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PT VKP's competitive strategy architecture in the healthcare digitalization industry

Dwinanda Hutama*, School of Business, Institut Pertanian Bogor, Bogor, West Java, Indonesia
Raden Dikky Indrawan, School of Business, Institut Pertanian Bogor, Bogor, West Java, Indonesia
Sufrin Hannan, School of Business, Institut Pertanian Bogor, Bogor, West Java, Indonesia

*Email for Correspondence: dwinandahutama@gmail.com

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SAAS (Software as a Service)

ABSTRACT

Indonesia's digital transformation has led to the emergence of startups like PT VKP, which focuses on the healthcare service segment. The company aims to optimize business opportunities in this segment, but the lack of mass vaccinations after Covid-19 has impacted the number of active consumers. To remain competitive, PT VKP must develop a strategic architecture strategy. The study analyzed the company's internal and external factors, conducted a competitive advantage analysis, and formulated a competing strategy architecture. Externally, the digital health industry presents an opportunity, while competitors' product diversification poses a threat. Internally, the company's ability to build relationships with partners is its strength, while its weakness is limited product features. Six alternative competitive strategies were identified, with the main focus being on making sales in the health service category. PT VKP will implement these strategies in four phases over a year.

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INTRODUCTION

Internet penetration in 2022 in Indonesia has reached 210 million users in dataindonesia.com. The use of internet technology can be felt by the wider community in increasing access to information without distance restrictions, so most people are getting used to activities involving the internet in everyday life. According to Verhoev.2019, the existence of technology such as the Internet is an important driving factor for digital transformation, namely the integration of digital technology into everyday aspects, including organizations and businesses. In Indonesia, companies in the definition of startups or startups are important actors in facilitating the digital process of digital transformation which with the ability to continue to innovate can utilize technology as a business model. This is marked by the development of startup companies with a number of at least 236 thousand startup companies in Indonesia in 2022 based on startupranking.com, and increasing the GMV value reflected in research conducted by Google, Temasek Bain *Gross Merchandise Value* (GMV) value reaches US $ 20 billion funds are expected to double by 2025 from startup companies in Indonesia.

Various startup companies are present in Indonesia in various categories including Software as a Service according to (Cho & Chan, 2015) SaaS is a cloud-based digital technology with wide access to online services utilizing the Internet (Cho & Chan, 2015). PT VKP Visi Karya Prakasa is one of the SAAS category startup companies with a focus on visiting management system software providers. Visiting services often face long queues or slow registration processes, leading to inefficient waiting times for visitors. In addition, visiting services experience recording problems so that they are regularly unable to conduct service performance monitoring analysis or workload analysis to improve service quality. PT VKP presents features to facilitate problems for 4 main consumer segments, namely financial service providers, health services, *service center* services, public services and other services. The existing Queue Management feature makes it easy for customers or visitors to register for queue numbers through automatic registration machines or through mobile applications remotely according to figure 1, as well as monitoring queue numbers. By collaborating with PT VKP, service providers can view visit reports, performance analysis to assist management in improving service quality.

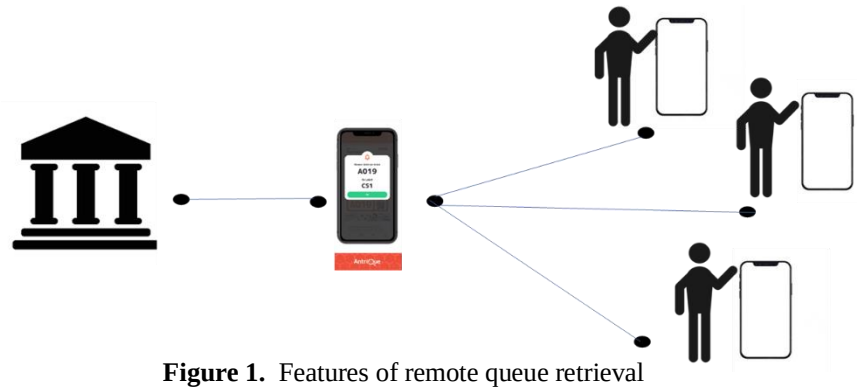


Figure 1. Features of remote queue retrieval

During the pandemic, PT VKP's consumers were dominated by the health service category seen in figure 2, in line with the regulation (PERPRES) regarding changes to Presidential Regulation Number 99 of 2020 concerning the procurement of vaccines and the implementation of vaccinations in the context of overcoming the Coronavirus Disease 2019 (Covid-19) pandemic. In the period 2019 to 2021, various health service providers such as clinics, community health centers, hospitals, and several institutions, both private and state, implemented PT VKP's visit management system in vaccination services. In addition to vaccines, there are also doctor examination and immunization services carried out by health care providers using the visit management system seen in figure 3.

