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Business Model Design for Digital Platform-Based Clinic Management Information System: A Case Study at Advomed

I Gede Arya Putra Dewangga, Dodie Tricahyono

Telkom University, Indonesia Email: aryaputradewangga96@gmail.com, dodietricahyono@telkomuniversity.ac.id

Abstract

Advomed, a provider of digital ecosystem solutions for clinic management, encounters challenges in delivering added value to its partner clinics, particularly in enhancing service efficiency and connectivity. This study aims to design a platform-based business model that improves clinic performance by minimizing operational risks, enhancing data-driven decision-making, and increasing revenue through the integration of artificial intelligence and telehealth services. Using a descriptive qualitative approach, data were collected through in-depth interviews, case studies, and document analysis. The research focuses on implementing digital platform strategies that generate network effects and strengthen collaboration among clinics, laboratories, and partner pharmacies. The results indicate that integrating electronic medical record (EMR) systems enhances clinic operational efficiency and expands patient access to healthcare services. Moreover, the proposed business model positions Advomed as a facilitator of collaboration across the healthcare ecosystem, enabling sustainable competitive advantage. The study concludes that applying the Platform Business Model Canvas (PBMC) framework provides a structured strategy for implementing platform elements through clear action plans, objectives, and execution steps. This framework supports ecosystem-based innovation, allowing Advomed to better capture network value and differentiate its service offerings. The findings also suggest that user dissatisfaction with current value propositions can serve as input for refining segmentation, targeting, and positioning strategies. This research contributes to the advancement of digital healthcare business models in Indonesia and offers practical guidance for platform development in similar contexts.

Keywords: Business Model Design; Clinical SIM; Digital Platform; Advomed.

INTRODUCTION

The development of digital technology has revolutionized healthcare management worldwide, with clinics in Indonesia increasingly adopting advanced systems to streamline patient operations and services (Begkos et al., 2024; Naik et al., 2022; Sikandar et al., 2022; Stoumpos et al., 2023; Tortorella et al., 2021; Yeung et al., 2023). Globally, the digitization of medical records has emerged as a critical improvement, enhancing efficiency, data accuracy, and patient care coordination. For instance, countries like the United States and those in the European Union have long implemented electronic health records (EHRs), resulting in significant reductions in administrative burdens and improved patient outcomes (WHO, 2023). In Indonesia, an orderly medical record system facilitates better monitoring of patient progress following new treatments or procedures (Evans, 2016; Han et al., 2022; Keshta & Odeh, 2021; Shahnaz et al., 2019; Tertulino et al., 2024). Such systems offer notable advantages, including enhanced information confidentiality, reduced risk of record loss, and improved documentation quality and authenticity. Manual retrieval of medical data—encompassing patient histories, examination results, and

prescribed medications—is often time-consuming. However, these challenges can be addressed through digital platform-based management information systems, which expedite data access and minimize processing delays.

One of the key innovations is the digital-based *Clinical Management Information System* (*SIMK*), which integrates *Electronic Medical Records* (*RME*) to improve administrative efficiency and diagnostic accuracy (De Medeiros et al., 2017; Okada et al., 2024; Shen et al., 2023; Xie & Luo, 2022; Yoon et al., 2022). The COVID-19 pandemic and government policies such as the *One Sehat* program by the Indonesian Ministry of Health have accelerated the adoption of *SIMK*, with a projected investment in health technology in Indonesia to reach USD1.5 billion by 2026 (Frost & Sullivan, 2023). A study by the Indonesian Health Information System Association (*ASI-KI*, 2022) states that 68% of small-medium clinics plan to adopt *SIMK* in the next 2 years, especially to comply with regulations and increase productivity.

The growth of this market is accompanied by complex challenges. At the user level, self-practice physicians and small clinics face limited access to supporting facilities such as diagnostic laboratories. *RISKESDAS* data (2022) shows that 65% of independent doctors in Indonesia have difficulty referring patients to trusted laboratories, so 30% of patients switch to large hospitals. This reduces the clinic's revenue and lowers patient confidence in primary services. On the supply side, 80% of small laboratory clinics in West Java experience underutilization of capacity due to a lack of patients, even though service costs are more affordable (Indonesian Clinical Laboratory Association, 2023). This problem is exacerbated by the dominance of large laboratories that already have a reputation and a strong marketing network.

Advomed as a player in the *SIMK* market initially focused on providing a ready-to-use clinic management system, but as competition with competitors such as Assist.ID (2,527 clinics), Smart Clinic (1,002 clinics), and MyKlinik (500 clinics) pushed and forced Advomed to seek more value differentiation. Market analysis reveals that competitors only focus on basic *SIMK* features such as *RME* and administration, without integrating the broader healthcare ecosystem. In fact, the needs of small clinics and independent doctors are not only limited to data management, but also access to diagnostic networks and increased visibility of services.

This is where this research gap arises: there is no SIMK platform in Indonesia that connects small clinics with diagnostic laboratories in one integrated ecosystem. Conventional business models such as the Business Model Canvas (BMC) are inadequate to solve this problem because they are not designed to manage multi-sided interactions. In contrast, the Business Model Canvas (PBMC) Platform offers the right framework for building a digital ecosystem, where network effects can increase the value of the platform as the number of doctors, laboratories, and patients grows.

