

What drives selection decisions of private universities in Jakarta?



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ABSTRACT

In many circumstances, the issues of competitiveness and selection decisions are becoming more important as a strategic focal point of the institutional function in higher education (HE). With the implementation of a social market economy in Indonesia, as an intermediary stage between socialism and capitalism, the need to incorporate competitiveness within an institutional role becomes more pressing. Despite the fact that private higher education in Indonesia grew steadily, there has been no published research on the competitiveness of private higher education. The purpose of this study is to examine the assessment of the competitiveness and selection decision of private universities (PTS) and the implications for the decision to attend a private university. The sample size is 300 students who choose to continue their education at PTS as part of the Higher Education Service Institute (LLDIKTI) Region III Jakarta. We employed the Analytical Hierarchy Process (AHP), the SWOT analysis, and the Business Model Canvas. The AHP results showed that a variety of variables could be utilized to choose private universities in LLDIKTI Region III Jakarta. Meanwhile, the SWOT analysis findings were located in the third quadrant (defense). In this situation, private universities have a big market opportunity, yet there are hurdles inside the private universities themselves. As a result, the PTS strategy should focus on minimizing internal PTS issues in order to capture the greater possibilities to compete with other PTS in LLDIKTI Region III Jakarta. Furthermore, the results of the business model canvas analysis proved that optimizing the role of websites, social media, alumni, scholarships, and competitiveness was expected to be able to make private universities superior and of high quality through the provision of accurate, fast, and easy information and communication channels that followed the technological developments and needs, as well as customer segments.

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1. Introduction

Along with the times, people have been able to assess quality universities. They assume that by choosing a quality university, their children will be able to improve their human resources to compete in the era of globalization. This indicates that university administrators understand how important it is to create a better-quality university. One of the efforts to attract public interest is to inform the community of superior higher education programs (Ürer Erdil et al., 2021).

Strategic planning is carried out based on institutional aspects and aspects of consumer (student) preferences. The main objective of the institution's strategy is to objectively see internal and external conditions so that the private university (PTS) can anticipate the changes. Thus, the SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis places a future position with the basic capital of strengths and weaknesses, then estimates what opportunities or threats are faced (Madsen, 2016). The second aspect is the preference of how students determine college admission choices. Preference is part of consumer behavior, namely how an individual or group uses certain goods and services (Armstrong et al., 2014). Preference implies the tendency to choose or prioritize the desired. Thus, this study wants to know the priorities desired by prospective students towards choosing a study program.

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One of the ways used by companies or business actors to be able to compete and develop is to create new strategies. Competition from other PTS, especially in finding students, is demanded with various appropriate strategies. This makes every PTS always required to develop. PTS must also have a strong and appropriate business model. In this context, the business model canvas is described as the reason for how an organization creates, delivers, and captures value and then describes how a business can run well and provide value to consumers (Osterwalder and Pigneur, 2010). Understanding the real business model is the starting point for any good discussion about an innovative business model.

2. Literature review and hypothesis development

2.1. Theory of marketing

In principle, marketing is a social process through which individuals or organizations acquire what they require and desire to produce, offer, and freely trade valuable items, goods, or services with others (Armstrong et al., 2014). The American Marketing Association (Hair et al., 2000) also supports this, which defines marketing as an institutional function and a collection of processes for developing, communicating, delivering, and exchanging offerings of value to customers, organizations, stakeholders, partners, and the general public.

In this study, we use the concept of Malhotra et al. (2010) who defined it as the strategic philosophy and managerial method that an organization employs to meet the wants and requirements of individuals and groups to increase exchange. While some feel that students are the only customers of educational services, others believe that the service benefits parents, future employers, and society (Al-Fattal, 2010).

2.2. Selection decisions

The selection decisions of universities are affected by several aspects related to the marketing of educational services, including:

1. The university's website;
2. Social media activity;
3. Alumni network;
4. Scholarship availability;
5. Competitiveness (Madsen, 2016; Maringe, 2006; Nadiri, 2006; Wiese et al., 2009).

As a whole, the website is a collection of pages that are used to display text information, still or motion pictures, animations, sounds, and or a combination of all of them in terms of static and dynamic, which form a series of interrelated buildings, each of which is connected to a network (Maringe, 2006; Nadiri, 2006; Wiese et al., 2009).

