimantan local policy documents related to its local economy planning. All the authors examined the local policy document individually. In cases of differences, a commonly shared interpretation was achieved through discussion among authors.

This research uses the characteristics of fast fashion to determine the kinds of fast fashion industries operating in Indonesia, particularly in East Kalimantan. The Identification process of fast fashion practices is also important before going further to analyze consumer awareness toward Circular Economy. Luxury fashions normally associated with slow-to-market responses due to the length of time in designing signature products (Sull & Turconi, 2008). Most luxury fashion are produced on a twice-yearly basis (Bruce & Kratz, 2007). Meanwhile, the current business in the fashion sector relies on fast manufacturing, copy couture, and short product life cycles. Fast fashion brands may have new designs arriving twice a week or even once a week at a relatively cheap price (Ghemawat & Nueno, 2006). To attain important data, researchers identified fast fashion brands based on the characteristics of fast fashion (fast production, mass production, fast changing design, and copied couture). The scheme illustrated below shows the fashion department store in East Kalimantan that can be categorized as a part of the fast fashion industry.

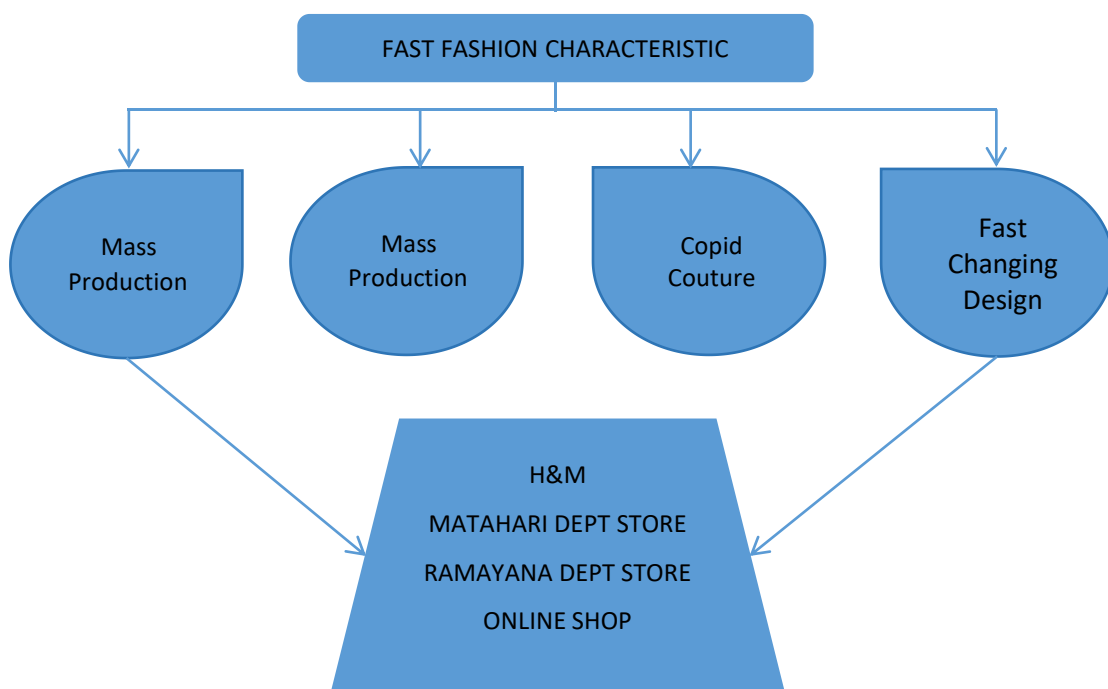


Figure 1. Fast Fashion Characteristics

Source: Authors' analysis gathered from various sources, 2022



How to Analyze CE Awareness on Consumers, Stores and Local Policy?