The integration of diagnostic services into Advomed's *SIMK* allows doctors to refer patients to partner laboratories instantly, while small laboratory clinics gain access to a wider market. The review system and price transparency on the platform can build patient trust in a laboratory that is not yet well-known.

Advomed has the unique potential to answer this challenge because it already has a *SIMK* user base spread across small clinics. By leveraging the existing technology infrastructure, Advomed can transform from just a *SIMK* provider to a digital health ecosystem platform that connects the entire primary service value chain. This research aims to design a *PBMC*-based business model for Advomed, with the hope of not only increasing the company's competitiveness, but also contributing to equitable access to quality healthcare services in Indonesia.

Based on the background of the problems that have been described earlier, the researcher is interested in conducting research to provide an alternative data collection and data management system that is more effective and efficient. Thus, the title of this study is "Designing a Digital Platform-Based Clinical *SIM* Business Model: A Case Study on Advomed."

From the background information that has been presented, the researcher formulated the main problems for this study, which also underline the urgency of addressing the current fragmentation and inefficiency in clinic-laboratory integration within Indonesia's primary healthcare ecosystem. As digital transformation accelerates and the government mandates system interoperability through programs like *SATUSEHAT*, there is a pressing need for business models that enable sustainable and scalable healthcare platforms. The inability of small clinics to access diagnostic support and the underutilization of smaller laboratories represent not only economic inefficiencies but also barriers to equitable healthcare access. Therefore, this research becomes urgent and relevant to fill the gap between policy expectations and operational realities.

The objectives of this study are to analyze the influence of external factors—such as the *One Sehat* regulation and competition with large laboratories—and internal factors, including the technological limitations of Advomed, on the development opportunities of a laboratory-integrated *Clinical Management Information System* (*SIMK*) business model in Indonesia. Furthermore, this study aims to design the elements of the *Platform Business Model Canvas* (*PBMC*) by integrating small clinics, laboratories, and patients within the Advomed platform, referring to the Platform Innovation Kit version 5.0 Loop 1 (Discover & Launch). In addition, the research seeks to formulate strategies that can enhance interaction within the platform to build a more sustainable digital health ecosystem, while also exploring the implementation of network effects through two-sided user acquisition (clinics and laboratories) in collaboration with external stakeholders.

This research is expected to provide several key benefits. For the Advomed platform developers, it offers strategic insights to support decision-making in product development and innovation, particularly in integrating diagnostic services to increase laboratory partnerships and improve interaction across clinic-laboratory-patient networks. For the Indonesian healthcare industry, the research contributes to the formulation of digital platform business models and growth strategies that are contextually relevant, especially in addressing the underutilization of small laboratories and improving healthcare access in remote areas through collaborative digital solutions. From an academic perspective, this study enriches the literature on digital transformation and network effects in the health sector, while also serving as a foundation for future research on the application of *PBMC* in building integrated digital healthcare ecosystems.

RESEARCH METHODS

This research is descriptive, with a qualitative approach to describe phenomena related to the challenges of small clinics and laboratories within the SIM Klinik ecosystem, as well as to design a business model based on the Platform Business Model Canvas (PBMC). This research is also included in the Research and Development (R&D) category because it aims to develop a new business model that can be applied in the context of Advomed as an integrated Clinical SIM platform. The research paradigm used is post-positivism, which views reality as something holistic, dynamic, and reciprocal. This paradigm was chosen because it aligns with the complexity of the digital health ecosystem, which involves interactions between clinics, laboratories, patients, and regulators. This research was conducted in a non-contrived setting (natural field) to ensure that the data collected depicted real conditions, without intervention or manipulation by the researcher.

RESULT AND DISCUSSION

1. Context Canvas: Internal and External Environment Analysis

The process of identifying elements of this business model involves related parties in managing the Advomed Platform. This stage is the initial stage to describe the condition of the software development business model through a business model canvas approach. Basically, all companies have a business model, but it is not necessarily in accordance with the company's business. For this reason, the right business model is needed in running the business.

A. External

External business environment analysis is used to determine the state and conditions of the company's external environment that affect the development and running of the Advomed Platform.

Regulation: The One Healthy Program encourages the digitization of the medical record system.

Economy: Small clinics are limited in funds to build their own laboratory facilities.

Social: People are increasingly accustomed to digital and fast services.

Technology: Cloud computing, API integration, and AI are becoming more and more available.

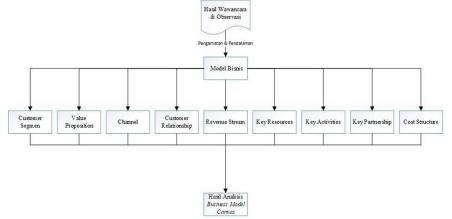


Figure 1. Business Model Canvas Analysis Chart (Peppard & Ward, 2016)

A. Advomed Platform Internal Environmental Analysis

The process of identifying elements of this business model involves related parties in managing the Advomed Platform. This stage is the initial stage to describe the condition of Platform Advomed's business model through a business model canvas approach. Basically, all companies have a business model, but it is not necessarily in accordance with the company's business. For this reason, the right business model is needed in running the business. Here is an internal analysis of the Advomed Platform