A university's website is the primary method of disseminating information about its numerous departments and academic programs. Students' decisions about whether or not they want to continue their education at a certain university are primarily influenced by the quality of the website's design, information design, aesthetics, and navigation. Therefore, website development's success is heavily dependent on gaining the trust and commitment of potential students interested in continuing their education (Maringe, 2006; Nadiri, 2006; Wiese et al., 2009).

Meanwhile, social media is designed to facilitate interactive or two-way social interactions. Information is now being disseminated to a far larger number of people via internet-based social media platforms. In addition to being used to post material such as product profiles, activities, or even user comments, social media like Facebook, Twitter, and Skype are used to facilitate communication and involvement in social networks online.

Moving alumni refers to a group of people who have graduated from a university or other educational institution. A product is created after an educational process is completed. In this case, the existence of alumni is expected to find employment that matches the skills and abilities they already possess due to their studies.

According to Corcoran et al. (2010), alumni are a crucial part of the long-term viability and quality of the institutions they have graduated. As a result, strategic efforts must be made to pay attention to the existence of alumni because, in addition to being the quality aim of a university, alumni are also a channel for evaluating and monitoring the success of a university. Concerning alumni, tracer study can provide important information regarding the relationship between higher education and the world of professional work, assessing the relevance of higher education, information for stakeholders, and completeness of requirements for higher education accreditation.

Meanwhile, scholarships are tuition support provided to students to participate in and complete Higher Education based on primary academic achievement and potential. Finally, competitiveness is a concept of comparing the ability and performance of companies, in this case, universities in selling or supplying goods and services, meaning graduates who can compete in the labor market with graduates from other universities (Madsen, 2016). In this study, competitiveness in universities is measured by the latest university ranking on the QS World. This institution conducts a more in-depth assessment based on the quality of the university, which includes the number of students, the number of study programs, as well as the number of research and publications in journals that are considered internationally reputable (Madsen, 2016).

After the application and campus acceptance has been obtained, prospective students enter the third stage, namely selection, and actual attendance. Throughout this stage, prospective students

compare and evaluate several preferred alternatives by paying attention to the most important attributes of each of these campuses. This stage will end with the final attendance or decision to enroll in the campus.

The university selection decision-making process will go through three main stages, as follows (Madsen, 2016):

1. A prospective student realizes that he has an interest in continuing his studies at the tertiary level;
2. Prospective students are looking for important information about the college they want to go to;
3. A prospective student decides to enroll in a particular college.

Many factors will influence the decision-making process. Baker et al. (2002) stated that external stimuli in the form of marketing and environmental stimuli can influence a person in making decisions.

H1: Specification has a positive and significant effect on selection decisions.

3. Research methods

In this study, the sample size is 300 students who chose to continue their education at private universities (PTS) inside the Higher Education Service Institute (LLDIKTI) Region III Jakarta. This study is a descriptive study, which means it will explain the findings of calculations in the form of a description. The Analytical Hierarchy Process (AHP), SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, and Business Model Canvas (BMC) are used in this study (Fig. 1, Fig. 2, and Fig. 3).

The AHP approach divides complicated and unstructured situations into groups, then arranges the groups into a hierarchy before inserting numerical values as a substitute for human vision in making relative comparisons (Table 1). The synthesis will determine which ingredient is the most important (Moogan et al., 1999; Cubillo et al., 2006; Drewes and Michael, 2006; Nanath et al., 2002). When making pairwise comparisons, a basic scale is utilized, based on the psychological study of the individual's ability to conduct pairwise comparisons against numerous items to be compared (Saaty, 2008).

