Platform and e-commerce design for Indonesian family businesses[*]

Anita Wijayanti, Kartika Hendra Titisari, Agni Astungkara

Faculty of Economics, University of Islam Batik Surakarta
Correspondence: itax_solo@yahoo.com

Abstract

The COVID-19 pandemic has required the adoption of digital platforms and e-commerce for family businesses in Indonesia. This digital transformation is not only crucial for their survival but also for their growth and long-term success. By embracing digital technologies, family businesses can adapt to the "new normal" reestablish their operations and capitalize on the opportunities presented by the evolving digital ecosystem. This article aims to provide an overview of the platform and e-commerce design for Indonesia family businesses. The data was collected from six family businesses through interview, observation, and focus group discussion method. The results have shown the development of two types of designs platform for e-commerce Indonesian family business including general platform designs and detailed platform designs. The general platform design aims to explain the components of the online platform, while the detailed platform design provides a more detailed description of the activities conducted on the platform.

***Keywords:** design, e-commerce, family business, platform*

1. Introduction

The COVID-19 pandemic has had a profound impact on economies worldwide, and Indonesia has been no exception. The crisis disrupted traditional business operations, forcing family businesses to confront unprecedented challenges. However, amidst adversity, the pandemic also accelerated the digital transformation, making platform and marketplace development more crucial than ever for the survival and growth of family businesses in Indonesia (González and Pérez-Uribe, 2021). In the aftermath of COVID-19, these businesses must embrace digital platforms and marketplaces to adapt to the "new normal," reestablish their operations, and capitalize on the opportunities presented by a rapidly evolving digital ecosystem (Jayakumar and De Massis, 2020).

The COVID-19 crisis exposed the vulnerability of traditional business models to external shocks (Saleem, 2021). Family businesses in Indonesia faced disruptions in supply chains, limitations on physical operations, and reduced customer footfall. However, digital platforms and marketplaces offer a lifeline for these businesses, providing a resilient framework that ensures business continuity even in times of uncertainty (Zaini et al., 2022). By establishing an online presence, family businesses can diversify their revenue streams, reduce dependence on physical stores, and mitigate risks associated with unforeseen circumstances. Platforms and e-commerce enable businesses to pivot quickly, adapt their offerings, and ensure

---

[*] Selected from The International Conference "Digital Media & Economic Recovery" held in Ho Chi Minh City, Vietnam on 11th July, 2023.

uninterrupted customer engagement. The pandemic unleashed a surge in e-commerce adoption as lockdowns and social distancing measures restricted physical interactions. With people turning to online shopping, family businesses must recognize the significance of digital platforms and marketplaces as essential avenues for reaching customers. By establishing an online presence, businesses can tap into the growing e-commerce market, leveraging the increased consumer preference for contactless shopping. Platform and e-commerce development enables family businesses in Indonesia to capture a larger share of the online consumer base, driving sales and revenue growth in the post-COVID era (Saleem, 2021). The pandemic has significantly altered consumer behavior, with lasting effects expected even after the crisis subsides. Family businesses in Indonesia must recognize and respond to these changes by adopting digital platforms and marketplaces. Online channels allow businesses to cater to evolving customer preferences, such as contactless transactions, home deliveries, and personalized shopping experiences. By leveraging digital platforms, businesses can gather valuable data on customer behavior, preferences, and purchase patterns. This data-driven approach enables businesses to tailor their offerings, optimize marketing strategies, and deliver personalized experiences that resonate with post-pandemic consumers (Rume and Islam, 2020; Saleem, 2021).

Existing research has explored various aspects of platform design and user experience (Garcez and Sbragia, 2013). However, there is a need for further investigation into specific design elements that enhance user engagement, trust, and satisfaction within the context of platforms and marketplace (Aragón et al., 2017). By identifying the key design factors that contribute to a positive user experience, businesses can optimize their platforms to better meet the needs and preferences of users. While platform performance has been studied to some extent, there is a research gap in understanding the specific performance metrics that are most relevant for different types of businesses operating on platforms and marketplaces. Understanding the key performance indicators that drive positive business outcomes can help businesses prioritize their investments in platform development and optimization (Schreieck et al., 2016). Existing research on platform user interfaces has explored various design principles and guidelines. However, there is a research gap in understanding the specific challenges and strategies for contextually adapting user interfaces in platform environments (Lu et al., 2016). While some studies have examined user interface design for single-sided platforms (Tura et al., 2018), there is a research gap regarding the design considerations and challenges specific to multi-sided platforms. This article aims to provide an overview of the platform and e-commerce design for family businesses. Therefore, this article will discuss the conditions of family business after COVID-19, theories about platform development, family business needs of platform and marketplace, and design of platform and marketplace.