Tahel 1	Rusiness	Model	Canvas Platform	Advomed
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Tabel 1. Business Model Canvas Platform Advomed								
Key Partnerships	Key Activities	Value Proposition						
 Clinic Server Providers Hosting and domain providers 	 Creating a software product or application Offering service 	1. Platform Advomed's flagship product is the development of information systems or clinical service applications.						
		2. Cloud technology is already in place.3. Digitization of medical records, clinic liaison services.						
Customer Relationship	Customer Segment	Key Resources						
 Good product quality assurance and according to client requirements Responsive and solution- oriented in solving problems such as product errors and malfunctions application 	All circles and institutions (large, medium and small clinics, both public and private or individual)	 Human Resources (HR). The core team is limited yet adaptive. Physical Resources (SDF) includes computer equipment. 						
Channels	Cost Structure	Revenue Stream						
1. Offline method by distributing brochures directly to clients	Office Facility Maintenance Costs	Application or software development						
2. Online Method by conducting campaigns through social media (Instagram, YouTube and Website)	2. HR salary above UMR	2. Procurement of Hardware						

Customer segmentation describes a different group of people or organizations that a company wants to reach or serve. In this research activity, it is known that the results of the interview stated that the customer segment of the Advomed Platform company is the entire community and the clinic in Indonesia is unlimited as said by the informant during the interview, namely: "Our customer segment is unlimited, meaning that all circles, institutions and institutions are targets or potential clients for the Adfomed Platform. So far, Adfomed Platform clients are divided into two clusters, namely the government agency cluster and the private institution cluster." (CEO & Marketing Business Manager, April 2025). Value Proposition describes the combination of products and services that create value for specific customers, describing what values are provided by the current Advomed Platform. Based on the results of the interviews conducted, there are several value propositions applied by the Advomed Platform, including Superior Products are integrated application products or information systems.

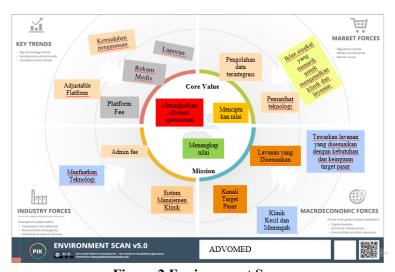


Figure 2 Environment Scan

Source: Author's Processing (2025)

Because the Advomed Platform is a company engaged in the development of applications or information systems, the dominant product that clients need and want so far is an application or information system product. As stated by the Advomed Platform during the interview, namely: "The Advomed Platform is an application developer. So our flagship product and in great demand by clients is an integrated service information application or system." According to the researcher, the superior products have been offered by the complete and thorough Advomed Platform. The needs of each client that are different for the use of the application can be met, the possibility of being able to develop bias occurs, and according to the results of observation and analysis what does not yet exist and needs development is that there is no feature to connect directly to external laboratories or large clinics.

Channels describe how a business or company communicates with its customer segment and reaches out to them to provide a value proposition. In reaching customers or clients to market their products, the Advomed Platform company does it with two methods, namely offline and online. As stated by the informant during the interview, namely: "So far, the Advomed Platform has two methods for marketing needs, namely the offline method and the online method. The offline method is taken by distributing brochures directly to potential clients. Meanwhile, the online method is carried out via social media such as Instagram, Facebook, YouTube and websites." According to the author, the channels owned by the Advomed Platform are comprehensive and comprehensive. The company is aware that there are different types of client characters. With the diversity of these types of clients, the way to reach them must also be complete with offline (direct) methods and online methods.

Customer Relationships describe the different types of relationships that companies build alongside specific customer segments. Basically, customer relationships are the way organizations communicate to retain old customers and get new ones. Based on the results of the interview with the Advomed Platform, it was conveyed: "In addition to offering products that clients need, the Advomed Platform also provides services in the form of free maintenance for six months to a year. With this maintenance service, we hope to be able to satisfy clients so that they repeat orders or further development." The maintenance services that have been provided by the Advomed Platform are already running well and effectively.

Key Activities that describe the important things that companies must do in order for their business model to work. In general, key activities in the Advomed Platform company have been running well. Every company must have a strategy in operating the company's performance, of course to run its business. However, so far the Advomed Platform is still focusing on the business model that is already running. The Advomed platform is still concentrating on its business model as a developer of clinical applications. This kind of business model relies only on projects that come from clients. This was conveyed in an interview with the company: "Our main focus or key activity is the marketing of existing applications according to the client's needs.

Key Partnerships describe a network of suppliers and partners that make business models work. Key Partnerships or the main partnerships and forms of cooperation in the company are with large, medium and small clinics, both public, private and or individual. As stated by the Advomed Platform in an interview: "We partner with clinical institutions in Indonesia, both public and private. This partnership is implemented by providing facilities to input data so that it is integrated both medical records and so on". By facilitating the Advomed Platform, it builds relationships to work together in terms of services.

This Cost Structure describes the most important costs that arise when operating a particular business model. The Cost Structure in this case describes all the costs incurred by the Advomed Platform. The Advomed Platform Company has several important parts in its financing related to the company's performance. Based on the interviews, the results of the identification include the cost of maintaining office facilities, human resource salaries, and product socialization costs. As stated by the Advomed Platform during the interview, namely: "We can't tell you what the nominal form is, but the company's expenses include the maintenance of office assets, employee salaries, socialization costs and many more." (CEO & Marketing Business Manager, April 2025). What is clear is that the salary given to employees is above the UMR because the employee is a bachelor's degree graduate.

