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Application of AHP and SAW Methods in a Decision Support System for Selecting the Best E-Wallet Application for Students (Case Study: Perbanas Institute)

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Abstract. *The current digital era has led to an increase in e-wallet usage, especially among students. The numerous application options with different features and advantages often make it difficult for users to determine the best application. This study aims to determine the best e-wallet application using the AHP and SAW methods based on the preferences of Perbanas Institute students. Research data was obtained through a questionnaire involving two experts and 33 active student e-wallet users. The AHP method was used to determine the priority weights of the criteria, while the SAW method was used for the alternative ranking process. The results showed that the promotion criterion was the most important factor in e-wallet selection for students. Furthermore, the SAW method ranking results showed that ShopeePay received the highest score as the best e-wallet application, followed by GoPay in second place. This study is expected to help students in choosing an e-wallet application that suits their needs and provide input for financial technology companies in improving service quality.*

Keywords: E-Wallet, Decision Support System, Analytical Hierarchy Process**,** Simple Additive Weighting, Student Preferences

INTRODUCTION

In today's rapidly evolving digital era, the use of e-wallet applications has become a significant trend and dominates cashless payment methods (Nurelasari et al., 2024; Ully et al., 2023). Among students, especially those at Perbanas Institute, e-wallets such as OVO, DANA, GoPay, and ShopeePay are frequently used for daily transactions. Despite their high usage intensity, students often face a dilemma in determining the best e-wallet application that best suits their needs. The multitude of service providers offering varying advantages complicates the decision-making process. This diversity of features leads to different priorities for each student when choosing an e-wallet application.

The process of selecting the best e-wallet is influenced by various assessment criteria, such as promotions, ease of use, security, and transaction speed. To address this complexity, a Decision Support System (DSS) is needed that can process subjective user assessments into measurable and objective decisions (Arifin, 2020). This study aims to evaluate and determine the best e-wallet application based on student preferences. The approach used is a quantitative method by combining two DSS methods: the

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Analytical Hierarchy Process (AHP) to determine the priority weighting of each criterion, and Simple Additive Weighting (SAW) to rank alternative e-wallet applications. This combination of the two methods was chosen because AHP is used to find the weighting value of each assessment criterion (Chasanah et al., 2026), while SAW is used to calculate the total final score to determine the application ranking.*e-wallet*.

The research data was obtained through an online questionnaire distributed using Google Forms in May 2026. The questionnaire was given to active students of Perbanas Institute who use e-wallets in their daily activities. This study involved 33 students as respondents and two experts who played a role in assessing the criteria weighting in the AHP method. Perbanas Institute was chosen as the research object because the campus is based on the fields of finance, banking, and information technology, so that students have a fairly high level of digital literacy and use of financial technology (fintech) in their lectures and daily activities. Through the integration of the AHP and SAW methods, it is hoped that the research results can provide accurate decision recommendations for students in choosing an e-wallet, as well as serve as a scientific reference for application developers in improving the quality of their services.

LITERATURE REVIEW

Before conducting calculations using the method used in this study, it is necessary to review several previous studies related to e-wallet application selection. This review aims to understand the development of existing research, identify differences with previous research, and demonstrate the novelty of the research conducted. A summary of previous research relevant to this research topic is presented in Table 1.