2. Literature review

2.1. Family business condition after Covid-19

Family businesses are a unique and prominent form of enterprise that combines

the dynamics of family relationships with the complexities of managing a business (Siakas et al., 2014). A family business can be defined as a business entity in which the ownership, control and management are directly related to the family or group of individuals concerned (Hidalgo and Salazar, 2016). These businesses are typically characterized by the following elements: Family members are actively involved in the business, hold key positions, make strategic decisions, and participate in day-to-day operations. Family members can include founders, descendants, spouses, and sometimes extended family members (Nordqvist et al., 2015). Family businesses are mostly owned by families, often across generations. Ownership shares may be held by individual family members or through a family trust or holding company (Mcadam et al., 2019). Family businesses tend to have a long-term orientation, driven by a desire to preserve the family legacy and ensure its continuity for future generations (Berrone et al., 2012). Decision making is often influenced by family values, traditions, and intergenerational goals (Sharma et al., 1997).

The pandemic disrupted the operations of family businesses across various sectors in Indonesia. Lockdowns, travel restrictions, and social distancing measures led to a sharp decline in consumer demand, supply chain disruptions, and financial constraints. Many family businesses are facing revenue losses, reduced cash flows, and operational difficulties, especially those in sectors heavily affected by the pandemic, such as tourism, hospitality and retail (González and Pérez-Uribe, 2021; Rume and Islam, 2020).

Despite the challenges, family businesses in Indonesia have demonstrated remarkable adaptability and resilience.

Many have swiftly adjusted their strategies to survive and sustain their operations. For example, several family businesses shifted their focus to online platforms, embracing e-commerce and digital marketing to reach customers. This transition allowed them to tap into the growing trend of online shopping and maintain sales during lockdowns. Family businesses also diversified their product offerings and explored new markets. By identifying emerging opportunities in sectors less impacted by the pandemic, such as healthcare, essential goods, and digital services, they were able to mitigate losses and generate alternative revenue streams. Some family businesses collaborated with other companies or formed partnerships to pool resources, share costs, and leverage collective strengths, enabling them to withstand the challenges more effectively (Filho et al., 2021; Saleem, 2021; Susilawati et al., 2020).

The Indonesian government recognized the importance of family businesses and implemented several measures to support their recovery. Initiatives include financial assistance programs, tax incentives, and regulatory relaxations to ease the burden on family businesses. Government-backed loan schemes and grants were introduced to provide liquidity and facilitate business continuity. Additionally, the government encouraged digital transformation by providing resources and training programs to help family businesses embrace technology and online platforms (Susilawati et al., 2020; Wahjono et al., 2021).

As the Indonesian economy gradually recovers from the pandemic, family businesses must focus on long-term strategies to thrive in the post-COVID-19 era

(Jayakumar and De Massis, 2020). Investing in digitalization and enhancing online presence will remain critical. Family businesses should continue to adapt to changing consumer behavior and market dynamics by leveraging technology and e-commerce platforms techniques to reach a wider customer base (Wijanarka et al., 2022).

2.2. Platform and e-commerce development

In recent years, the rapid advancements in technology have revolutionized the way businesses operate, leading to the rise of platforms and e-commerce. Platforms have emerged as digital ecosystems that connect different participants, enabling interactions and transactions. Initially, platforms were primarily limited to software and technology industries (Schreieck et al., 2016). However, with the advent of the internet, platforms have expanded to various sectors such as e-commerce.

E-commerce, or electronic commerce, refers to the buying and selling of goods and services over the internet. The rise of e-commerce has transformed traditional retail models and provided businesses with new opportunities for growth (Looi, 2005; Ho, 2017).

Technological advancements, including improved internet connectivity, mobile devices, and secure online payment systems, have created a conducive environment for the growth of platforms and e-commerce (Giessmann and Legner, 2013; Lu et al., 2016). These developments have enhanced convenience, accessibility, and trust for consumers and businesses. Shifting consumer preferences towards online shopping, convenience, and personalized experiences have fueled the demand for e-commerce platforms (Tewari and Sareen, 2014). Consumers today expect seamless browsing, personalized recommendations, and hassle-free transactions. Platforms and e-commerce allow businesses to reach a global audience, breaking geographical barriers and expanding market opportunities. With minimal infrastructure requirements, e-commerce enables businesses of all sizes to scale rapidly and cater to a diverse customer base (Schreieck et al., 2016).

