

Android-Based Selling Point and Animal Care Information System (Vet Clinic) In A Company Operating in The Field of Technology Services and Pet Care and Basic Needs in Cianjur Regency

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Abstract

The prior technology allowed clients to view only available products, without providing functionality for direct payments and service orders through the application. Users were limited to browsing a catalog of products, such as food, accessories, and pet pharmaceuticals. However, they were required to visit the store in person to acquire items or request services such as grooming, health assessments, and pet boarding. This constraint rendered the transaction process inefficient and curtailed consumer convenience. The absence of online payment options restricted clients' flexibility in selecting payment methods that met their preferences, such as bank transfers or cash-on-delivery (COD).

This research develops an information system that facilitates direct ordering and payment through the application, thereby overcoming these limitations. These new capabilities enable users to effortlessly order services such as grooming, pet boarding, or health assessments, in addition to acquiring necessary items. The application accommodates various payment options, including bank transfers and cash on delivery, providing considerable flexibility for consumers. This application is developed using the Flutter framework for the frontend, ensuring a responsive and visually appealing user experience, and CodeIgniter for the backend, which manages server functionality and data handling. Through these changes, a technological services and vital pet care firm in Cianjur aims to attract additional customers, enhance its sales potential, improve customer satisfaction, and expand its market share in Cianjur and surrounding regions.

Keywords: *Selling Point, Android, Flutter*

Introduction

The worldwide e-commerce market analysis from eCBD forecasts a 10.4% growth in the global e-commerce market for 2024. Indonesia is anticipated to experience the most significant e-commerce growth globally, at 30.5%, which is about three times the worldwide average increase for that year. Given this substantial potential, Indonesia has the capacity to improve online purchasing and selling transactions, referred to as electronic commerce or e-commerce. This approach can be executed across multiple platforms, including websites, online advertisements, social media, and mobile applications.

Online ordering allows companies to promote their products or services to a broader audience while reducing advertising expenses. (Hanif et al., 2024; Rohmawati & Ramadhani, 2020) Online shopping facilitates the acquisition of desired things for purchasers, enabling orders to be placed at any time and from any location with internet access, thus eliminating the need to visit a physical store. Further benefits include the simplicity of product searches, identification of optimal pricing, direct shipping, and diverse payment options such as cash on delivery (COD) and bank transfers. (Abdulghani et al., 2021; Darmayadi & Izmazatnika, 2020)

Selling Point Concept

The verb "sell" denotes "to transfer goods or provide services to another in exchange for monetary compensation; to dispose of to a buyer for a price." Simultaneously, "selling" serves as the present participle of "sell" and also operates as a gerund (a word generated from a verb), which translates to "penjualan" in Indonesian. Selling is the transactional process involving an exchange between a seller and a customer via authorized payment methods (Elianti, N. M. D., Githa, D. P., & Susila, 2023). Junanda & Mardhiyyah (2025) defines sales as the monetary exchange for items over a specified duration, encompassing a clearly articulated service plan.

Sales is a procedure aimed at satisfying the requirements of both sellers and purchasers through the exchange of information and interests. The notion entails endeavors to persuade consumers to acquire the given products or services. Consequently, sales activities are conducted to ensure

consumer happiness and attain profitability for the organization (Pramanda, 2023; Rao, S., Triase, T., & Alda, 2024). Consequently, any product must possess distinguishing traits that set it apart from competitors to augment its marketability.

A selling point denotes a quality or trait of a product or service deemed appealing or significant to consumers, potentially motivating them to complete a purchase. Various strategies that may enhance selling points encompass:

A selling point refers to a quality or trait of a product or service that is considered appealing or significant to consumers, potentially motivating them to make a purchase. Various strategies can enhance these selling points, starting with the Unique Selling Proposition (USP), a concept developed by Rosser Reeves. The USP highlights the distinctive characteristics of a product or service that differentiate it from competitors, encompassing unique qualities, advantages, and values that cannot easily be replicated. This makes the USP essential in today's competitive landscape (Padang, 2023; Syafariani, R. F., & Hayati, 2024). However, the USP method has limitations; while it can effectively emphasize a product's distinctiveness at launch, competing items with similar propositions may emerge in the market shortly after, often at lower prices, necessitating a reassessment of the initial USP.

Another strategy is the Emotional Selling Proposition (ESP), which prioritizes building emotional connections with consumers. In contrast to the USP, which focuses on tangible product attributes, the ESP seeks to cultivate a more intimate relationship with consumers. This emotional bond significantly influences purchase decisions, as consumers often find it easier to remember feelings associated with a product rather than its physical characteristics.