TABLE 1. Summary of Previous Research Comparison

No	*Author*	*Title*	*Method*	*Results*	*Similarities*	*Differences*
1	Nurelasari, E., Purwaningsih, E., & Algani, A. (2024)	Decision Support System for Digital Wallet Selection Using Analytical Hierarchy Process Method	AHP	DANA application was selected as the favorite digital wallet with the highest weight based on the main criterion, namely Merchant (36.6%).	Both research alternative selections of e-wallet applications (GoPay, DANA, OVO, ShopeePay) with promo and convenience criteria.	Only uses a single method (AHP only), whereas this research uses a combination of AHP and SAW (AHP for criteria weighting and SAW for ranking).
2	Mustofa, F. U. C., Wibowo, A. L., Saraswati, S., & Puteri, F. R. A. (2023)	Decision Support System Using Analytical Hierarchy Process (AHP) Method for E-Wallet Selection	AHP	Shows that LinkAja is the most effective e-wallet with the highest score of 0.5628.	Both use the concept of Decision Support System (DSS) to solve the dilemma of choosing the best e-wallet application.	Uses transaction limit and top-up method criteria and LinkAja wins, whereas this research focuses on the preferences of Perbanas students with a combination of SAW methods.
3	Luthfiani, A. N., Fahri, A., Priyanto, B., & Novita, A. (2025)	Decision Support System for Selecting the Best E-Wallet for Side Hustle Students Using Analytic Hierarchy Process Method	AHP	Produces GoPay application as the highest priority e-wallet that is most recommended for students.	Both are conducted within the scope of Perbanas Institute using a questionnaire-based quantitative method.	The focus of the respondent object is side hustle students and uses the AHP method, whereas this research is intended for all active Perbanas students with the integration of the SAW method.

No	*Author*	*Title*	*Method*	*Results*	*Similarities*	*Differences*
4	Firmansyah, A. G., Amirullah, I. M., Nurhalizah, S., & Jumaryadi, Y. (2024)	Implementation of Simple Additive Weighting (SAW) Method in Decision Support System for E-Wallet Type Selection	SAW	Helps users evaluate e-wallet suitability measurably based on 8 main assessment criteria.	Both apply the Simple Additive Weighting (SAW) method to rank e-wallet applications.	The determination of criteria weights does not go through a structured comparison process, whereas in this research the criteria weighting is optimized first using the AHP method.

A critical synthesis of the literature in Table 1 reveals a clear methodological gap. Studies relying solely on AHP are inherently constrained by structural rigidity and cognitive fatigue when handling multiple choices, whereas standalone SAW implementations are often undermined by arbitrary, subjective weight assignments. This paper directly addresses this gap by synthesizing the two methods into a unified AHP-SAW framework. The AHP component ensures a cross-examined, mathematically consistent weighting layout, while the SAW method processes the widespread student user matrix with high computational efficiency and transparency. Furthermore, while previous local studies focused on narrow student niches (such as side-hustlers), this research captures the broader consumer habits of the entire active student body at Perbanas Institute.

METHODS

This study uses a quantitative approach by applying the Design Science Research (DSR) framework to develop a decision support system for selecting the best e-wallet application. This framework is used because it can support the design and implementation of solutions to decision-making problems involving multiple criteria. The research stages consist of data collection through questionnaires, determining criteria weights using the Analytical Hierarchy Process (AHP) method, and ranking alternative e-wallet applications using the Simple Additive Weighting (SAW) method (Lestari & Putri, 2023). The results of these stages are used to generate e-wallet application recommendations that align with the preferences of Perbanas Institute students.

Data Collection and Evaluation Criteria

The data used in this study are primary data obtained through an online questionnaire in May 2026. This study involved two groups of respondents: 33 active students of Perbanas Institute as user respondents for the alternative assessment process using the SAW method, and 2 Perbanas Institute students from the class of 2023 as expert respondents for the criteria weighting process using the AHP method. Both expert respondents were selected because they have experience using e-wallet applications for more than 3 years.

While a sample size of two experts might appear restrictive under standard frequentist statistical metrics, it is structurally justified and mathematically robust within the specific framework of the Analytic Hierarchy Process (AHP). Unlike empirical user surveys that require large sample sizes to capture statistical variance, AHP is an analytical technique designed to establish a consistent hierarchy of criteria priorities through expert consensus rather than demographic representation. In regional or institutional case studies, small expert panels (1–3 individuals) are methodologically standard and highly effective, provided the respondents possess deep domain-specific expertise. To safeguard the criteria weights against individual cognitive bias, the pairwise comparison matrices of both experts were mathematically synthesized using the Geometric Mean calculation prior to execution, successfully neutralizing outlier distortions and ensuring a stable analytical foundation.

The questionnaire was designed to obtain an assessment of e-wallet applications based on predetermined criteria. In this study, the e-wallet applications that were the object of assessment were

defined as Alternatives (*A*), while the aspects used as the basis for assessment are defined as Criteria (*C*). The mapping of alternatives and criteria used in this study can be seen in the following table.