Platform development refers to the creation of a digital ecosystem that facilitates interactions and transactions between different participants. Platforms enable businesses to connect with customers, suppliers and partners, driving collaboration, innovation and scalability (Tura et al., 2018). The main techniques involved in platform development include:

Scalable Architecture: Platform developers focus on building a scalable and flexible architecture that can handle increasing user demands. This involves designing modular components, leveraging cloud infrastructure, and implementing distributed systems.

APIs and Integrations: Application Programming Interfaces (APIs) enable platforms to connect with external systems, applications, and data sources. By providing seamless integration capabilities, APIs allow platform users to take advantage of existing technologies and extend functionality.

User-Centered Design: The platform prioritizes user experience using user-centric design principles. This involves conducting user research, creating intuitive interfaces, and personalizing interactions to increase engagement and satisfaction.

Platform and e-commerce design development involves a systematic process to create an effective and user-friendly

digital ecosystem (Morvan et al., 2016; Tura et al., 2018). Here are the key steps involved in platform design development (Gawer, 2015; Morvan et al., 2016; Schreieck et al., 2016):

Define goals and user needs: Begin by defining the goals of the platform and understanding the needs of your target users. Conduct user research, interviews, and surveys to gather insights into user preferences, pain points, and expectations. This will help you align the platform design with user needs.

Create user personas and use cases: Based on the user research, develop user personas that represent the different types of users who will interact with the platform. Identify their characteristics, goals, behaviors, and pain points. Then, create use cases that outline the specific scenarios and tasks users will perform on the platform.

Information architecture and user flow: Design the information architecture, which involves organizing and structuring the content and features of the platform. Define the navigation structure, hierarchies, and categorization of information. Create user flows that outline the step-by-step paths users will take to accomplish their goals on the platform.

Wireframing and prototyping: Start by creating low-fidelity wireframes that represent the layout and structure of the platform. Wireframes focus on the placement of key elements, such as navigation menus, content sections, and interactive components. Use prototyping tools to build interactive prototypes that simulate user interactions and flows.

Visual design: Develop the visual design of the platform, including the colors, typography, icons and overall visual style. Ensure that the design aligns with your brand identity and resonates with the target audience. Pay attention to creating a visually appealing and consistent user interface.

Responsive design and accessibility: Ensure that the platform design is responsive and accessible across different devices and screen sizes. Optimize the user experience for mobile devices, tablets, and desktops. Incorporate accessibility features to accommodate users with disabilities and comply with accessibility guidelines.

Continuous design maintenance: Even after the platform is launched, continue to monitor user feedback and data to make design enhancements and improvements. Stay updated with industry trends and evolving user needs. Implement regular design updates and optimizations to keep the platform fresh and engaging.

By following the experience and well-designed platform and e-commerce that meets users' needs effectively, provides an intuitive user experience, and aligns with family business goals.

3. Research methodology

The research process requires systematic research to inform decision making, validate ideas, and ensure successful outcomes.

Based on previous research findings, engage in idea sessions to generate creative ideas and concepts. Brainstorming, mind mapping, and design thinking techniques can facilitate this process. Develop and refine concepts that meet user needs, align with research insights, and align with project goals.

Create a prototype that represents the design and functionality of the intended online platform. This can include low-fidelity wireframes, interactive mockups, or

even physical prototypes. Test prototypes with user representatives to gather feedback on usability, functionality, and user satisfaction. Iterate the design based on user feedback to improve the final product.

Analyzing research data collected through a case study with a sample of six business families. Respondents in this study were business units from six family businesses used as samples. Interview, observation, and focus group discussion were the methods used to collect data. Interview protocols, observation protocols, and Forum Focus Group Discussion (FFGD) protocols were used as the instruments of the survey. Data analysis was done through thematic analysis. Thereby, identify patterns, themes and insights to inform design decisions and validate assumptions.

The research process carried out are shown in (Table 1).

Table 1. The research process

Research question	Research method	Sample	Respondent	Instrument	Data collection	Data analysis
How does the design platform for e-commerce Indonesian family businesses?	Case study	6 Family Business	Business units from six family businesses used as samples	Interview Protocol Observation Protocol FGD Protocol	Interview Observation Focus group discussion	Thematic analysis

4. Results and Discussion
4.1. Design platform for e-commerce Indonesian family business

A platform is a means used to meet business families with customers, suppliers, or other stakeholders. Online Platforms are useful for exchanging information, trading, or offering services and services. The online platform needs to be designed, to adopt the wishes and needs of the family business. The preparation of the online platform design is carried out with a focus group discussion. Two types of designs were developed, namely general platform designs and detailed platform designs. The general online platform design is done to explain the components that exist in the online platform. The second is a detailed online platform design, which provides a detailed description of the activities carried out on the online platform.