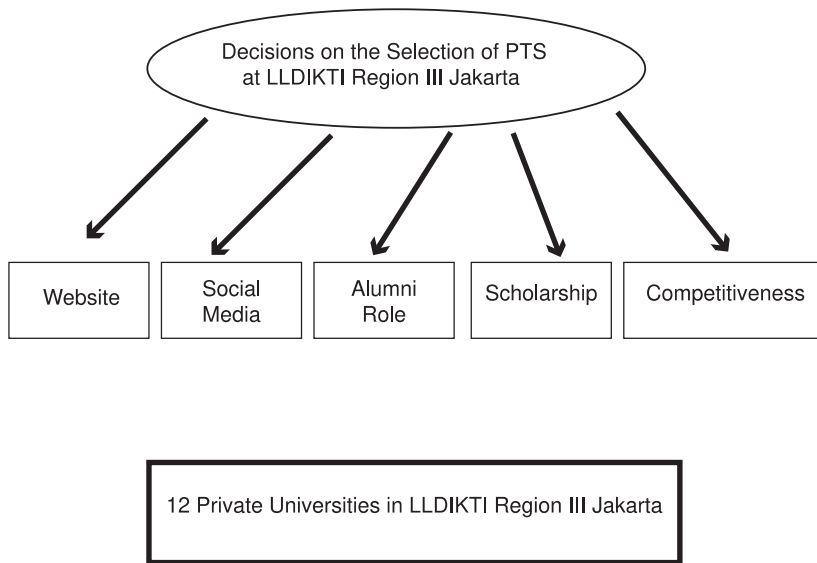


Fig. 1: Conceptual model using AHP



Fig. 2: Conceptual model using SWOT

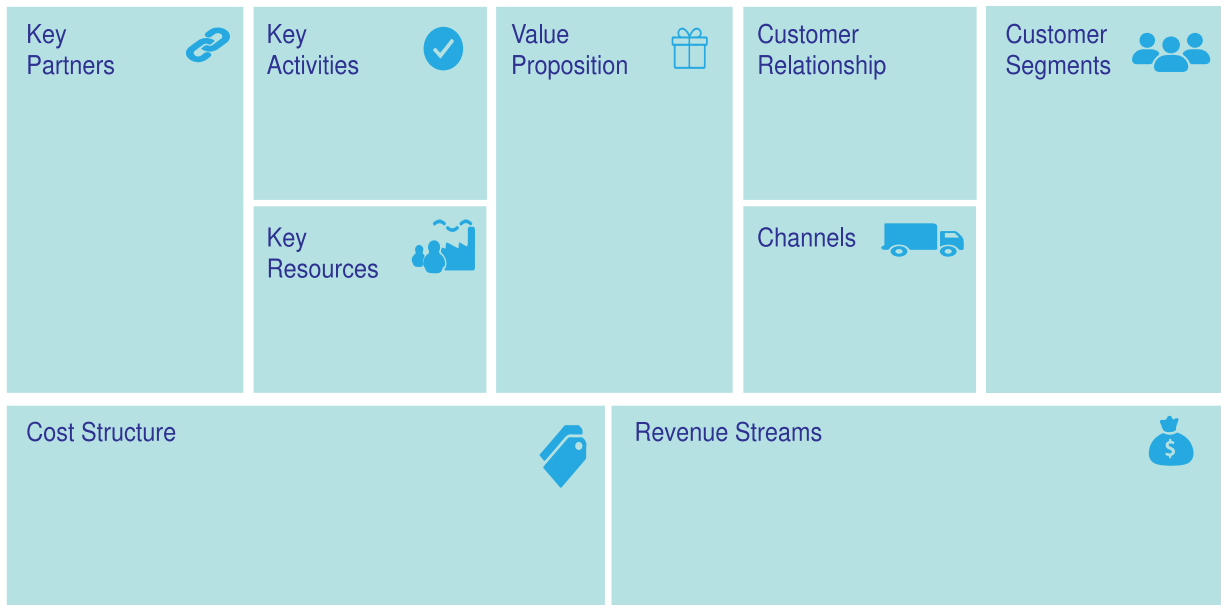


Fig. 3: Conceptual model using business model canvas

Table 1: Inter-criteria rating scale (Saaty, 2008)

Comparison of the relative value between criteria i and criteria j (X_{ij})	Definition of rating	Explanation
1	Equally important	Two criteria (i and j) have the same level of importance in meeting the objectives
3	Relatively more important	Criterion i is slightly more important than criterion j in meeting the objectives
5	More important	Criterion i has a fairly large level of importance compared to criterion j in meeting the objectives
7	Very important	Criterion i has a very large level of importance compared to criterion j in meeting the objectives
9	Much more important	Criterion i has much greater importance than criterion j in meeting the objectives
2, 4, 6, 8	Intermediate value	Rating among other relative values

In this study, the SWOT analysis is supposed to uncover crucial internal and external aspects in accomplishing goals by identifying strengths, weaknesses, opportunities, and threats. This analysis is based on the logic of thinking used to determine the policy plan that will be implemented. An organization must utilize its strengths and opportunities while minimizing its existing flaws and threats to balance internal and external situations (Madsen, 2016).