This research used the concept of Circular Economy as an analytical tool. The most renowned definition has been framed by the Ellen MacArthur Foundation, introducing the Circular Economy as “an industrial economy that is restorative or regenerative by intention and design”. Similarly, Geng and Doberstein (2008, p.231), focusing on the Chinese implementation of the concept, described the Circular Economy as the “realization of a closed loop material flow in the whole economic system. Circular Economy is a regenerative system in which resource input and waste, emission, and energy leakage are minimized by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling (Geissdoerfer et al., 2017). The other characteristic of the Circular Economy is a closed flow of materials, and the use of raw materials and energy through multiple phases.

The Circular Economy is defined as "an industry oriented to the economy, which produces products (usually in the form of goods/non-services) that are intentionally designed to be restorative or regenerative". Restorative means that when the product has expired, the products produced are deliberately designed to be repaired back to their original state, while regenerative means that the goods produced are deliberately designed to be made back to their original condition. According to (Geissdoerfer et al., (2017), the operationalization of a Circular Economy can be carried out through the following practices: Recycle, Reuse, Remanufacture, Repurpose, Reduce, Reproduction, Repair, Recover. We try to simplify how fast-fashion consumers develop awareness toward these dimensions below:

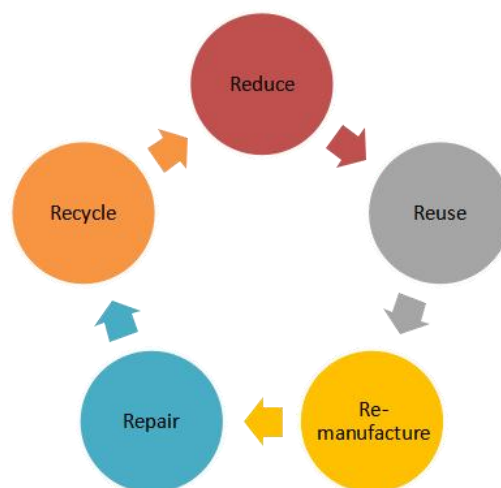


Figure 2. Circular Economy Dimensions for Fast-Fashion Consumers
Source: Authors'analysis gathered from various sources

In the analysis, the text was coded based on the circular economy dimensions. The data was coded based on 5 dimensions: Reduce, Reuse, Remanufacture, Repair, Recycle. The dimensions of Reduce, Reuse, and Repair were designed to probe information from the fast fashion consumers. Meanwhile, the Recycle and Remanufacture dimensions were asked to the stores.