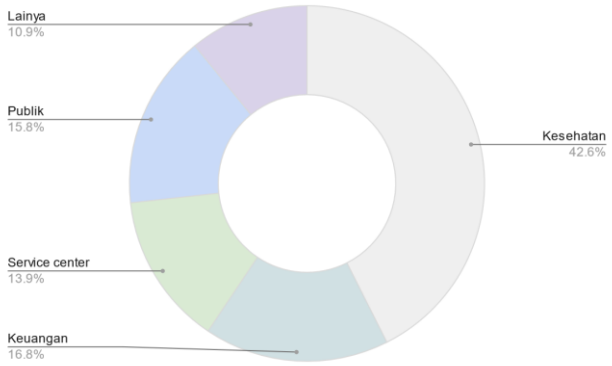


Figure 2. Distribution of the Number of Consumers by Service Type Category

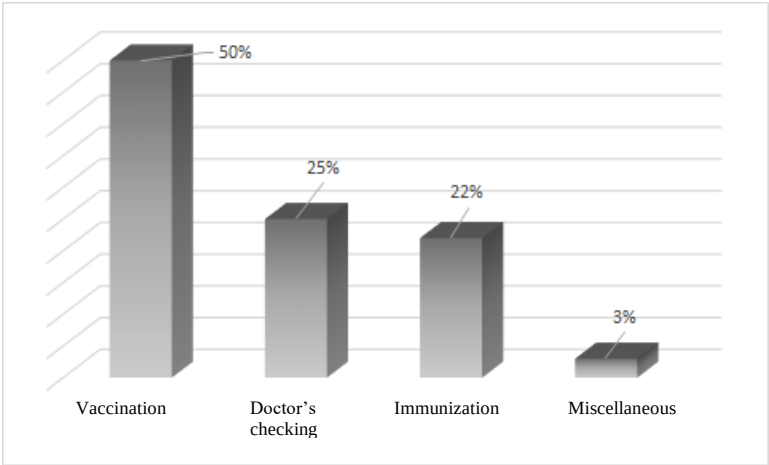


Figure 3. Distribution of Services by Health Consumers

After the third wave of Covid-19 was seen in figure 4, the spread gradually decreased, this is directly proportional to the decline in vaccine activity in the Mid-2022 period. The reduction in vaccine activity was also felt by PT VKP because it had a direct impact on the decline in active consumers from the health service category to reach 50%. To maintain the market and expand the market, the company aims to provide more

attractiveness to health care providers with services other than Covid-19 vaccination in the form of more comprehensive digitalization of health services.

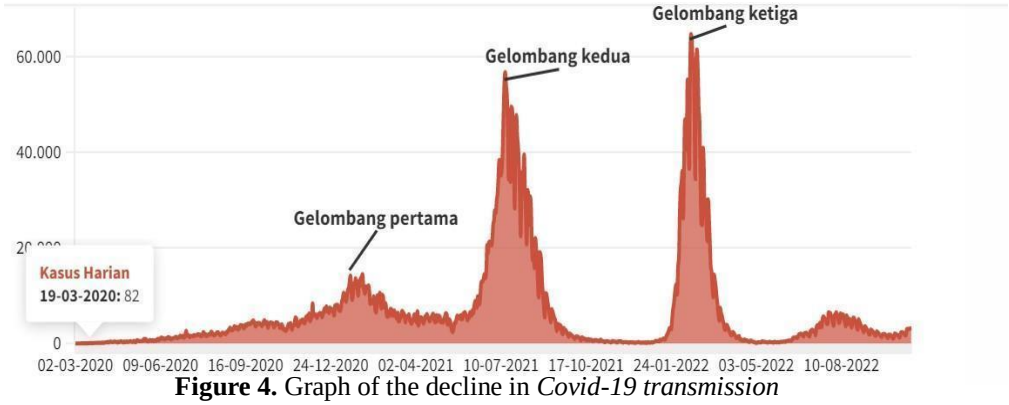


Figure 4. Graph of the decline in *Covid-19 transmission*

Health service providers such as PUSKESMAS & Clinics have carried out digital transformation through the implementation of a visit system from PT VKP, making it easier for officers to bring order to the queue crowd at the service place. However, along with the rampant counseling on digitalization of health services by the government, one of which is related to Health Data System Integration and Health Big Data Analytics System Development, there have been several competing companies that have been able to offer supporting features such as electronic medical records and have been connected to BPJS and Satu sehat. One such company is PT KP with a business model similar to PT VKP.

The need for digitalization in healthcare continues to grow. After implementing electronic medical records for accreditation purposes from the government, there are other needs related to the efficiency of health services in every line including (First Level Health Facilities / FKTP and Advanced Referral Health Facilities / FKRTL) in increasing accessibility, efficiency, and quality of services in the health sector. Collaboration with innovation providers is needed by the government to realize the process of digitizing health services in Indonesia. Thus, PT VKP needs to develop their visit management system to provide a more comprehensive service.

The management of PT VKP realizes that to be able to answer existing opportunities and compete with competing companies and competing in this industry, the company needs to formulate a competitive strategy architecture as a provider of digital systems for health services. In formulating a strategy, companies need to map the resources and competencies they already have, to build sustainable competitive advantage. In the future, companies need to build core competencies. Corporate sustainability is closely related to the company's ability to monitor and adapt to the internal and external environment (Tan and Tan 2005).

METHOD

This research was conducted at the Head Office of PT VKP located in Jakarta The selection of PT VKP head office as the object of this research was carried out because it is the center of corporate strategy planning activities and is a place where Management works. The research period will be carried out with the period of the research period carried out from May 2023 to June 2023.

This study used two types of data, namely primary and secondary. Primary data is obtained through direct data collection in the form of *in-depth interviews*, *in depth interviews* are data and information collection activities with an interview approach. According to Esterberg (2002), *in-depth interview* is the process of obtaining information by means of questions and answers using or not guidelines. While the data while secondary data are obtained indirectly, through individual intermediaries and other documents (Hardani *et al*. 2020).

Data collection techniques in this study were carried out by conducting interviews (*in-depth interviews*) to obtain primary data as identification of internal and external factors. An interview is a question and answer event between two or more individuals directly (Hardani *et al.* 2020). A questionnaire is a set of written statements or questions addressed to respondents (Widoyoko, 2016). Research respondents were determined by one of the purposive sampling methods, namely *expert sampling*. Expert sampling is a sampling of experts who have high knowledge and certain expertise in the field to be studied (Glen 2015; Baran and Jones 2016). However, this study does not have a population, so it is called expert judgment. The minimum number of expert judgment respondents is three respondents (Bruce et al. 2008). The following respondents in this study can be seen in Table 1.

Table 1. Interview respondents

Position	Criterion
Commissioner	Responden Internal
President Director	Responden Internal
Operations manager	Responden Internal
Technologist	External Respondents
Merchant	External Respondents
User	External Respondents

The respondents' criteria were taken based on involvement in the use and development of *platforms* owned by PT VKP. Each respondent has a different perspective on the future of the company.

After obtaining the internal and external factors identified, a second stage of interviews will be conducted to measure the weight of these factors. Weighting is done through pairwise comparison as a measurement of which factors are most influential. In addition to interviews and weighting, other primary data is obtained through important information about the growth movement of users and merchants with company permission.