Clearly, the majority of the business model examined will be concerned with some form of strategy, decision-making, or concept. These choices are stated in words such as target market, target customer, network position, competitive strategy, and rules. Moreover, a strong business model canvas framework should include a description of the company's resources and competencies.

4. Results and discussion

4.1. Statistical descriptive of website

In Table 2, the PTS website at LLDIKTI Region III Jakarta with a mean (average) score of 8.31 is on a scale of 8.00. This indicates that respondents perceive the average PTS website at LLDIKTI Region III Jakarta as absolutely important.

4.2. Statistical descriptive of social media

In Table 3, the social media owned by a private university in LLDIKTI Region III Jakarta with a mean score of 8.005 is on a scale of 8.00. This shows that the average social media of a private university in LLDIKTI Region III Jakarta is perceived by respondents as absolutely important.

Table 2: Statistical summary of website

Question code	University website	Mean
1	College website design display	8.29
2	Display messages on college websites	8.27
3	College website navigation display	8.35
4	The existence of an academic and non-academic service information system on the university website	8.31
	Total score mean	33.22
	Mean score	8.305

Table 3: Statistical summary of social media

Question code	Social media	Mean
1	Participation in social media	7.90
2	Get involved with social media	8.05
3	Conversations with social media	7.84
4	Communication through social media communities	8.23
	Total score mean	32.02
	Mean score	8.005

4.3. Statistical descriptive of alumni engagement

In Table 4, the role of alumni-owned by a private university in LLDIKTI Region III Jakarta with a mean score of 7.99 on a scale of 8.00. This reflects that the average role of alumni of a private university in LLDIKTI Region III Jakarta is perceived by respondents as significantly more important.

Table 4: Statistical summary of alumni

Question code	Alumni involvement	Mean
1	Alumni integrity	7.99
2	The existence of an alumni organization	7.94
3	Alumni jobs according to the field of science	8.03
4	Acceptance of alumni in the world of work	8.14
5	Alumni's ability in communication	7.92
6	Alumni can work with a team	7.66
7	Alumni always keep up with the times	8.22
	Total score mean	55.9
	Mean score	7.99

4.4. Statistical descriptive of scholarship

In Table 5, the provision of scholarships available and awarded to a private university in LLDIKTI Region III Jakarta with a mean score of 8.18 is on a scale of 8.00. This reflects that the average number of scholarships awarded to a private university in LLDIKTI Region III Jakarta is perceived by respondents as absolutely important.

4.5. Statistical descriptive of competitiveness

In Table 6, the competitiveness of a private university in LLDIKTI Region III Jakarta with a mean score of 8.25 is on a scale of 8.00. This shows that respondents perceive the average competitiveness of a private university in LLDIKTI Region III Jakarta as absolutely important.

Table 5: Statistical summary of scholarship

Question code	Scholarship	Mean
1	Easy scholarship administration procedure	8.30
2	Scholarship amount varies	8.29
3	Punctuality of scholarship award	7.96
	Total score mean	24.55
	Mean score	8.18

Table 6: Statistical summary of competitiveness

Question code	Competitiveness	Mean
1	A large number of students studying	8.37
2	The number of study programs owned	8.41
3	There is a clear commitment of lecturers and employees	8.30
4	Records of research performance and publications of national and international lecturers	8.13
5	Community service activities for lecturers	8.05
	Total score mean	41.26
	Mean score	8.25

4.6. Results based on analytical hierarchy process (AHP)

PTS might assume that potential students pick PTS in LLDIKTI Region III Jakarta because of the quality of the website. According to Fig. 4, there are five (5) selection criteria for choosing private colleges in LLDIKTI Region III Jakarta: Websites, social media, scholarships, alumni, and competitiveness. The website weighted 0.594, whereas social media, alumni, scholarship, and competitiveness had weights of 0.238, 0.101, 0.048, and 0.019, respectively.

The findings of this study are consistent with those of Sangka and Muchsin's (2018) findings. They found that the AHP method can help students choose elective courses based on weights obtained through calculations used in a relatively short amount of time and with optimal results.