The revenue stream of the Advomed Platform benefits from clients who contact the Advomed Platform directly and can also be obtained from the Advomed Platform offers to clinics. The implementation of the business or operational activities of the Advomed Platform client receives full payment.

Key Resources describes the most important assets needed for a business model to function. Key resources in the Advomed company describe what resources are needed in carrying out the company's work operational activities. Because resources are part of a factor that is also important in running a business concept to increase sales profitability. So based on the results of the interview with the Advomed Platform, namely: "The main resource we have is humans themselves, there are also office facilities or the name SDA." (Resource person, April 2025).

In order to support the implementation of all business processes that have been built in small and medium clinics that exist as users of the Advomed Platform, in order to fulfill the strategic planning of the technology and information system in the clinic so that it runs smoothly and has a competitive advantage for the clinic, it is necessary to make strategic improvements to the technology and information system that is being prepared in realizing the implementation of the top planning faced by the clinic.

B. External Environmental Analysis

This analysis is carried out by looking at the conditions of existing competitors and current market conditions. This analysis includes 5 factors, including:

a) Bargaining Power of Suppliers: Health is everyone's need, so this makes the clinic must have competitiveness and super-fast, good and wise service. In following the current development

pattern, one of the things that must be developed is online administration and services in an appropriate and targeted manner, thus the clinic has a strong bargaining value. So the supplier in this case is the Advomed platform as a digital health platform that has services in the clinic in terms of connecting services must have added value from existing competitor platforms.

- b) Bargaining Power of Buyers; Because consumers are very sensitive to changes in the price of securities services when consumers decrease or increase, it is considered not too significant. So that consumers need information about existing health services and alternatives as well as convenience for consumers to switch to other services that are more affordable with the same minimum facilities and reliability.
- c) Threat of Substitute Products or Services: The growing West Java market attracts the interest of many foreign companies, so many similar companies are starting to enter the health platform market in West Java.
- d) Threat of New Entrants: Evaluation of barriers in the healthcare market, including capital costs, government regulations, and licensing needs. Increase profits that can deter newcomers. How unique the services Advomed offers compared to potential new competitors.
- e) Rivalry Among Existing Competitors: Competition between competitors is felt to be quite fierce, so companies must provide something more, both from the quality of services and products or innovations of the services provided.

From the analysis, it can be seen that Advomed as a health platform for small and medium clinics in the West Java area has many challenges in facing competition, some of which are dependence on the Platform to efforts to improve the quality of services provided. The results of the analysis are as follows:

- 1) Clinic's Dependence on the Advomed Platform as a service provider supplier.
- 2) Insignificant consumer influence and information needs for healthcare services
- 3) The West Java market is growing and attracts interest from other companies to enter West Java.
- 4) Increase profits to deter the entry of new entrants and diversify healthcare services.
- 5) Innovate in the health services provided.

2. Need & Problem Canvas

Some of the needs problems resulting from observation can be seen in the following table:

Tabel 2. Problems Prioritization

Tabel 2: 1 Toblems 1 Horitization							
Stakeholders	Problems Faced	Key Needs					
Small Clinics	Lack of laboratory facilities	Fast, integrated lab referral access					
Large Clinics	Underutilization of laboratory services	Referral patient sources from small clinics					
Patient	Slow and manual referral process	Integrated and transparent services					
Advomed	SIMK basic feature competition	Clinic-based ecosystem differentiation					

Source: Processed Author (2025)

Then the data is validated at the interview stage and strengthened with supporting data to ensure and in accordance with the problems faced by the customer, as follows:

1) The effectiveness of the use of the advomed platform which is strengthened by the results of the respondent interviews gives the opinion that efficiency in management and input is an obstacle that must be overcome immediately because it is a problem that affects the performance, both the performance of the clinic and Admoven as a platform used by the clinic so that training and counseling in its use must be maximized.

- 2) The service process, this problem is strengthened from the results of interviews and questionnaires, where many respondents prefer digital services to manual services. Meanwhile, from the interview, it was obtained that there must be complaints from customers even though they have used the system digitally or not.
- 3) Lack of transaction tracking. This problem was strengthened in the interview process where the respondents argued that data input could be digitally systemed but still input by employees, while for file collection, the manual process was still used directly to provide the required files.
- 4) That respondents prefer to use the system rather than the manual use and assess that the use of the system can make the work easier than manual management.

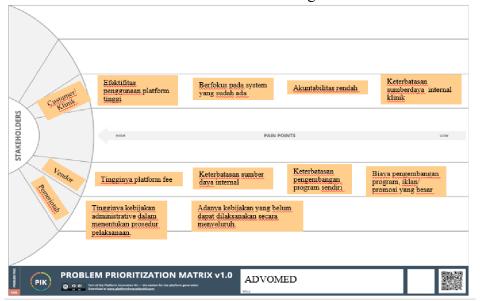


Figure 3. Problems Prioritization

Source: Processed Author (2025)

From the efforts to solve the problems faced, it is produced in the form of providing a digital health platform so that it can be easily accessed and applied in the stages of the marketing mix that explain the product (Product) that can solve the problem of the customer, and the solution is then validated in accordance with the interview stage, where the focus of the problem solving is:

- a. Data collection, which is carried out through a digital system to make it easier to input without having to use manual forms such as paper or data collection that still uses excel and so on which are manual, both in medical records, outpatient treatment, hospital referrals, laboratories, drug prescriptions and so on. This focus was obtained during an interview session where one of the informants revealed that their management is still manual and uses excel as a tool for data collection.
- b. All the available features are summarized with just one system that makes it simpler and expected to be easy to operate.
- c. It is hoped that there will be referral access from small clinics to large laboratory clinics directly by the doctor or the clinic.