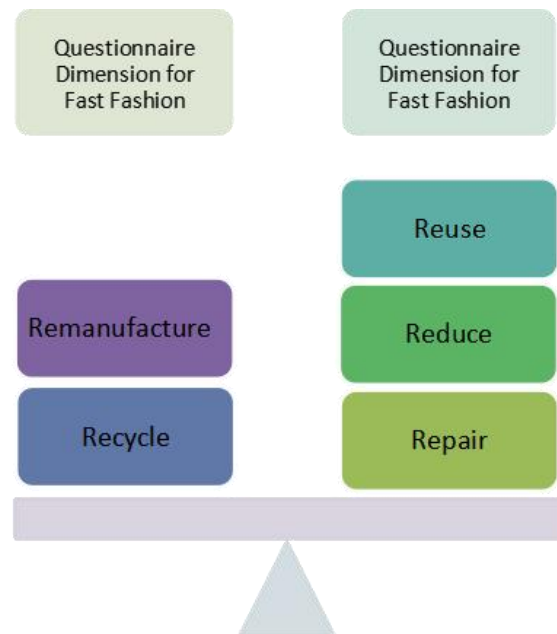


Figure 3. The Dimension of Questionnaire Mapping
Source: Authors, 2022

Result and Analysis

The linear model is often referred to as the “take-make-throw” model, which became possible after the first Industrial Revolution and greatly accelerated during the post-war era, accompanied by a global population boom (Liu & Sheraam, 2021). The linear economy adds value at every step of the product life cycle, but then drops at the end of the products life. On the other hand, Circular Economy attempts to maximize the value at each point in a product’s life (even beyond use). A Circular Economy model seeks to rebuild capital, whether financial, manufactured, human, social, or natural. This ensures an enhanced flow of goods and services. 15 developed and developing countries together with various European Union member countries that are members of the Global Alliance on Circular Economy and Resource Efficiency (GACERE) have committed to implement and advocate circular fashion in 2020. In addition, the G20 countries also conducted circular fashion workshops, which discussed the role of the state to contribute through supportive policies in 2021. This fact shows us that at a global level, the fashion industry has been situated to shift its business model from linear to circular. Despite efforts at the national level, the fashion sector is rarely discussed in relations to in relations to Circular Economy.

Overview of Fast Fashion Business Model in East Kalimantan

The global world clothing and fashion industry is the most dynamic and fast-moving industry with various business models. The business model is the way a company captures value and sets strategies to be implemented throughout an organization. Traditionally, value was considered to be purely financial and profit is highly associated with money or tangible assets. This research found out that the fashion business in East Kalimantan still highly adhered to the traditional mindset (value is pure financial profit).

It was found that both H&M and Matahari Department Store find difficulties to contribute to the “greener” business and implement the Circular Economy due to a lack of both internal and external driven-factors to shift the model (from linear to circular). There are several external conditions that do not fit to the Circular Economy model:

1. Limited supporting regulation

CE is highly acknowledged at the global level and the government supports the implementation of CE by providing derivative regulations and standardization. Meanwhile, CE has just begun to be introduced at the national level. The Indonesian government accepts this model, but it is neither widely spread nor translated into national regulations. Furthermore, the CE value has not been spread thoroughly to the local levels including in East Kalimantan. Apparently, CE is not the biggest concern for both the local government and local society in East Kalimantan. This can be seen from the non-existence of derivative regulations that support the implementation of CE. The Balikpapan Mayor regulation or Peraturan Walikota Balikpapan Perwali No 8 of 2018 about the plastic bag usage restriction cannot be considered as CE practices because it is simply reducing, but not creating closed-loop production processes in which the output of one process can become the input of another.

2. Local Consumers Resistant to the idea of “Reuse”

The principle of Reuse is not fully accepted by the local consumers. Especially for the young generations, fashion is just like a social status and in this “flexing era”, people feel ashamed if they have to use secondhand products (Open Questionnaire from fast fashion consumers).

3. Traditional Supply Chain Management

Supply chain management has traditionally been concerned with how to efficiently and effectively deliver goods from the sources to the consumers. However, in the circular supply chain, the used products can be reused by the consumer. It could be refurbished or remanufactured so they can be used by the product manufacturer. Both H&M and Matahari Department Store at Samarinda claimed that they are not supported by the particular supply chain management. Matahari Department Store even claimed that there is an official procedure to destroy unsold items or defect items. This procedure aims to keep the exclusivity of certain brands. Instead of selling defect items at a cheaper price, some brands prefer to destroy the products by using a burning mechanism. Aside from the external factors that hinder the shifting of the economy model, there are also other factors such as:

- a. Traditional Business Paradigm: Even though H&M is one of the pioneers of sustainable fashion, its subsidiary (H&M at Samarinda East Kalimantan) does not necessarily comply with sustainable value or Circular Economy Model due to its internal organization paradigm. From the field research, it is found that H&M and Matahari Department Store prioritizes financial profits, which is evident from its weekly or monthly selling targets. In other words, their paradigm is just business as usual, the accumulation of money by selling products is the paramount goal for both of them. They have not yet considered Circular Economy might help the stores achieve their main goals especially for the principle of reducing the production. “The Reduce principle of CE does not fit with our business goal” (Interview with the supervisors of H&M and Matahari Department Store)
- b. Conventional Technology: Technology is one of the major factors to enable Circular Economy practices. The hydrothermal system, mechanical recycling, and ball mill system are needed in the context of fashion or garment industries. Without the particular innovation in technology, it will be difficult to shift into the Circular Economy model. In this case, the subsidiary of H&M in East Kalimantan is not provided with the adequate technology to process the used materials into a brand new products.