Additionally, Competitive Advantage, as defined by Dirgantoro and referenced by Mohamad, R., et al. in "Analisis Strategi Daya Saing (Competitive Advantage) Kopia Karanji Gorontalo," refers to a company's ability to create value that motivates consumers to choose its products or services. Agustinus Sri Wahyudi describes competitive advantage as the

factor enabling a company to achieve higher profits than the average earnings generated by its competitors within the same industry. A key competitive advantage of the information system discussed in this study is its ability to streamline product and service orders through a unified application, which accommodates various payment methods, including cash on delivery (COD) and bank transfers.

Animal Care

The book "Arif Cerdas untuk Sekolah Dasar 4" by Christiana Umi states that pet care necessitates meticulous adherence to numerous essential guidelines. Pets require regular nutrition with the suitable type and quantity of food to meet their needs. Ensuring the cleanliness of their cages is crucial, as consistent cleaning guarantees the animals' comfort. Furthermore, animal excrement must be removed everyday to maintain a sanitary environment for the pets. In the event of a pet's illness, it should be taken promptly to a veterinarian's facility after any unsuccessful attempts at self-treatment. Consistent delivery of vaccines and vitamins tailored to the animal's unique requirements is essential, including administering vitamins to adult cats every four months and vaccines annually. The responsibilities of veterinarians are crucial for safeguarding and enhancing the health of every pet. Consequently, veterinarians establish clinics and offer a range of products and services to promote the well-being of pets.

Enhancing sales potential can be achieved by creating a more sophisticated and user-friendly online ordering system. This system must facilitate client payments via cash on delivery (COD) or bank transfers inside a unified application. Furthermore, incorporating Global Positioning System (GPS) technology for client addresses will greatly enhance couriers' ability to deliver products with increased accuracy and efficiency.

Prior to the implementation of this system, the existing application merely presented a product catalog, without the functionality for clients to order products or services, hence necessitating in-store visits for order

placement. In response to this issue, the author undertook research to develop an application system designed to enhance the competitive advantage and operational efficiency of a company providing technological services, pet care, and essential needs in Cianjur Regency. This application development employs the Dart programming language and the Flutter framework for the frontend, while utilizing PHP (Hypertext Preprocessor) in conjunction with the CodeIgniter 3 framework for the backend.

Research Method

The study employs a qualitative methodology to develop an information system that addresses the shortcomings of earlier technologies, which allowed clients to browse products but did not facilitate direct payments or service requests. Data collection methods encompass interviews and surveys with prospective customers to ascertain their needs and preferences for online shopping and payment alternatives. This qualitative data informs the design and functionality of the new application, ensuring it efficiently meets the needs of consumers. The project aims to develop an efficient ordering process that enhances consumer convenience and satisfaction by prioritizing user experience.

The application for system development utilizes the Flutter framework for the frontend, ensuring a responsive and aesthetically pleasing interface. The backend is administered with CodeIgniter to manage server functions and data processing. This amalgamation of technology enables the seamless integration of diverse payment methods, including bank transfers and cash-on-delivery, allowing consumers to procure services such as grooming and health evaluations easily. The systematic development process adheres to agile principles, facilitating iterative testing and enhancement of features informed by user feedback. The technical services and essential pet care company in Cianjur aims to acquire additional clients, enhance sales potential, and expand its market position through these initiatives.

Result and Discussion

Analysis of Ongoing Business Processes

A business process is an organized set of interconnected actions or tasks designed to address a specific issue or produce a product or service. The existing operational procedure for the Pet Shop application is outlined as follows:

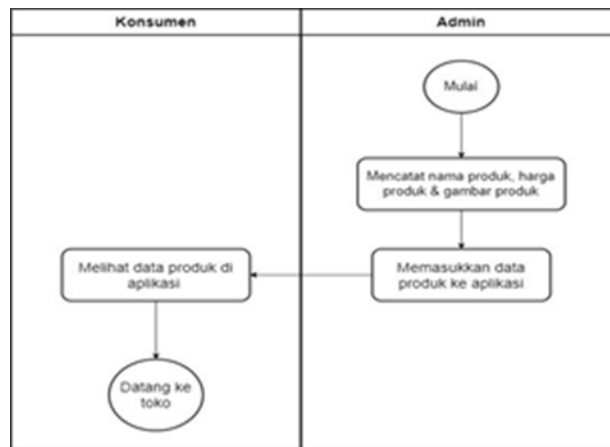


Figure 1. Analysis of Ongoing Business Processes

System Design

System design aims to identify the technological elements that will be incorporated into the design solution. At this juncture, the design will be meticulously delineated to tackle additional technical concerns pertinent to implementation tasks, including system architecture design, database design, and interface design.