3. Supply Side

The supply side of small and medium-sized clinics refers to the availability of facilities, resources, and services offered by clinics to meet the needs of patients. This covers various aspects,

from medical and non-medical personnel, medical equipment, to physical facilities such as beds and waiting rooms. Small and medium clinics that are patient senders, which will be recorded in a structured manner on the Advomed platform used by the clinic. In the platform, the emphasis will be on patient registration, test requests and access to results.

4. Demand Side

The demand side of clinics connected to the Advomed platform refers to the aspect of the user's needs and ability to access and utilize the health services available in the clinic, which involves the ability of human resources to receive, seek, achieve, pay, and participate in health services. This demand side focuses on test reservations, result reporting, and payments that allow patients at clinics to book tests, view test results, and make payments online, and small clinics can be integrated with large clinics and independent laboratories that provide more screening services than small and medium-sized clinics using a platform Advoment as a link.

5. External Stakeholders

Medical records are the backbone of health care facilities (fasyankes) and health workers (nakes) in providing optimal services to patients. The government as a stakeholder through the Ministry of Health regulates the digitization of medical records is a major milestone in the transformation of health services, which is regulated in the Minister of Health Regulation Number 24 of 2022 concerning the obligations of health facilities in the management of electronic medical records, through regulatory analysis and literature review. Of course, the Ministry of Health (Ministry of Health) plays an important role in the regulation and implementation of SATUSEHAT, the Advomed platform is also integrated with health service data. SATUSEHAT is regulated by various regulations of the Ministry of Health, such as the Regulation of the Minister of Health Number 24 of 2022 concerning Medical Records which mandates the integration of medical record data with SATUSEHAT. The Ministry of Health has also issued Regulation of the Minister of Health Number 18 of 2022 concerning the Implementation of One Data in the Health Sector through the Health Information System, which supports data integration in SATUSEHAT. Where SATUSEHAT is a platform that functions as a health data exchange ecosystem that connects various information systems in the health ecosystem, including health facilities, regulators, guarantors, and digital service providers. Of course, Advomed is also one of the platforms in directing the flow of health services to be more efficient with the existence of electronic medical records, a technological innovation that not only makes it easier to store patient data, but also improves the quality of overall health services.

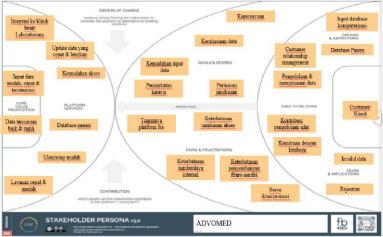


Figure 4. Stakeholder Persona

Source: Processed Author (2025)

6. Platform Value Network

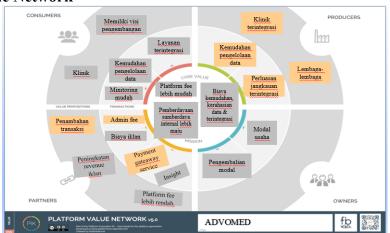


Figure 5. Platform Value Network

Source: Processed Author (2025)

Platform fees are easier and cost easier, data confidentiality and integrated. Meanwhile, the platform's mission is to empower more advanced internal resources so that clinics are integrated.

Advomed Platform Business Model Design

In the opinion of design experts, it is the first step in planning a process to create and design the latest system. System design in this study is a critical stage in the development of a system, where the main goal is to determine the processes and data needed in the system. The purpose of system design is to provide an overview to system users in designing a new system, this new system is the opposite of the current system because it aims to improve a system that is running in a Small Clinic so that it can produce a computerized system and be integrated in a data storage, so that the processing of information systems can be more effective and efficient. With the construction of the proposed system, it is hoped that it can meet the needs needed by users and be able to overcome a problem that occurs in existing small clinics. In this context, system design aims to meet the needs of users so that they can provide a clear picture and produce a complete design. System design is the drawing, planning, and sketching of many separate elements in a perfect unit. In this study, how can the system run well so that business development increases well and can be used for a long period of time.

A. Value Proposition

Value proposition is an important part of a company's business strategy. Since a value proposition is a tool to attract potential customers, these values must be communicated through the company's marketing strategy materials.

Advomed as a platform providing services for clinics that want to carry out the government's appeal in digitizing clinic administration, of course, Advomed provides the best, even though there are many competitors, but Admoven always prioritizes its best service in a way that

- 1) Getting to know the Users where Advomed analyzes the market and potential customers. Identify potential customers and market segments to understand what they need.
- 2) Good Product. Offer products or services that suit your needs.

