

DECISION MAKING ANALYSIS IN THE IMPLEMENTATION OF CAMPUS-BASED THEMATIC BANKING CAFE USING THE ANALYTICAL HIERARCHY PROCESS (AHP) APPROACH – CASE STUDY : THEMATIC MODEL BANKING CAFÉ BNI TRISAKTI KAMPUS A SUB-BRANCH

Ifan Pinandhita¹, Manahan Siallagan^{2*}

Institut Teknologi Bandung, Indonesia

Email: Ifan_pinandhita@sbm-itb.ac.id¹, manahan@sbm-itb.ac.id^{2*}

Keywords

Analytical Hierarchy Process, Decision-Making, Thematic Banking Cafe, Higher Education, Strategic Planning

ABSTRACT

In the pursuit of innovative and practical learning environments, the concept of a campus-based thematic banking café has emerged as a promising initiative that integrates education, entrepreneurship, and financial literacy. This research analyzes the decision-making process behind the implementation of such a café using the Analytical Hierarchy Process (AHP) methodology. The aim is to identify and prioritize key factors that influence the feasibility and success of the initiative within a university setting. A hierarchical decision model was developed, incorporating five main criteria: educational impact, financial feasibility, operational sustainability, stakeholder support, and technological integration. Through pairwise comparisons and expert input from university stakeholders, including academic staff, students, financial managers, and banking partners, priority weights were calculated for each criterion using AHP. The results show that educational impact is the most critical factor, emphasizing the role of the café in supporting academic goals and experiential learning. Financial feasibility and operational sustainability also received significant attention, while technological integration and stakeholder support were found to be important but secondary considerations. The findings demonstrate that AHP is an effective tool for multi-criteria decision-making in higher education contexts. It enables universities to align diverse perspectives and justify strategic decisions through a structured and transparent framework. This study offers a practical reference for educational institutions considering similar campus-based initiatives and highlights the potential for cross-sector partnerships to enhance student learning experiences.

INTRODUCTION

The banking industry is currently undergoing a massive transformation driven by the rapid development of technology and evolving consumer behaviors. In today's digital era, customers demand financial services that are fast, seamless, and accessible anytime and anywhere. As a result, digital banking has emerged as a core component of modern banking operations (*Khon, Nizam, Tan, and Taraporevala, McKinsey 2022*). The growing presence of *fintech* startups and disruptive digital platforms has further intensified market competition, compelling conventional banks to accelerate their transformation initiatives to remain relevant (*Diener & Špaček, 2021*).

Despite the rise of digital banking, a significant portion of the Indonesian population continues to rely on traditional banks, valuing their credibility, security, and personalized service. According to Romero (2023), while more than 72 million users across major banks in Indonesia, including Bank Negara Indonesia (BNI), are actively using digital platforms, 53% of Indonesians still favor traditional banks as their primary banking providers. Physical branches remain indispensable, especially for services that benefit from direct interaction, such as financial consultations and problem resolution (Khon, Nizam, Tan, and Taraporevala, McKinsey 2022).

In response to these dual demands, BNI introduced a *hybrid banking* concept in 2023 that merges physical branch services with digital banking innovations. This approach aims to offer a more flexible, user-centric experience and is part of BNI's broader corporate strategy to modernize operations while sustaining customer loyalty.

One of the flagship initiatives under this hybrid model is the *Campus-Based Thematic Banking Café*, a concept developed specifically for academic settings like Universitas Trisakti. The *Banking Café* is designed as an innovative space where banking services intersect with educational engagement. It offers more than transactional services; it is also utilized as an instrument to disseminate financial education and initiate discussions on digital finance. This *two-in-one* concept offers students, faculty, and staff a unique banking experience.

To successfully implement a themed *Banking Café*, several strategic decisions must be made. *Multicriteria Decision-Making (MCDM)* methods are effective tools for managing such complexity, with the *Analytical Hierarchy Process (AHP)* being a well-established approach in this area. AHP assists in systematizing the evaluation of multiple criteria and stakeholder perspectives to arrive at the most suitable strategic orientation (Saaty & Vargas, 2012). Since AHP is capable of handling complex and multiple criteria problems (Vaidya & Kumar, 2006), it is widely used in business and management research.

This research presents a case study of the BNI Sub-Branch Office at Campus A, Universitas Trisakti, to illustrate how AHP can be utilized to reach strategic decisions within the banking system. Using this approach, stakeholders can weigh essential factors such as student and faculty preferences, operational feasibility, and the integration of digital and physical services. The results of this analysis will contribute creatively to the implementation model of the *Banking Café* and enhance its strategic role in today's fast-changing and digitally competitive environment.

Furthermore, the presence of a *Banking Café* on campus positions BNI as a progressive bank responding to industry development while advancing financial literacy and independence among youth. Given the significance of this market segment, a deeper understanding of the needs, behaviors, and expectations of students is crucial for long-term success. The findings emphasize the importance of a stakeholder-driven decision-making process that actively involves students, faculty, and campus staff to ensure the initiative remains relevant, inclusive, and effective.

In general, this study analyzes the decision-making process undertaken by BNI in implementing the *Campus-Based Thematic Banking Café*, using the AHP approach. Through the case of BNI's Trisakti Campus A branch, this research seeks to contribute knowledge on innovative banking formats and their potential future development by traditional banks amid ongoing digital transformation.

PT Bank Negara Indonesia (*Persero*) Tbk, commonly known as BNI, was established on July 5, 1946. It is Indonesia's first state-owned bank and has grown to become one of the largest financial institutions in the country. BNI offers a wide range of financial products for both retail and corporate customers. As of 2023, BNI operates 17 regional offices, 195 branch offices, 1,586 sub-branch offices, and 13,390 ATMs and CRMs.

Since April 2021, BNI has embarked on a corporate transformation journey aimed at achieving operational excellence, enhancing customer experience, and improving competitiveness in the dynamic financial services sector. This transformation agenda continues with a focus on standardizing and digitalizing end-to-end credit processes, revitalizing branch formats, expanding international networks—including the opening of a representative office in Amsterdam—and

integrating state-of-the-art digital banking solutions such as BNI Mobile Banking and Cash Management.

Branch Format Revitalization, one of BNI's key corporate transformation initiatives, introduces new branch concepts designed to improve comfort, accessibility, and service quality. These formats include *Super Flagship*, *Business Flagship*, *Digital-First*, and *Thematic Branches*, offering a faster, more personalized, and more comprehensive banking experience.

