Journal of Artificial Intelligence and Engineering Applications

Website: https://ioinformatic.org/

15th October 2025. Vol. 5. No. 1; e-ISSN: 2808-4519

Designing the Interface and Features of the Web-Based "Flowernest" Marketplace Platform to Support the Digitalisation of MSME Florists

Prasasti Karunia F. A[1], Maesy Azzika Anansa[2], Laili Magfiroh Novia Putri Mahmud Hasan[3] , Dea Indah Lestari[4]

[1,2,3,4]*Universitas Pembangunan Nasional "Veteran" Jawa Timur*
prasasti.karunia.fasilkom@upnjatim.ac.id[1*], 23082010001@student.upnjatim.ac.id[2], 23082010017@student.upnjatim.ac.id[3], 23082010017@student.upnjatim.ac.id[4]

Abstract

FlowerNest is an innovative digital marketplace platform designed to address key challenges in the florist industry, especially for micro, small and medium enterprises (MSME) and customers. By integrating a digital ordering system, seller dashboard, delivery tracking, and product personalization features, FlowerNest aims to improve operational efficiency and customer satisfaction. In-depth analysis using the Eisenhower Matrix, MoSCow Framework, and User Journey Map supported the development of a system that is responsive to market needs. Validation through prototypes and usability testing demonstrated functional feasibility and positive user acceptance. Focusing on ease of use, MSME support, and an enhanced online flower shopping experience, FlowerNest has the potential to be a pioneer in the Indonesian florist market. The implementation will be carried out in stages, starting with a Minimum Viable Product (MVP) and expanding with advanced features such as AI-based recommendations and AR previews, supported by digital marketing campaigns and strategic partnerships to achieve sustainable growth.

Keywords: *E-Commerce, Florist, Marketplace, MSME Digitalization, Website*

1. Introduction

In recent years, the florist business has experienced significant growth in line with the increasing public awareness of the importance of emotional expression through giving flowers in various events, such as birthdays, weddings, inaugurations, and expressions of condolences [1]. Flowers are not only a symbol of beauty, but also a means of deep emotional communication, making them even more relevant amidst modern social dynamics. In today's digital era, consumers demand convenience, speed, and flexibility in every purchase process, including online flower purchases [2]. However, behind this growth, there are still various challenges faced by both consumers and florist businesses. Some of these include difficulties in finding a florist that matches customer preferences, limited customization services, and poorly structured ordering and delivery processes [3]. Meanwhile, many local florists still rely on traditional marketing strategies that are less able to reach a wider and more competitive market. This suggests the need for a digital solution that not only efficiently connects consumers with flower providers, but also empowers local florists through an integrated ordering and marketing system. FlowerNets is a digital marketplace platform that aims to bridge the gap between local florists and consumers through a more sophisticated, faster and personalized service. This business model design focuses on how FlowerNets can be a strategic solution in overcoming various obstacles in the florist industry while increasing the competitiveness of local businesses in the midst of technological developments and changes in consumer behavior. Thus, this design is expected to produce a digital business model that is relevant, applicable, and has a real impact on the local florist ecosystem.

2. Methodology

This research uses a prototyping approach focused on the design stages of the florist marketplace system [4]. The design process is not only based on identifying user needs, but also reinforced by the application of Minimum Viable Product (MVP) to determine the most essential core features. In addition, a SWOT analysis was conducted to evaluate the strengths, weaknesses, opportunities, and threats of the system, so as to provide a strategic overview in the context of local florist digital business development. The main objective of the

FlowerNest website design is to present a marketplace platform that can be utilized by florist MSME as a medium for promotion, sales, and digital business management. The stages in the prototyping method are described as follows:

Fig. 1: Design stages

Stages of Prototyping Method

1. Needs Analysis

Table 1: Tools and Materials

No	Component	Description
1	Figma	To design the user interface and interactive prototype
2	Draw.io	To create flowcharts and systems flowchart
3	Google Form (optional)	For an initial survey of user needs if required
4	Maze	For user testing platform