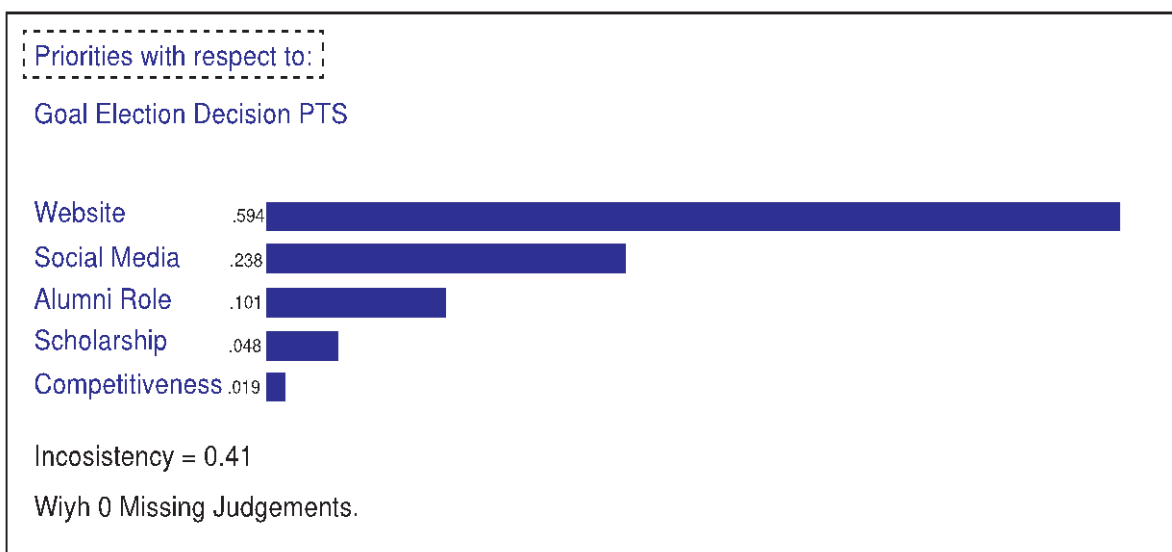


Fig. 4: Synthesis results among criteria

From Fig. 5, it can be concluded that in the PTS selection decision based on several criteria, such as website, social media, alumni roles, scholarships, and

competitiveness, Bina Nusantara University studied has a match rate of up to 12.1%.

4.7. Results based on SWOT

Based on Fig. 6, it can be concluded that the calculation results are in quadrant 3 (Defense). In this condition, the company is in a very large market opportunity, but within the company itself is having

obstacles. This company's strategy aims to minimize its internal problems so that it can seize better opportunities to win the competition with other private universities (PTS) located in LLDIKTI Region III Jakarta.

