Development of Sharing Economy Business Model for Company Sustainability: A Case Study on Gojek

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ABSTRACT

The definition of the sharing economy is still unclear and causes inconsistent research contributions and the application of the concept of the sharing economy business model. The research focused on developing sharing economy business model that supported sharing economy for company sustainability. The research approach was a qualitative research, the object was data related to the sharing economy business model on company sustainability. The sample data were collected from consumers’ comments and reviews on the Gojek application on Google Playstore. The data used were 23,888 reviews. Then, Bigram was used as text processing and language developed by the system to identify topics in the comment data using Latent Dirichlet Allocation (LDA) topic modeling to determine trending topics. The results show that the sharing economy business model have an important role in company sustainability. There are important elements, such as type of platform, shared practice, place of interaction, review system, and revenue stream. The research also provides additional contributions to scientific development in the managerial field. It is expected to support the sharing economy theory and business model. Last, the research results can support and prove that the sustainable company is good at implementing the sharing economy business model for company sustainability.

Keywords: sharing economy, business model, company sustainability

INTRODUCTION

The sharing economy provides an overview of technological mediation by accessing a section of products and services that are rarely used for their benefits (Curtis, 2021). People have been doing sharing practices for a long time, such as exchanging goods or services, giving loans, selling, giving gifts, and buying new goods. Hence, the sharing economy can be used in various uses of different practices and organizational models (Aistaja et al., 2022; Curtis & Mont, 2020; Guyader & Piscicelli, 2019).

Sharing economy is defined as a socio-economic system that utilizes technology to act as a market intermediary that facilitates temporary access to goods that are less used for company sustainability (Curtis & Lehner, 2019). Sharing economy is expected to reduce negative social impacts, such as excessive consumption, air, water, or soil pollution, and the impact of poverty by reducing the public budget (Mardhiyah, Islami, Gusdiansyah, Saputra, & Farma, 2021; Chen, Prentice, Weaven, & Hsiao, 2022; Kumar & Ayedee, 2021).

In 2015, the sharing economy was still unknown to Indonesian. It could be seen in a survey of 1,008 people with an age range of 20 to 25 years and as many as 42% of the total respondents in DKI Jakarta and West Java. As many as 85% of respondents heard of the sharing economy concept, but less than 40% tried it. In 2020, these services became a necessity and part of the lifestyle of Indonesian (Yusra, 2020).

Online transportation, such as Gojek, is one example that has implemented the sharing economy and has become an economic trend for the future (Chen et al., 2022; Hamari, Sjöklint, & Ukkonen, 2016). Data have shown that Gojek is Indonesia’s largest local sharing economy platform. Gojek has operated in 214 cities and 5 countries in Southeast Asia.
Asia with more than 2 million driver partners. More than 190 million customers have downloaded the Gojek application (Gojek, 2021; Yusra, 2020). Gojek becomes a company that runs a new business model in the transportation sector using the ride-sharing method. The sharing economy can increase income for business owners and new jobs. Gojek is also considered capable of helping the government create jobs (Akhmedova, Manresa, Escobar Rivera, & Bikfalvi, 2021; Chaerunisa, Darmastuti, & Widiastutie, 2022; Hidayat, 2021).

However, the unclear definition of the sharing economy causes inconsistent research contributions. The application of the sharing economy business model concept is also different from usual (Li, Hong, & Zhang, 2021; Wang, Yan, Ruan, & Zeng, 2022). Some researchers do not define the sharing economy, while others are different in the definition of a sharing economy but cannot consistently apply it to their works (Curtis & Mont, 2020; Plewnia & Guenther, 2018).

The sharing economy first entered the public in 2011, judging by the success of Airbnb and Uber (Hossain, 2020; Martin, 2016). That is when the sharing economy is often studied from various perspectives, such as consumption practices, lifestyle, mobility, social movements, social innovation and disruption, sharing paradigms, travel patterns, beliefs, and motivations (Cheng, 2016; Hossain, 2020; Mauri, Minazzi, Nieto-Garcia, & Viglia, 2018). In addition, drinking with friends, eating with relatives, and households using washing machines are examples of collaborative consumption (Hossain, 2020; Li & Tsai, 2022; Da Silva Cruz & De Freitas, 2021).

The sharing economy is a phenomenon where people start doing various activities, such as borrowing, bartering, renting, trading, exchanging, and transportation (Ciulli & Kolk, 2019; Hossain, 2020). The concept of the sharing economy covers various disciplines, including economics, geography, innovation, law, management, marketing, psychology, sociology, sustainability, tourism, and transactions (Česnuityte, Klimczuk, Miguel, & Avram, 2022; Hossain, 2020). Some argue that the sharing economy in 2025 will be worth US$335 billion compared to US$15 billion in 2015 (Hossain, 2020).

