


Design Thinking Strategy On Improving Academic Administration Bureau Services (Case Study: Bakrie University)

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Article Info	ABSTRACT
Keywords: Design Thinking, Academic Administration Services, Bakrie University, Service Innovation.	<p>This research discusses the application of design thinking strategies in improving services at the Academic Administration Bureau of Bakrie University. Design thinking, as an approach that focuses on a deep understanding of user needs, was adapted to identify and address challenges faced in academic administration services. Through a qualitative method involving observation, interviews, and documentation analysis, this study found that design thinking can improve the service process by socializing with students to integrate user perspectives and increase student satisfaction. This research concluded that design thinking can be used to improve Bakrie University services by socializing to stakeholders about services so that a target of 90% of active students at Bakrie University understand existing services is obtained. The results of implementing this strategy show an increase in service quality, as well as providing valuable insights for the development of academic administration services in higher education.</p>
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INTRODUCTION

Education is a deliberate and planned effort to create a learning environment and a learning process that enables learners to actively develop their potential to have spiritual strength, self-control, intelligence, noble character, and the skills needed for themselves, their community, their nation, and their country. (Undang-Undang Republik Indonesia Nomor 20, 2003). A University is an institution established according to the prevailing legal requirements and with the objective of enhancing the standard of education. (Sayidah et al., 2019). The quality standards of higher education must continue to be improved to advance the Tri Dharma of Universities. As a unique entity in the world of education, universities certainly have certain goals in accordance with the characteristics of internal and external media. Each higher education institution has its own goals and ideals, which are outlined in mission and vision documents prepared with input from stakeholders (Sayidah et al., 2019). The aims and role of higher education are stated in Republic of Indonesia Law Number 12 Article 5, including as a place of learning for students and society, a place for developing future national leaders, a center for scientific and technological progress, a place to learn morals and search for truth, and a place to advance country's civilization (Undang-Undang Republik Indonesia Nomor 12, 2012). As educational institutions, universities must of course be able to provide good and quality educational services. This is in accordance with the 2009 Law of the

Republic of Indonesia which regulates principles and competitiveness with other universities. Apart from that, excellence in fulfilling student desires is because student desires are an obligation to be fulfilled by every university, especially improving the image of higher education in society. This satisfaction certainly gives great confidence in carrying out responsibilities that can be mutually beneficial (Undang- Undang RI, 2009).

Service quality can be evaluated based on five dimensions, including physical evidence (Tangibles), reliability, responsiveness, assurance and empathy. Service quality must be assessed from the recipient's perspective, because student satisfaction can be used as a benchmark to improve the image of higher education in society (Berry et al., 1988). Academic services are activities directly or indirectly offered by universities to achieve academic goals, which are offered to students during their study period to solve academic problems. Academic services play an important role in the education sector (Amin, 2017). To improve the quality of education services, design thinking skills are a necessary innovation offering considering the increasingly sophisticated technology in the disruptive era (Mauliya, 2021). Design thinking was originally created by Tim Brown at Harvard Business and over time developed into a "five step" design thinking framework developed by the Stanford d.school (School of Design). Stanford d.school is an academic institution that focuses on teaching design thinking whose stages consist of Emphasize, Define, Ideate, Prototype, and Test Brown in (Putra, 2021).

Bakrie University has academic services, namely the Academic Administration Bureau (BAA), which has the vision "A globally recognized university through engagement with industries and experiential learning methods.". So the academic administration services section requires attention specifically to provide optimal service. There are several obstacles to the lack of service at the Bakrie University academic administration bureau, namely BAA service is not friendly, Unstructured service flow, Unclear information and information that is thrown around, Lack of BAA service outreach, Ability to provide services according to stakeholder wishes (time, cost, quality, quantity, work enthusiasm, professionalism, responsiveness, safety and good communication).

This research aims to explore how design thinking can be applied to improve services at the Academic Administration Bureau of Bakrie University. Previously, various studies have examined the application of design thinking in other sectors, such as healthcare, business, and technology. Studies by Brown (2008) show that design thinking can improve processes and outcomes in various industrial contexts by focusing on user-driven innovation. However, the application of design thinking in the context of academic administration services in higher education institutions is still relatively unexplored. Previous studies tend to focus on the business or healthcare sectors, with little attention to how this approach can be adapted to the education sector, particularly in the context of administrative services. Some previous studies have also not specifically examined the impact of implementing design thinking on academic administration processes in universities, both in terms of operational efficiency and service user satisfaction.

The object of this research, the Academic Administration Bureau of Bakrie University, was chosen because this institution is experiencing significant challenges in administrative

services that could be addressed with an innovative approach. This research is also an initial step to provide concrete recommendations on how design thinking can be effectively implemented in the higher education sector, based on findings from previous studies and the specific needs of Bakrie University. By conducting this research, it is expected to provide new insights into the application of design thinking in the context of academic administration and offer practical recommendations for higher education institutions facing similar challenges.