This initial stage aims to identify the main features required in the florist marketplace application. The techniques used include a literature study of similar platforms such as social media, marketplaces and websites to understand common features and digital interaction patterns, as well as light observation of local florist business practices [5]. In addition, an analysis of user preferences in purchasing flowers online was conducted. To strengthen feature selection, a Minimum Viable Product (MVP) approach was applied with a focus on developing core features so that the system can function fundamentally and efficiently [6]. The minimum features developed include user registration and login, catalog and product details, store and admin dashboards, shopping cart, checkout process, as well as simple delivery integration without real-time tracking. Business processes can generally be divided into 3 groups:

2. Interface and Navigation Design

The user interface (UI) and user experience (UX) design process was conducted using Figma. Visual elements designed include the main page, product list, flower detail page, shopping cart, and checkout. Navigation between pages was organized through wireflows and clickable prototypes, which visually and logically describe user interaction scenarios. The design refers to a user-centered design approach that emphasizes ease of use, consistency of visual elements, and user comfort. The design also considers the results of the SWOT analysis, to understand FlowerNest's position in the digital florist ecosystem.

3. Preparation of Design Documentation

Technical and visual documentation was prepared to support the gradual and structured system implementation process. This documentation includes a navigation flowchart that explains the flow of movement between pages in the application, making it easier to understand the logic of user interaction [7]. In addition, a page structure schema is included that describes the layout of UI components and the relationship between elements, to provide a clear visual representation of the interface structure. Equally important, the documentation also contains a description of the function of each page, which explains the purpose and workings of each view, and serves as a technical guideline for developers in the further implementation process.

4. Internal Evaluation of Design

Evaluation is carried out internally by the development team or researchers, as well as externally through direct trials using the Maze platform to several users who represent the target audience, such as florist businesses and general website users [8]. The purpose of this evaluation is to assess the compatibility of the prototype with the needs that have been designed, including the completeness of basic features, clarity of appearance, ease of navigation, and comfort of use. Feedback from users through the Maze test is used to identify aspects that need to be improved, both in terms of visual design and interaction flow [9]. The results of this evaluation became the basis for making improvements to the prototype before it was considered final for the design stage. By involving users directly, this evaluation reinforces the user-centered design approach that underpins the development of the FlowerNest system [10].

5. Research Output

The output of this research is a prototype of the FlowerNest application developed with the Minimum Viable Product (MVP) approach using Figma. This prototype represents the main functions of the florist marketplace system and is supported by SWOT analysis as the basis for the development strategy. Other results include a functional requirements analysis document based on observation and literature, navigation flowchart and user flow, page structure scheme (UI layout), UX description and navigation prototype. All of these results are

an initial representation of the system that is still in the design stage, and can be used as an initial reference for the development team in preparing for the next technical implementation stage.

3. Results and Discussion

3.1. Problem Prioritization and Innovative Solutions

In identifying and prioritizing problems, Flowernets used two main frameworks: Eisenhower Matrix and MoSCow Framework. The Eisenhower Matrix divides tasks by urgency and importance, categorizing key issues into four classifications. The issues of "difficulty in finding a flower shop that suits users' needs" and "untimely delivery" fall into the "Urgent & Important" category (Do First). Meanwhile, "limitations in digital marketing" is considered "Not Urgent & Not Important" (Eliminate or Delete). In line with this, the MoSCow Framework that prioritizes needs based on 'Must Have', 'Should Have', 'Could Have', and 'Won't Have' also underlines the same issue as a 'Must Have'. The Five Whys analysis showed the main root cause of the problem to be the lack of an integrated system that links ordering, product availability, and delivery services in real-time as most florists still rely on manual systems due to budget constraints and technological understanding.

3.2. Business Model and Competitive Analysis

FlowerNest's Business Model Canvas (BMC) describes nine key elements. Customer segments include individuals for various events and companies that require regular floral decorations. Key value propositions include a marketplace that connects local florists, an AI recommendation system, AR technology, real-time delivery tracking, and flexible payment options. Distribution channels include websites, mobile apps, and social media. Customer relationships are built through AI chatbots, shopping personalization, and loyalty programs. Revenue sources come from transaction commissions, premium store subscription fees, advertising, and data analytics sales. FlowerNest's SWOT analysis revealed strengths such as a focus on MSME florists and a full suite of digital services. Weaknesses include the lack of a website for MSME florists and reliance on partners. The big opportunity lies in the low digitization of MSME florists and the small flower marketplace in Indonesia. Threats come from large competitors who already have their own websites and the resistance of MSMEs that are not ready to go digital.