A business can be sustainable if it can continue to develop innovation in each of its products (Clinton & Whisnant, 2019; Franco, 2019; Lüdeke-Freund, 2020; Reuter, 2022; Sundiman & Kristina, 2021). The main focus is to create value with innovation in all products to meet customers’ and society’s needs or expectations (Lüdeke-Freund, 2020; Nonaka & Takeuchi, 2021; Sundiman & Kristina, 2021). Companies must be aware of patterns of demand from the community and customers (Gao & Li, 2020; Sundiman & Kristina, 2021; Ulvenblad, Ulvenblad, & Tell, 2019). Companies will have a chance to survive longer if they can create products that can solve all problems of customers or the community (Carroll, 2021; Clinton & Whisnant, 2019; Lüdeke-Freund, 2020; Sundiman & Kristina, 2021; Viciunaite & Alfnes, 2020). Another example shows that technology that uses social media can provide facilities for exchanging information effectively between resource users and owners (Itani, Krush, Agnihotri, & Trainor, 2020; Sundiman & Kristina, 2021). It shows that trust is the strongest factor in influencing the sustainability of customer use (Amanda & Sari, 2021; Räisänen, Ojala, & Tuovinen, 2021). If the application of the sharing economy business model can be appropriately implemented, it will certainly have a good impact on company sustainability.

Sharing economy business model is defined as a business model of a sharing platform that acts as an intermediary and exchange between resource owners and resource users to provide temporary access to goods that are less used (key activity) and reduce transaction costs associated with sharing (value proposition) (Curtis & Mont, 2020; Massa, Tucci, & Afuah, 2017). Figure 1 shows how the sharing economy business model can provide innovation in reducing the negative impact on company sustainability. It is supported by multiple tools, such as platform types, shared practices, governance models, places of interaction, geographic scale, review systems, interface mediation, and revenue streams, with the potential to shape these innovations.

Propositions are tentative assumptions about phenomena that occur in research. Temporary conjecture is the idea of knowledge with certain characteristics and is more general in form. If the sharing economy business model is carried out in the right way, it will provide the potential for company sustainability. Based on the conceptual framework in Figure 1, the research states the research proposition that sharing economy business model are important in company sustainability (Filser, Kraus, Breier, Nenova, & Puimalainen, 2021; Mercuri, Della Corte, & Ricci, 2021).

Currently, no tools support the sharing economy in terms of sustainable business model innovation. Therefore, the research aims to determine the important role of the sharing economy business model in company sustainability. Previous studies focus on the mediating dimensions of Information and Communication Technology (ICT), non-financial motivation for owners, temporary access, competition, and tangible goods. These characteristics seek to balance the potential of the sharing economy among various conceptualizations from various sciences. Hence, the emerging definition shows that the practice in the sharing economy prioritizes sustainable consumption (Curtis & Lehner, 2019; Henry et al., 2021). Meanwhile, the other studies focus on platform types, shared practices, governance models, mediation interfaces, venues for interaction, geographic scale, review systems, and revenue streams for sustainability (Curtis & Mont, 2020; Dabbous & Tarhini, 2021; Teece, 2010). Previous research suggests that there are limited data and a lack of reliable tools in the sharing economy (Curtis & Mont, 2020). Therefore,
Development of Sharing Economy business model is often used. The design of Python is to emphasize code readability which allows program users to express concepts in fewer lines of code. Python supports several programming paradigms, such as object-oriented, imperative, and functional or procedural styles (Tulchak & Marchuk, 2016). The syntax of Python with interpreted properties makes it an ideal language for scripting and application development on multiple platforms (Van Rossum & Drake, 2003).

Then, the data analysis method is Latent Dirichlet Allocation (LDA) and Bigram. LDA is a method for distributing latent topics for a large corpus (Blei, Ng, & Jordan, 2003; Jelodar et al., 2019). The LDA can analyze several documents from selected words (Jelodar et al., 2019). Meanwhile, Bigram has a sentence similarity measurement or semantic similarity as a measurement of the level of similarity in a text. The score obtained from the semantic similarity gives the semantic relationship between the two words. If there are two or more words, the level of similarity can be calculated. The higher the score is, the higher the level of similarity of the words will be (Setiaji & Wibowo, 2016).