In taking information from respondents, systematic steps are needed so that the results can be as expected, as follows:

1. Collect the basics in determining questions related to the formulated problem.
2. Make a list of open-ended questions, so that in the process you will get more information than expected.
3. Assign respondents according to competencies around the problem
4. Ensure the readiness of respondents before the interview
5. Conduct an interview
6. Record and/or record interview activities.
7. Identify and analyze interview results as a reference for information to be used in problem solving.

After data collection, the data is analyzed to obtain a formula for digital banking development strategies. The stages in data processing and analysis are described as follows:

8. Input *stage of* business environment analysis
9. *Matching Stage*
10. Implementation of *strategy roadmap* with AHP

Business Environment Analysis

External Factor Evaluation *(EFE) matrix analysis is the identification of indicators of the company's external environment and classifies them into opportunities and threats* that affect the company. *Internal Factor Evaluation* (IFE) analysis is the identification of indicators of the company's internal environment and classifies them into strengths and weaknesses that affect the company (Sudarmaja and Suparna 2013).

Internal and external analysis is used to obtain *strengths*, *weaknesses*, *opportunities*, and *threats*. Internal analysis is carried out with factors obtained from VRIO analysis, while external analysis is obtained from Porter's *Five Forces* analysis . These factors are assessed for their rating and weight. The steps in compiling internal and external analysis carried out by researchers are:

a. After *depth interviews* for each method, a sorting process is carried out to determine the factors that are *strength*, *weakness*, *opportunity* and *threat*.
b. After the factors are obtained, the process of assigning values for weights and ratings can be carried out. The scoring process is carried out by conducting *in-depth interviews* with PT VKP's internal parties for weighting and rating on internal analysis, while for external analysis weighting and rating is carried out by *in-depth interviews* on external parties.
c. Weights and ratings are assigned using an interval scale with values of one through five. The sum of the weights of all factors when added together must be equal to 1.00. Especially for strength and weakness factors, weighting uses a scale of three and four for strengths, and a scale of one and two for weaknesses. The calculation of weights is done using Microsoft Excel software by calculating the average value, or with the following formula:

$$\sum_{i=1}^{z} \pi = \frac{(a1 * b1) + (a2 * b2) + (a3 * b3)}{n}$$

$$S = \pi 1 + \pi 2 + \pi 3 + \pi 4 + \pi 5$$

In which:
Π = Average value for each variable
A1, A2, A3 = Number of respondents who chose scale values B1, B2, B3 = Selected scale values
n = Number of respondents
S = the number of average values for each variable Wi = weight value

IE Matrix Analysis

After the internal and external factors are identified, an evaluation is carried out in the form of *Internal Factor Evaluation (IFE*) and *External Factor Evaluation (EFE).* After the IFE and EFE matrices are formed, matching is carried out using the Internal-External matrix to determine the current quadrant position of the company.

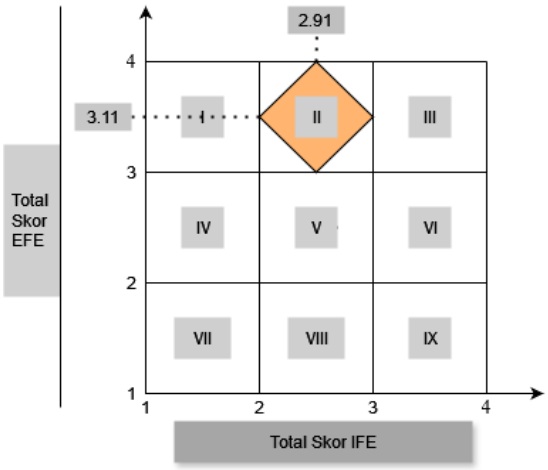


Figure 5. Matrix IE

Next, the matching stage of the identification and weighting results. At this stage, an Internal-External (IE) matrix will be used to determine the company's actual position before determining its best strategy. According to David (2011), the use of IE matrix has the goal of obtaining a more detailed business strategy to be adapted by the group. The IE matrix is divided into three broad sections that identify nine cells and have different strategic implications. Here is a grouping of three main strategies according to David (2011):

a. Growth strategy is the growth of the object of study itself (cells I, II and IV). Strategies that can be executed are intensive strategies (market penetration, market development, and horizontal integration).
b. A stability strategy is a strategy that can be applied without changing existing strategies (cells III, V and VII). Market penetration and product development are strategies that can be used.
c. The *retrenchment* strategy is in cells VI, VIII and IX. *Retrenchment* strategy is a strategy that reduces or minimizes the effort made.

Matching Stage

SWOT Matrix

Once found, the influential factors will then be given a weight to determine the SWOT Matrix. Through SWOT analysis can help to develop four types of strategies, namely SO (Strength-Opportunities), WO (Weakness-Opportunities), ST (Strengths-Threats), and WT (Weakness-Threats) strategies so that researchers allow to determine alternative strategies based on a combination of internal and external factors. Analysis on SWOT is used for qualitative analysis tools by producing alternative strategies by looking at internal and external factors.

Table 2. Matrix SWOT

Internal Factor →	**Strengths (S)**	**Weakness (W)**
External Factor ↓	Internal strength factor	Internal weakness strength
Opportunities (O)	S-O Strategy	W-O Strategy
External Opportunity Factor	A strategy to use strength to for opportunities	A strategy to minimize weakness to use opportunities
Threats (T)	S-T Strategy	W-T Strategy
External Threat Factor	A strategy using strength to overcome threats	A strategy to minimize weakness to use avoid threats

Ssource: Hubeis & Najib (2014)

Analisis SWOT - AHP (A'WOT)

After the SWOT Matrix is formed, a SWOT analysis will be carried out in prioritizing alternative strategies. A'WOT is a combination of SWOT (Strengths, Weaknesses, Opportunities, Threats) and AHP (Analytical Hierarchy Process) strategy formulation. AHP is used to give weight to each level and provide an assessment in knowing the right strategy from alternative SWOT matrix strategies (Kangas et al. 2001).