4.1.1. General platform design

Online platforms have been divided into two major parts, namely strategy and marketplace. The strategy is related to the decisions taken to run the online platform, while the marketplace is a design for the transaction process carried out through the online platform.

Strategy

Strategy is the policy direction to operate an online platform. Strategy is a policy that is decided by the family business at the beginning of the development of the online platform. There are five aspects of the strategy that have been decided in the

focus group discussion.

Online Platform owner: Ownership of this online platform is the family business community. This was revealed in a focus group discussion, where one of the quotes from a family business member was "*The owner of the platform is, of course, a family business who has agreed to form a partnership in a strategic alliance*" (Operational Manager, X12, Daughter, Family Business E).

Online Platform name: An identity is required for the built business platform various ideas for the name of the online platform, put forward in the focus group discussion. The following is a statement put forward in the focus group discussion. "*Business platforms must have a name that identifies the platform in market share. The name of the platform that will be used is called Laweyan Hospitality, because our company is located and operates in the Laweyan area of Surakarta and we are engaged in the service industry and trade, it would be appropriate to name it Laweyan Hospitality*" (Hotel Operations manager, X2, non-Family Member, Family Business A). Finally, Laweyan Hospitality was agreed to be the name of the online platform.

Online Platform type: The type of business platform is developed on a website basis. The results of focus group discussion with members of the family business community explain the choice of the website as the type of platform to be developed "*The platform developed is website-based, so that access can be done easily, and its development can meet the aspects of our technology needs*" (General Manager, X9, Brother-in-Law. Family Business C).

Online Value proposition: The value proposition is the added value promised to customers who buy products from the business platform. The value proposition obtained by the customer is the convenience of the customer's journey to Laweyan Surakarta because all the needs needed to travel in Laweyan Surakarta are available on the business platform "*This business platform will provide customer convenience value for traveling in Laweyan Surakarta because all the needs needed for traveling are contained in the business platform.*" (CEO, X8, Son, Family Business C). Another key value defined in this platform is the emotional value, in the form of positive feelings towards the content on the platform, that participants in the business platform do not see the price or value of the product, but satisfaction from emotional/ psychological aspects. This business platform requires every family business in which the seller strives to provide products with excellent services to satisfy all transactions made in the business. The Key-Value platform used in this business platform includes social value, where sellers on this platform are required to present experiences in the lives of buyers.

Key Activity: Key activities are all activities related to business productivity related to a product. Activities carried out on the platform are as a place for buying and selling products and services. The geographic scope that this business platform wants to cover is local (solo and surrounding), Regional (Indonesia), and global (all countries).

Marketplace

The marketplace is a medium for online transactions between family businesses and customers, suppliers, and other stakeholders. The activities carried

out on the platform are as a place for buying and selling products and services. The interaction between Buyers and Sellers is facilitated by the platform as a market, in this context, the platform is often called a two-sided market (Rochet and Tirole, 2003). The scope of the industry involved in the business as a market platform to provide value to customers is vertical and horizontal integration which includes the hospitality, food and beverage, tour and travel, batik, and other services industries. The marketplace model in the online platform can be described (Figure 1).
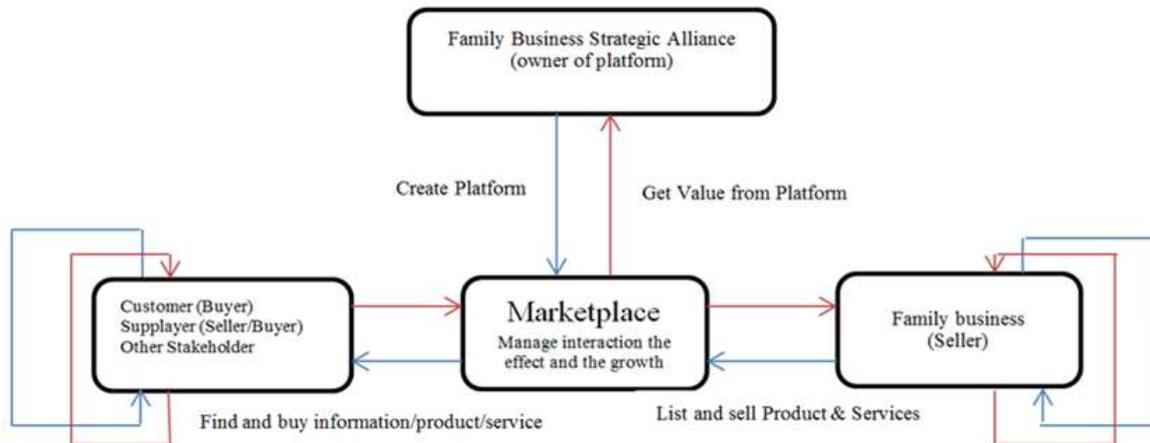
Figure 1. Marketplace Model of Online Platform Design

Transactions carried out in the marketplace include business to business (B2B), customer to business (C2B), customer to customer (C2C). There are several things related to the marketplace which are explained below:

Activity: Activities that can be found in the marketplace are as follows providing data services and community building.