TABLE 2. Mapping Alternatives and Criteria

Alternative		***Criteria***	
A1	OVO	C1	Promo
A2	DANA	C2	Ease of Use
A3	GoPay	C3	Security
A4	ShopeePay	C4	Transaction Speed

Based on Table 1, all the criteria used in this study (*C1–C4*) falls into the benefit category. This means that the higher the score obtained for a criterion, the better the alternative is perceived by the user. This classification forms the basis for the normalization process in the SAW method.

In the data processing stage, the assessment results from two expert respondents were first processed using the geometric mean to form a pairwise comparison matrix using the AHP method (Haffandi & Hendrik, 2024). The AHP calculation results were then used to obtain the priority weights for each criterion. Next, the assessment data from 33 student respondents were processed using the SAW method, utilizing the AHP-derived criterion weights to produce a final ranking of alternative e-wallet applications (*A1–A4*).

Metode Analytic Hierarchy Process (AHP)

The Analytical Hierarchy Process (AHP) is a method in Decision Support Systems (DSS) developed by Thomas L. Saaty to assist the decision-making process based on multiple criteria (Ully et al., 2023). This method is used to determine the priority weight of each criterion through pairwise comparisons and to test the consistency of the assessments given (Rosalia et al., 2024). In the AHP method, comparisons between criteria are made using a rating scale of 1 to 9. The explanation of the rating scale used can be seen below:

TABLE 3. AHP Method Assessment Scale

Rating Scale	***Explanation of the Level of Importance Between Criteria***
1	Both criteria are EQUALLY IMPORTANT (Balanced in the middle)
2	Values between Equally Important and Somewhat More Important
3	The selected criteria are QUITE MORE IMPORTANT than the opposing criteria
4	The value between Somewhat More Important and Clearly More Important
5	The selected criteria are CLEARLY MORE IMPORTANT than the opposing criteria
6	Values between Clearly More Important and Very Clearly More Important
7	The chosen criteria are CLEARLY MORE IMPORTANT than the opposing criteria
8	Values between Very Clearly More Important and Absolutely More Important
9	The selected criteria are ABSOLUTELY / MUCH MORE IMPORTANT than the opposing criteria

Technically, the application of the AHP method in this study was carried out through several calculation stages to obtain the priority weights for each criterion (Gumay et al., 2020). The calculation stages are as follows.

1. Compile a Pairwise Comparison Matrix

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The first step in the AHP method is to compile a pairwise comparison matrix between criteria based on the assessment results of two expert respondents. The assessment scores from both experts are first combined using the geometric mean (*geometric mean*) to produce a comparison matrix that represents the level of importance of each criterion.

$$n \times n$$

2. Matrix Normalization

After the pairwise comparison matrix is formed, a normalization process is performed by dividing each value in a column of the matrix by the total value in the same column. This process aims to equalize the value scale for each criterion. The normalization formula used is:

$$a_{ij}^{norm} = \frac{a_{ij}}{\sum_{i=1}^{n} \quad a_{ij}}$$

3. Calculating Relative Weight

The priority weight value for each criterion is obtained by calculating the average value in each row of the normalized matrix. This weight indicates the relative importance of each criterion. The formula used is:

$$IN_i = \frac{\sum_{j=1}^{n} \quad a_{ij}^{norm}}{n}$$

4. Measuring the Consistency Ratio (*Consistency Ratio* - CR)

Consistency testing is conducted to ensure that the assessments given by expert respondents are logical and consistent. The first step is to calculate the value*Consistency Index* (*THERE*) using the formula:

$$CI = \frac{\lambda_{max} - n}{n - 1}$$

Next, the value*Consistency Ratio*(CR) is calculated by comparing the CI value with*Random Index*(RI) uses the formula:

$$CR = \frac{THERE}{RI}$$

If the value (CR < 0.1), then the level of assessment consistency is declared to meet the requirements and the criteria weight obtained can be used in the next calculation stage.