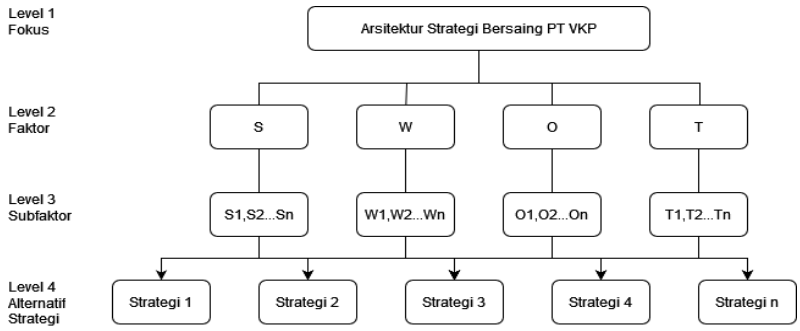


Figure 6. Hierarchical structure of the SWOT-AHP analysis

1. Level 1 is the goal to be achieved by the company, namely the competitive strategy and
2. Level 2 is an internal and external factor identified in the form of *Strengths, Weaknesses, Opportunities* and *Threats.*
3. Level 3 are the factors identified in each SWOT component and described in S1, S2, Sn, W1, W2, Wn, O1, O2, On, T1, T2, Tn.
4. Level 4 is an alternative strategy that will be evaluated and a comparison made to obtain the expected strategy.

Alternative strategies obtained based on SWOT analysis are compared in pairs to determine the priority scale, The priority strategy will be applied through value ratings. Each hierarchy will be evaluated by multiplying the index value and consistency of priority criteria. AHP consistency is assessed by various considerations, namely *the Consistency Ratio* (CR) of the *Consistency index* (CI) with the appropriate value.

Table 3. Paired Comparison Scale

Value	**Information**
1	Criterion A is equally important with criterion B
3	A is a little bit more important than B
5	A is obviously more important than B
7	A is very obviously more important than B
9	A is absolutely more important than B
2, 4, 6, 8	When doubting between close values

Source: Saaty (1993)

Strategy Architecture

In preparing the strategy road map and to illustrate the relationship between PT VKP's goals with future competencies and strategy priorities, the AHP (Analytic Hierarchy Process) method is used. AHP has many advantages in explaining the decision-making process because it can be depicted graphically, so that it is easily understood by all parties involved in making the decision (Budiarto et al. 2018). The target of PT

VKP will determine the time period for implementing alternative strategies. In-depth interviews are again conducted with the general director to determine the implementation period of the strategy that has been formulated The general director is the person who has the final say in making a policy.

RESULTS AND DISCUSSION

External Environment Analysis

Five Forces Porter Analysis

EFE (External Factor Evaluation) analysis is a tool used to evaluate external factors related to the influence of the performance of a company or organization. This helps in identifying opportunities and threats from the environment outside the company. The analysis of PT VKP's external environment uses Porter's Five Forces analysis approach. Identification of external environmental factors is carried out through interviews with all respondents, overall get the factors categorized as opportunities and threats from each respondent as follows:

Table 4. Porter Analysis 5

Aspects	N/O	Impact
Similar industry competition		
Competitor brand awareness is better known to the public	Threat	High
Competitors apply initial implementation costs	Opportunity	High
Competitors have the advantage of features in the form of electronic medical records	Threat	High
Most competitors do not have online queue management	Opportunity	High
The threat of newcomers		
The possibility of AI technology companies being implemented in digitizing health care facilities	Threat	Medium
Requires large capital to build a customer base	Threat	High
Supplier's bargaining position		
Interest from queuing machine vendors to partner	Opportunity	High
Talent availability	Threat	High
Availability of payment gateway machine vendor selection and IT *Infrastructure*	Opportunity	Medium
The bargaining position of the buyer		
Increased number of healthcare transactions from the consumer base	Opportunity	High
Limited target market reach	Threat	High
PT VKP's consumer base is dominated by several agencies	Threat	High
The threat of substitution products		
Some health care facilities still use manual recording	Opportunity	High
Low switching costs to switch to a company with similar services	Threat	High

1) Similar Industry Competition: The development of the healthcare digitalization industry is an opportunity for companies with. The healthcare digitalization industry is growing positively in line with the need for digital transformation by health care facility providers. The healthcare digitalization industry has grown rapidly in recent years, leading to intense competition among existing players for market share. PT VKP will experience competition with several similar competitors that already exist in Indonesia. The number of competitors is one of the threat factors with a high category.

   Feature Expansion and Innovation continues to compete among competitors to develop new features and innovations in an effort to provide added value and competitive advantage. This encourages rapid product development cycles and competition in terms of innovation. This makes product diversification and innovation from competitors a high-category threat for PT VKP.

   The price competition and switching costs required for customers to switch from one Medical SaaS provider to another are relatively low This encourages price competition and aggressive promotions to attract and retain customers. This is a threat in the medium category because of the application of a fairly low price by PT VKP.

Brand awareness competition with competitors is very tight, Some competitors first have a fairly high social media follower base, because they are active in carrying out digital marketing and socialization to health care facilities. This is a threat with a high category, thus there is a possibility that potential potential customers have been exposed to content from competitors.

2) New Entrant Threat: The implementation of artificial intelligence is a threat to most health technology companies, with the application of intelligence allowing all health activities to be fully served with artificial intelligence. It is feared that there will be no more health visit activities and human interaction in it. However, it is classified as a threat with a high category although it still takes time to be reviewed by regulations and accepted by the wider community in Indonesia.

   One of the threat factors coming from new entrants is the movement of the customer base. In this case, it is categorized as a threat with a low category because there is a need for large acquisition costs and there are costs of moving and migrating the required systems.

3) Supplier Bargaining Position: PT VKP relies on other technology companies such as server providers and payment gateways In this case, with the availability of several alternative vendors, the company will have no difficulty moving servers to other places and also with a cloud server system, the company can fully monitor usage to reduce costs more effectively. In addition, with the increase in transactions, the use of the application can increase bargaining position to get lower prices. This is classified as an opportunity with a medium category.

   PT VKP also relies on queuing machine vendors, the possibility of *upstream* integration by vendors is quite low. Vendors who have collaborated with PT VKP even offered to be an extension of the company to make acquisitions.