- The platform will provide various data needed by actors in the online platform. The data provided by the marketplace are sales, commissions, and information-related products sold through the marketplace; data related to business platform activity information; information related to businesses, product tutorials, and others possibly utilized by the business platform users; transaction data through online platforms with limited access.

- Community building: The online platform functions as a community building. Forming a community between the family business and customers, suppliers, and other stakeholders. Community formation is an expansion of the community formed between family members. With a large number of community members and the strong commitment of members, loyalty to the products sold in the marketplace is formed.

Actor: The actor is an actor involved in transactions in the marketplace. Actors explain roles in transactions in the marketplace.

- Seller: Seller is a product/ service seller on a business platform. Family Business is the seller in the online platform. A family business that sells products/services through an online

platform. The following is a snippet of the results of the discussion group forum on the roles of the family business in the online platform. "*Family Business who will sell on the business platform…*" (Hotel operational manager, X2, Non-family member, Family Business A). Seller can add/ remove content. The seller accepts the payment is made through the online platform. The business platform will notify the family business that the payment is already made. Products/ services may then be delivered to the customer.

- Customer: Everyone willing to pay in exchange for a product/ service that is sold by a seller on the business platform is called a customer. The snippet of the results of the group discussion forum explains the role of the customer in the online platform. "*Transactions on the business platform are buyers, namely people who are willing to pay to get goods/services sold on the business platform*" (CEO, X8, Son, Family Business C). Customers can use the business platform to search the products/services offered, buy products/ services, and make payment information. Customers can also join the community provided to interact with other community members. Customers will also get various information about products, services, and other promotions.

- Supplier: Suppliers are partners who supply raw materials to the family business. On this business platform, the supplier does not sell their products/services through the business platform. A snippet of the results of the discussion group forum explaining the

supplier's position on the online platform. "*Suppliers also need to be involved as actors in this platform, namely those who distribute goods or raw materials to the family business, but they do not participate as sellers in the business platform*" (Operational Manager, X11, Son, Family Business D). Suppliers can access the information provided on the business platform. Suppliers can join the available community, so they can interact and share information with other community members, through the available platforms.

- Other stakeholders: All elements in the community, whether individuals, groups, or communities who are interested in the various information presented on the business platform. The business platform also provides data and information related to customers, suppliers, and other stakeholders. They may access those data and information. The role of other stakeholders in the online platform sparked one opinion in the focus group discussion "*Other parties who want to know various information presented in the business platform*" (CEO, X14, Daughter, Family Business F). Stakeholders can also join the available communities; they will be able to interact and share information with other community members through the available platforms.

4.1.2. Specific platform design

A detailed design is carried out to show a detailed description of the transaction process through the online platform according to the wishes of the family business. The following is a detailed design of the online platform (Figure 2).
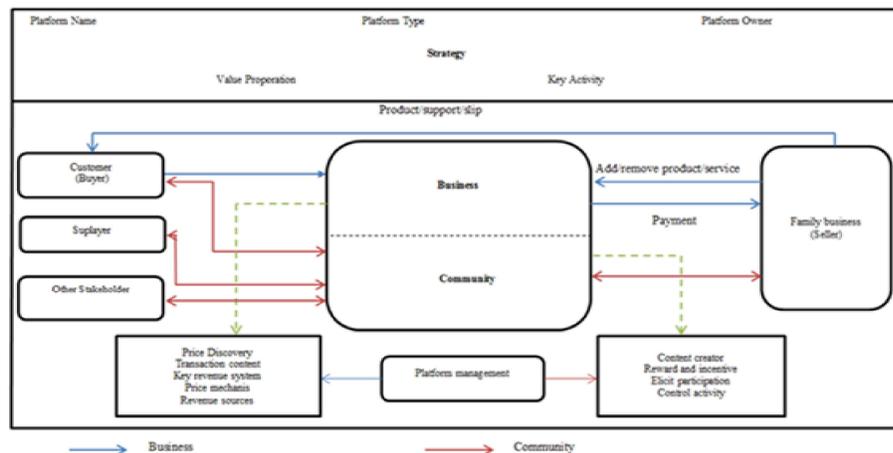
Figure 2. Design platform for e-commerce Indonesian family business

Price Discovery: The prices for products/ services sold through platform website are considered by sellers. The seller, in this case, the family business, can update prices as desired by the company. Snippets of opinions in the discussion group forum explain "*From the family business as a seller, we will determine the price to be sold through the business web platform, up to date prices will be made according to the needs directly through the platform.*" (Owner, X11, Father, Family Business E). The platform will not be involved in determining the selling price of the product/ service, the platform will only monitor the price determination made by the seller.