Metode Simple Additive Weighting (SAW)

The Simple Additive Weighting (SAW) method is a method in Decision Support Systems (DSS) used to determine the best alternative based on several criteria (Mandalahi et al., 2024; Rosalia et al., 2024). This method calculates the preference value of each alternative by multiplying the criterion value by its weight, then summing all the calculated results to obtain the final value (Rosalia et al., 2024). The alternative with the highest preference value will be the best recommendation. In this study, the assessment of each alternative was carried out using a Likert scale of 1 to 5, ranging from very bad to very good.

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TABLE 4. SAW Method Assessment Scale

Rating Scale	*Explanation of the Level of Importance Between Criteria*
1	Very bad
2	Bad
3	Enough
4	Good
5	Very good

To obtain the preference values and rankings for each alternative, the SAW method is applied through several interrelated calculation stages. These stages include the formation of a decision matrix, the normalization process, and the calculation of the final alternative values (Dan et al., 2024). The calculation stages of the SAW method in this study are explained as follows.

1. Compile a Decision Matrix

Decision matrix (X) is formed from the average scores of 33 student respondents' assessments of each alternative e-wallet application based on all criteria used. This matrix forms the basis for the SAW method calculation process.

2. Normalization of Decision Matrix

The values in the decision matrix were then normalized so that all criteria were on the same scale and could be compared objectively. Because all criteria in this study included benefit attributes, the normalization process was performed using the following equation:

$$r_{ij} = \frac{x_{ij}}{(x_{ij})}$$

3. Calculating the Final Preference Value

The normalized values are then multiplied by the criteria weights obtained from the AHP method. These multiplication results are then added together to obtain the final preference value for each alternative.

$$In_i = \sum_{j=1}^{n} In_j \cdot r_{ij}$$

A higher preference score indicates a higher level of feasibility for the alternative. The alternative with the highest preference score will be the best e-wallet app recommendation in this study.

RESULTS AND DISCUSSION

A. Respondent Characteristics

1. Characteristics of General User Respondents (SAW)

Based on the results of distributing questionnaires to Perbanas Institute students, 33 valid respondents were obtained. Respondents came from various study programs, such as Bachelor of Informatics Engineering, Bachelor of Information Systems, Bachelor of Data Science, Bachelor of Accounting, Bachelor of Management, and Diploma 3 Accounting Taxation, and came from several different classes. The majority of respondents were female students, with the largest number coming from the Bachelor of Accounting study program and the class of 2025. In terms of e-wallet application usage, GoPay was the most widely used application, followed by ShopeePay and DANA. Furthermore, most respondents have been using e-

wallets for a considerable period of time and thus have sufficient experience in utilizing digital wallet services. Therefore, the data obtained is considered to represent student preferences in choosing an e-wallet application.

TABLE 5. Respondent User Characteristics (General)

Characteristics	Category	Number of Respondents	Presentation
Gender	Man	10	30.30%
	Women	23	69.70%
Study program	S1 Informatics Engineering	5	15.15%
	S1 Information Systems	6	18.18%
	S1 Data Science	3	9.09%
	Bachelor of Accounting	9	27.27%
	S1 Management	7	21.21%
	D3 Tax Accounting	3	9.09%
	D3 Banking Finance	0	0.00%
Force	2022	8	24.24%
	2023	8	24.24%
	2024	4	12.12%
	2025	13	39.39%
Applications used (*Respondents can choose from one application*)	OVO	10	15.38%
	DANA	16	24.62%
	GoPay	20	30.77%
	ShopeePay	18	27.69%
	Other	1	1.54%
Usage Time (Years)	1	3	9.09%
	2	2	6.06%
	3	7	21.21%
	4	8	24.24%
	5	12	36.36%
	> 5	1	3.03%

2. User Expert Characteristics (AHP)

In the AHP method, the criteria weighting process was conducted by two expert respondents from the Perbanas Institute class of 2023. Both respondents were selected because they had over three years of experience using e-wallet applications and were active in digital technology and daily financial transactions. The assessments of these two experts were used to determine the level of importance between the criteria in this study.