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The data that have been taken from the comment section in the application on Google Playstore will be transferred to Excel. Then, it will be processed via LDA by importing the Excel file. Using the LDA and Bigram methods, the researchers can collect a number of words to be analyzed. The important word in the research is related to sharing economy business model and company sustainability.

Next, the research also uses the triangulation method to measure the validity of the data. According to Carter, Bryant-Lukosius, DiCenso, Blythe, and Neville (2014) by quoting Patton (1999), triangulation uses several methods or data sources to develop a comprehensive understanding of the phenomenon.
Triangulation is an approach to analyzing data that unites various sources into a single unit (Bachri, 2010). The approach also checks the validity of research findings using more than one data collection technique, such as using Latent Dirichlet Allocation (LDA) and Bigram.

RESULTS AND DISCUSSIONS

The results that can be seen based on data searches and modeling topics using LDA show that the sharing economy business model are essential in company sustainability. It can be seen in Topic 1 (Figure 2). Around 36.4% of the phenomena in the comment data can be interpreted as events that occur in the community. It indicates that the sharing economy business model play an important role in company sustainability. The main activity of the platform is to act as an intermediary in social interactions and economic transactions between resource owners and users (Curtis & Mont, 2020).

Figure 2 shows the 10 dominant keywords, namely kecewa (disappointed), bagus (good), layanan (service), customer, sesuai (appropriate), nyaman (comfortable), aman (safe), suka (like), cashback (cashback), konsumen (consumer). Then, from the bigram data, there are 100 main related words. Some examples are kecewa pelayanan (disappointed service), bagus suka (good and like), bagus aplikasinya (good application), bagus pelayanan (good service), bagus cepat (good and fast), bagus mudah (good and easy), pelayanan memuaskan (satisfying service), puas pelayanan (satisfied service), pelayanan customer (customer service), sesuai harga (right price), aman nyaman (safe and comfortable), promo cashback (cashback promo). These words imply that the sharing economy business model is important in company sustainability as there are expressions conveyed in comment column of the Google Playstore by several customers who use the Gojek application. The services provided by Gojek can provide a sense of security and comfort for customers. It is also supported by the cashback promo that makes customers like Gojek.

Based on the definition from Gojek (2021), Gojek is a platform that acts as an intermediary in interactions or transactions between customers, driver partners, and Gojek owners. The joint practice carried out by customers is by transacting on the Gojek application. The place of interaction for customers lies in the Gojek application itself. It can be seen in the comment data in Topic 1 in Table 1, which shows customers’ comment on the Gojek application on the Google Playstore.
Topic 2 in Figure 3 shows the topics generated from the LDA model with 33.3% of the topics discussed. Some of the words displayed on this topic are phenomena that occur in some communities and are taken to be research material for the Gojek application. The word displayed on Topic 2 is one of the expressions conveyed by people who use the application.

From Table 2, it shows 10 dominant keywords: promo (promotion), harga (price), mahal (expensive), diskon (discount), top, oke (ok), suka (like), kecewa (disappointed), murah (cheap), ongkos (fare). Meanwhile, the Bigram data state 100 main related words. Some examples are promo diskon (discount promotion), promo menarik (interesting promotion), harga sesuai (reasonable price), harga murah (cheap price), diskon ongkir (delivery cost discount), bagus suka (like and good), suka membantu (helpful), kecewa pelayanan (disappointed service). It can be concluded that from the text, the sharing economy business model is important for company sustainability. The comment data shown in Topic 2 suggest that Gojek provides promos that can attract fans from customers. The existence of this discount promo provides a plus for Gojek’s services, but with the high price, some customers are disappointed. It is in line with one of the elements in Gojek, namely the review system.

<table>
<thead>
<tr>
<th>Word</th>
<th>Importance</th>
<th>Word_count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kecewa (disappointed)</td>
<td>0.03812889</td>
<td>2.364</td>
</tr>
<tr>
<td>Bagus (good)</td>
<td>0.03399287</td>
<td>2.338</td>
</tr>
<tr>
<td>Layan (service)</td>
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<tr>
<td>Customer</td>
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</tr>
<tr>
<td>Sesuai (appropriate)</td>
<td>0.02286956</td>
<td>1.084</td>
</tr>
<tr>
<td>Nyaman (comfortable)</td>
<td>0.01411811</td>
<td>600</td>
</tr>
<tr>
<td>Aman (safe)</td>
<td>0.01243018</td>
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</tr>
<tr>
<td>Suka (like)</td>
<td>0.01212939</td>
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</tr>
<tr>
<td>Cashback</td>
<td>0.00785376</td>
<td>329</td>
</tr>
<tr>
<td>Konsumen (consumer)</td>
<td>0.00679726</td>
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</tr>
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</table>