Transaction content: The transactions were possibly made either online or offline since some parts of family business processes were considered as the traditional ones in which the business processes are still using the offline system. Some product sales were also made in physical forms. One of the snippets of opinion in the discussion group forum explains "*Because in the business transformation process, the transaction process that occurs on the platform still allows some activities in offline transactions, even though most of*

the business processes that occur through the platform are already in online mode." (Restaurant Manager, X6, Brother-in-law, Family Business B).

Key revenue system: The key revenue system is used within this business platform is the commissions obtained from the sold products/ services. One of the snippets in the focus group discussion explains the presentation obtained by the online platform "*The advantage of the platform is the commission that is given on the sale of goods/ services, the seller gives 5%-10% commission to the platform for the goods sold*" (General Manager, X9, Brother-in-Law, Family Business C).

Price mechanism: The considered pricing is a fixed price system while the family business as the seller may change the prices as required. This happens because the family business platform does not change prices and only gets a commission from the seller. One snippet from the focus group discussion explains the price mechanism "*The price sold in the family business platform is a fixed price because the platform management will receive a commission from the sale*" (CEO, X14, Daughter, Family Business F).

Revenue source: The revenue source is only obtained from the products and services sales. One snippet of the results in the discussion group forum explained that the revenue source from the online platform only comes from commissions on product and service sales "*Revenue earned by the business platform only comes from the sale of products and services sold through the platform*." (CEO, X8, Son, Family Business C).

Content Creator: Content creation is not only in the form of narrations, photos, and videos but also in creating dialogs for audiences, including customers, suppliers, and stakeholders. One of the snippets of opinion in the discussion group explains the importance of content creators in online platforms. "*Content is needed to make the online platform look attractive. Information can be delivered attractively and correctly*" (Operational Manager, X10, Son, Family Business D).

Reward and incentive: Set up rewards and incentives given to community members in the form of points, discounts, gifts, free shipping. One of the snippets of opinion in the focus group discussion explains rewards and incentives for online platform users "*To appreciate community members, it is necessary to give rewards and incentives, for example to customers, they can be given discounts or points or prizes*" (Operation Manager, X15, Brother-in-Law, Family Business F).

Elicit participation: Activities to get community participants in community. This is considered important as a snapshot of the results of focus group discussions because the number of visitors visiting the online platform will further increase the potential for visitors to become members of the community "*The division that is responsible for developing the community by acquiring new community participants*" (General Manager, X9, Brother-in-Law, Family Business C).

Control activity: The control activity develops the framework as well as directs the community in the business platform according to the expected goals. Activities to mediate problems that arise in the community and ensure enforcement of roles that have been agreed upon. The results of the discussion group forum explain the importance of activity control as in the following opinion excerpt "*Activities develop a framework and direct the interaction of community members to suit the objectives of the community. There is a section in community management on the business platform, which monitors the compliance with assigned roles as well as mediating when problems occur between community members*." (Operational Manager, X12, Daughter, Family Business E).

Platform Management: The owner of the platform in this case is a family business that has joined the Strategic Alliance appointing a group of people to act in operating the family business platform, which is then called the management platform. The platform manager becomes something important to maintain the viability of the online platform as excerpts from the results of the following discussion group forum "*The family business platform will be managed by a group of professional people who carry out their functions related to business and community development through the platform*" (Operational Manager, X10, Son, Family Business D).

The platform model was agreed upon based on the interviews and observations conducted, as well as the results of the focus

group discussions. The platform model is divided into three parts: strategy, business, and community. This is consistent with previous research that stated that the platform strategy consists of the platform name, platform type, platform owner, value proportion, and activity (Piezunka, 2011; Täuscher and Laudien, 2017). Customers, suppliers, other stakeholders, as well as family businesses and platform managers, are the actors on this platform in the business and community sections. (Kim and Min, 2019). The management platform will oversee various business and community-related activities. Process discovery, transaction, handle payment, key revenue system, price mechanism, and revenue sources are some of the activities carried out in this section (Piezunka, 2011; Täuscher and Laudien, 2017). Management will also organize content creators, rewards and incentives, elicit participation, and content activities in the community section (Giessmann and Legner, 2013; Kim and Min, 2019).

