Determination of MSMEs Business Feasibility Decisions using the Profile Matching Method

Salsa Bila Jihan Maulidah[1]* , I Gede Iwan Sudipa[2]* , Yuri Prima Fittryani[3] , Komang Kurniawan Widiartha[4] , Komang Redy Winatha [5]
[1,2,3,4,5] Fakultas Teknologi dan Informatika, Program Studi Teknik Informatika, Institut Bisnis dan Teknologi Indonesia
[1]salsabilamjk@gmail.com, [2]*iwansudipa@instiki.ac.id,[3] yuri.prima@instiki.ac.id,
[4]komang.kurniawan@instiki.ac.id,[5] redwin@instiki.ac.id

Abstract: Micro and Medium Enterprises (MSMEs) in Bali contribute to the local economy. When operating a business, it is crucial to evaluate the viability of MSME enterprises to enhance the calibre of business offerings and services. Nevertheless, the lack of competence to establish the parameters or criteria for evaluating the viability of a firm poses challenges for MSMEs in decision-making. This study presents a business feasibility assessment model utilising the Profile Matching method to aid in resolving issues and supporting Micro, Small, and Medium Enterprises (MSMEs) in making informed decisions for the long-term viability of their businesses. This study examines the feasibility of MSME businesses using the Profile Matching method. The method involves assessing 13 criteria and selecting from 10 alternatives. The process includes determining initial and target values, weighting criteria, grouping core and secondary factors, calculating total values, and ranking. The final results indicate which MSMEs are feasible and which ones require further evaluation. According to the calculations using the Profile Matching method, MSME 5 has a value of 27.80, indicating its feasibility.

Keywords: Decision Support System, Business Feasibility Decision Making, Bali MSMEs, Profile Matching Method.

INTRODUCTION

Bali plays an important role in the national economy as a tourist destination in Indonesia. Rapid growth in the tourism sector has had a positive impact on the island's economy. However, despite the glory of tourism, economic challenges still remain, especially for micro, small and medium enterprises (MSMEs), which are the pillars of the regional economy. According to Law No. 20/2008 on Micro, Small and Medium Enterprises, MSMEs are productive businesses of individuals and or individual business entities that meet the criteria of micro, small and medium enterprises as stipulated in the law (Kurniawati & Ahmad, 2021).

MSMEs are often run by local entrepreneurs who demonstrate creativity and dedication, creating a diverse range of unique products and services. Despite their important contribution to the economy, MSMEs often face barriers in accessing financial resources, management knowledge, and competitive markets to sustain their businesses (Pantatu & Drajana, 2022). Business feasibility assessment is very important for MSMEs in evaluating the viability and sustainability of business products and services, besides that Business feasibility assessment is an evaluation process that is very important for Micro (MSMEs) to determine whether a business idea or planned business expansion will
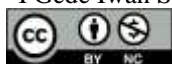
be feasible from a technical, economic and financial perspective (Sudarmo, 2021). This process helps MSMEs owners in making the right decision before investing time, money, and other resources.

One of the major challenges faced by MSMEs is the difficulty in assessing the feasibility of their business operations. Lack of understanding of relevant assessment criteria, limited access to adequate assessment tools and the complexity of internal and external factors affecting the business make it difficult for MSME owners to make strategic decisions. This challenge requires a comprehensive and structured approach to help MSME owners assess and improve their business viability (Harianto et al., 2022; Setrojoyo et al., 2023). In supporting MSMEs in knowing business feasibility based on assessment parameters, it is necessary to have a decision-making process to be adjusted to the ideal profile of the business feasibility of each MSME.

ealm of decision making, multi-criteria decision making is known, which is determining the best decision from many criteria (Aristamy et al., 2021; Rony et al., 2023; Santika et al., 2022). When viewed from the problem of business feasibility for MSMEs, of course, it can be categorized as a multi-criteria problem because there are many assessment parameters that determine the feasibility of MSME businesses. However, in the selection of decisions to determine the best alternative in accordance with a predetermined ideal profile (Sudipa et al., 2022) It is necessary to have an appropriate decision-making method, namely the Profile Matching method.

The advantage of the profile matching method lies in the profile matching process between the ideal profile value and the selected alternative value (Faizal, 2019b; Putri et al., 2024; Wiratama et al., 2022). With the profile matching technique, the best alternative is the alternative that has the smallest value of the ideal profile difference, and of course this can support objective decision making. (Sari & Oktavia, 2023). The Profile Matching method is used to compare MSME business profiles with predetermined criteria. In this way, the model can be used to determine how a particular MSME business meets current standards and obstacles. Profile Matching is the process of comparing individual competencies into profile competencies so that differences in competencies can be known which are also often referred to as GAP, the smaller the resulting GAP, the greater the weight value for the best alternative profile (Saraski et al., 2022; Yanti et al., 2021).

Based on the explanation above, the research objective is to apply a decision-making technique for assessing the feasibility of MSMEs businesses based on ideal profile matching to the value of selection alternatives, with consideration of the multi-criteria assessment used in the selection process using the Profile Matching Method. Based on the interview process with MSME managers in Giarnyar Village and strengthened by the literature review, this study uses assessment criteria consisting of 13 criteria, namely, the level of quality of products produced by MSMEs, the level of damaged or defective products, the level of demand for products produced by MSMEs, the level of MSME products in the market, the level of diversity of product types, the average revenue per month, the average operating costs per month, the effect of inflation on MSMEs, innovation and product development of MSMEs, the level of quality of raw materials, MSME marketing media, the level of marketing and branding of products, the level of ability to fulfill orders on time.