4) Buyer's Bargaining Position: One of the factors of the buyer's bargaining power towards the product, which is dependent on only a few consumers. This is categorized as a high threat, because if something happens to these consumers such as payments from consumers retreat or there is a cancellation of cooperation, it will have an impact on decreasing PT VKP's income.

   Based on the company's transaction report, there was an increase in the number of service transaction activities in the health category consumers. This is classified as a high category opportunity as an affirmation that PT VKP's digitalization solution is acceptable for health service facilities.

5) Substitution Product Threat: The presence of products with similar functionality can be identified as low threat. The available substitution product related to the digitalization of health services is the development of on-premises systems. Self-management On-premises software must be fully managed by healthcare facilities, including installation, configuration, updates, data backups, and maintenance of infrastructure such as servers, additionally requiring paying expensive licenses for each user or computer using the software. Integration also has limitations Access to data or systems can only be done from within the internal network of health facilities.

EFE Matrix Analysis

Based on the analysis of the 5 porter five factors, the highest rating is ranked based on the impact on the company in running a business. There are ten main external factors with high impact, each of which has 5 factors classified as the main Opportunity and, 5 factors classified as the main threat.

Table 5. EFE Analysis

External Factors	Weight	Rating	Score
Opportunity			
Industrial development of digitalization of health services	0.121	4	0.485
Availability of substitute products in the form of on-premise development	0.106	4	0.371
Collaboration with queue machine vendors	0.101	3	0.337
Movement of the consumer base	0.096	3	0.304
Level of satisfaction and loyalty of the consumer base	0.096	4	0.304
Threats			

Diversification of competitors' products	0.115	4	0.420
Large number of similar competitors	0.104	3	0.347
Brands from competitors today are better known	0.099	3	0.313
Dependence of certain consumers	0.094	3	0.281
The presence of artificial intelligence technology	0.083	3	0.222
Value			3.337

Internal Environmental Analysis

The formulation of the internal environment of VKP is identified using the VRIO (Value, Rarity, Imitability, Organization) analysis approach. indicates a number of factors of the internal environment of the company. Based on discussion and measurement by 3 (three) respondents who have expertise and competence in carrying out company strategy. The five respondents are President Director, Commissioner and Operations Manager. Furthermore, conclusions will be discussed in the form of internal environmental factors that are the strengths and weaknesses of the company.

Resource Based View

Companies can develop the right strategic direction by knowing the quality of resources and capabilities to minimize weaknesses as well as maximize their strengths. Resources are things owned by the company that are used to form and implement strategies. While capability is the managerial ability of the company to use its resources strategically to achieve the expected goals. Resources have an important role in every organization, including PT VKP both intangible and tangible resources.

Intangible or invisible resources are resources that do not have a physical form but provide value to PT VKP, these resources include knowledge, exclusive rights, network relationships. Here are some of the resources contained in the PT VKP organization:

1) Brand Awareness: Currently, the company runs health care facility content on social media accounts that are different from the company's main account. Thus, the social media follower base on the main account has not been exposed to health content, while the second social media account still has a minimal number of followers so it takes hard work to develop brand awareness again.
2) Relationship with Partners: The Company has the ability to foster relationships with strategic partners. One of the collaborations carried out is product development without having to make expensive investments, and get special skills. Currently, the company is integrating electronic medical records, fiber, drug stock features. In this case, the company can maintain good relations with third-party strategic partners.

   In addition to product development partners, the company also has good relations with startup company associations which can help companies in terms of marketing and capital. Another association that is fostered is the association of doctors where companies will be invited to attend socialization on digitalization of health services.

   Currently, the company also fosters good relations with one of the agencies, namely PUSDOKES where both parties have collaborated to implement a digitalization system for FKTP POLRI in the territory of Indonesia. Previously, the system had been implemented for vaccination activities during Covid-19. Based on the interview, it was explained that maintaining relationships is an art that not all organizations can do well.
3) Human Resources: Currently marketing activities are fully carried out by the marketing division, but with limited amounts of resources there are limitations to the market area that can be reached, besides that there is no utilization of digital marketing is still not optimal so that the target of sales is also still not reaching the sales projection.

Currently, product development activities carried out by PT VKP are carried out by the product team, which consists of Developers, QA, UI / UX and accompanied by Product Managers. These capabilities have helped develop features that have been used more than 1 million times by consumers without any significant constraints, this is an added value of the organization.

The company already has an allocation team in order to provide after-sales technical support to consumers, it is just that there is no Service level Agreement SLA agreement such as recording customer complaint documentation, there is no target given regarding the technical resolution of system disruptions.

Therefore, improvements are still needed related to the technical support system to help the level of customer satisfaction.

One of the weaknesses that companies have based on interviews is project management that is often behind schedule or not on target. Because companies still need employees with project management competencies to maximize the project timeframe.

Tangible resources or tangible assets are assets that have a physical form and can be identified materially, along with visible resources owned by PT VKP:

1) Capital: By retaining ownership The founders of a startup can retain ownership maintaining a level of complete control over the company without having to hand over shares to investors. That way it becomes a reference to create positive cash flow and a sustainable business model without the need for outside funds.
2) Technology Infrastructure: The technology used is cloud, API, and Internet technology can be categorized as not rare because almost all similar companies have used.
3) Application: The application provided by PT VKP is specifically for visitors and service providers. In addition, it is available with Mobile, Web and desktop versions, both IOS and Android. Platform applications are a product that can provide value to users to facilitate previously manual processes but this is not a common thing along with massive digitalization. However, the features in the application still need to be improved to meet consumer needs. Currently, there is no electronic medical record feature and has not been integrated with BPJS or Satu Sehat. Thus for the features owned is still not a plus.

VRIO (Value, Rareness, Imitability, Organizational)

Based on the resources and capabilities owned by the company, identification will be carried out based on the competitive level to determine the company's core competencies. The results of the identification related to these competitive implications can be seen in Table 4.3.