- 3) Understanding Costs and Benefits. Measure the benefits that can be taken from the product, as well as the potential costs that users have to incur.
- 4) Always observe the Competitors. After analyzing the target customers, Advomed is always meticulous in assessing the shortcomings and advantages of competitors, and looking for ways in which the product is present in the midst of the competition.
- 5) Short and Clear. Always remember that an effective value proposition is short and clear. The user's target customers must be able to quickly understand the message being conveyed.
- 6) Design is everything. Create a good and striking promotional media in every marketing material

By having a value proposition, Advomed is biased to provide reasons why its products should have potential customers. This is where marketing strategy is important so that potential customers are confident that they want to use Advomed as a platform that can be relied on. The advantages of Advomed's platform compared to competitors are that Advomed can digitally access small clinics to external laboratories without additional investment in equipment or human resources, able to monetize lab services through online referral systems, quick checks, digital results, and price transparency, Differentiation as an enabler of the clinic ecosystem, can solve the problem of small clinics that have difficulty providing laboratory services, It can be integrated with large clinics or inter-clinic laboratories through the platform, the first platform that focuses on interclinic integration, not just between clinics and patients.

Other advantages are:

- 1) The two-way interaction between small and large clinics creates a new network of values.
- 2) Advomed as a mediator and interconnection infrastructure.
- 3) Value stream: patient information → referral requests → payments → digital lab results.

B. Market Observations

After determining the solution to the problem perceived by stakeholders, observation of the market needs to be carried out, starting from studying the environmental conditions and the effectiveness of current clinical services with ecosystem force scan and value chain scanning.

1) Ecosystem Force Scan

The ecosystem force scan here is to determine the platform's business ideas that cannot be separated from the influence of what is happening today, both market, economic, social and cultural trends as well as the condition of stakeholders who may be one of the ecosystems of competitors' existence. By using Ecosystem force scans here, conditions that affect businesses can be mapped. After determining the solution to the problem felt by stakeholders, it is necessary to observe the market share, whether the solution has a wide market. Market observation begins by studying the environmental conditions and the effectiveness of current user advomed activities with ecosystem scan canvas and venue chain canvas. Platform business ideas cannot be separated from the influence of current trends, both market trends, economic, socio-cultural and stakeholders who may be involved in the ecosystem which also includes the existence of competitors who are substitutes or competitors. By using the ecosystem scan canvas, the following conditions can be mapped:



Figure 6. Ecosystem Scan Canvas Source: Writer's Processing (2025)

Viewed from the market side, the clinic requires a wider network coverage and ease of service, so it requires market price analysis, feasibility studies and price trials.

2) Value Chain Scan Canvas

The Value Chain Scan Canvas is a visual tool used to analyze the value chain of a product or service, focusing on identifying potential opportunities and challenges in the production and distribution process.

	I	Table 3	3. Clinic Infrastru	cture					
	Clinic Infrastructure								
	Nursing:		Support:	General & Financial:					
	1		Records	-Logistics					
	-Outpatient Installation			-TU & Staffing					
	-Maternity Room Install	lation		-Finance					
Support Activity				-Information					
ţ;	HR Management:								
Ą	-Employee acceptance								
ort	-Training and improvement of clinic management skills								
ď	-Processing of data								
Su	-Administrative management								
	Technology Development:								
	-Development of a clinical management system based on a digital platform								
	-Use of professional external digital consulting platform								
	Purchase:								
	Purchase of medical and		al equipment						
	Inbound Logistics:	Operation:	Outbound	Marketing:	Service:				
⊳ 7€	-Acceptance of patient	-Patient Data	Logistics:	-Promotion to the	-Good service				
Primary Analysis	registration	Imputation	-Patient data	community	to patients				
	-Collaboration	-Patient	management	-Establishing	-Handling of				
		Examination &	-Clinical data	cooperation with	complaints and				
	Platform companies	Actions	management &	companies	complaints				
			enterprise Platform						

Source: Processed Author, 2025.

The development of a "value chain scan" or value chain analysis is the process of evaluating all the activities involved in creating the value of a product or service, from start to finish. This process helps companies identify opportunities to improve efficiency, reduce costs, and increase competitive advantage. The value chain canvas helps identify key activities, resources, partnerships, and how clinics are adding value to patients at every stage of care. The value chain canvas in the clinic will include the main processes ranging from patient admission, doctor consultation, examination, treatment, to post-treatment services, clinic resources need to identify needed resources such as medical personnel, equipment, facilities, and information systems, partnerships with labs, pharmacies, or other health facilities can expand services and improve quality, how the clinic provides added value to patients, Such as personalized service, effective treatment, or optimal comfort by using the Advomed platform, it is hoped that the clinic can work appropriately and efficiently, so as to create service satisfaction. By using the value chain canvas, clinics can identify inefficiencies, find inefficiencies, find inefficiencies or ineffective processes in the value chain, so that they can optimize efficiencies, improve efficiencies, and look for ways to improve efficiency and reduce costs without compromising the quality of service, build partnerships and collaborate with others to expand services and improve quality, and define a clear value proposition for how clinics deliver value add different compared to competitors.

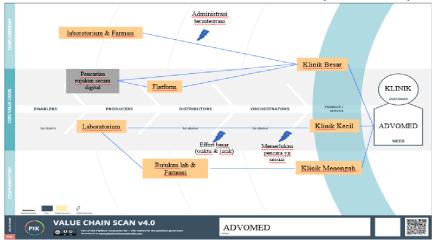


Figure 7. Value Chain Scan

Source: Writer's Processing (2025)

The Value chain image understands how the different stages in the value chain contribute to the value created for customers, and how those processes can be optimized. In optimizing the services of the advomed platform in small and medium clinics, several steps need to be added. In analyzing the platform innovation kit market, a longtail discovery canvas is carried out by matching the solutions offered by the platform to each stakeholder while defining whether the solution belongs to the longtail or niche category.