Previous studies have examined digital banking and customer experience in the financial sector, but they often focus solely on traditional or fully digital models without exploring integrated approaches. For example, *Khon et al.* (2022) highlight the rapid transformation of the banking industry due to *fintech* and digital banking but do not examine how hybrid models like the *Banking Café* can address the needs of both digital-savvy and traditional customers. Likewise, *Diener and Špaček* (2021) discuss competition and digital disruption in banking, yet overlook how educational settings can be leveraged to foster innovation, customer loyalty, and financial literacy.

This study aims to analyze the decision-making criteria involved in implementing the BNI *Banking Café* using the *Analytical Hierarchy Process* (AHP) and to identify the optimal strategy for its successful and sustainable operation. The research offers valuable insights into the integration of digital and physical banking services, enhancing the banking experience for university communities.

RESEARCH METHODOLOGY

Research Design

This research applies a *multi-criteria decision-making* method using the *Technique for Order of Preference by Similarity to Ideal Solution* (TOPSIS) to identify dominant factors for the implementation of the BNI *Banking Café* at Trisakti University Campus A. The use of the TOPSIS method is justified due to its ability to address complex decisions involving multiple criteria with varying levels of preference.

This study employs a qualitative approach combined with simple quantitative analysis to capture the perspectives of students and lecturers regarding the BNI *Banking Café*. A *mixed-methods* approach was selected as it allows for the inclusion of both numerical and narrative data, contributing to rich and detailed research findings.

A *case study* was employed as the research strategy, with the BNI Branch Office at Trisakti University Campus A serving as the unit of analysis. The rationale for selecting this venue lies in the trial of a new-format *Banking Café*, which began operating as a pilot in July 2023. This location provides an ideal environment to assess how effectively the hybrid service model functions. *Case studies* enable in-depth investigation of phenomena within a specific context and are suitable for addressing complex issues, such as the interaction between service design and user behavior (*Harrison et al.*, 2017).

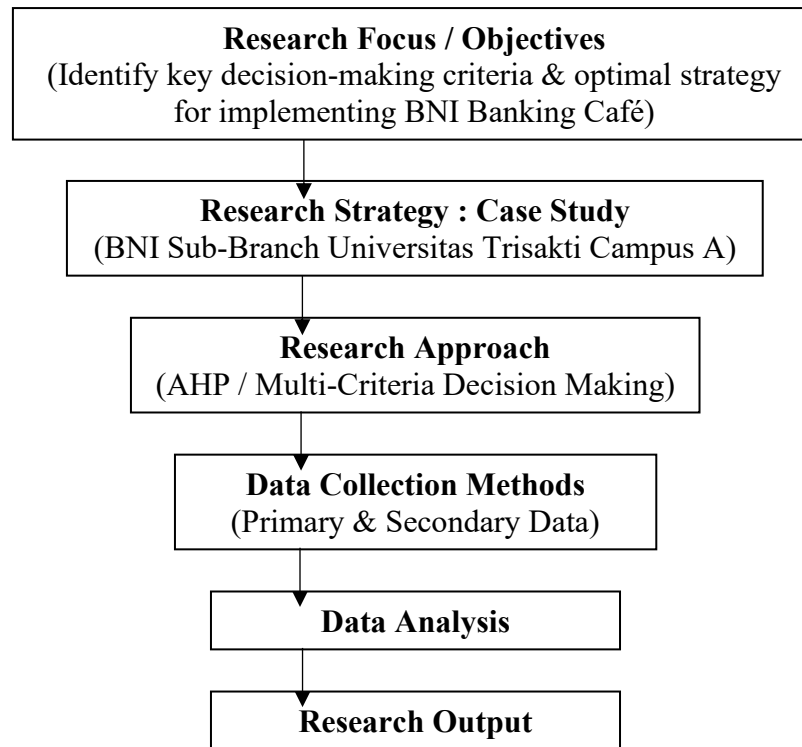


Figure 1. Research Design
Source: Author (2025)

Data Collection Method

The data collection for this study combines primary and secondary data sources to provide a comprehensive understanding of the BNI *Banking Café* implementation at *Universitas Trisakti*. Primary data was collected through semi-structured interviews conducted with two key groups: students, faculty, and university staff who have direct experience using the *Banking Café* services; and BNI management experts involved in the design and planning of the project. The interviews aim to gather insights into user perceptions, operational challenges, and the effectiveness of the hybrid banking model.

Secondary data includes historical banking transaction records from the campus branch, both before and after the implementation of the *Banking Café*. This data is used to evaluate the impact of the *Banking Café* on transaction behavior and to assess changes in the use of digital and conventional banking services within the university community.

Data Analysis Method

Qualitative data analysis was conducted systematically to produce meaningful findings from in-depth interviews with students and faculty. This methodology followed an established qualitative research framework to ensure the trustworthiness and validity of the findings, as suggested by *Creswell* (2014). Data preparation began with detailed note-taking to capture initial impressions and key information. This was followed by the identification of major issues related to the findings.

Themes were generated by organizing related categories, allowing the analysis to focus on core elements relevant to the research questions and highlighting the essential features of the interviews.

RESULTS AND DISCUSSION

This research employs the Analytical Hierarchy Process (AHP) approach to examine decision-making related to establishing campus-based thematic cafe banks. AHP is a systematic method that helps structure and assess complex decisions by comparing different criteria and options in pairs. The primary goal of this study is to identify the key criteria and select the optimal alternative for implementing thematic cafe banks. The evaluation criteria consist of factors such as transaction

volume, foot traffic, and service quality. The alternatives assessed cover a range of operational models and potential campus locations. Through the pairwise comparison process, the priority of each criteria is determined based on its level of importance to the main objective. For example, the financial aspect can be considered more important than other aspects, so it gets a higher priority weight. Furthermore, each alternative is evaluated against each criterion to determine an overall score.