Table 6. VRIO Analysis

Aspects	V	R	I	O	Impact	Impact on Competitive Advantage
Visible Resources						
Application	Yes	Yes	No		High	Temporary Excellence
Permodalan	No	No			Medium	Balanced Advantage
Infrastructure	Yes	No	No		Medium	Balanced Advantage
Invisible Resources						
Relationship with Partners	Yes	Yes	Yes	Yes	High	Sustainable Excellence
Brand Awareness	Yes				High	Balanced Advantage
Human Resources	Yes	No	No		High	Balanced Advantage

Barney and Clark (2007) say that if the organization is able to manage capabilities to gain innovative, imitable advantage and has been able to run it well, the organization will get sustained competitive advantage. It can be seen from Figure 4.1 with the company's choice to focus on the business of digitizing visit management at low prices, making a breath of fresh air for the startup industry as a whole because not many companies in that category have received the spotlight in Indonesia.

Core Competencies

Core competencies of the company demonstrate the competitive advantage possessed by the company which has the uniqueness to diversify into new markets. Based on the VRIO analysis that has been carried out, the network of cooperation with partners and product development is a core competency possessed by PT VKP to compete in the health service digitalization industry. Cooperation networks have a high value because with a cooperation will facilitate the business learning process. Brand name has a high value because in doing business Through strategic cooperation, companies can increase marketing acceleration and present more comprehensive service solutions. The ability to develop products has a high value, and is needed to know the wishes of the industry and provide solutions.

IFE Matrix Analysis

Based on interviews with respondents, there are 5 internal factors that become strengths and internal factors that become weaknesses, Based on discussions and rankings by respondents determined each of the five most important and influential internal environmental factor modifiers. There are 5 internal factors each classified as the company's main strength, and five internal factors are classified as company weaknesses.

Table 7. IFE Analysis

Internal Factors	Weight	Rating	Score
Strength			
Relationship with government partners	3.000	0.464	4.000
Relationships with product development partners	2.000	0.422	4.000
Relationship with association	3.000	0.346	3.000
Has apps with Android, IOS, webview and desktop versions	2.000	0.277	3.000
Have qualified development team resources	3.000	0.216	3.000
Weakness			
Product feature availability	3.000	0.309	3.000
Increased marketing team resources	4.000	0.429	4.000
The need to develop brand awareness	3.000	0.283	3.000
Capability in providing after-sales service support	2.000	0.197	2.000
Do not have employees with project management competencies	1.000	0.112	1.000
Value			2.964

IE Matrix Analysis

The Internal-external (IE) matrix results are a combination of information from the evaluation of internal factors (IFE) and external factors (EFE). The IFE score is 2.964 and the EFE score is 2.337. The results of combining IFE and EFE scores in the IE matrix show the company's position in cell V. According to David (2011) cell II is a growth *strategy* through market penetration strategies and product development.

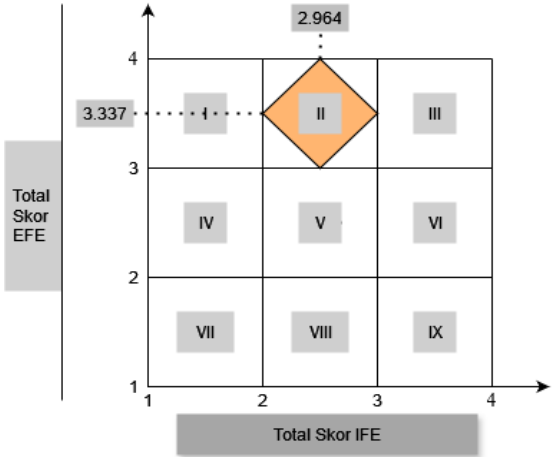


Figure 7. Matrix IE

Based on the IE Value Matrix, companies in a competitive position are in the stabilization stage. PT VKP needs to carry out a growth strategy in the form of strengthening competencies in order to grow and compete and have sustainable advantages.

SWOT Matrix Analysis

Strategy formulation through the SWOT matrix is carried out by combining internal and external key factors, so that the formulation of the SO (Strength-Opportunity) strategy, ST (Strength-Threat) strategy, WO (Weakness-Opportunity) strategy and WT (Weakness-Threat) strategy will be obtained.

Table 8. TOWS matrix

SWOT	***Opportunity*** O1. Industrial Development of Digitalization of Health Services O2. Availability of substitute products in the form of on-premise development O3. Collaboration with Queue machine vendors O4. Scramble for consumer base O5. Level of satisfaction and loyalty of the Consumer base	***Threads*** T1. Diversification of competitors' products T2. Large number of similar competitors T3. Brands from competitors today are better known T4. Dependence on certain consumers T5. The presence of artificial intelligence technology
Strength S1. Relationship with Government Partners S2. Relationship with Development Partners S3. Relationship with Association S4. Has apps with Android, IOS, webview and desktop versions S5. Have qualified development team resources	**SO Strategy** SO1 Making sales from the healthcare category the company's main focus (S1,S3,S5,O1,O4,O5)	**ST Strategy** ST1 Collaboration on the development of new technology adaptations (S2,S4,S5,T5)
Weakness W1. Limited features available W2. Increased marketing team resources W3. The need to develop brand awareness W4. Capability in providing after-sales service support W5. Do not have employees with project management competencies	**Strategy WO** WO1 Increase consumer acquisition from clinical and similar segments (W1,W2, O1,O2,O3) WO2 Complementing the application ecosystem with various supporting features for health services (W1,W4,W5,O1,O2)	**WT Strategy** WT1 Building the Company's brand image as a health service SaaS (W3, T1,T2,T3) WT2 Expanding market and regional segmentation throughout Indonesia (W1,W2. T2,T3,T4)

The results of strategy formulation using SWOT Matrix 6 (six) strategies as follows:

1) Strategy 1 (S-O Strategy): SO1 Make sales from the healthcare category the company's main focus (S1,S3,S5,O1,O4,O5). The company has the largest user base in the healthcare category. By determining the focus on these segments, the company has the opportunity to continue to grow. Intense competition between competitors requires proper allocation of resources as well as clear priorities. The resource allocation process aims to prioritize key initiatives and projects. The right helps maintain focus on strategic objectives and efficiency towards low priority resources.
2) Strategy 2 (S-T Strategy): ST1 Collaboration on the development of new technology adaptations (S2,S4,S5,T5). The advancement and emergence of new technologies such as artificial

intelligence,s has the potential to significantly change the landscape of the SaaS industry in the medical field. Companies need to continue to innovate appropriately in adopting and utilizing these latest technologies, this is done to face the risk of being left behind and unable to compete with competitors who are adaptive in implementing these technologies into their products and services.