The circular economy model can minimize the level of waste by designing new products within the closed loop system method (De Angelis & De Angelis, 2018). This model can also be implemented in fashion industries, mimicking the process of some local fashion brands such as Upasana, Pero, Green The Map, Bhussatva, Do You Speak Green, No Nasties, Sukkha Citta etc.

Local Consumers Awareness

Textiles are the fourth highest-pressure category for the use of primary raw materials and water, after food, housing and transport, and fifth for GHG emissions (EEA Briefing Report, 2019). In recent years, substantial waste from fast fashion called deadstock. Deadstock are new, unworn garments that are unsold or returned after being bought online. In 2016, for instance, Eco-textile News reported that only a third of all imported clothing in the EU is sold at full retail price, a third is sold at a discounted price and a third is not sold at all. The Swedish fast-fashion brand H&M was reported to hold \$4.3 billion worth of unsold inventory in warehouses (De Angelis & De Angelis, 2018). The clothing deadstock either end up at the final disposal or are burned by the stores. Both of these scenarios contribute to emission and are inevitably inconsistent with the Circular Economy model.

In the context of fashion, consumers also play a significant role in either hindering or supporting economic transformation, such as what occurred in India. Before the year 2000, the purchasing behavior of Indian customers were predefined. The customers used to purchase new apparels only during occasions such as festivals and family functions. Along with the increase of per capita income, Indian customers purchased more clothes than ever. This situation also occurred in Indonesia, where the increase of per capita income leads to more consumptions. This section will discuss the research findings from fast fashion consumers awareness toward Circular Economy. This section mainly relies on primary data collected and coded by the authors.

We use open questions to probe an in-depth perspective on how the Circular Economy is being perceived by local fashion consumers in Samarinda, East Kalimantan. We design open questionnaires based on the principles of Reduce, Reuse, and Repair. Open questionnaires allow the respondents to give more explanations and reasoning so the results will provide a holistic view.

Table 1. Questions and Answer based on Reuse Principle

Open Questionnaires on Reuse	Answers
<p>Do you agree with renting clothes? What is your opinion about the secondhand clothing business or renting clothes?</p> <p>(12 out of 17 respondents, do not agree with the idea of renting or buying secondhand clothes. 4 people answered by providing elaborative reasons)</p>	<ul style="list-style-type: none"> ● That is not a common business for fashion and of course I prefer to buy new clothes for hygiene reasons (H&M Consumer X, 29 years old) ● I do not mind with the business but I prefer not to buy it or rent any clothes. I prefer to buy the cheap one as long as it is new. Secondhand or rental clothes might be dirty and cause skin problems. Instead of being cost efficient, we might end up with more budgets to visit skin clinics (H&M Consumer Y, 35 years old) ● I do not agree with renting clothes because it is too shameful if my friends find out I was renting what I wear (Uniqlo Consumer X, 18 years old)

	<ul style="list-style-type: none"> I do agree with the renting system but we cannot find it here. However, second hand fashion here is too dirty and I can't bear it. We might find some fleas there. (Matahari Dept Store Consumer X, 22 years old)
<p>Would you be willing to wear last year's party dress that still fits?</p> <p>(10 out of 17 respondents are willing to wear last year's party dress, 2 out of 17 people answered by providing elaborative reasons)</p>	<ul style="list-style-type: none"> I would like to use my old dress as long as it still fits on me because I do not have to spend more money for a new dress (H&M Consumer X, 29 years old). I prefer to buy a new one each year because fashion is changing so fast. I would be look old-fashioned if I wear last year's party dress (Uniqlo Consumer X, 18 years old)
<p>Would you be willing to wear your sibling's old dress that fits on you?</p> <p>(11 out of 17 respondents are willing to wear their sibling's old dress, 2 out of 17 people answered by providing elaborate explanations)</p>	<ul style="list-style-type: none"> For me personally, that will be okay but my sibling would like to buy me a new one instead of giving me the old dress. (H&M Consumer X, 29 years old). If my sibling has not posted any OOTD with that dress on social media, perhaps it is okay for me (Uniqlo Consumer X, 18 years old)