Table 1. Urgency of the Business Issue

Problem	Timing	Trend	Impact	Process
Low customer engagement and number of transactions	H	H	H	DA
Misalignment between Banking Cafe design/services and student/lecturer expectations	H	H	H	DA
Ineffective communication of added value compared to digital banking alternatives	H	H	H	DA
Insufficient staff readiness and customer service orientation for advisory/concierge roles	H	H	H	DA
Underutilized or misunderstood digital tools and e-channel features	H	H	H	DA

Interview Result

The first step in our research is to gather the criteria and options for our goal, which is to assess the implementation of a banking café at Trisakti University to address a business problem. According to Thomas Saaty in his 1980 book, he suggests that the Analytic Hierarchy Process (AHP) should involve a minimum of 2 to 15 experts, depending on how complex the decision is. In this study, considering the medium size of the organization, we will collect information from 9 key informants. These informants will be divided into 3 stakeholders and 6 customers, representing 3 different roles within the university as follow :

Table 2. Participants of Interview

Participants	Position
Novian Prasetyo	Distribution and Network Service Dept. Head - BNI
R.M. Bambang	Regional Business Development Head BNI
Hani Novianti	Sub Branch Manager - BNI
Prof. Muhammad Zilal	FEB Lectures
Prof. Eleonora Sofilda	FEB Lectures
Fajar Melati	Vice Dean Assistant
Nita S. Purba	Student
Edso Yudistira	Student
Linda Anggraeni	Student

Table 3. Interview Result (Expert)

Question	Expert	
	Novian Prasetyo	R.M. Bambang
What is the main background behind BNI's decision to initiate the concept of a thematic banking café on campus?	The thematic banking café is part of BNI's network and distribution transformation initiative. The idea is to present a banking service model that is more relevant and connected to the younger generation, particularly students. By combining banking services with a collaborative and casual space, we aim to create a financial	From our side at Regional Business and Digital Development, the thematic banking café was designed to act as a bridge between our physical presence and our digital services. We realize that younger generations prefer self-service digital banking, but

	ecosystem that integrates seamlessly with academic and social activities on campus. It also aligns with our broader strategy to promote digitalization and financial inclusion among Millennials and Gen Z.	we also understand the importance of maintaining physical touchpoints for brand presence and trust-building. The café provides a soft entry point for students and lecturers to engage with BNI's full range of digital solutions, while also maintaining human interaction when necessary.
What key factors are considered when selecting a campus location for implementing the banking café?	We have several main criteria that we analyze. First, accessibility—the café must be easily accessible for students and campus staff. Second, we evaluate the market potential, such as the size of the campus community and the level of daily activity. Third, the institutional support from university management is crucial for long-term success. And lastly, the supporting infrastructure like internet facilities and space availability. To prioritize these factors, we apply the Analytical Hierarchy Process (AHP) to structure and weigh them objectively.	We prioritized several aspects: 1. Digital Engagement Potential: Whether the campus population is receptive to using mobile and internet banking services. 2. Location Synergy: The café must be located where digital promotions can have maximum exposure, such as near student hubs. 3. Collaborative Opportunities: Opportunities to collaborate with faculties or student bodies for financial education campaigns. We applied an internal decision-making model, supported by AHP analysis, to objectively weigh these factors before finalizing the site and service concepts.
What strategies have been applied to optimize visitor traffic and service usage at the banking café?	We use several approaches. First, we integrate our digital banking services like BNI Mobile Banking to create a seamless digital-physical experience. We also organize financial literacy workshops and seminars targeted at students. Moreover, we collaborate actively with student organizations to host joint events, making the café a lively center of activities. Finally, we offer promotional programs to incentivize usage among campus communities.	We launched a hybrid strategy: 1. Digital onboarding station: Inside the café, we provided areas where users can open accounts and activate BNI Mobile Banking independently. 2. Gamified promotions: Rewards and cashback programs were linked to the usage of BNI digital apps, especially for transactions initiated from the café. 3. Financial literacy series: We arranged talk shows and mini-seminars about digital finance management directly inside the café environment. The goal is simple—to make digital

What are the biggest challenges during the implementation and operational phase?	One major challenge is cultural adaptation. Integrating a banking service into a dynamic academic environment requires flexibility and understanding. We also face the challenge of user education—ensuring that students and lecturers are aware of and understand the services offered. Additionally, resource allocation is important—ensuring that we have staff members who are competent and empathetic to campus users.	banking feel natural and beneficial to campus life. The biggest challenge is the behavioral gap. Many students are familiar with digital applications but may not immediately associate a banking app with something exciting or necessary. Another challenge is maintaining user retention after onboarding. We have to continuously engage them, or they will forget the banking app quickly after opening it.
How does BNI evaluate the success of the banking café, and what are the future plans?	We conduct regular evaluations on visitor volume, service usage rates, and customer feedback. Going forward, we plan to expand the thematic banking café model to other universities with high potential. We also aim to enhance the concept with added features such as co-working spaces and digital finance education hubs to stay relevant to the campus environment.	We believe sustainability comes from continuous integration between the café experience and our digital ecosystem. In the near future, we plan to: • Link the café with BNI loyalty programs and merchant networks. • Develop “campus ambassador” programs, where selected students promote BNI digital products. • Customize offers based on user behavior data collected ethically from café engagement. These actions will strengthen the café as both a community hub and a digital banking gateway.
From your personal viewpoint, what is the key success factor for the thematic banking café?	In my view, the success depends heavily on strong collaboration with the university and the ability to continuously adapt to student and lecturer needs. If we understand and respond to their expectations, we can ensure the banking café remains a valuable and sustainable presence on campus.	In my opinion, success depends on how well we blend lifestyle and banking into one seamless experience. If students see the banking café not only as a place to conduct transactions but as part of their daily campus routine for studying, networking, relaxing—while naturally being exposed to financial tools—then we are on the right path.

Table 4. Interview Result (Stakeholder)