3.3. Product Objectives and Metrics

FlowerNest's main objective (OKR) is to make it easy for customers to find and select flower shops through an integrated location search system. Its performance targets include a 30% increase in the number of monthly active users in six months, an 85% customer satisfaction rate, and a 50% increase in the number of registered flower shops in one year. AARRR (Acquisition, Activation, Retention, Revenue, Referral) metrics are used to track the user journey. For example, in the acquisition stage, it is measured how many new users visit the website. The retention stage measures how many users return to use the platform after the first activity.

3.4. User and market research

User research uses User Persona to understand the characteristics of customers (individuals looking for flowers for various events) and florist owners who want to expand their market through digitization. Customer personas such as Putri Mahmud H. (22 years old) seek ease and speed of transactions, while florists such as Aristawidya Salsabila (20 years old) and Oktavia Rahmadani (20 years old) need an efficient platform to manage stock and orders. Market condition analysis shows positive growth of the florist industry in Indonesia, driven by the increasing use of e-commerce. FlowerNest's market segmentation includes demographic (male/female 20-40 years old, living in big cities East Java), psychographic (likes to celebrate special moments, active on social media), and behavioral (used to online shopping, sensitive to reviews). The main target market is individual customers who actively shop online (especially 18-28 years old) and local florist owners (MSMEs) in East Java. Surveys show that 85% of customers like fast and practical services, while 90% of florists struggle to reach new customers online.

3.5. Needs Gathering and Testing Concept

Customer Journey Map (CJM) was created for customers, sellers and florist owners. All three go through the five main stages of Awareness, Consideration, Decision, Service and Loyalty but with different perspectives and needs. Customers seek convenience and trust in buying flowers, florists as sellers focus on the process of joining and managing the shop, while florist owners emphasize service quality and customer satisfaction. The User Flow Diagram describes the user flow (registration, login, product selection, checkout, payment, delivery) and the admin flow (management of users, stores, orders).