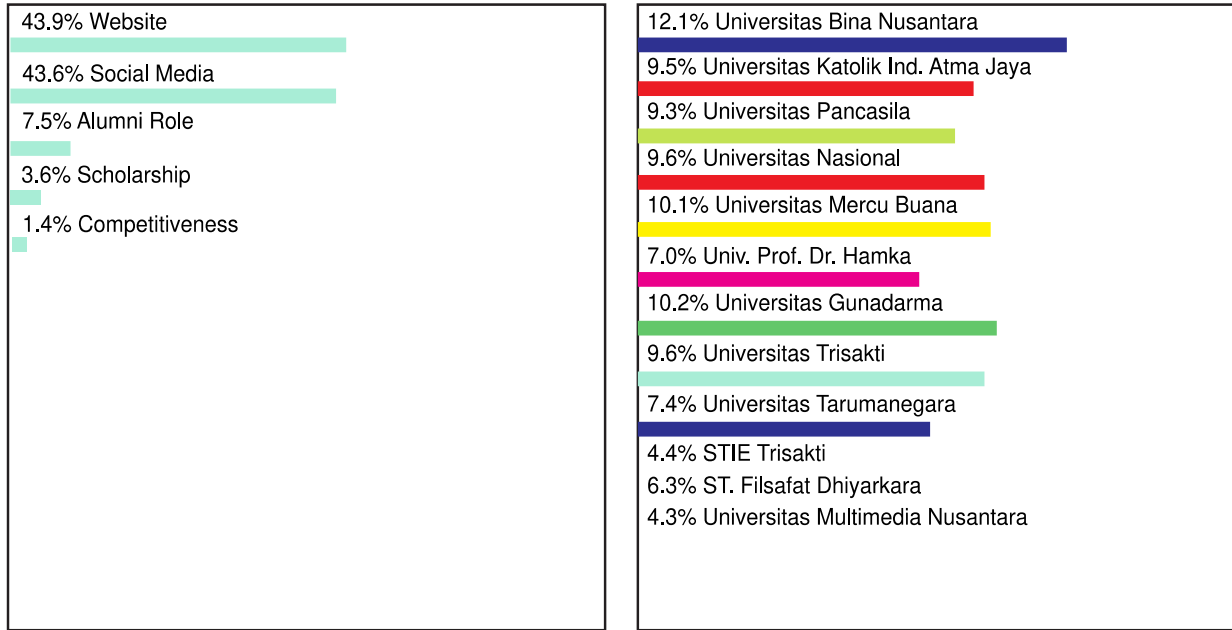


Fig. 5: Dynamic graphics

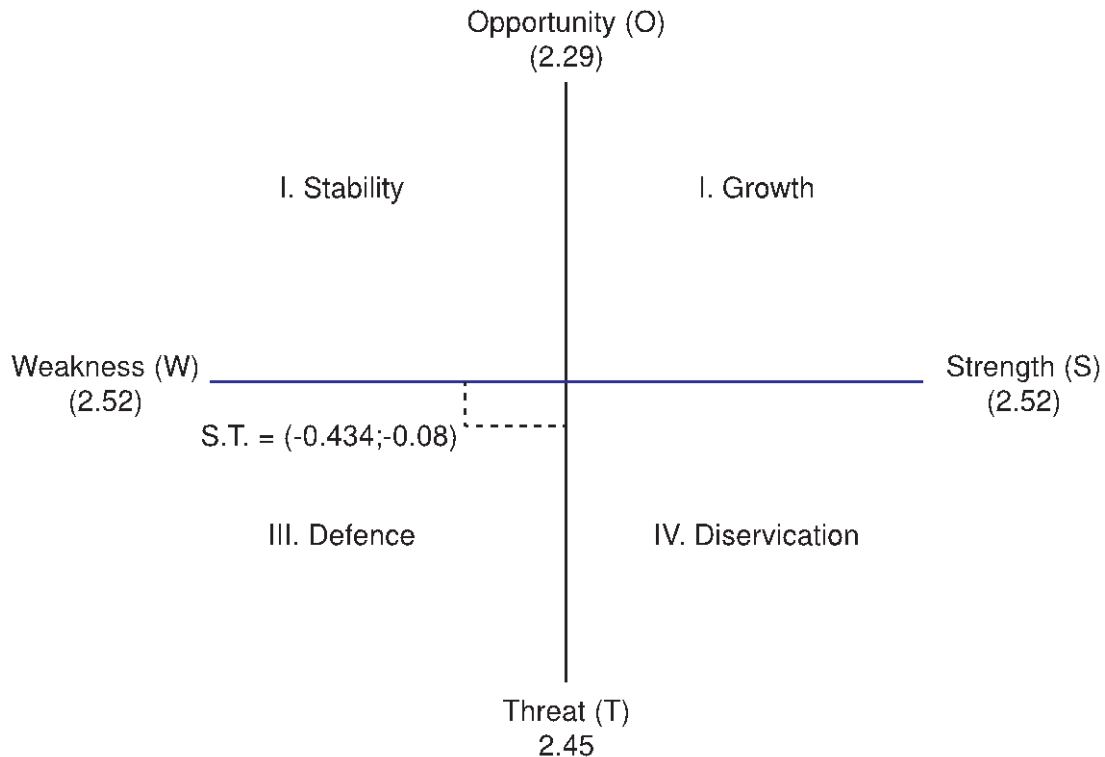


Fig. 6: Cartesius diagram of SWOT

The analysis results using the IE matrix in Table 7 and Table 8 show that the PTS position in LLDIKTI Region III Jakarta is in cell I. This condition indicates that the decision to select PTS in LLDIKTI Region III Jakarta is in a period of growth and development.

Strategies that can be applied include the Weakness Threat (WT) strategy by minimizing the weaknesses and threats that PTS must adjust and face in LLDIKTI Region III Jakarta.