Figure 3 Topic 2
Topic 3 in Figure 4 shows 30.2% of the topics discussed. Opinions from customers are a community phenomenon that occurs in the Gojek application. It is also a customer expression conveyed virtually on the Google Playstore. Next, Table 3 shows 10 dominant keywords: bantu (help), mudah (easy), cepat (fast), bagus (good). PayLater, layanan (service), mantap (great), ramah (friendly), lancar (smooth), sukses (success). Then, in Bigram data, there are 100 related keywords. Some examples are membantu perjalanan (help on the way), aplikasinya membantu (helpful application), membantu mempermudah (help to make it easier), mudah cepat (easy and fast), bagus mudah (good and easy), aplikasinya bagus (good application), pembayaran PayLater (PayLater payments), tagihan PayLater (PayLater bills), puas pelayanan (satisfied service), pelayanan bagus (good service), cepat ramah (fast friendly), lancar jaya (smooth running). The text can prove that the sharing economy business model is essential for company sustainability. It can be seen from several customers’ comments that the products provided by Gojek can help the community to facilitate their daily activities. The results of Figure 4, which explains Topic 3, show that one of the products from the Gojek application, PayLater, is good and fast to use. PayLater is one of the products offered by the Gojek company that has functions, such as credit cards used by the public. Gojek can also provide satisfactory

Table 2 Discussion in Topic 2

<table>
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<tr>
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</thead>
<tbody>
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</tr>
<tr>
<td>Harga (price)</td>
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</tr>
<tr>
<td>Mahal (expensive)</td>
<td>0.03803154</td>
<td>1.331</td>
</tr>
<tr>
<td>Diskon (discount)</td>
<td>0.02542539</td>
<td>869</td>
</tr>
<tr>
<td>Top</td>
<td>0.02291796</td>
<td>873</td>
</tr>
<tr>
<td>Oke (ok)</td>
<td>0.02243811</td>
<td>888</td>
</tr>
<tr>
<td>Suka (like)</td>
<td>0.01719099</td>
<td>1.267</td>
</tr>
<tr>
<td>Kecewa (disappointed)</td>
<td>0.01388182</td>
<td>2.364</td>
</tr>
<tr>
<td>Murah (cheap)</td>
<td>0.01255275</td>
<td>504</td>
</tr>
<tr>
<td>Ongkos (fare)</td>
<td>0.00843354</td>
<td>322</td>
</tr>
</tbody>
</table>

Figure 4 Topic 3
service so that customers show their love for Gojek.

Topic 3 also shows that the sharing economy business model have an important role in company sustainability. The data for the summary of Topic 3 show that the products provided have a positive value to society. It relates to one of the elements in the sharing economy business model: the type of platform, practices, places of interaction, and revenue streams. The revenue stream element is a record of value that shows various income streams that can be used to record economic value through the provision of products, services, and information (Curtis & Mont, 2020). Based on the definition from previous research, Gojek provides products that can provide economic value through the provision of products, services, and information to the public (Fathara, Rizal, Arifianti, & Husna, 2021).

The comments obtained show that Gojek can help, simplify, and provide fast service to customers. It is in line with the Gojek element, namely the review system element, in which the customer gives an opinion that Gojek provides helpful, easier, and fast services. Companies that provide good customer service can increase their competitive advantage and strengthen the market (Na, Kang, & Jeong, 2019). In other words, the existence of a competitive advantage can make a company remain sustainable (Sridadi, 2014).

Based on the presentation of the data displayed and the discussion presented, the topics have an important role in company sustainability. The customers’ perceptions of the transaction experience are very important for company sustainability (Wardhanie & Wulandari, 2021). It corresponds to several related words in Topic 1, Topic 2, and Topic 3, namely, kecewa (disappointed), bagus (good), layanan (service), customer, sesuai (appropriate), nyaman (comfortable), aman (safe), suka (like), cashback (Topic 1), promo, harga (price), diskon (discount), suka (like), kecewa (disappointed), murah (cheap) (Topic 2), and bantu (help), mudah (easy), cepat (fast), bagus (good). PayLater, layanan (service), ramah (friendly), lancar (smooth) (Topic 3). These words have a close relationship with the words in Bigram. Some of the words in Bigram have implications related to company sustainability. From the comment data, it is intended for the sharing economy business model, namely Gojek. The research supports the theory of Curtis and Mont (2020) in terms of examining the important role of the sharing economy business model for company sustainability.