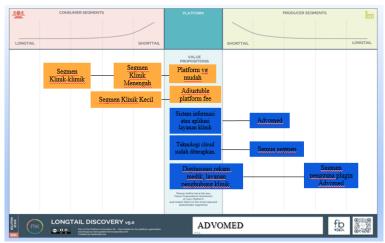


Figure 8. Longtail Discovery

Source: Writer's Processing (2025)

The USP (User Services Platform) platform is the new standard for faster, more efficient, and more reliable management of connected devices. This advomed platform enables the management, monitoring, and control of connected devices in clinics. USP provides a standardized framework for communication between devices and services from various vendors.

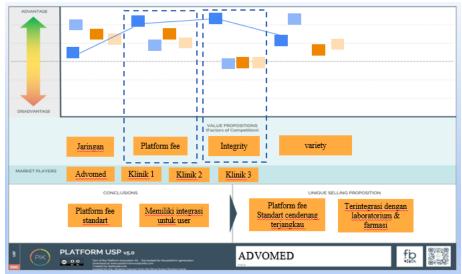


Figure 9. USP Platform

Source: Writer's Processing (2025)

3) Value Capture & Monetization

The mechanism to capture the added value generated from platform investments related to clinical healthcare can involve various strategies, such as the use of patient data to develop new healthcare products and services, such as fees per transaction of laboratory test referrals, premium subscriptions for large clinics that open laboratory access as an integration for small and medium-sized clinics, and of course Advomed provides AI-based insights services and dashboards for Integrated clinics.

For Advomed, market size is very important, in order to be able to measure and know the number of service users from the Advomed Clinic Platform service. Knowing the market size, is

the same as checking the feasibility of the startup that is being built, so that the larger the market size that will be obtained, it means that Advomed is more feasible to continue. Because data about market size can be a determining indicator needed by investors and related to ROI (Return on Investment).

4) Platform Team

Admoved as a platform certainly has a Platform team for clinics that is responsible for the development, implementation, and maintenance of systems used to manage various aspects of clinic operations according to the type of services used. This team platform consists of various IT professionals, such as software developers, system analysts, and software testers, who work together to ensure that the system functions properly and meets the needs of the clinic, so that clinics can use Advomed in the future. The elements in this Team Advomed Platform are:

- Clinic Management Information System (SIMK). SImK is a core software used to manage patient data, medical records, administration, and clinic finances.
- b. Integration with External Systems. Admoved This clinic platform is integrated with external systems such as BPJS and SATUSEHAT, to facilitate the claims process and patient services.
- c. Technical Services. The platform team is also responsible for technical services, including bug fixes, software updates, and user support.



Figure 10. Team Platform Source: Writer's Processing (2025)

5) Platform Opportunity Canvas

Health services that are directly related to the quality of service are very closely related, which of course is a very big opportunity for the business to progress rapidly. Basically, patients and/or patients' families have a desire to be provided with the best service and continue to improve. If the clinic can provide what it wants, this can have an impact on the sustainability of its business. Currently, the healthcare business is also facing tremendous pressure due to technological developments. He explained that patients are given the convenience of being able to find information, discuss, consult without having to come to the location and can register at a health unit such as a clinic or hospital. Health facilities (clinics) are unique and complex organizations. It is unique because in the clinic there is a process that produces medical services and treatment in the form of services to patients who are outpatient.

Broadly speaking, what the Advomed platform offers is convenience, data confidentiality and accompanied by a minimum platform fee. The offer of this Advomed platform is of course the end result is maximum service for patients by competent clinics, directly also developing better internal resources, in accordance with the government's direction that medical records and so on related to current services must be carried out with the development of neat technology and data so that they can be monitored properly so that they can be integrated thoroughly.

The development of Opportunity Canvas clinics for both small and medium clinics or individual clinics is a method to identify and evaluate potential business opportunities that can improve clinic performance and growth. This canvas helps identify patient needs, competitive advantages, and strategies to take advantage of existing opportunities listed on the canvas and clarified in the following table:

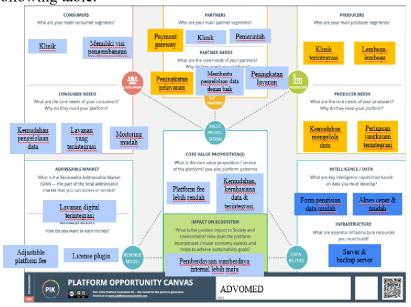


Figure 11. Opportunity Canvas Source: Writer's Processing (2025)

6) Unfair Advantage Canvas

Advomed as a service provider integrated in one electronic medical application starting from DPM, primary clinic, main clinic, dental, beauty to inpatient and emergency room are all considered to be more practical and well-structured. The advantage is market access that has embraced clinics from small, medium and independent clinics.