Figure 2. Proposed use case

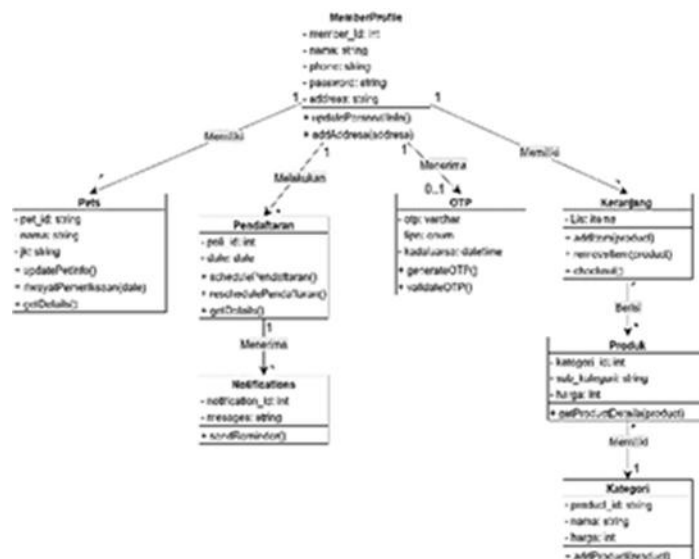


Figure 3. Class diagram design

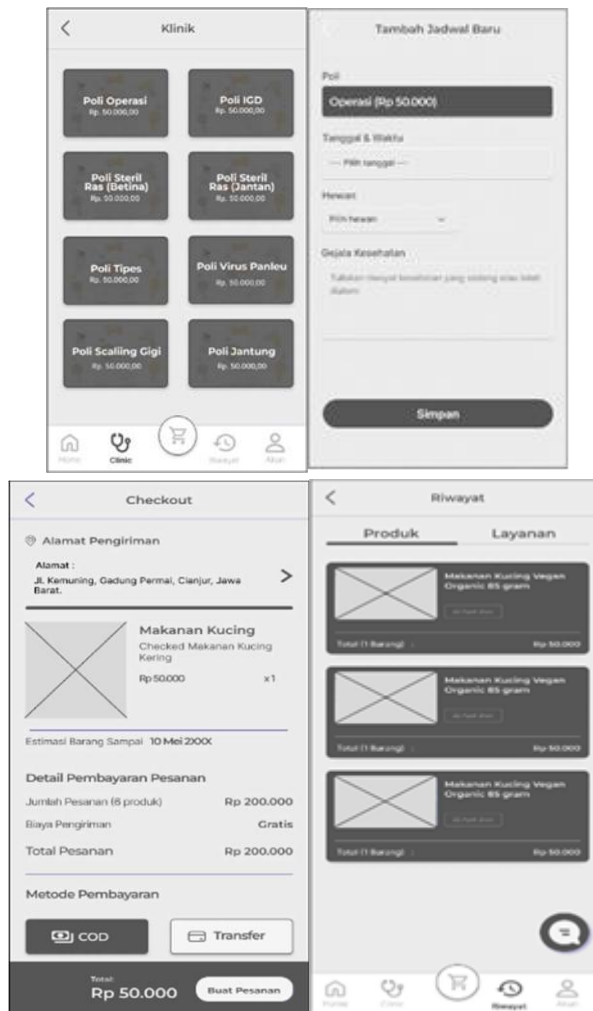


Figure 4. Interface design

System Implementation

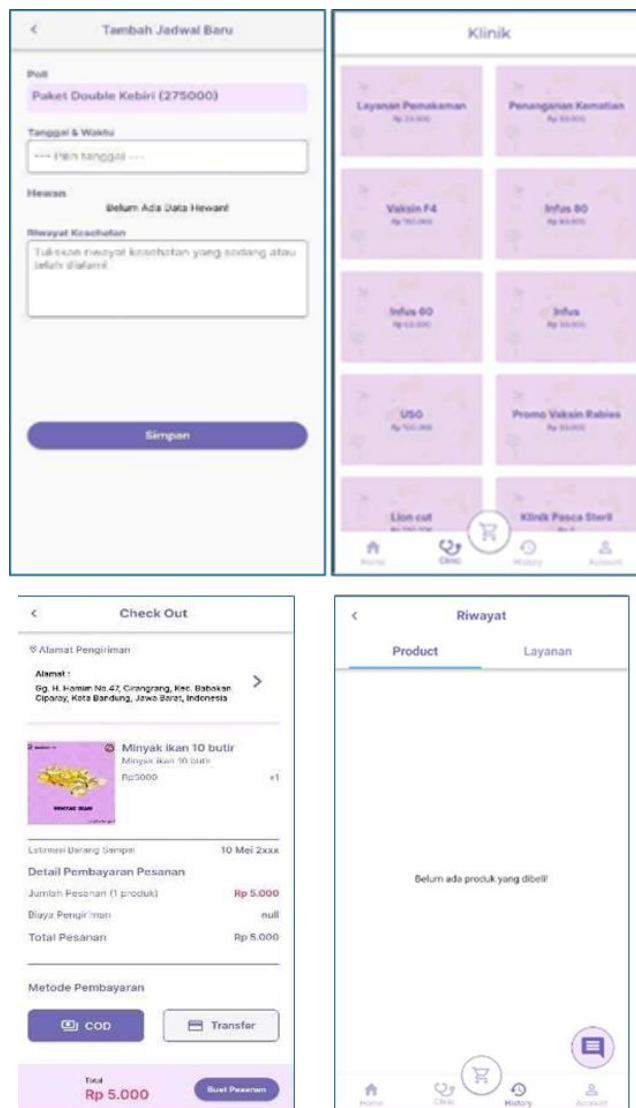


Figure 5. System Implementation

Conclusion

According to the aforementioned research, a technological services and critical pet care company in Cianjur Regency has created an information system that enables clients to order items and services directly through a unified application. This system aims to enhance sales value, optimize

transaction efficiency, and improve customer satisfaction by offering online ordering and payment functionalities, including various payment options such as bank transfers and cash on delivery (COD). The information system is constructed utilizing the Flutter framework for the frontend and CodeIgniter for the backend. The company aims to acquire additional customers, enhance sales potential, improve customer satisfaction, and expand its market presence in Cianjur and surrounding regions through these enhancements.

References

- Abdulghani, T., Jaelani, L., & Sidik, J. (2021). Android Based Information System of Indekos Booking and Rentation Locations in Cianjur District. *Journal of Physics: Conference Series*, 1764(1), 012157. <https://doi.org/10.1088/1742-6596/1764/1/012157>
- Darmayadi, A., & Izmazatnika, Y. M. (2020). Android Based Information System Design. *IOP Conference Series: Materials Science and Engineering*, 879(1), 012096. <https://doi.org/10.1088/1757-899X/879/1/012096>
- Elianti, N. M. D., Githa, D. P., & Susila, A. A. N. H. (2023). Android-based driving course information system. *Proceedings of the Information Technology Department, Faculty of Engineering, Udayana University, Bali, Indonesia*.