Literatur Riview

Service Quality

Service quality is an endeavor to fulfill customer needs and desires, and to ensure timely delivery to meet customer expectations. Service quality can be defined as an indicator to measure whether the level of service provided can meet the desired expectations of customers (Septiani, Arribe, 2020). This means that service quality can be realized through the fulfillment of customer needs and desires, and the timeliness of delivery in balancing customer expectations, as customers expect good service or even exceeding their expectations, so this needs to be considered by companies to provide the best service to their customers so that customers feel satisfied with the service provided. Service quality is a crucial factor influencing customer satisfaction and loyalty, particularly in higher education. As a service-oriented organization, the foundation of higher education worldwide is service. (Sudana et al., 2021). From the time perspective students apply, are accepted, and engage in academic activities until they graduate, students experience a dynamic and individualized service process. Therefore, high-quality service is essential to ensure student satisfaction. (Kemenuh, 2020).

Academic services refer to educational services that directly relate to the primary customers or students of a higher education institution, including curriculum, general syllabi, course quality design, subject matter units, material presentation, evaluation, practicums, and guidance. This is because universities can be seen as industries operating in the education sector, providing both academic and non-academic services. Academic service quality is a crucial aspect of educational institutions. Academic services can be considered high quality or excellent when they meet the needs and expectations of their customers. (Amin, 2017)

Design Thinking

Design thinking is not limited to a specific group of people, many people are actually talented to do it. Furthermore, the research explains that design thinkers do not necessarily have to come from design schools, although successful ones have some form of training. The right mindset is a must for design thinkers as it sets the right perspective for someone to start creating and innovating. The actions taken during the Design Thinking process are expressions of attitude and mindset. A person who thinks in a closed-minded way will never be able to accept new and unconventional ways and means.

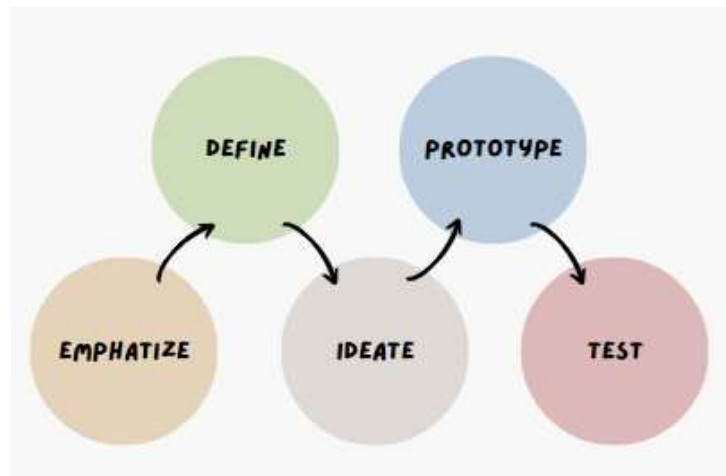


Figure 1. Skema Design thinking

- a. Empathize: The first stage of the Design Thinking method allows researchers to gain an empathetic understanding of the problem they are trying to solve, usually through user interviews. Empathy is the process by which researchers understand the user's feelings and experience the same thing. Before seeking a solution, it is necessary to understand the problem to be solved. Once empathized, the researcher will position themselves as a user (Putra, 2021)
- b. Define: After understanding and gathering information obtained through the empathy stage, the next stage is defining the problem (problem statement). This process will help researchers gather ideas to build features that will later be used to solve existing problems. This process produces a short and clear statement of the results of protection efforts (Putra, 2021).
- c. Ideate: The next stage is Ideation or brainstorming. Brainstorming is a technique for finding solutions to existing problems by spontaneously collecting several ideas from a group of people. Many ideas that can be used to solve problems emerge in the process. In this process, researchers also need to think creatively by coming up with various ideas (Putra, 2021).
- d. Prototype: A prototype is an early form or standard size for a model. A prototype can also be interpreted as representing the first or initial form that is actually implemented in a full-scale product or experiment. In this process, there is a principle called fast failure, which means seeing failure as soon as possible. This principle is important to determine the next steps and to correct errors and does not require a long time or process (Putra, 2021).
- e. Testing: The testing stage of the previously created module, by showing it to the user, then the user will experience the newly created module for the first time. In addition, at this stage, it also aims to get feedback from users. Changes and improvements are still ongoing at this stage, and the key is to make the most of them. Simply put, design thinking, as applied in education, is a learning approach that focuses on developing students' creative confidence and where participants engage in direct design

challenges focused on developing empathy, promoting a bias for action, fostering ideation, developing metacognitive awareness, and encouraging creative problem-solving. It is a formal method for practical and creative problem-solving or issues, with the intention of better future outcomes. (Lor, 2017)