Table 7: Quantitative strategy combination planning matrix

IFAS/EFAS	Strength (S)	Weakness (W)
Opportunity (O)	S-O Strategy: Use strength to take advantage of opportunities=3.94	W-O strategy: Minimize weaknesses by taking advantage of opportunity=4.81
Threats (T)	S-T Strategy: Use force to overcome threats=4.1	W-T Strategy: Minimize weaknesses and avoid threats=4.97

IFAS: Internal factor analysis strategy; EFAS: External factor analysis strategy

Table 8: Internal external assessment matrix on SWOT

IFAS/EFAS	Strong (3-4)	Medium (2-2.99)	Low (1-1.99)
High 3-4	I	II	III
Medium 2-2.99	IV	V	VI
Low 1-1.99	VII	VII	IX

IFAS: Internal factor analysis strategy; EFAS: External factor analysis strategy

The Weakness Threat (WT) strategy that can minimize weaknesses and threats requires private universities in LLDIKTI Region III Jakarta to:

- Maximize the performance of human resources, in this case, Lecturers as teachers to produce quality graduates;
- Provide intensive training to human resources owned;
- Combine location and use of technology to maximize university outcomes;
- Conduct marketing intensively and consistently by using marketing strategies that are in accordance with the conditions;
- Conduct digital marketing on PTS products.

According to [Leiber et al. \(2018\)](#) investigation, SWOT analysis can be used to make policy suggestions and future improvement initiatives. As a result, higher education institutions must be able to implement these policies and strategies with full commitment, discipline, and responsibility in order to realize quality educational institutions with integrity and produce students who will become human resources who will excel not only in academics but also in moral, religious, and social aspects. Meanwhile, the findings of [Nasreen and Afzal \(2020\)](#) demonstrated that MM-UST has more strengths than flaws and more possibilities than dangers. Based on this mapping, the MM-UST quadrant is located in the SWOT diagram quadrant I, relevant to the expansion plan.

Unlike [Khalid et al. \(2017\)](#) and [Fahim et al. \(2021\)](#), findings indicated that many internal and external challenges and conditions in Morocco have good and negative influences, which can be examined as an effective strategy for the future development of Morocco. SWOT analysis can effectively evaluate strategic choices in analyzing Morocco's potential to survive in the globalization era.

4.8. Results based on business model canvas

The Business Model Canvas is one of the most popular management strategies among businesses and is often studied at universities. This popularity is due to the simple and easy-to-understand

appearance of the Business Model Canvas. It is a tool to explain how a business or organization can create, deliver, and capture value ([Osterwalder and Pigneur, 2010](#)).

In [Table 9](#), researchers gathered observational and documented data to develop a business model for 12 private universities (PTS) in LLDIKTI Region III Jakarta, which included the nine elements listed below:

a) The value proposition: The value proposition is the value that the company positions for potential customers. Among the values provided by the 12 private universities in LLDIKTI Region III Jakarta are:

- Execution: The website's presence as an information medium for the PTS in question provides information about access to search for certain information owned in the form of a repository that shows accreditation, curriculum, scientific works owned by the PTS, and so on;
- Availability: Ease of access to a PTS both online and offline, with the assistance of additional resources that support the PTS's existence;
- Affordability: The availability of facilities/support owned by a private university, such as free internet access, libraries, laboratories, etc.

b) Customer segmentation: All students with active status and teachers (permanent lecturers and extraordinary lecturers) with active status are the client segments owned and served by a PTS based in LLDIKTI Region III Jakarta.

c) Channel: Every business requires a method to deliver its services or products to customers. Channels deliver services or products to clients based on the segment targeted by the PTS.

d) Relationships with customers: Developing positive relationships with clients is critical when you opt to study at a private university. It is discussed in this part how a PTS creates a relationship with the community as prospective pupils. Communication carried out or established by a PTS can be done not just face-to-face but also via numerous media such as telephone, e-mail, online chat on the PTS's website, and social media controlled by the PTS. As

a result, prospective clients are unlikely to switch to another company in this situation. Furthermore, tight and extensive oversight is required in client contacts.

- e) Important actions: Some of the activities carried out by PTS in generating products or services and surviving in the face of competition. A PTS can fill several types of activities that they will perform to develop products and services that can compete with other PTS. Key activities also demonstrate the primary activities that a private university must focus on for the knowledge to be known to the larger population.
- f) Important resources: The main resources will be used to realize the value proposition through the key actions carried out. Companies can fill essential resources with whatever resources they have, including educators and inanimate objects like equipment and equipment as ideas to support the process of developing a private university curriculum.
- g) Important collaboration: Plan how the relationship will flow during business execution to promote a well-maintained relationship. Key resources can be filled, and partners must be invited to collaborate to achieve goals. Cooperation between private universities in carrying out the curriculum, the three-pillar of higher education, and the independent learning campus curriculum (MBKM) are currently very necessary in order to produce graduates who have not only academic abilities

but also non-academic abilities and other supporting abilities in order to compete in the world. Society is required.