The consumers' answers from the Reuse principle shows that renting clothes is not acceptable for some reasons, especially in relations to hygiene. Even though the majority of them are willing to use old dresses, the reason is because it is less cost, but there are no specific concerns about sustainability. Moreover, teenagers also prefer to keep their fashions updated by wearing new party dresses at different occasions. Fashion is related to social status, which makes them feel an urge to always look new.

Table 2. Questions and Answer based on Repair and Reduce Principle

Open Questionnaires on Repair and Reduce	Answers
<p>Would you like to repair your broken clothes and use it for a longer period?</p> <p>(13 out of 17 respondents prefer to buy new clothes instead of repair the broken ones)</p>	<ul style="list-style-type: none"> The cost of repairing and buying might be the same. So I would just simply buy the new one.
<p>Would you mind if the government or fashion stores limit the number of clothes that consumers can buy in a year?</p> <p>(17 out of 17 respondents do not agree with the limitation of purchasing fashion products)</p>	<ul style="list-style-type: none"> That will not happen, businesses need to accumulate profit and government receives taxes from business operation. They will not enforce limitations because it is irrational for both parties.

From the answers related to Repair and Reduce, it can be seen that the consumers are not familiar with Circular Economy, and their decision is simply shaped by today's business model. For local consumers in East Kalimantan, sustainability is not their concern, especially when it comes to the context of fashion. The ideas of Circular Economy for sustainable living are still far from their thoughts. Environmental

consciousness for consumers should be shaped and designed through social, economy, and political engineering, such as supporting policy in circular fashion. By considering the consumers' perspective, we need to start rethinking about how to make Reuse, Repair, Remanufacture, and Reduce, be widely accepted by consumers and stores. By doing so, the idea of circular fashion might be accepted and adapted thoroughly.

The Local Policy Context of East Kalimantan

It is undeniable that the government has a sizeable share in all efforts to design economic development, including setting goals to shift from the linear economy to a Circular Economy through policymaking. We examined the East Kalimantan's local policy in terms of the transformative economic development from a linear to a circular model. We try to use a top-to-bottom analysis by analyzing the National Medium Term Development Plan 2020-2024 (Rencana Jangka Panjang-Menengah Nasional 2020-2024) to East Kalimantan Regional Medium-Term Development Plan (Rencana Jangka Panjang Menengah Daerah) and its derivative regulations. This development plan provides a reference for its derivative regulations and provides a legal basis for the long-term development of the region. We use content policy analysis by analyzing the narratives and specific concepts used to project the economy roadmap or economy goal from the government.

Indonesia as a developing country has paid attention to solve the problem of textile waste in a sustainable manner in the green industry program precisely through the Regulation of the Minister of Industry of the Republic of Indonesia No 13 of 2019. More broadly, the responsibility of the textile industry in relations to wastewater quality standards is regulated through the Law Number 32 of 2009 concerning Environmental Protection and Management. However, the regulations at the national level do not specifically discuss the idea of circular fashion. Moreover, the policies are executed only partially and are fragmented. Apparently, there is a reduction of sustainable values from the National Development Plan to the derivative regulations. The National Development Planning seems to be very well attuned to sustainable development, and Circular Economy is considered as a main measure to reach sustainability. However, both concepts of sustainable development and Circular Economy are not being frequently discussed in derivative regulations.