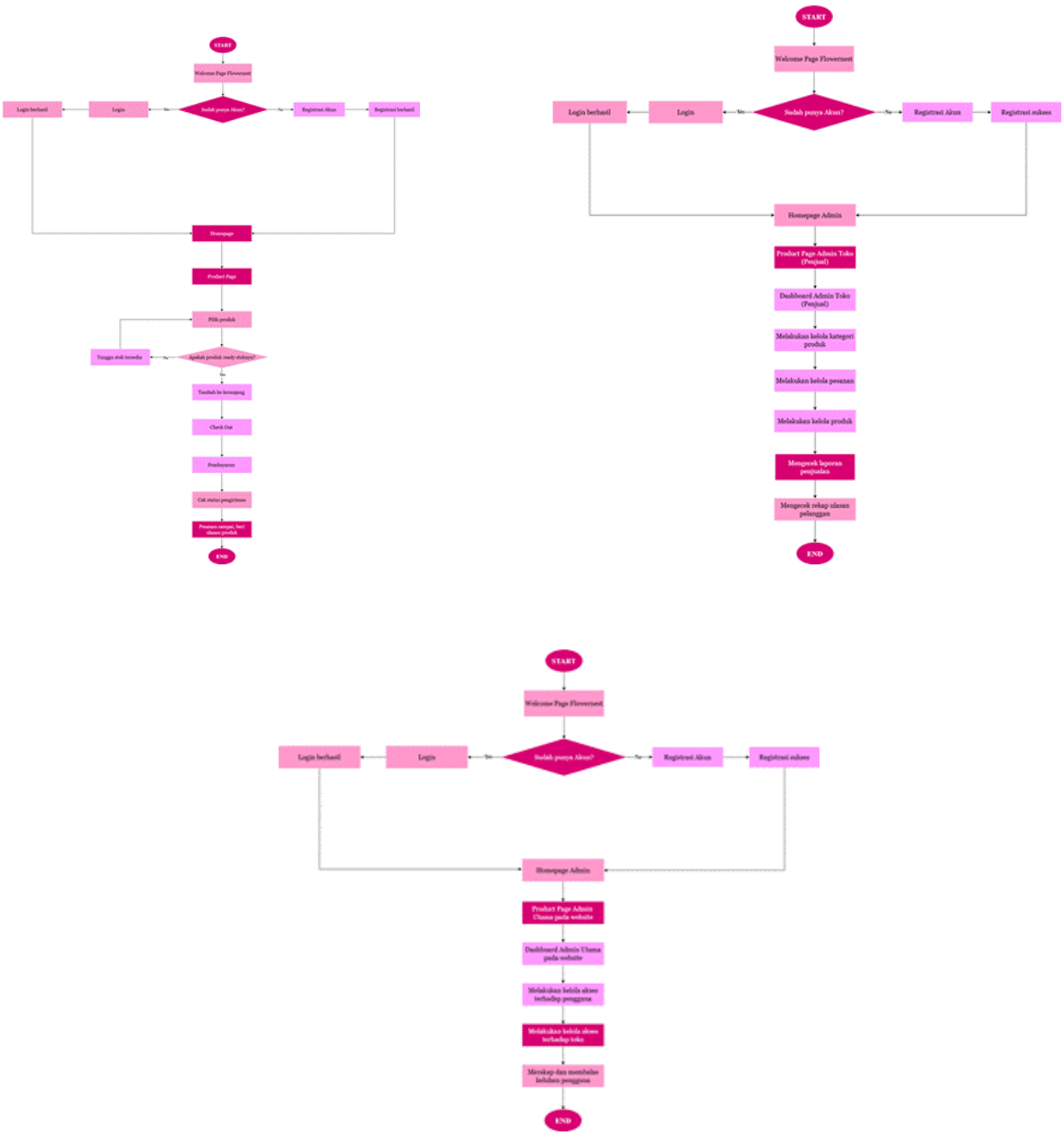


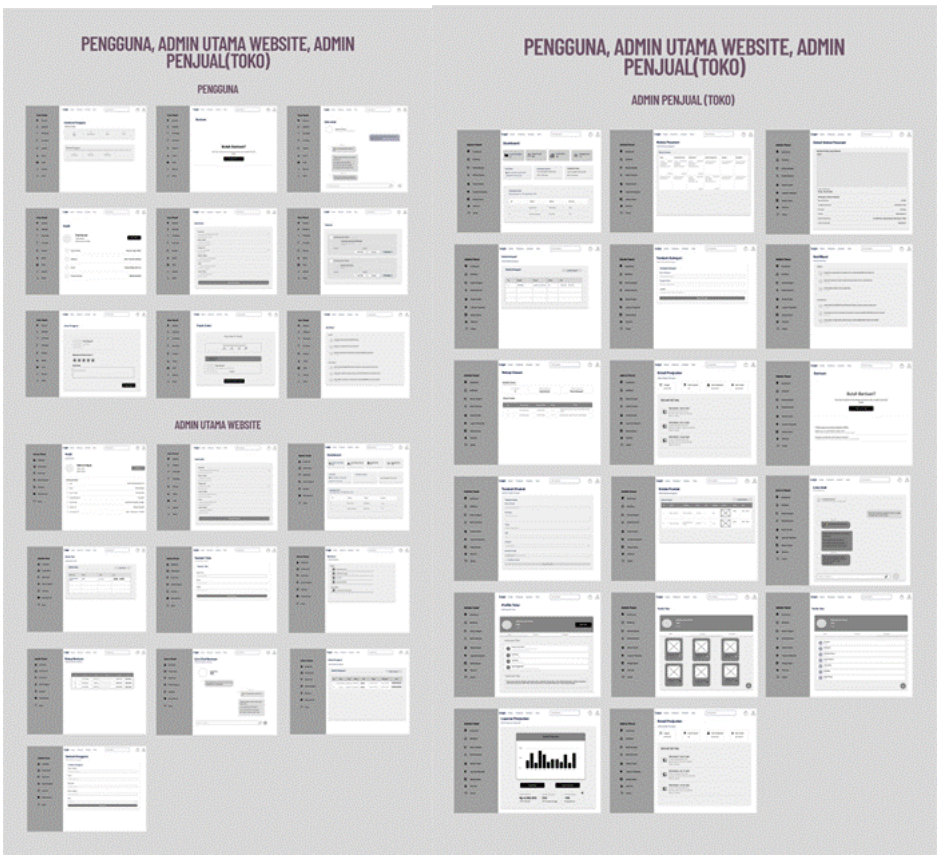
Fig 2. User flow

3.6. Needs Gathering and Testing Concept

FlowerNets' long-term product vision is to be the leading online florist marketplace in Indonesia that supports MSMEs and connects local florists with customers in a fast, personalized and reliable way. Key initiatives include website MVP development, user-friendly UI/UX design, florist shop management system, automated payment integration, and promotion program. Core features developed include user registration and login system, product catalog page, shopping cart, and basic checkout process as part of the MVP. The responsive and intuitive UI/UX design ensures convenient access across various devices. To support sellers, a florist dashboard is provided that allows management of products, stock and order history. Product delivery is directly connected to couriers such as GoSend or LalaMove, complete with order tracking features. In addition, there is a promotion and discount system, event and workshop features, as well as SEO optimization and digital content to increase platform visibility. Additional support includes AI-based product recommendations, florist community forum, flower care tips articles. Flowernets' Minimum Viable Product (MVP) focuses on core features such as user registration & login, product pages, shopping cart & checkout, shipping, and main seller & admin dashboards. These features were chosen because they are essential to the basic functionality of the marketplace and provide immediate value to users. MVP feature prioritization was determined using RICE scores, with "User Registration & Login" having the highest score (450), followed by "Shopping Cart & Checkout" (255).

3.7. Prototyping and Usability Testing

Prototyping was done from low fidelity (interface sketches) to high fidelity (interactive prototypes) which included key MVP features. The results of user testing using the Maze platform show that 57% of respondents have used a florist marketplace website. Goal Flow 1 (user flow) and Goal Flow 2 (admin flow) testing achieved 100% success rate with no drop-off, indicating an easy-to-understand design. However, there are some suggestions for visual improvements such as the use of softer colors and neater icon arrangement. A/B testing was conducted to compare the icon design and filter button color. Variant B, with wider icon spacing, was preferred by users and resulted in faster task completion time, confirming the importance of visual details in user experience.