5. Conclusion

Platforms and e-commerce have emerged as powerful tools for family businesses, enabling them to expand their market reach, increase brand exposure, operate more efficiently, and provide a seamless customer experience. While these advantages are undeniable, challenges such as technological barriers, operational complexities, competition, and data security must be addressed for successful adoption. With careful design planning, family businesses can leverage platforms and e-commerce to thrive in the digital era.

The limitation of this research shows that this research is only carried out on family businesses with different problems from other types of companies, so the platform for e-commerce model is only appropriate for family businesses with the scope of small and medium enterprises. The developed model still has weaknesses, specifically in the customer handling and payment processes, so additional research can be conducted to improve it. As feedback for future research, there are some suggestions related to the weaknesses found in this research. The model needs to be applied to different types of companies and industries; thus, the research result may be generalized for all company types. More attentions are greatly required to the interactions between researcher and respondents. This emphasizes the interview guide where interview protocol allows individual questions and interaction style adapted to individual. Designing and flexibly adapting interaction process are deemed to be the researcher's high level qualitative skill that future researchers need to develop and master. Research design is optimized to disclose maximum data diversity, and then explore further in groups and areas where the most interesting ideas arise.

Conflict of Interest

The authors declare no conflict of interest.

Reference

Aragón, P., Gómez, V., and Kaltenbrunner, A. (2017). To Thread or Not to Thread : The Impact of Conversation Threading on Online Discussion. *International Conference on Web and Social Media*: 12-21.

Berrone. P., Cruz, C. and Gomez-Mejia, L. R. (2012). Socioemotional Wealth in Family Firms : Theoretical Dimensions, Assessment Approaches, and Agenda

for Future Research. *Family Business Review*, *25(3)*: 258-279. https://doi.org/10.1177/0894486511435355

Filho, W., Azul, A. M., Wall, T., Vasconcelos, C. R. P., Salvia, A. L., do Paço, A., Shulla, K., Levesque, V., Doni, F., Alvarez-Castañón, L., Maclean, C., Avila, L. V., Damke, L. I., Castro, P., Azeiteiro, U. M., Fritzen, B., Ferreira, P., and Frankenberger, F. (2021). COVID-19: the impact of a global crisis on sustainable development research. *Sustainability Science*, *16*(1): 85-99. https://doi.org/10.1007/s11625-020-00866-y

Garcez, M. P., and Sbragia, R. (2013). The selection of partners in technological alliances projects. *Journal of Technology Management and Innovation*, *8*(Special Issue ALTEC): 219-232. https://doi.org/10.4067/s0718-27242013000300049

Gawer, A. (2015). *What Drives Shifts in Platform Boundaries : An Organizational Perspective*. *Academy of Management Proceeding*, *2015*(1). https://doi.org/10.5465/ambpp.2015.13765abstract

Giessmann, A., and Legner, C. (2013). Designing business models for Platform as a Service: Towards a design theory. *International Conference on Information Systems (ICIS 2013): Reshaping Society Through Information Systems Design*,: 1034-1043.

González. A. C. and Pérez-Uribe, M. A. (2021). Family business resilience under the COVID-19: A comparative study in the furniture industry in the United States of America and Colombia. *Estudios Gerenciales*, *37*(158): 138-152. https://doi.org/10.18046/j.estger.2021.158.4423

Hidalgo, J. F. O. and Salazar, A. L. (2016). Family, business, and ownership: influence of family businesses on corporate social responsibility. *European Journal of Business and Social Sciences*, *5*(06): 17-35.

Ho, G. H. (2017). *The adoption of e-commerce in small and medium-sized enterprises in Vietnam*. Thesis, Turku University of Applied Sciences

Jayakumar, T., and De Massis, A. (2020). A Shock to the System: How Family Businesses Can Survive Covid-19. *Entrepreneur and Innovation Exchange*. https://doi.org/10.32617/532-5ef363ecefe0c

Kim, J., and Min, J. (2019). Supplier, tailor, and facilitator: Typology of platform business models. *Journal of Open Innovation: Technology, Market, and Complexity*, *5*(3). https://doi.org/10.3390/joitmc5030057

Looi, H. C. (2005). E-Commerce Adoption in Brunei Darussalam : A Quantitative Analysis Of Factor Influencing ITS Adoption. *Communication of The Association for Information System*, *15*: 61-81. https://doi.org/10.17705/1CAIS.01503

Lu, H. K., Lin, P. C., and Li, C. A. (2016). A Study of Behavior Intention of Runners' Virtual Community The Case of Marathon's World Website. *Proceedings of the 2016 International*

Conference on Communications, Information Management and Network Security: 97-102. https://doi.org/10.2991/cimns-16.2016.25