Question	Stakeholder
----------	-------------

	Hani Novianti - BNI Sub-Branch Manager	Prof. Muhammad Zilal Hamzah - Lecturer	Prof. Eleonora Sofilda - Lecturer	Nita S. Purba - Student	Edson Yudistira - Student	Linda Anggraeni - Student
What is your view on the role of the banking café?	It is a good innovation to bring services closer to the campus, but the impact is still below optimal in terms of traffic and transactions.	It's creative, but I feel uncomfortable due to the lack of privacy in the open setting.	Fits student lifestyle, but the noisy environment reduces comfort.	Looks modern and stylish, but I wasn't sure it was for banking.	Attractive design, seemed more like a hangout spot than a bank.	Casual and friendly design, but doesn't feel like a banking space.
What factors are prioritized or expected in operations?	Accessibility, comfort, customer service, and integration with BNI digital services.	Needs to support financial literacy, could act as a financial simulator and career hub.	Should balance lifestyle with professional banking standards.	I use mobile banking, but I'd go if there were special events.	No attractive offers yet; services should be clearly promoted.	Came with a friend, but just used Wi-Fi; didn't transact.
Are accessibility, facility comfort, and service convenience satisfactory?	Facilities like Wi-Fi and seating are appealing, but not yet effective in driving transactions.	No; privacy is compromised. More secluded areas are needed.	Comfortable for gatherings, not for transactions. Needs zoning.	Accessible and comfy, but too casual for banking.	Good for chilling, awkward for banking.	Great for socializing, too noisy for personal banking.
What would make the café more relevant or attractive?	More joint programs and events to increase traffic.	Embed financial programs, career workshops, simulations.	Evolve with lifestyle but improve customer journey and zoning.	Career events, job info — make it a real info hub.	Internships, seminars on salary management.	Resume clinics, career-related talks, and job fair connections.
Have you used the banking café for transactions?	Yes, but walk-in transactions are low.	Visited but avoided transacting due to lack of privacy.	Tried but felt uncomfortable; now rely on mobile banking.	Not yet. Prefer online services.	Only visited for coffee.	Visited once, didn't transact.
Suggestions or development plans?	Promotions, hybrid banking experience, adjusted service hours,	Make café a platform for education and financial simulation.	Improve zoning and personalize services.	Add job boards, financial sessions.	Teach saving, offer internships.	Provide student development programs and partner with companies.

student
events.

Based on the in-depth interviews conducted with two key experts from PT Bank Negara Indonesia (Persero) Tbk, three major criteria emerged as crucial for the successful implementation of a thematic banking café on campus. Infrastructure, Digital Engagement, and Institutional were consistently highlighted as strategic factors influencing the decision-making process. Each criterion was not only emphasized individually by the experts but also demonstrated interconnectivity in ensuring the café's effectiveness and sustainability.

Infrastructure, refers to the physical and technological readiness of the campus environment. Expert 1 (Novian Prasetyo) stressed that accessibility, internet facilities, and space availability are essential for establishing a conducive banking café atmosphere. Without adequate infrastructure, the integration of digital services and the overall user experience would be compromised. This aligns with BNI's objective to create a hybrid environment where traditional and digital banking experiences merge seamlessly.

Digital Engagement, captures the campus community's responsiveness to digital banking services. Expert 2 (R.M. Bambang) emphasized that students must not only be familiar with technology but also be motivated to actively use mobile banking platforms. In Universitas Trisakti, this factor was seen as critical in choosing the location, as the digital behavior of the student body influenced both marketing strategies and service design. Digital engagement is not only a tool for initial adoption but also a driver for continuous interaction with the banking ecosystem.

Institutional Support, is tied to the level of cooperation and endorsement provided by the university. Both experts agreed that long-term success depends heavily on the collaboration between BNI and the campus. Institutional backing facilitates smoother implementation, helps build trust with the academic community, and opens opportunities for educational partnerships such as financial literacy programs and student ambassador initiatives. Strong institutional support also contributes to better brand presence and community integration.

From the stakeholder interviews, three main variables were identified to be included in the AHP model: Job Fit, Career Opportunities, and Work Environment/Culture. These variables repeatedly surfaced as the interviewee's thought about their preferences, motivations, and factors relevant to career choice.

Matched To Job was next in importance, due in part to the participant's emphasis on needing to meet certain criteria in terms of personal background, interests, and skill-set to perform well in the role. They demonstrated a very strong preference for positions that entail communication, social interaction and creativity, and they want work that's interesting and engaging. This would indicate that something must match very well with who you are and what you want to spend your time doing for it to even be worth a second look.

The second most significant factor revealed was Career Development Prospects. The interviewee emphasized the importance of continuous study, professional development and the ability to realize longer-term career aspirations. There was a clear aspiration to develop competencies beyond current qualifications and to seek environments where those ambitions are supported. This suggests that job roles or institutions that invest in employee development, provide access to new challenges, or offer training and advancement paths will be prioritized.

Work Environment / Culture, reflects the interviewee's concern for organizational values, leadership style, and the overall work atmosphere. The individual noted the significance of flexibility, mutual respect, and ethical practices in a workplace, indicating that comfort and compatibility with the work environment are essential. This criterion underscores the need for a healthy and supportive culture where the interviewee can thrive emotionally and socially.

Analytical Hierarchy Process

Based on the interview, the researcher can conclude the 6 criteria and 3 alternative for weight scoring with AHP method as follow:

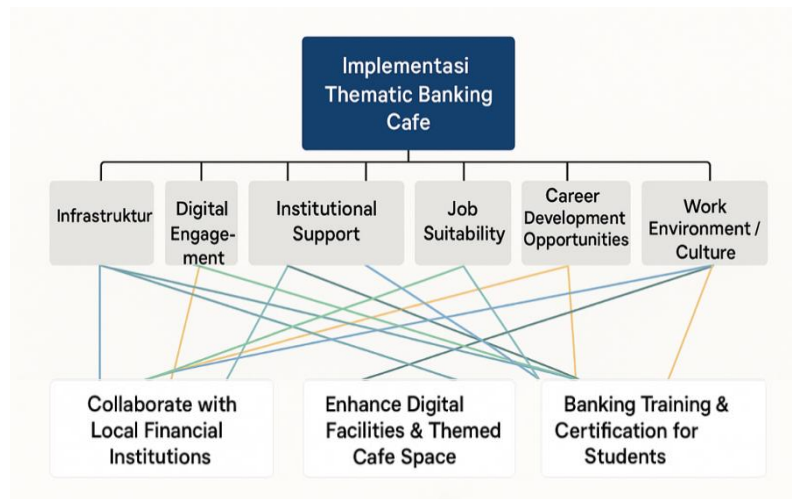


Figure 2. AHP Hierarchy

The attribute definition form 6 criteria when deciding related to the implementation of the thematic banking cafe, as follow:

1. Infrastructure

Infrastructure refers to the quality and availability of supporting facilities, such as high-speed internet, electricity, and suitable physical space for both the café and banking operations. A reliable internet connection is particularly essential, as it supports BNI's digital services like mobile banking activation, DIGI CS transactions, and digital onboarding stations. Expert 1 emphasized that a location lacking in supporting infrastructure could undermine the user experience and limit the effectiveness of service delivery. Therefore, campuses with strong infrastructure and easily accessible points offer a more strategic advantage.