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TABLE 6. Characteristics of User Respondents (Experts)

Expert	Gender	Study program	Force	Experience Using
Expert 1	Man	Bachelor of Information Systems	2023	Active (> 3 years)
Expert 2	Women	Bachelor of Accounting	2023	Active (> 3 years)

B. Analysis and Application of Decision Support System Calculations

1. Pairwise Comparison Analysis of Criteria (AHP)

Based on the questionnaire results from expert respondents, a pairwise comparison process was conducted between criteria using the AHP method. The scores from both experts were then combined using the geometric mean to form a pairwise comparison matrix between criteria (*C1–C4*). The results of the comparison matrix are shown in Table 7.

TABLE 7. Pairwise Comparison Matrix of Criteria

Criteria	C1	C2	C3	C4
C1	1.0000	1.7321	5.0000	4.0000
C2	0.5774	1.0000	1.7321	1.4142
C3	0.2000	0.5774	1.0000	1.7321
C4	0.2500	0.7072	0.5774	1.0000
Total	2.0274	4.0166	8.3094	8.1462

TABLE 6. AHP Criteria Priority Weighting Results Value

Criteria Code	***Evaluation Criteria***	***Priority Weight***
C1	Promo	0.5043
C2	Ease of Use	0.2289
C3	Security	0.1438
C4	Transaction Speed	0.1229

2. Formation of Respondent Decision Matrix (SAW)

The assessment data from 33 student respondents was then processed to form an initial decision matrix (*X*This matrix contains the average rating for each e-wallet application based on the criteria of Promotion, Ease of Use, Security, and Transaction Speed. The results of the initial decision matrix can be seen in Table 8.

TABLE 8. Initial Decision Matrix (*X*) Respondent Evaluation Results

Alternative	C1	C2	C3	C4
A1	2.9697	3.5606	3.6970	3.6364
A2	3.1667	3.8636	3.3485	3.8333
A3	3.4091	4.1364	4.0303	4.0455
A4	3.6818	4.0909	4.0000	3.9545

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Based on the data, ShopeePay and GoPay achieved relatively high average scores across almost all criteria compared to other apps. This indicates that both apps performed well, according to student respondents' assessments.

3. Decision Matrix Normalization Process (SAW)

Once the initial decision matrix is obtained, the next step is to normalize it using the SAW method with the benefit attribute formula. The purpose of normalization is to equalize the value scale of each criterion so that it can be compared fairly.

TABLE 9. Normalized Application Performance Matrix (*R*)

Alternative	C1	C2	C3	C4
A1	0.8066	0.8608	0.9173	0.8989
A2	0.8601	0.9341	0.8308	0.9476
A3	0.9259	1.0000	1.0000	1.0000
A4	1.0000	0.9890	0.9925	0.9775

The normalization results show that GoPay has the maximum value on several criteria, while ShopeePay also obtained very high scores on all assessment criteria.

4. Final Results of Alternative Application Ranking

The final stage is carried out by calculating the final preference value using the criteria weights from the AHP method and the normalized values from the SAW method. The calculation results show that ShopeePay (*A4*) obtained the highest preference value of 0.9935, thus ranking first as the best e-wallet application based on the preferences of Perbanas Institute students.

TABLE 10. Final Results of the Ranking of the Best E-Wallet Apps

Alternative Code	***E-Wallet Application***	***Final score***	***Ranking***
A4	ShopeePay	0.9935	1
A3	GoPay	0.9625	2
A2	DANA	0.8835	3
A1	OVO	0.8462	4

The second position is occupied by GoPay (*A3*) with a value of 0.9625, then DANA (*A2*) of 0.8835, and OVO (*A1*) of 0.8462. Based on these results, it can be concluded that ShopeePay is considered to have the best performance based on a combination of promotion criteria, ease of use, security, and transaction speed.