Figure 4. Table of National and Local Development Planning
 Source: Authors' analysis gathered from various sources

A deliberative policy analysis approach was used to analyze this policy. The research finding shows that the National Medium-Term Development Plan or RJPMD 2020-2024 emphasizes on the economic transformation based on the Sustainable Development. However, there is no concept of the Circular Economy and specific discussions related to the transformation of a linear economy to a Circular Economy. At the local level, Regional Medium-Term Development Plan (RPJMD) 2019-2022 has few discussions about sustainable development. The East Kalimantan government's focus on economic development does not include the Circular Economy. Instead, all the local policies are oriented towards economic growth and it is manifested through the development of the Malloy Batuta Special Economic Zone (SEZ Malloy Batuta). More specifically, the main focus relies on the economic creative to boost the economic growth and per capita income. This policy is manifested in the Governor Regulation No 42 of 2021 about Economic Creative in East Kalimantan. The industrial regulation placed more emphasized on how to generate economy from creative industries instead of only depending on the mining industry. Unfortunately, sustainability is not a main goal in the context of the East Kalimantan local policy.

However, this research also found that there are several local regulations about plastic waste reduction such as the Mayor Regulation No 1 of 2019, targeting plastic waste reduction to 50% by the end of 2021 (DLHK Samarinda). The regulations can also be found in the Regent Regulation of Nunukan No 44 of 2018 and the Mayor Regulation (Perwali) No 8 of 2018 in Balikpapan. The Reduce principle of Circular Economy are implied, though not plainly expressed in the aforementioned local regulations. However, Circular Economy is not only about reducing, but also installing closed-loop systems that lead to the production of products from cradle to cradle. This new model requires a new economic infrastructure supported by integrated policies. Thus, policies should regulate the supply chain from design to production and eventually back to the production again.

Conclusion

This study found that there is a lack of awareness of fast fashion consumers regarding Circular Economy, which can be seen from the reluctance of consumers and stores to adapt circular economic dimensions, especially the Reuse dimension. Circular Economy has been internalized through national development planning, but there have been no supportive regulations at the local level. Increasing per-capita income is much more significant for East Kalimantan Development Planning. This lack of awareness and reluctance from consumers is due to numerous barriers, including limited supporting regulations. To enable circular fashion, both national and local policy needs to provide more drivers than barriers for consumers and stores. Some barriers keep consumers away from circular fashion concepts than drivers. These barriers include fashion consumer culture, costs, hygiene, and the availability of circular economic infrastructure. The fashion industry, which has so far been implemented with a linear approach at the manufacturing, distribution, and consumption processes, must switch and be replaced with a circular economy approach through 5 main dimensions: Recycle, Remanufacture, Reuse, Reduce and Repair. In order to enable the transition to a Circular Economy, businesses and its constituents: government and consumers are expected to play a significant role in supporting the implementation of the CE model. It needs commitment from business actors, academia and local governments to shift from a linear economy to circular economy models. Convincing local business actors that Circular Economy does not reduce product competitiveness also becomes a great challenge. Policy instruments, including economic instruments, play a key role in ensuring that circular fashion benefits both consumers and businesses. This study finds disrupting the economic and business models might be challenging, thereby creating incentives for circularity is important for both consumers and businesses. The authors hope that the findings from this research is not only limited to meaningful data but also as advocacy for the local policy to be more well-attuned to the concept of Circular Economy. The finding results of the first research question will be an initial platform to conduct a Focus Discussion Group with local policymakers. Last but not least, this research finding might have implications for global trade research by rethinking political and social engineering to accelerate circular fashion from the global level to the local level.

Acknowledgments

First and foremost, the authors would like to thank The Almighty Allah SWT for His blessings. We would like to convey a special gratitude to the Research and Community Service Institution of Universitas Nahdlatul Ulama Kaltim (LPPM UNU Kaltim) for the moral and financial support in this collaborative research. We would also like to express our sincere gratitude to the supervisors of Matahari Department Stores, Uniqlo, and H&M at Bigmall Samarinda that supported this research by distributing open questionnaires and willingness to be interviewed thoroughly. We would like to thank Dinas Lingkungan Hidup East Kalimantan for providing policy documents related to sustainability. Last but not least, we are so grateful to all of the respondents who were willing to answer the open questionnaires with elaborative answers so that the researchers were able to see the specific issues that might hinder the economic transformation from a linear to a circular model.

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