2. Digital Engagement

Digital engagement refers to the likelihood of this population adopting and interacting with BNI's digital platforms. As highlighted by Expert 2, younger generations are generally familiar with digital tools, but this does not automatically translate into active use of digital banking. Therefore, campuses where students already exhibit strong digital behavior (such as high internet and smartphone penetration, frequent use of e-wallets or digital services) are more promising environments for promoting financial literacy and encouraging digital banking adoption. The synergy between potential user base and digital behavior is key to driving both café visits and digital transactions.

3. Institutional Support

Institutional support refers to the level of openness and strategic alignment between the university and BNI. Expert 1 stated that long-term success of the thematic banking café depends heavily on how well the bank can build a collaborative relationship with the academic institution. This includes getting administrative permission, integrating café functions with student services, and maintaining consistent communication with university leaders.

4. Job Suitability

From the interview, it is clear that the respondent places importance on finding a role that matches their capabilities and aspirations. They emphasize the importance of personal interest and passion when considering job opportunities. For example, they mention specific areas they feel more confident or enthusiastic about. This indicates that a good "fit" between the job content and the individual's personal profile is crucial for decision-making. Including this

criterion ensures that the chosen alternative will likely lead to better performance, satisfaction, and motivation.

5. Career Development Opportunities

The interviewee expressed a desire for continuous self-improvement and long-term professional advancement. They referred to gaining new skills and experiences as an important aspect of their future career. This reflects a preference for environments that not only value current capabilities but also invest in their employees’ development. By including this criterion, we recognize that individuals are not only looking for a job that suits them now but also one that supports their progress in the future.

6. Work Environment / Culture

The interview revealed several insights about the type of work culture the respondent prefers. They mentioned leadership expectations, communication preferences, and how they respond to different management approaches. A healthy and supportive work environment often leads to higher job satisfaction, reduced stress, and greater loyalty. For this reason, organizational culture becomes a key factor in the decision-making process. Whether an individual thrives in a fast-paced, collaborative startup or a structured, hierarchical government institution can greatly influence their job success and well-being.

Determine Weight Criteria

In this study, the pairwise comparison was applied to analyze the decision-making criteria involved in implementing a campus-based thematic banking café. Based on interviews with domain experts, six key criteria were identified as essential for evaluating potential campus sites and implementation strategies :

- Infrastructure
- Digital Engagement
- Institutional Support
- Job Suitability
- Career Development Opportunities
- Work Environment / Culture

To determine the relative importance of these six criteria, a pairwise comparison matrix was constructed using Saaty’s fundamental scale. Experts compared the importance of one criterion against another, and the results were compiled into a reciprocal matrix.

Table 5. pairwise comparison matrix

Criteria	Infra	Digital	Instit.	Job Suit.	Career Dev	Work Env
Infrastructure	1	2	3	4	4	4
Digital Engagement	1/2	1	2	3	3	3
Institutional Support	1/3	1/2	1	2	2	2
Job Suitability	1/4	1/3	1/2	1	2	2
Career Development	1/4	1/3	1/2	1/2	1	2
Work Environment	1/4	1/3	1/2	1/2	1/2	1

The matrix was then normalized, and the average of each row was calculated to generate the priority vector (i.e., weight) of each criterion.

Table 6. pairwise comparison matrix

Criteria	Infra	Digital	Instit.	Job Suit.	Career Dev	Work Env
Infrastructure	0.3872	0.4444	0.4000	0.3636	0.3200	0.2857
Digital Engagement	0.1936	0.2222	0.2667	0.2727	0.2400	0.2143

Institutional Support	0.1290	0.1111	0.1333	0.1818	0.1600	0.1429
Job Suitability	0.0968	0.0741	0.0667	0.0909	0.1600	0.1429
Career Development	0.0968	0.0741	0.0667	0.0455	0.0800	0.1429
Work Environment	0.0968	0.0741	0.0667	0.0455	0.0400	0.0714

To ensure that the pairwise comparisons were logically consistent, a consistency analysis was conducted. The steps are as follows:

- λ_{max} (Maximum Eigenvalue) = 6.175
- Consistency Index (CI) = $(\lambda_{\text{max}} - n) / (n - 1)$
= $(6.175 - 6) / (6 - 1) = 0.035$
- Random Index (RI) for n = 6 is 1.24
- Consistency Ratio (CR) = $CI / RI = 0.028$

Since the Consistency Ratio is less than 0.1, the pairwise comparison matrix is consistent, and the priority weights can be accepted as reliable. After normalizing the matrix and calculating the average of each row, the priority vector (weights) was obtained:

Resulting Priorities

Cat		Priority	Rank
1	Infrastructure	35.8%	1
2	Digital Engagement	24.5%	2
3	Institutional Support	11.5%	4
4	Job Suitability	12.3%	3
5	Career Development	9.3%	5
6	Work Environment / Culture	6.6%	6

Figure 3. Main Criteria Ranking

The results of the AHP analysis indicate that **Infrastructure** is the most influential factor in the decision to implement a thematic banking café. This includes the availability of high-speed internet, electricity, and suitable physical space factors that are essential for supporting BNI’s digital banking services such as mobile banking, DIGI CS payments, and onboarding systems.

Digital Engagement is the second most important criterion, reflecting the importance of choosing campuses with high levels of student familiarity and interaction with digital tools, which is critical for driving digital financial literacy and usage.

Institutional Support ranks third, signifying the importance of administrative alignment, permissions, and partnerships between the bank and the university. Meanwhile, Job Suitability, Career Development, and Work Environment are also considered, but their weights are relatively lower. These factors are more relevant to internal HR considerations than external implementation feasibility.

According to the AHP performed, Infrastructure, being ranked first at 0.3668, it is remarkably a long way ahead than other factors like Digital Engagement (0.2349) and Institutional Support (0.1430). These findings show that the readiness of infrastructure is crucial to the success and continuance of the BNI Banking Café program. To further examine this condition, alternative

campus sites were compared in terms of infrastructure quality, with expert judgments and linearly normalized scores.

Three potential campuses were evaluated in the selection process according to their available infrastructure. These are factors such as availability of dependable high-speed internet, 24hr power, and convenient physical environments for banking/cafes. For infrastructure, each campus was scored from 1 to 9 using the scale provided in Table 2, and then multiplied by its associated weight of 0.3668 to find the weighted score for that selection. This approach was applied to all other criteria and the sum of weighted scores provided the final ranking.