RESULTS AND DISCUSSION

The research object is the Academic Administrative Office of Bakrie University. Through this research, the researcher aims to contribute to the university by developing strategies to improve the quality of services provided to students

Observation

The researcher conducted an observation by distributing questionnaires to Bakrie University students to identify the limitations of the academic administrative services. The following section will elaborate on the respondents' assessment of the tangible dimension through questionnaires and interviews. The questionnaire included indicators that served as weights for each question on a 1-4 scale, with the following explanation:

- A score of 4 was given for a very good answer.
- A score of 3 was given for a good answer.
- A score of 2 was given for a less good answer.
- A score of 1 was given for a bad answer.

In this research, the indicators of academic administrative service quality are the assessment of speed and accuracy, assessment of service friendliness, and assessment of service procedure ease. The following table presents the respondents' assessment results based on the questionnaire.

Tabel 1.1 Results of student questionnaire respondents

Indicator	Score				Amount	Average	%
	1	2	3	4			
The service procedures at the Academic Administrative Office have been clearly communicated and are easy to understand.	0	7	36	61	366	3,52	87,98%
The Academic Administrative Office has a standard service time that is communicated to lecturers/students.	2	8	41	53	353	3,39	84,86%
Academic administrative services are easily accessible.	1	5	34	64	369	3,55	88,70%
Your assessment of the Academic Administrative Office in responding to complaints.	5	10	37	52	344	3,31	82,69%
Your assessment of the speed and accuracy of the Academic Administrative Office services.	5	10	38	51	343	3,30	82,45%
Your assessment of the friendliness, discipline, and integrity of the Academic Administrative Office services.	5	7	39	53	348	3,35	83,65%
Your assessment of the ease of the Academic Administrative Office service procedures.	3	7	37	57	356	3,42	85,58%

It contains input provided by students, as follows:

Tabel 1.2 Results of student questionnaire respondents

No	Suggestion
1	Service time standards should be more quantifiable.
2	The response to service requests should be faster and more responsive.
3	The dissemination of existing information should be clearer and better communicated.
4	The existing procedures are unclear, resulting in some procedures being uncertain.
5	There needs to be more clarity in the process of borrowing classrooms for student events.
6	The payment process is not transparent.
7	The scheduling of final projects needs to be improved.
8	The information available on the BIG system is not up to date.

Empathize

This research delves deeper into the issue of academic administrative services by seeking information and input from the primary users: Bakrie University students. Through in-depth interviews with students, the researcher aims to gain a clear understanding of the problems faced. Based on the interview findings, the researcher has summarized the key issues as presented in the following table.

Tabel 1.3 Problem Conclusion

No	Problem Conclusion
1	Users want more socialization regarding the services provided by the Academic Administrative Office so that the available information can be effectively communicated.
2	Users desire user-friendly technical services equipped with features that can facilitate ease of use.
3	Users want the services to be more responsive and faster.
4	Users anticipate more prudent major/procedure policies.

Define

After comprehending and gathering information through the empathy stage, the next step is to define the problem (problem statement). This process will assist the researcher in generating ideas for developing features that will be used to solve the existing problem. This process results in a concise and clear statement regarding the outcome of the protection efforts. After obtaining answers from Bakrie University students and lecturers, the results of this stage are categorized to facilitate the researcher in finding effective solutions to the problems.

Tabel 1.4 Problem Category

No	Problem	Category
1	Users want more socialization regarding the services provided by the Academic Administrative Office so that the available information can be effectively communicated.	Socialization
2	Users desire user-friendly technical services equipped with features that can facilitate ease of use.	User friendly
3	Users want the services to be more responsive and faster.	Layanan Responsif
4	Users anticipate more prudent major/procedure policies.	Prosedur

Ideate

An evaluation needs to be conducted by the Academic Administrative Office to address the issue of socialization regarding announcements and the available services within the Academic Administrative Office. In this regard, it is also necessary to consider the estimated level of benefit and ease of implementation. Strategies that can be implemented by the Academic Administrative Office include conducting soundings for every information or announcement regarding available services or related to lectures to the campus email of every student and lecturer, or alternatively, introducing the Academic Administrative Office every semester to ensure smooth socialization within each semester with a target of 90% of active students at Bakrie University.

Tabel 1.5 Solution

No	Solution
1.	Students and lecturers receive socialization regarding online services provided by the Academic Administrative Office every semester.
2.	Service information can also be included on the BIG dashboard after students log in.
3.	Five random questions or quizzes related to the available services of the Academic Administrative Office can be added when students are filling out their course registration form (KRS).
4.	For students who take a leave of absence or withdraw, a link to random questions or quizzes regarding the available services of the Academic Administrative Office can be included in the process.