- h) Revenue flows: In addition to the critical activities indicated in the key activities, the company must identify how it will generate profit or benefit from the key activities that will be carried out under the value proposition. The revenue stream describes how the company, in this case, a PTS, makes a profit once the business is completed. The benefits here can be understood as an increase in the number of students each academic year, an increase in PTS performance as evidenced by A-rated accreditation and worldwide accreditation, an improvement in university rankings, etc.
- i) Cost structure: A private university will pay various costs in carrying out its normal activities, both in terms of supporting resources and human resource development, to realize its mission.

Based on the PTS business model canvas findings at LLDIKTI Region III, it is possible to infer that the vision implemented with numerous alternative websites, social media, alumni, scholarships, and competitiveness is projected to make the PTS superior. Such outcomes can be achieved by providing complete, rapid, and simple communication channels that are in line with technological advancements and the needs of the consumer segment.

Table 9: Business model canvas

Value proposition	Customer segments	Channel
<ul style="list-style-type: none"> • The PTS studied to have institutional accreditation A • The PTS studied to have several Study Programs • Easy-to-reach location 	<ul style="list-style-type: none"> • The community as prospective students from the upper-middle class 	<ul style="list-style-type: none"> • Website • Social media (Instagram, WhatsApp, and Facebook) • Endorsement
Customer relationship	Key activities	Key resources
<ul style="list-style-type: none"> • Social media (Instagram, WhatsApp, and Facebook) 	<ul style="list-style-type: none"> • Promotional activities • Maximum control of sales and promotion processes • Endorsement 	<ul style="list-style-type: none"> • Human resources • Inventory • Buildings, parking areas, laboratory rooms, libraries, etc • Equipment and supplies
Key partners	Revenue stream	Cost structure
<ul style="list-style-type: none"> • High school and equivalent • Local governments assign employees to continue their studies • Institutions that support the process of running the tri dharma of higher education • Professional diploma 	<ul style="list-style-type: none"> • Sales forms • Tuition payment 	<ul style="list-style-type: none"> • Building maintenance costs • Cost of maintenance of lecture facilities and infrastructure • Inventory maintenance costs.

5. Conclusion

The PTS selection process on the AHP model for each level has been designed to meet the demands of students. Meanwhile, SWOT analysis selects alternative PTS selection decisions at LLDIKTI Region III, with the following stages:

1. Identification of internal and external factors based on data collection, both through interviews and documents in the PTS environment; and
2. Obtain several inputs for internal and external factors. In addition, competency in human resources can be a determining factor.

Through the business model canvas innovation, those owned by PTS managers can produce 9 block models:

- Customers segment;
- Value proposition;
- Customer relationship;
- Channel;
- Revenue streams;
- Key resources;
- Key activities;
- Key partnerships; and

- Cost structures. These can improve the selection decision through the website, social media, alumni role, scholarship awards, and competitiveness.

However, the following are the limitations of this study:

1. The universities in this study vary. Hence this research was not conducted in a homogeneous university setting;
2. Because this study's sample size is limited to twelve universities in LLDIKTI Region III Jakarta, the findings cannot be generalized;
3. The SWOT analysis approach has various flaws, including the tendency to perceive the problem from a single point of view, that of the primary stakeholder. The major stakeholders in this study are institutions, which in this case are represented by 12 private universities. Another flaw is that the generated data heavily relies on the respondent's evaluation. As a result, the respondents who are the research targets have not yet provided an impartial assessment of the difficulties presented, making it difficult to control the subjectivity of the assessment; and
4. The AHP paradigm is not immune to several deadly flaws. The model's reliance on input in the form of an expert's perception renders the final output useless if the expert makes an incorrect evaluation.

Because of this condition and the lack of defined criteria for an expert, people frequently hesitate to respond to the solutions offered by this model.

For future research, the implemented strategy must be evaluated later so that the university manager is aware of the strategy's accomplishments. Additionally, it is hoped that future studies will not simply focus on giving strategies. However, it can be added to the financial analysis that must be spent to implement the strategy.

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Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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