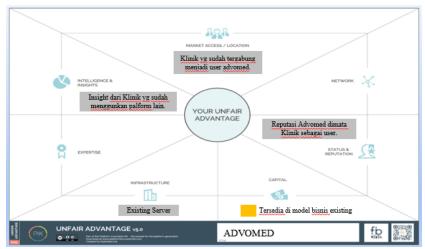


Figure 12. Unfair Advantage

Source: Writer's Processing (2025)

7) Business Model

The Business Model Canvas is one of the effective planning containers for a clinical business that is being run by creating elements in the business model canvas, namely Value Creation consisting of (Consumers, producers, core network effect and Touchpoints Experience), Value proposition consisting of (vision, value proposition and USP), Value delivery consisting of (core service, key people & skills, key data, key infrastructure, suppliers, investors and supports), the last variable is Value Capture which consists of (TAM – SAM – SOM, Monetization strategy, cost structure and ecosystem Impact). These variables can be described as follows:

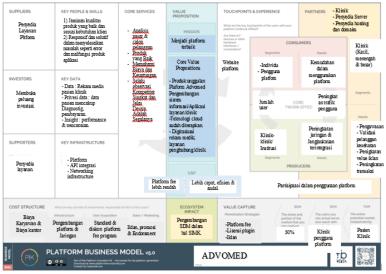


Figure 13. Business Model Platforms

Source: Processed Author 2025

All the elements in the business model canvas have clear guidelines. The value proposition and improving the quality of services are important points in competition in the business world, especially in the health business.

Collaborating with medical and industry partners such as health insurance, hospitals for follow-up referrals, companies or agencies, it is also one of the plans included in the business modeling planning in the Business Model Canvas. This can lead to an increase in network and this

is very important for consumers in Advomed platform partner clinics. The planning and business creation of Advomed platform partner clinics is expected to improve the clinic's business performance in the long term.

The designed business model shows that Advomed can play a new role as a horizontal platform in the primary service sector, not just as SIMK software. This is in line with the multi-sided platform theory of Parker & Van Alstyne (2006), and reinforces the PBMC approach that bridges the need for two sides of the market that complement each other.

One of the main strategies that clinics can implement in the face of competition in the healthcare market is service differentiation. According to research conducted by Berry et al. (2006), clinics that offer a high patient experience through more exclusive and personalized services have greater competitiveness. Service excellence based on patient experience is a major factor that drives patients to remain loyal (Kotler & Keller, 2016). Patients tend to choose clinics that offer convenience, fast service, and more humane hands-on interaction than online consultations through the healthcare marketplace.

The advantage of the platform lies in its ability to create a network effect, namely:

- 1) Small clinics are increasingly interested because many laboratories are available.
- 2) Large clinics are becoming more efficient because many small clinics refer patients.

The implementation of the Clinical Management Information System (SIMK) is one of the important innovations that has provided various benefits for the clinic business. Thus, Advomed's strategy not only creates new value but also strengthens the lock-in effect for all parties who join the Advomed ecosystem which is increasingly advanced as it is today, information technology developments have affected almost all fields, including healthcare.

The advantages obtained by the Advomed Platform user clinic are as follows:

- 1) Improved Operational Efficiency: Improved operational efficiency. The system allows clinic administrations to manage patient appointments, manage medication inventory, and track medical records more easily and efficiently. Doctors and medical staff can quickly access patient data, reducing wait times and speeding up the examination process.
- 2) Improving User Experience: Clinical Driver's Licenses also contribute to improving patient experience. With this system, patients can easily make online appointments, access their medical history, and receive appointment reminders. This improves patient comfort and helps build a better relationship between the clinic and the patient.
- 3) Better Data Management: Medical clinics generate a wealth of data every day, including medical records, financial records, and patient information. SIM Clinic helps in this data management in a more structured and organized way, making it easier to track patient progress, meet regulatory requirements, and make decisions based on accurate data.
- 4) Human Error Reduction: One of the common problems in the clinical business is human error, such as errors in medical data recording or drug dosage. The advantages of Clinic Driver's License help reduce this risk with the automation of administrative processes and the use of algorithms that can detect errors. This can help prevent mistakes that could be detrimental to patients.
- 5) Improved Data Security: The security of patient data is very important in the healthcare field. Clinic driver's licenses typically come with a high level of security, including data encryption and limited access. This helps protect patients' medical information from unauthorized access or potential data breaches.

6) Better Data Analysis: Clinical Pilots allow clinics to better analyze data. It can be used to identify health trends, improve operational efficiencies, and plan better business strategies. Data analysis can also help in human resource planning and inventory management.

A Clinic Advocacy Platform is a wise move for a modern clinic business. By improving operational efficiency, patient experience, data management, and information security, the advantages of SIM Klinik help medical clinics provide better services to patients while optimizing operations.

CONCLUSION

External and internal dynamics affect the development of the business model of the laboratory-integrated SIMK platform in Indonesia, where digital platforms create an efficient ecosystem for data and transactions, providing business opportunities through network effects. Advomed, as an integrated service provider for clinics, analyzes political, economic, social, and technological (PAST) factors as well as the quality of the platform to build clinical trust, which has a positive impact on loyalty. Research shows the importance of stages in creating value for users and the need for additional steps to optimize services in small and medium-sized clinics. The elements in the Business Model Canvas Platform (PBMC) help Advomed connect clinics, laboratories, and patients by integrating services and building relationships. Market segmentation and value proposition are key to understanding customer needs, while comprehensive communication channels (offline and online) reinforce marketing. Quality assurance and responsiveness to issues also contribute to success. The platform interaction enhancement strategy in PBMC allows Advomed to design and capture value by understanding customers and competitors and collaborating with partners to implement effective action plans, thereby creating a network effect through user acquisition on both sides. This process involves open communication and collaboration between departments to ensure alignment in achieving business goals.

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