By implementing these achievable solutions, the Academic Administrative Office aims to enhance student and faculty awareness of its services and gather valuable feedback to improve future offerings.

Prototype

Following the ideation phase, the author has devised a strategy to introduce the Academic Administrative Office to students and faculty at the beginning of each semester. This strategy aims to effectively and comprehensively socialize the services provided by the Academic Administrative Office. The socialization will be conducted through presentations that explain the available services and the procedures for requesting services such as class schedules, attendance, course registration, and certificates. It is expected that this approach will enhance students' and faculty's understanding of the Academic Administrative Office's role in supporting academic activities and guide them on how to access the required services. This concept is inspired by the user-friendly interface of the BIG Bakrie 2.0 website.

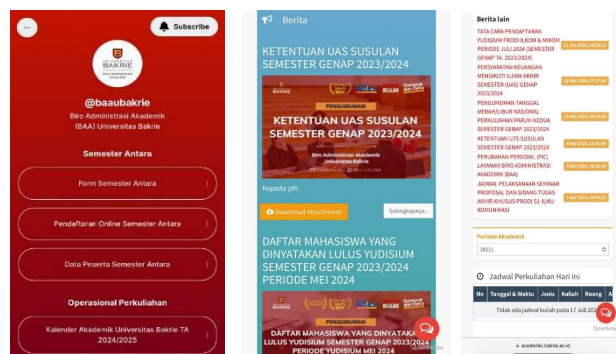


Figure 2. Bakrie Information Gateway Information Display

Through these semesterly socialization sessions, which include presentations on the available services and their application procedures, students and lecturers of Bakrie University will have a better understanding of the Academic Administrative Office' role in supporting academic activities and how to access the required services. This concept is inspired by the user-friendly interface of the BIG Bakrie 2.0 website.

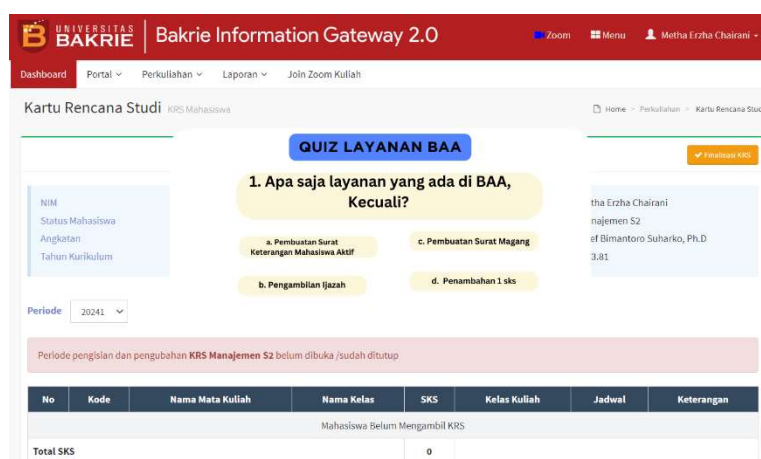


Figure 3. Bakrie Information Gateway Information Display

By implementing a questionnaire/quiz during the course registration process each semester, the Academic Administrative Office can gauge students' understanding of the services provided. The results will reveal the percentage of students who answered correctly and the overall level of comprehension. Subsequently, the Academic Administrative Office will conduct more comprehensive and accessible presentations to address any knowledge gaps and ensure that students are fully aware of the available services and their application procedures.

Testing

The final stage of the Design Thinking method is Testing, where researchers conduct user tests to evaluate the product. The goal of this stage is to validate the product and gather

feedback from users. Following a re-interview with the four previously interviewed students, the following results were obtained:

- a. Student 1 stated that they agree with the idea of providing service socialization every semester so that students can be aware of the stages of the services provided by the Academic Administrative Office.
- b. Student 2 thinks that the concept of random questions/quizzes during course registration is a great idea to provide additional information for students.
- c. Student 3 believes that the concept of random questions/quizzes during course registration can increase students' awareness.
- d. Student 4 thinks that holding service socialization every semester is a good solution so that students won't be misinformed if there are any new policies.

CONCLUSIONS

This research has achieved the goal of analyzing design thinking strategies to improve services at the Academic Administration Bureau. By using design thinking principles, including empathy, ideation, and prototyping, Bakrie University managed to identify and overcome various problems in the academic administration process, by conducting socialization every semester to students at Bakrie University. The implementation of this strategy proved effective in improving services, increasing user satisfaction, and optimizing administrative processes. For further development, it is recommended that Bakrie University continue to involve stakeholders in the iteration process and expand the application of design thinking to other aspects of academic administration to maximize the results obtained. Additional research is also needed to assess the long-term impact and potential adaptation of this strategy in other higher education institutions.

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