When the aggregate weight of all six criteria were calculated, the campus with the highest aggregate weighted score on Infrastructure demonstrated a strong lead in the overall rankings. It appears that campuses with 'superior' infrastructure are the best candidates for early deployment. These campuses not only provide technical feasibility but also reduce the risk of operational issues, enhance user satisfaction, and enable seamless integration with BNI's digital banking services, such as DIGI CS payments and mobile banking onboarding.

The AHP results indicate that **Infrastructure** holds the highest weight (0.3668) among all six decision criteria. This means that the most effective and sustainable strategy for implementing the BNI Banking Café is to prioritize campuses with strong and reliable infrastructure. This includes:

- High-speed internet connectivity
- Stable electricity supply
- Appropriate and accessible physical space for the café and banking operations

These infrastructural elements are not only essential for supporting digital banking services (e.g., mobile banking, DIGI CS, onboarding) but also ensure smooth operations and a positive user experience from day one.

By selecting campuses with solid infrastructure, BNI can:

- Minimize operational disruptions
- Maximize user satisfaction and engagement
- Accelerate digital adoption among students
- Create a replicable model for future expansion

Therefore, infrastructure readiness should be the primary strategic focus to ensure the success and sustainability of the BNI Banking Café initiative.

Selection of Best Alternative Solution

Once the importance of each criterion has been determined, we employ the Analytic Hierarchy Process (AHP) to identify the best alternative. The individual who administered the questionnaire will also carry out a pairwise comparison, ensuring consistency based on a previously established scale. AHP utilizes a hierarchical structure to compute the rankings for each criterion and integrates these rankings of the alternatives to identify the optimal solution. Updated explanations for each criterion and alternative will be provided accordingly.

Decision Hierarchy						
Level 0	Level 1	Glb. Prio.	Collaborate with Institution	Enhance Digital Facilities	Banking Training or Seminar	
Thematic Banking Cafe Implementation	Infrastructure	0.370	37.0%	0.241	0.438	0.322
	Digital Engagement	0.242	24.2%	0.191	0.427	0.382
	Institutional Support	0.132	13.2%	0.287	0.415	0.298
	Job Suitability	0.115	11.5%	0.401	0.244	0.355
	Career Development	0.083	8.3%	0.308	0.221	0.471
	Work Environment / Culture	0.059	5.9%	0.180	0.543	0.277
		1.0	25.5%	39.8%	34.7%	

Figure 4. Final Criteria & Alternative Weight

Consolidated Weights of Alternatives

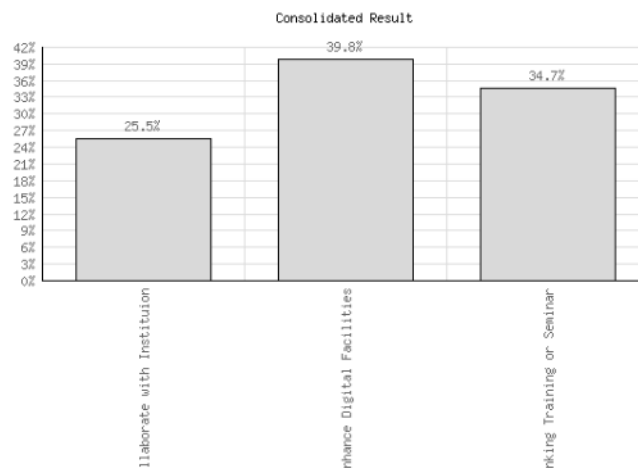


Figure 5. Best Alternative Solution

Detailed position analysis of the weight distribution for each alternative solution in the implementation of the Thematic Banking Café based on the informants’ choices and AHP weight results shown in the figure 4 and 54 above as follow :

1. Enhance Digital Facilities and Café Space Theme (39.8%) – Most Preferred Alternative. This alternative received the highest global weight, suggesting it is considered the most effective solution among informants. The strong preference likely reflects the growing digital behavior of campus users, especially students, who expect modern, functional, and comfortable spaces for both banking and social interaction. High contributions to this preference come from Infrastructure (0.438) and Digital Engagement (0.427), showing that the physical and digital environment is central in how users assess the value of the café. Informants (likely students and young lecturers) may feel that digital facilities like smart kiosks, integrated screens, or thematic seating zones improve their daily experience and increase the café's attractiveness.
2. Banking / Financial Training or Seminar (34.7%) – Second Priority. This alternative is highly valued, especially for its role in long-term benefits like skill improvement and job readiness. It received strong influence from criteria such as :
 - Job Suitability (0.355)
 - Career Development (0.477)
 - Institutional Support (0.295)

Informants possibly university staff and students appreciate the added value of career-related events, internships, or certifications offered in the café. However, despite its long-term

benefit, it may be seen as less urgent or less tangible compared to digital facility upgrades, which are more visible and experiential.

3. Collaborate with Institution (25.5%) – Least Preferred. Even though collaboration with the university sounds strategic, it has the lowest global priority among alternatives. This alternative had weaker weight values across almost all criteria, with the highest being only 0.308 from Career Development, and lower from Infrastructure (0.241) and Digital Engagement (0.191). This might indicate that informants feel collaboration is already happening at a minimum level or that it brings less direct impact to daily user experience compared to physical/digital improvements. Also, collaboration may depend more on institutional decision-making and is outside the influence of students or casual users, making it feel more passive or abstract.

Potential Problem Analysis

In the implementation of campus-based thematic banking cafés, several potential problems may arise that could impact the project's effectiveness and sustainability. These problems typically stem from the mismatch between user behavior, institutional readiness, and operational demands. Based on expert interviews, two critical problems identified are (1) low user engagement with digital banking services and (2) limited cultural integration of the café into campus life. To mitigate these risks, preventive strategies such as early-stage financial education campaigns, active collaboration with university stakeholders, and digital onboarding initiatives must be applied. Additionally, contingency plans should be in place to respond swiftly if these issues materialize.