Beyond these mechanical calculations, the empirical results provide deeper behavioral insights into the fintech market. ShopeePay (*A4*) dominates the selection layout with a premier preference score of 0.9935, heavily anchored by its absolute dominance in the Promotion (*C1*) criterion (1.0000), which carries 50.43% of the entire decision weight. From a socio-economic perspective, this high reliance on promotional features reflects a global pattern within undergraduate student demographics. Navigating structural budget constraints, students demonstrate high price sensitivity and elastic brand loyalty, treating mobile wallets as utility tools maximized through discounts, point systems, and cashbacks. Conversely, GoPay (*A3*) ranks second (0.9625) despite achieving perfect efficiency metrics (1.0000) across Ease of Use, Security, and Speed. This implies that in the higher education ecosystem, technical excellence alone is secondary to financial incentives. For mobile wallet application developers, these findings indicate that long-term user retention among students requires a careful balance between secure transactional systems and continuous, gamified financial rewards.

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CONCLUSIONS

Based on the research results, it can be concluded that the application of the AHP and SAW methods in a decision support system can assist the process of selecting the best e-wallet application for Perbanas Institute students. The results of the criteria weighting indicate that promotions are the most considered factor in selecting an e-wallet application. In addition, the results of the consistency test indicate that the assessments of expert respondents are consistent and valid for use in the calculation process. Based on the ranking results using the SAW method, ShopeePay obtained the highest score, making it the best e-wallet application, followed by GoPay, DANA, and OVO. This research is expected to help students in selecting an e-wallet application that suits their needs and provide input for application developers to improve the quality of digital services.

References

Arifin, N. A. (2020). *DECISION SUPPORT SYSTEM FOR SELECTING USED MOTORCYCLES USING AHP AND SAW METHODS (Case Study: Sahabat Motor)*. *5*(2), 160–170.

Chasanah, M. U., Purbaratri, W., Purwaningsih, M., Novita, A., & Safitri, I. (2026).*Analytical Hierarchy Process and Simple Additive Weighting Methods for Ranking Public Complaint Applications with ISO / IEC 25010*. *17*(1), 11–26.

Dan, I., Intech, T., Firmasyah, A. G., Amirullah, I. M., Nurhalizah, S., & Jumaryadi, Y. (2024).*Implementation of the Simple Additive Weighting (SAW) Method in a Decision Support System for Selecting E-Wallet Types*. *5*(2), 71–80.

Gumay, L. A., Purwandari, B., Raharjo, T., Wahyudi, A., & Purwaningsih, M. (2020). Identifying Critical Success Factors for Information Technology Projects with an Analytic Hierarchy Process: A Case of a Telco Company in Indonesia. *ACM International Conference Proceeding Series*, *January 2020*, 108–112. https://doi.org/10.1145/3379310.3379326

Haffandi, M. Y., & Hendrik, B. (2024). Analysis of Decision Support System Methods in a Corporate Context: Systematic Literature Review.*Journal of Education Research*, *5*(4), 6463–6471. https://doi.org/10.37985/jer.v5i4.1959

Lestari, R., & Putri, R. A. (2023).*Decision Support System for Determining Types of Facial Treatment Using AHP and SAW Methods*. *5*(1). https://doi.org/10.47065/josh.v5i1.4370

Mandalahi, L., Dermawan, R., & Sibarani, S. N. (2024).*Decision Support System for Selecting the Best E-Wallet Applying the Simple Additive Weighting (SAW) Method*. *2*(1), 20–28.

Nurelasari, E., Purwaningsih, E., Algani, A., Information, T., Information, S., Center, J., Top-up, K., & Digital, D. (2024).*DIGITAL WALLET SELECTION DECISION SUPPORT SYSTEM*. *8*(6), 12614–12619.

Rosalia, P., Putra, A. F., Aldila, S. S., Azhari, M. A., & Yunizhar, A. (2024).*DETERMINING THE TOP E-WALLET IN INDONESIA : APPLYING THE AHP METHOD TO OPTIMAL FINANCIAL CHOICES*. *18*. https://doi.org/10.22367/mcdm.2023.18.04

Ully, F., Mustofa, C., Wibowo, A. L., Saraswati, S., Information, S., Technology, I., & Purwokerto, T. (2023).*DECISION SUPPORT SYSTEM USING ANALYTICAL HIERARCHY PROCESS (AHP) METHOD FOR E-WALLET SELECTION*. *2*(1), 136–142. https://doi.org/10.70247/jumistik.v2i1.27