3) Strategy 3 (Strategy W-O):
   a) WO1 Increase consumer acquisition from clinical and similar segments (W1,W2, O1,O2,O3): The movement of the healthcare market in Indonesia is dynamic therefore increasing acquisitions from the most accessible segments will expand the company's customer base. A large and diverse consumer base can increase a company's resilience to market fluctuations and help maintain a steady stream of revenue. In addition, success in increasing consumer acquisition is expected to have an influence on increasing company revenue and profitability.
   b) WO2 Complementing the application ecosystem with various supporting features for health services (W1,W4,W5,O1,O2): Based on current conditions, companies need to complete their product features. Market demand is heading towards electronic medical record features. In addition to health services, it is also recommended to have digitalization of services that are integrated with BPJS and healthy ones. Therefore, companies need to immediately complete these features to increase the value of products in the market, and it is possible that it is also necessary to develop features that will be needed in the future.
4) Strategy 4 (W-T Strategies):
   a) Build the Company's brand image as a health service SaaS (W3, T1, T2, T3). Currently the company's brand still reflects as a SaaS queue management system with its main campaign being a queuing solution. Therefore, to have greater competitive value, companies need to build a corporate image as a health service SaaS
   b) Expanding market and regional segmentation throughout Indonesia (W1,W2. T2,T3,T4): Currently the company has consumer dominance from several agencies. The company's biggest profit comes from the results of subscription costs by the agency which does have a considerable number of service points. Risks will occur if the company has obstacles such as bad payments or unsubscribing, therefore to maintain health and stability the company can access new markets as consumer diversification.

A'WOT's Strategy Priorities

After conducting a SWOT analysis, 6 alternative strategies were obtained, in building strategic planning, strategic priorities need to be determined based on aspects of the development aspects of management in order to meet the expected goals. In this study, strategy prioritization was carried out through the AHP method.

Table 9. Priority Weight of PT VKP's SWOT Factor

SWOT Factor (Weight)	Value Inconsistency	Sub Factor SWOT	Weight
Strength (0,362)	0,08	Relationship with Government Partners	0,391
		Relationship with Development Partners	0,045
		Relationship with Association	0,084
		Has apps with Android, IOS, webview and desktop versions	0,218
		Have qualified development team resources	0,261
Weakness (0,212)	0,08	Limited features available	0,432
		Increased marketing team resources	0,052
		The need to develop *brand awareness*	0,102
		Capability in providing after-sales service support	0,254
		Do not have employees with project management competencies	0,159
Opportunity (0,302)	0,09	Consumer satisfaction level	0,476
		Movement of the consumer base	0,248

		Availability of substitute products in the form of on-premise development	0,135
		Industrial Development of Digitalization of Health Services	0,041
		Collaboration with Queue machine vendors	0,098
Threats (0,123)	0,08	Diversification of competitors' products	0,481
		Large number of similar competitors	0,111
		Brands from competitors are now better known	0,078
		Dependence on certain consumers	0,170
		The presence of artificial intelligence technology	0,161

Business Strategy Priority Analysis

Strategy priorities are obtained through a comparative assessment of SWOT components against alternative strategy objectives formulated in Table 10 as follows:

Table 10. Alternative weighting of strategies

Alternative Strategy	Weight
Making healthcare category sales the company's main focus	0,520
Complementing the application ecosystem with various supporting features for health services	0,189
Building the Company's brand image as *a health service* SaaS	0,106
Increase consumer acquisition from the clinic and similar segments	0,0990
Expanding market and regional segmentation throughout Indonesia	0,552
Collaboration on the development of new technology adaptations	0,039

Consistency Ratio (CR) < 10%, meaning that expert answers have been consistent

Strategy Architecture

Goal

The objectives of the management involved in this study understand the opportunities of the development of digital systems of health care facilities. PT VKP needs internal improvements in order to implement business growth more stably. Based on discussions with the Leadership to formulate the competitive strategy architecture of PT VKP in the health service digitalization industry, the strategic targets to be achieved by the company are determined based on the challenges faced so far, namely: (1) Able to compete with competitors based on feature capabilities, prices, and services (2) Understand the opportunities of the health service digitalization industry, (3) Penetrate the market.

Program Recommendations

Strategy architecture is different from strategic planning (Hamel and Prahalad, 1994). Based on the results of the formulation of the strategy architecture, recommendations were obtained in the form of 6 alternative strategies and their supporting programs. The strategy implementation plan includes program activities, implementation time, program implementers, KPIs (key performance indicators), and program monitoring and evaluation. To implement the strategy divided into 4 quarters for the next 1 year.

To implement the strategy, it is supported by related program programs which are divided into two, namely routine programs are programs that will be carried out regularly, and phased programs are programs with implementation within a certain period after determining the order. Here's the description of program recommendations.

Table 11. Program Recommendations

Phased Program

Making sales from the healthcare category the company's main focus
Allocate human resources to engage in the company's main focus strategy
Complementing the application ecosystem with various supporting features for health services
Determine the Roadmap of Features you want to develop
Apply agile *product development methodology*
Improve service and technical support
Building the Company's brand image as a health service SaaS
Improve digital content marketing through social media and public relations to build brand awareness
Participate in conferences, or online forums about health
Increase consumer acquisition from the clinic and similar segments
Establish partnerships with other companies as one of the marketing channels
Recruiting employees with marketing competencies
Expanding market and regional segmentation throughout Indonesia
Analyze new markets in other regions or countries that have potential for your product.
Opening Representative Offices of several regions in potential regions
Collaboration on the development of new technology adaptations
Establish a research and development team focused on the exploration and development of AI solutions.
Collaborate with universities for AI development
Program Rutin
Regular monitoring of key competitors, their products, features, marketing strategies, and business models.
Launch new features regularly to maintain a competitive advantage.
Apply a disciplined, flexible and competitive culture to employees
Leverage usage data, metrics, and analytics to optimize products, features, and marketing strategies.