Table 7. Potential Problem Analysis

Potential Problem	Possible Cause	Preventive Action	Contingency Plan
Low student usage of the café	a. Lack of awareness or promotion	a. Launch targeted digital marketing campaigns	a. Offer limited-time incentives to attract first-time users
	b. Services offered do not match student needs	b. Conduct pre-launch surveys to align offerings	b. Adjust service menu based on feedback (agile service model)
	c. Unappealing location or design	c. Involve student representatives in co-design process	c. Relocate digital activation booths to high-traffic zones
Delayed or limited institutional support	a. Bureaucratic approval takes too long	a. Initiate early engagement with campus leadership	a. Redirect efforts to more responsive departments or faculties
	b. Misalignment between BNI goals and campus vision	b. Present mutual benefit proposals (e.g., financial literacy programs)	b. Shift model to focus on community service rather than full commercial ops
	c. Resistance to private sector branding on campus	c. Propose co-branding strategies and CSR-based positioning	c. Switch to a temporary, event-based format to build early traction
Misalignment of job suitability	a. Lack of clear understanding of job requirements	a. Ensure comprehensive job description and interview preparation	a. Provide additional training or job shadowing for adjustment
	b. Insufficient communication between hiring managers and candidates	b. Foster clear and open communication during recruitment process	b. Offer reassessment of role fit after a probationary period
	c. Unclear expectations set during interviews	c. Provide structured interview guidelines to	c. Adjust job responsibilities and reassign tasks as needed

		assess candidate capabilities	
Limited career development growth	a. Slow organizational change or rigid hierarchical structure	a. Promote continuous professional development and mentoring	a. Look for external development opportunities or side projects
	b. Lack of leadership support for employee advancement	b. Establish a formal mentorship program	b. Encourage leadership to provide more career guidance
	c. Inadequate career advancement opportunities	c. Create transparent pathways for career progression	c. Explore lateral movement or cross-functional projects
Unfit work environment/culture	a. Discrepancy between personal values and company values	a. Conduct thorough research on the company's culture before deciding	a. Request a trial period or temporary assignment to evaluate fit
	b. Lack of diversity and inclusivity in the workplace	b. Promote diversity and inclusivity policies	b. Seek to transfer to another team or department if necessary
	c. Incompatibility with team dynamics	c. Offer team-building activities and regular feedback sessions	c. Consider seeking an alternative role in a different team

CONCLUSION

In conclusion, this research effectively addresses the research questions concerning the key criteria influencing decision-making in the implementation of the BNI *Banking Café* using the *Analytical Hierarchy Process (AHP)*. The findings reveal that infrastructure emerged as the most critical factor, followed by digital engagement, institutional support, job suitability, career development opportunities, and the work environment. The *AHP* method provided a reliable means of quantifying expert opinions, with a strong consistency ratio confirming the robustness of the results.

Regarding the optimal strategy for the successful and sustainable implementation of the BNI *Banking Café*, the research identifies enhancing digital facilities and *café* space as the most preferred alternative, followed by banking/financial training and seminars. Collaboration with the institution, though strategic, was ranked as the least preferred option. These results offer valuable insights into the priorities and strategies necessary for the effective implementation of hybrid banking services within educational settings.

Future research could explore the long-term impact of the *Banking Café* on student engagement, digital literacy, and financial behavior, particularly in assessing whether the model influences students' financial decision-making and the broader adoption of digital banking within the university community.

REFERENCES

- Amiri, M., Hashemi-Tabatabaei, M., Keshavarz-Ghorabae, M., Antucheviciene, J., Šaparauskas, J., & Keramatpanah, M. (2023). Evaluation of digital banking implementation indicators and models in the context of industry 4.0: A fuzzy group MCDM approach. *Axioms*, 12(6), 516.
- Angmalisang, S. I. (2019). Gap analysis of service quality of BNI banking cafe at Manado Town Square. *Journal of International Conference Proceedings*, 2(2), 168-175.
- Aren, S., & Hamamci, H. N. (2021). Biases in managerial decision making: overconfidence, status quo, anchoring, hindsight, availability. *Journal of Business Strategy Finance and Management*, 3(1-2), 8.

- Baldassarre, S., Bruno, G., Piccolo, C., & Ruiz-Hernández, D. (2024). Multi-channel distribution in the banking sector and the branch network restructuring. *Expert Systems with Applications*, 238, 122294.
- Barquin, S., & Hv, V. (2015). *Digital banking in Asia: What do consumers really want*. McKinsey & Company.
- Bayou, M. E., de Korvin, A., & Reinstein, A. (2007). Using the fuzzy-analytic-hierarchical-process to select the optimum mechanism for developing accounting standards. *Review of Accounting and Finance*, 6(2), 109-130.
- Bindal, A. (2024). Balancing tradition and innovation: Hybrid project management in banking and finance. *Tec Empresarial*, 6(2), 162-177.
- Bolton, R. N., McColl-Kennedy, J. R., Cheung, L., Gallan, A., Orsingher, C., Witell, L., & Zaki, M. (2018). Customer experience challenges: Bringing together digital, physical, and social realms. *Journal of Service Management*, 29(5), 776-808.
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252-271.
- Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford University Press.
- Celner, A., & Shilling, M. (2021). *2021 Banking and Capital Markets Outlook*. Deloitte. [deloitte.com/content/dam/Deloitte/tw/Documents/financial-services/pr210330-2021-banking-and-capital-markets-outlook-strengthening-resilience-accelerating-transformation.pdf]
- Chegut, A., & Langen, M. (2019). The financial impacts of coworking: Rental prices and market dynamics in the commercial office market. Available at SSRN 3481142.
- Chmielarz, W., & Zborowski, M. (2020). A hybrid method of assessing individual electronic banking services in 2019: The case of Poland. *Procedia Computer Science*, 176, 3881-3889.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.
- de la Mata, D. C., de Blanes Sebastián, M. G., & Camperos, M. C. (2024). Hybrid artificial intelligence: Application in the banking sector. *Revista de Ciencias Sociales*, 30(3), 22-36.
- Diener, F., & Špaček, M. (2021). Digital transformation in banking: A managerial perspective on barriers to change. *Sustainability*, 13(4), 2032.
- Edmondson, D. (2005). Likert scales: A history. In *Proceedings of the Conference on Historical Analysis and Research in Marketing* (Vol. 12, pp. 127-133).
- Ganguli, S., & Roy, S. K. (2010). Service quality dimensions of hybrid services. *Managing Service Quality: An International Journal*, 20(5), 404-424.
- Harrison, H., Birks, M., Franklin, R., & Mills, J. (2017). Case study research: Foundations and methodological orientations. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 18(1).
- Hernandez, J. G. V., & Ortega, R. P. (2019). Bounded rationality in decision-making. *MOJ Research Review*, 2(1), 1-8.
- Ho, W. (2008). Integrated analytic hierarchy process and its applications—A literature review. *European Journal of Operational Research*, 186(1), 211-228.
- Jameaba, M. S. (2020). Digitization revolution, FinTech disruption, and financial stability: Using the case of Indonesian banking ecosystem to highlight wide-ranging digitization opportunities and major challenges. *FinTech Disruption and Financial Stability*.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Kepner, C. H., & Tregoe, B. B. (1997). *The New Rational Manager: An Updated Edition for a New World*. Princeton Research Press.
- Korua, B. Y., Saerang, D. P., & Tumewu, F. J. (2021). The influence of co-branding on brand equity (Case study: BNI digital branch banking cafe Mantos 3). *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis, dan Akuntansi*, 9(3), 1631-1643.