McAdam, M., Clinton, E., Gamble, J. R., and Gartner, W. (2019). The Family Business as a Community of Practice. *Academy of Management Annual Meeting Proceeding.* https://doi.org/10.5465/AMBPP.2019.14915abstract

Morvan, L., Hintermann, F., and Vazirani, M. (2016). Five Ways To Win with digital Platform. *Accenture*: 1-33. https://www.accenture.com/us-en/_acnmedia/PDF-29/Accenture-Five-Ways-To-Win-With-Digital-Platforms-Full-Report.PDF

Nordqvist, M., Melin. L., Waldkirch, M. and Kumeto, G. (2015). *Theoretical Perspectives On Family Businesses*. Edward Elgar. https://doi.org/10.4337/978178347966 5

Piezunka, H. (2011). Technological platforms : An assessment of the primary types of technological platforms, their strategic issues and their linkages to organizational theory. *Journal Fur Betriebswirtschaft*, *61*(2-3): 179-226. https://doi.org/10.1007/s11301-011-0078-x

Rochet, J.-C., and Tirole, J. (2003). Platform Competition in Two-Sided Markets. *Journal of the European Economic Association*, *1*(4): 990-1029. https://doi.org/10.1162/154247603322 493212

Rume, T., and Islam, S. M. D. U. (2020). Environmental effects of COVID-19

pandemic and potential strategies of sustainability. *Heliyon*, *6*(9): e04965. https://doi.org/10.1016/j.heliyon.2020. e04965

Saleem, I. (2021). A Strategy for Family Business Survival during the Crisis in Gulf Business Environment. *Academia Letters*. https://doi.org/10.20935/al886

Schreieck, M., Wiesche, M., and Krcmar, H. (2016). Design and governance of platform ecosystems - Key concepts and issues for future research. İstanbul, Turkey, *24ᵗʰ European Conference on Information Systems, ECIS 2016*.

Sharma, P., Chrisman, J. J., and Chua, J. H. (1997). Strategic Management of the Family Business : Past Research and Future Challenges. *Family Business Review,* *10*(1). https://doi.org/10.1111/j.1741-6248.1997.00001.x

Siakas, K., Naaranoja, M., Vlachakis, S., and Siakas, E. (2014). Family Businesses in the New Economy: How to Survive and Develop in Times of Financial Crisis. *Procedia Economics and Finance*, *9*(14): 331-341. https://doi.org/10.1016/S2212-5671(14)00034-3

Susilawati, S., Falefi, R., and Purwoko, A. (2020). Impact of COVID-19's Pandemic on the Economy of Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, *3*(2): 1147-1156. https://doi.org/10.33258/birci.v3i2.954

Täuscher, K., and Laudien, S. M. (2017). Understanding Platform Business Models : A Mixed Methods Study of Marketplaces. *European Management Journal,* *36*(3): 319-329.

https://doi.org/10.1016/j.emj.2017.06.005

Tewari, A., and Sareen, P. (2014). *Platform Business Models and Mobile Ecosystem*. *University of Koblenz*. https://doi.org/10.13140/2.1.1371.9367

Tura, N., Kutvonen, A., and Ritala, P. (2018). Platform design framework: conceptualisation and application. *Technology Analysis and Strategic Management*, *30*(8): 881-894. https://doi.org/10.1080/09537325.2017.1390220

Wahjono, S. I., Marina, A., Fam, S.-F. and Rasulong, I. (2021). Crowdfunding as a Business Innovation to Finance SMEs for Sustainable Development Goals to Anticipating the Impact of Corona Virus Pandemic Disease (Covid-19) in Indonesia. *Proceedings of the 4th International Conference on Sustainable Innovation 2020-Accounting and Management (ICoSIAMS 2020)*, *Advances in Economics, Business and Management Research*, *176*: 315-323. https://doi.org/10.2991/aer.k.210121.044

Wijanarka, T., Kadek, N., and Anggun, D. (2022). *The Role of SMEs in Indonesian E-Commerce to the Indonesian Economy during the Covid-19 Pandemic Introduc on*, *7*(1): 33-48.

Zaini, S. M., Noruddin, N. A. A., Yusof, M., and Nor, L. M. (2022). Fostering Family Business Sustainability Strategies During Covid-19 Pandemic. In H. H. Kamaruddin, T. D. N. M. Kamaruddin, T. D. N. S. Yaacob, M. A. M. Kamal, and K. F. Ne'matullah (Eds.), *Reimagining Resilient Sustainability: An Integrated Effort in Research, Practices and Education*. *European Proceedings of Multidisciplinary Sciences, vol 3*: 731-750. https://doi.org/10.15405/epms.2022.10.69