Refer to strategy recommendations according to the company's position in cell II where the company is in the category of growth and development, namely market penetration, market development and product development.

1) Market Penetration: making healthcare category sales the company's main focus, building the company's brand image as healthcare *SaaS*, and increasing consumer acquisition from the clinical and similar segments. Market penetration is a strategy to increase sales conversions. Currently, with strategy recommendations focused on streamlining the acquisition process from the marketing stage to initial implementation. For this reason, by distributing marketers, in the region can establish good communication with potential customers. The provision of promos is considered to be a consideration for potential customers choosing the services provided by the company.
2) Market Development:
    a) Expanding market and regional segmentation throughout Indonesia: Marketing development focuses on marketing products / services that are already owned with the aim that new market segments can be classified with expansion areas, or market segments that have not been touched before. Currently, with consumers centralized in the Jabodetabek area dominated by several agencies, it indicates that the market potential in other regions has not been touched. The expansion of market segments is aimed at diversifying consumers and reducing the risk of buyers' bargaining power.
    b) Product Development: Complementing the application ecosystem with various supporting features for health services and collaboration in developing new technology adaptations. Innovation in product or service development according to customer needs in order to stay ahead of competing products, along with the competition for completeness of features by competitors, in accordance with the needs of health digitalization driven by the Ministry of Health.

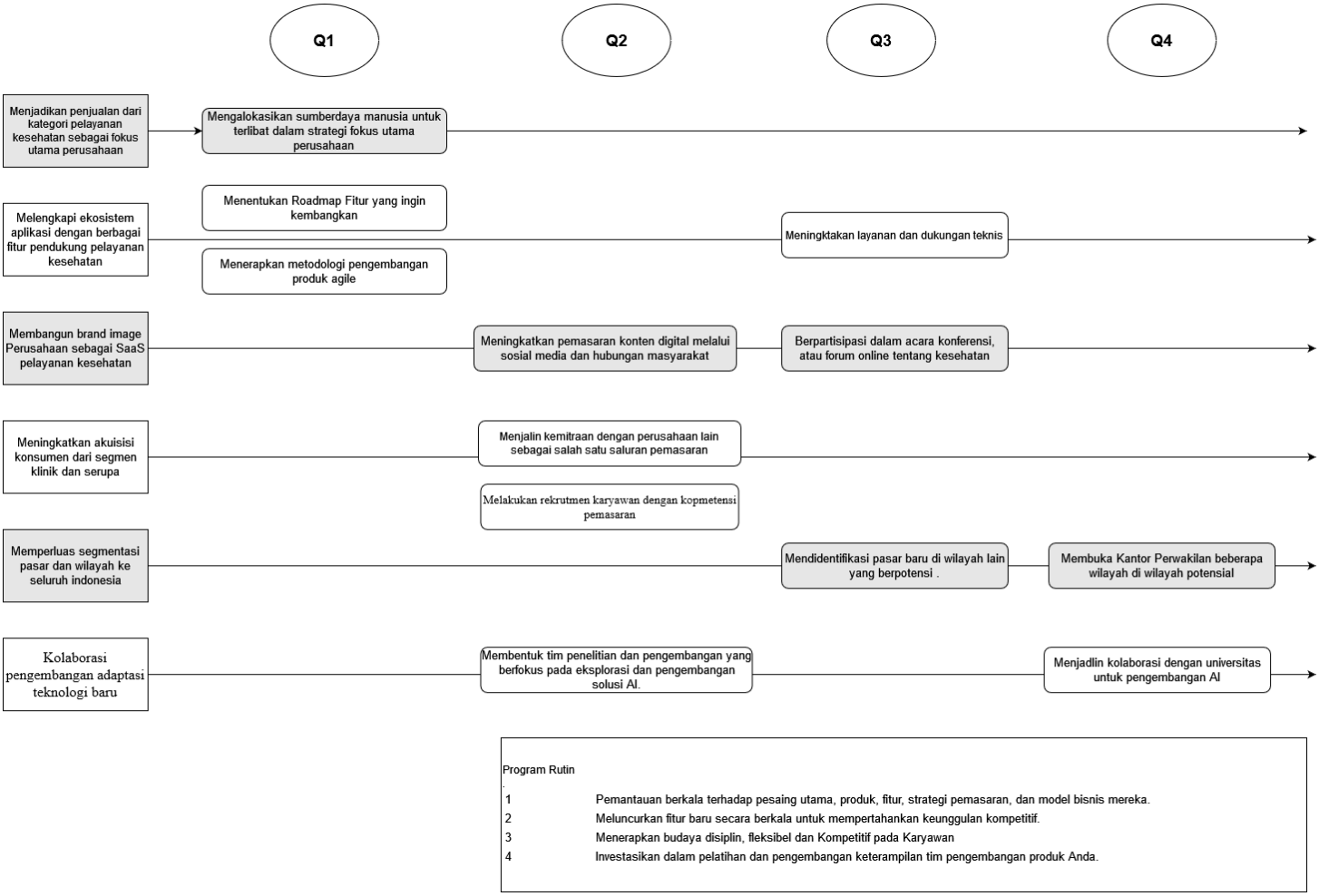


Figure 8. Strategy Architecture Design

CONCLUSION

The research identifies ten external and internal factors that shape a company's competitive strategy. The Porter 5 forces method identifies five opportunities and five threats, with digitalization of health services as the highest opportunity and competitor product diversification as the main threat. The Resource Based View and VRIO analysis reveals five strengths and five weaknesses, with government relationship as a strength and health features as a weakness. The company's internal and external environmental factors are categorized into growth and build, with an IFE score of 2,964 and an EFE score of 3,337. Six alternative strategies are formulated, with a competitive strategy architecture of one year and four quarters. The top priority strategy is maintaining sales in the health service category. However, the research has limitations, including the absence of actors in AHP and limited financial information. Future studies should include more comprehensive financial conditions to improve the strategy architecture.

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