- Kou, G., Ergu, D., Lin, C., & Chen, Y. (2016). Pairwise comparison matrix in multiple criteria decision making. *Technological and Economic Development of Economy*, 22(5), 738-765.
- Kustina, K. T., Dewi, G. A. A. O., Prena, G. D., & Suryasa, W. (2019). Branchless banking, third-party funds, and profitability: Evidence from the banking sector in Indonesia. *Journal of Advanced Research in Dynamical & Control Systems*, 11(2), 290-299.
- Khon Sergey, David Tan, David and Taraporevala, Zubin (2022). *McKinsey Balancing digital and physical channels in retail banking*. <https://www.mckinsey.com/industries/financial-services/our-insights/best-of-both-worlds-balancing-digital-and-physical-channels-in-retail-banking>
- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making. *Annual Review of Psychology*, 66(1), 799-823.
- Mason, C. H., & Perreault Jr, W. D. (1991). Collinearity, power, and interpretation of multiple regression analysis. *Journal of Marketing Research*, 28(3), 268-280.
- Mikhailov, L. (2003). Deriving priorities from fuzzy pairwise comparison judgements. *Fuzzy Sets and Systems*, 134(3), 365-385.
- Mikhailov, L., & Tsvetinov, P. (2004). Evaluation of services using a fuzzy analytic hierarchy process. *Applied Soft Computing*, 5(1), 23-33.
- Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*. Boston: Pearson.
- Nouri, B. A., & Soltani, M. (2019). A hybrid model of factors affecting adoption of mobile banking technology between customers of Iranian banks. *Serbian Journal of Management*, 14(1), 49-75.
- Oliveira, A. (2007). A discussion of rational and psychological decision-making theories and models: The search for a cultural-ethical decision-making model. *Electronic journal of Business Ethics and Organization Studies*, 12(2), 12-17.
- Ononiwu, M. I., Onwuzulike, O. C., Shitu, K., & Ojo, O. O. (2024). The impact of digital transformation on banking operations in developing economies. *World Journal of Advanced Research and Reviews*, 23(3), 460-474.
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods* (4th ed.). SAGE Publications.
- Petrova, E., Dewing, J., & Camilleri, M. (2016). Confidentiality in participatory research: Challenges from one study. *Nursing Ethics*, 23(4), 442-454.
- Porcelli, A. J., & Delgado, M. R. (2009). Acute stress modulates risk taking in financial decision making. *Psychological Science*, 20(3), 278-283.
- Reinares, P., & Garcia, L. (2012). Methods of improving the physical spaces of banking establishments. *International Journal of Bank Marketing*, 30(5), 376-389.
- Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making: Implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, 7(1), 1-44.
- Romero, L. (2023). *Preference for digital versus traditional banks among consumers in Indonesia in 2023*. Statista. [statista.com/statistics/1326425/indonesia-preferences-towards-digital-versus-traditional-banks]
- Rosenblatt, V. (2012). Hierarchies, power inequalities, and organizational corruption. *Journal of Business Ethics*, 111, 237-251.
- Saaty, T. L., & Vargas, L. G. (2012). *Models, Methods, Concepts & Applications of the Analytic Hierarchy Process*. New York: Springer Science & Business Media.
- Taurisano, E. (2017). Virtual branch: How customers' behaviour is reshaping the concept of traditional branch.
- Turtiainen, T. (2021). Customer engagement and hybrid wealth advice model: Case study of combining human interaction and digital advisory for retail banking customers in Finland.
- Vaidya, O. S., & Kumar, S. (2006). Analytic hierarchy process: An overview of applications. *European Journal of Operational Research*, 169(1), 1-29.
- Vargas, L. G. (1990). An overview of the analytic hierarchy process and its applications. *European Journal of Operational Research*, 48(1), 2-8.

- Xu, A., Baysari, M. T., Stocker, S. L., Leow, L. J., Day, R. O., & Carland, J. E. (2020). Researchers' views on, and experiences with, the requirement to obtain informed consent in research involving human participants: A qualitative study. *BMC Medical Ethics*, 21(1), 1-11.
- Yadav, M. H., & Tandon, J. K. (2024). Gen-Z's impetus and engagement in the internet banking revolution: A review. *Economic Sciences*, 20(2), 08-22.
- Harahap, N., Yudhistira, W., Khair, R., & Almadany, K. (2025). Implementation of Digital Financial Literacy in the Investment Decision-Making System for the Community of Padangsidempuan City using the Analytical Hierarchy Process (AHP) Method. *Journal of Science and Education (JSE)*, 5(2), 443-450.
- Kaftandzieva, M., & Cvetkoska, V. (2021). Financial Decision Making Among Young Adults: An AHP Approach. *International Journal of the Analytic Hierarchy Process*, 13(3).
- Mundzir, M., Zulkarnain, R., & Hardi, R. (2023). Employing Fuzzy AHP in Modeling a Decision Support System for Determining Scholarship Recipients within the University Context. *Jurnal Solusi Masyarakat (JSM)*.
- Puspitasari, T. D., Yufit, H., & Destarianto, P. (2018). Decision Support System for Determining Scholarship Selection using an Analytical Hierarchy Process. *IOP Conference Series: Materials Science and Engineering*, 953(1), 012119.
- Astutik, S. S., & Jatiningrum, W. S. (2019). Designing the Decision Support System to Determine the Major and Higher Education Institution based on Preferences of Prospective Students. *Spektrum Industri*, 17(1), 1-8.
- Stofkova, J., Krejnus, M., Stofkova, K. R., Malega, P., & Binasova, V. (2022). Use of the analytic hierarchy process and selected methods in the managerial decision-making process in the context of sustainable development. *Sustainability*, 14(18), 11546.
- Malczewski, J., & Rinner, C. (2015). *Multicriteria Decision Analysis in Geographic Information Science* (Vol. 1, pp. 55-77). New York: Springer.