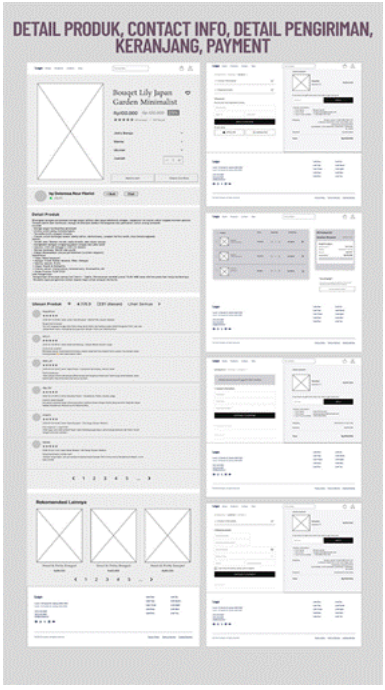


Fig 3. Low fidelity

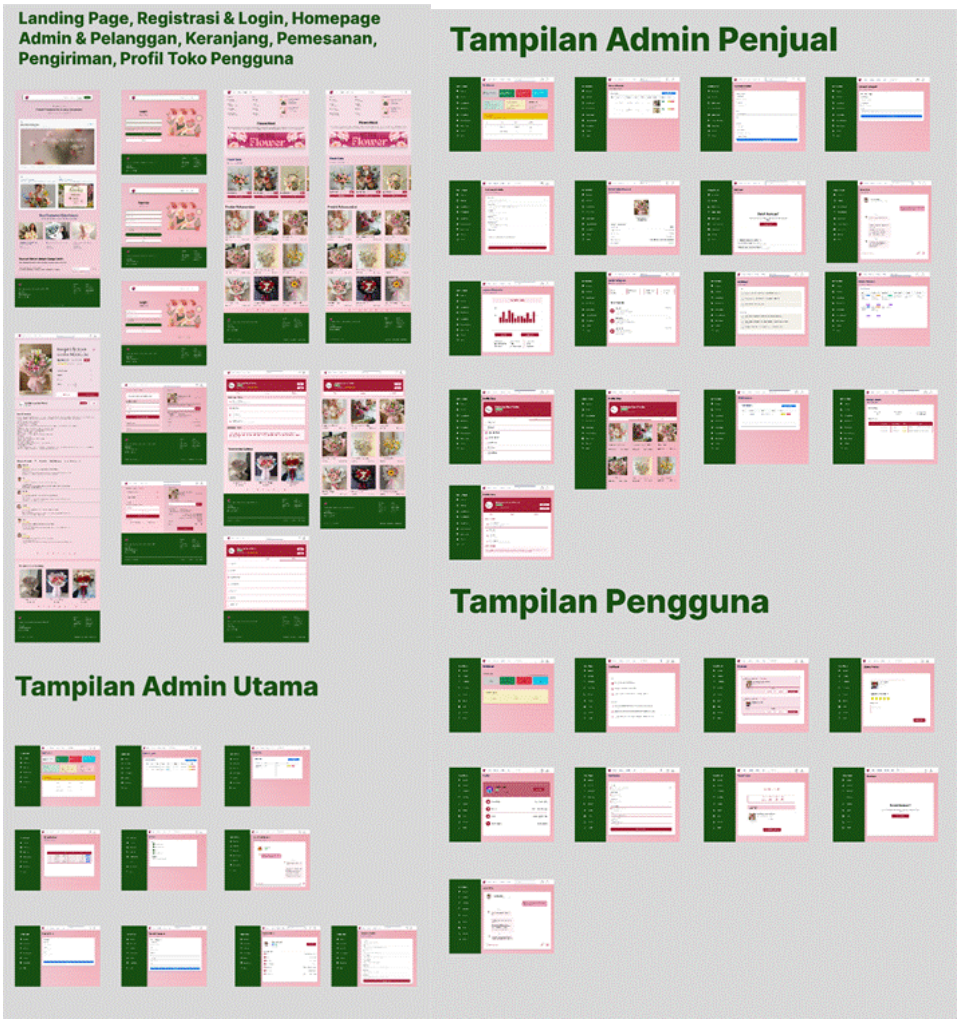


Fig 4. High fidelity

3.8. Go-To-Market (GTM) Strategy

FlowerNest's GTM strategy is based on product validation results. Market targeting is focused on individual customers (20-40 years old, active on social media) and local florist owners (MSMEs in East Java). Communication will be visual-friendly and solution-based, with key messages such as "Selling flowers is easier, faster, and wider with a digital platform". The pricing strategy for new florists is 0% commission for the first 50 transactions, then 5% per transaction, and to 4% for top sellers. For buyers, cashback and free shipping are offered on the first order. Initial KPIs include a target of at least 30 active florists and 100 registered users within 2-4 weeks, and 25 successful transactions within 1 month. Marketing will be done through social media (Instagram, Facebook, TikTok) and collaboration with local florist communities.

4. Conclusion

The FlowerNest marketplace application design successfully presents an innovative digital solution to overcome the challenges of the florist industry, especially for MSME players and consumers in Indonesia. Through a prototyping approach and Minimum Viable Product (MVP) implementation, FlowerNest was able to design core features such as user registration, product catalog, seller dashboard, checkout process, and simple delivery that have been validated through usability testing, with the results showing positive reception in terms of ease of use and navigational effectiveness. The main advantages of this application lie in the focus on empowering local florists, the application of user-centered design, and the support of strategic analysis such as Eisenhower Matrix, MoSCoW Framework, and SWOT. However, limitations such as the absence of real-time tracking features and the low level of brand awareness indicate the need for further development. Therefore, further development of FlowerNest is recommended to include the integration of features such as real-time delivery tracking, AI-based product recommendations, and product previews using AR technology to improve user experience. In addition, an aggressive and collaborative digital marketing strategy with the local florist community needs to be implemented to increase the visibility of the platform, as well as digital education for MSME players to be better equipped to utilize technology. Regular system evaluation and improvement based on user feedback is also key to keeping FlowerNest relevant, competitive and delivering real impact in supporting the digital transformation of the florist sector in Indonesia.

Acknowledgement

The authors would like to express their sincere gratitude to Prasasti Karunia F. A., S.Kom., M.Kom., M.IM, academic supervisor of the E-Business course at the Information Systems Study Program, UPN "Veteran" Jawa Timur, for the valuable guidance and input that enabled us to publish our final project assignment in this journal.

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