- Hanif, A., Suhendar, A., & Sejati, R. H. P. (2024). Design and Development of an Android-Based Point of Sale Application: A Case Study of Warung Dapur Barokah, Pangkalpinang. *International Journal Software Engineering and Computer Science (IJSECS)*, 4(1), 293–300. <https://doi.org/10.35870/ijsecs.v4i1.2325>
- Junanda, D. B., & Mardhiyyah, R. (2025). Development of a Cashier Business Transaction System using the Android Based Agile Method. *JISA(Jurnal Informatika Dan Sains)*, 7(2), 217–225. <https://doi.org/10.31326/jisa.v7i2.2113>
- Padang, J. (2023). Application of Trend Projection in Prediction of Animal Feed Sales at PT. Android-Based Charoen Pokphand Medan. *Jurnal*

Komputer Indonesia (Ju-Komi), 1(02), 1–10.
<https://doi.org/10.58471/ju-komi.v1i02.37>

Pramanda, A. F. (2023). PENGEMBANGAN SISTEM INFORMASI PENJEMPUTAN SAMPAH MENGGUNAKAN GLOBAL POSITIONING SYSTEM (GPS) BERBASIS ANDROID DI YOGYAKARTA. *The Indonesian Journal of Computer Science Research*, 2(2), 9–15. <https://doi.org/10.59095/ijcsr.v2i2.53>

Rao, S., Triase, T., & Alda, M. (2024). SISTEM INFORMASI POINT OF SALES PADA TOKO DISTRIBUTOR SALAH DUGA BERBASIS ANDROID. *JOURNAL OF SCIENCE AND SOCIAL RESEARCH*, 7(3), 1192–1200.

Rohmawati, T., & Ramadhani, F. (2020). Android Based Livestock Sales Application Information System. *IOP Conference Series: Materials Science and Engineering*, 879(1), 012005. <https://doi.org/10.1088/1757-899X/879/1/012005>

Syafariani, R. F., & Hayati, E. N. (2024). Android Based Information System Modelling: Case Study of Building Materials Sales. *International Journal of Research and Applied Technology (INJURATECH)*, 4(1), 167–175.