According to Amanda and Sari (2021), customers’ trust is the strongest factor in influencing sustainability. It is proven in the research that from several customer comments provided, many customers believe that Gojek provides good, fast, and helpful service. Therefore, it creates a sense of security and comfort for customers (Issock Issock, Mpinganjira, & Roberts-Lombard, 2020; Steffen & Doppler, 2019).

Next, according to Yuniastuti, Laksmono, and Sardjono (2019), Some of the components that build the sharing economy are human and sustainability. Gojek founders, driver-partners, and customers are components that build Gojek as a sharing economy. The company can consider the existence of customers who provide feedback so that the company can be sustainable in the future. This situation shows that sharing economy business model has an essential role in company sustainability.

Creating high value for existing and new customers is necessary to get a more sustainable company. Even reducing internal costs, including all parties within the business organization, is important. These factors encourage large companies to implement the sharing economy in various ways (Ciulli & Kolk, 2019). It can be seen from Gojek, which embraces the sharing economy and includes customers as one of the factors for company sustainability (Parente, Geleilate, & Rong, 2018).

Human resources management is considered an important part of the parties within the business organization. According to Pradana (2021), knowledge management is a solution to life problems in the context of humans as lifelong learners, alongside

<table>
<thead>
<tr>
<th>Word</th>
<th>Importance</th>
<th>Word_count</th>
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<tr>
<td>Bantu (help)</td>
<td>0,09526591</td>
<td>3.247</td>
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<tr>
<td>Mudah (easy)</td>
<td>0,04863764</td>
<td>1.718</td>
</tr>
<tr>
<td>Cepat (fast)</td>
<td>0,04565761</td>
<td>1.551</td>
</tr>
<tr>
<td>Bagus (good)</td>
<td>0,02799114</td>
<td>2.338</td>
</tr>
<tr>
<td>PayLater</td>
<td>0,02017068</td>
<td>797</td>
</tr>
<tr>
<td>Layanan (service)</td>
<td>0,01842656</td>
<td>1.914</td>
</tr>
<tr>
<td>Mantap (great)</td>
<td>0,01820477</td>
<td>542</td>
</tr>
<tr>
<td>Ramah (friendly)</td>
<td>0,01541279</td>
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<td>Lancar (smooth)</td>
<td>0,01397701</td>
<td>479</td>
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<td>Sukses (success)</td>
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</tbody>
</table>
talent management as a way of managing talent in the organization effectively, planning and developing succession in the organization, realizing maximum employee self-development and optimizing talent utilization. To acquire sustainability, a company should take human resources management as one of the essential parts of the sustainable process.

In sharing economy services, it is necessary to have innovative product ideas, respond to market demand quickly, and have resources that can provide good service to customers to increase product innovation, competitive advantage, and market power. Then, to provide innovative product ideas, a company should focus on total quality management (Natalia & Harris, 2022). As an illustration, Gojek has products, such as PayLater, that can help customers with financial problems, good and helpful service, quick response to customers’ requests, and promos and discounts. It makes Gojek superior in terms of competitiveness and market power. Hence, it makes the sharing economy and Gojek’s business model have an important role in company sustainability (Na et al., 2019).

CONCLUSIONS

Based on the analysis and discussion of data that has been described, it can be concluded that the sharing economy business model have an important role in company sustainability. There are essential elements, such as type of platform, shared practice, place of interaction, review system, and revenue streams.

The research contributes to scientific development in the managerial field, especially in technology companies such as Gojek. The research is expected to support the sharing economy theory business model in the future. The research results can support and prove that Gojek, which is a technology company and related parties, is good at implementing the sharing economy business model for company sustainability. The research in the managerial field can also be operated and coordinated to achieve the desired and determined goal, namely company sustainability. Based on the results, Gojek is suggested to increase customers’ trust further and innovate continuously to survive in the long term. The data in the research still show that some customers are dissatisfied or even give negative comments on the Gojek application.

The research has many limitations. Many technology companies, like Grab and Maxim, serve transportation as their main business. However, the research only focuses on one technology company that serves online transportation (Gojek). The research applies only a qualitative method by analyzing the context of feedback from Gojek consumers. Therefore, the results are not fully represented by scientific data. In addition, the data come from existing consumers. Therefore, it is likely that consumers in the future may provide more varied feedback. Future research can also add or expand research objects and variables and examine them with different methods.

REFERENCES


Ciulli, F., & Kolk, A. (2019). Incumbents and business model innovation for the sharing economy: Implications for sustainability. Journal of Cleaner Production,
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(Lily Elvina Dewi; Didi Sundiman)