Where by using profile matching, this model allows comparison of MSME business characteristics against predetermined criteria. This model is expected to provide accurate guidance to MSME owners in making business decisions. This research also helps increase the competitiveness and contribution of the MSME sector to overall economic growth.

LITERATURE REVIEW
Some research related to the application of the Decision Support System (DSS) to analyze the feasibility of Micro, Small and Medium Enterprises (MSMEs) by (Cahyani et al., 2017) which aims to assist MSMEs in analyzing business feasibility through the decision-making process. The results show that Adiba MSMEs pass feasibility based on the NPV method, which indicates that these MSMEs can be run and pass the feasibility test. In the research (Sofiah & Septiana, 2017) this discusses the development of a decision support system for feasibility studies in assessing business feasibility. This system is designed to help decision makers use data and models for business implementation. The article also discusses the characteristics, classification, and benefits of decision support systems. The research method used is action research with a qualitative approach, with data collection techniques including

*I Gede Iwan Sudipa
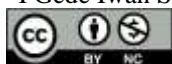
observation, interviews, document analysis, and literature study. The results showed that business feasibility analysis based on financial projections can support company decisions or potential investors. The advice given is to obtain valid financial data before conducting simulations. In research (Kurniawati & Ahmad, 2021) It develops a decision support system with the Profile Matching method to assess the feasibility of Micro, Small and Medium Enterprises (MSMEs) based on financial and non-financial aspects. System development using PHP and MYSQL database, tested with Black Box Testing. Data was collected through interviews and documentation. Documents include basic theories such as decision support systems, eligibility, profile matching, MSMEs, PHP, Extreme Programming, and Black Box Testing. The discussion also includes documentation, use case diagram, profile matching calculation, interface design, system implementation, test results, and conclusion. The system aims to simplify assessment and speed up decision making for MSMEs. In the research (Istu & Gunawansyah, 2022) This research discusses the use of decision support techniques to determine the eligibility of MSME aid recipients in a particular village. This research highlights the importance of poverty reduction and increasing poverty levels in Indonesia, as well as how the SMART method can make the decision-making process more efficient and transparent. The article also discusses data collection methods and the development of a decision support system using web engineering. The conclusion emphasizes the efficiency and objectivity of the system in determining the eligibility of MSME beneficiaries. In the research (Sugiana et al., 2022) aims to provide targeted business capital assistance to MSMEs in West Bandung Regency. The SAW method is used with six criteria to support decision making. This research also discusses the importance of decision support systems in providing targeted business capital assistance to MSMEs. The results showed that the SAW method provided more objective final results in the selection of the feasibility of providing MSME capital, with Tatang as the best alternative. In the current study using the Profile Matching method in determining the feasibility of MSME businesses, this method has advantages in the process of matching MSME alternative profiles with predetermined ideal profiles based on assessment criteria, using 13 assessment criteria so that the decision results can be objective and produce alternative profile rankings that are closest to ideal values (Mahendra et al., 2023; Sudipa et al., 2023).

Decision Support System

Decision Support System (DSS) is a system capable of providing problem solving and communication capabilities for problems with semi-structured and unstructured conditions (Sudipa et al., 2023). This system is used to assist decision making in semi-structured situations and unstructured situations, where no one knows exactly how decisions should be made. (Darpi Nurhayati, 2022; Mahendra et al., 2023). Decision Support System (DSS) is the implementation of decision-making theories that have been introduced by sciences such as operation research and management science, the difference is that previously literacy calculations had to be done manually and nowadays Personal Computer (PC) has offered its ability to solve the same problem in a relatively short time. The objectives of the Decision Support System (DSS) include the following

a. Improving the effectiveness of decisions made by leaders more than improving their efficiency.
b. Overcoming cognitive limitations in processing and storage.
c. Speed of computation. Computers allow decision-makers to perform many computations quickly at low cost.
d. Assist a leader in decision-making on semi-structured problems.

Business Feasibility

Business and business feasibility studies are research with various aspects both in terms of legal, social, economic and cultural aspects, market and marketing aspects, management and financial aspects (Arianton et al., 2019). A business feasibility study is a feasibility study of a project or business has the aim of avoiding too much capital investment for an activity that turns out to be unprofitable by conducting a comprehensive assessment to assess the success of a project or business (Sudarmo, 2020). Feasibillity study is a consideration in making a decision, whether to accept a planned project or business or reject it. Feasibility can be interpreted as the possibility of the project or business idea to be implemented to provide benefits, both in the financial sense and in the social benefit sense.

*I Gede Iwan Sudipa

Profile Matching Method

Profile matching is a decision-making mechanism that assumes that there is an ideal level of predictor variables that the subject under study should possess, rather than a minimum level that must be met or passed. (Sugiartawan et al., 2021). In the Profile Matching process, it is broadly a process of comparing individual competencies into performance competencies so that differences in competence (also called gaps) can be known.(Faizal, 2019a; Kharisma et al., 2023)The smaller the resulting gap, the greater the weight of the value, which means it has a greater chance for employees to get the value of their performance (Umar et al., 2022).

The following are the stages and formulation of calculations with the Profile Matching method according to (Badrul, 2021).

1. Weighting At this stage, the weight of the value of each aspect will be determined using the gap weight. Table 1 describes the GAP weights.

Table 1
GAP Weight

GAP	Value Weight	Information
0	5	competencies as required
1	4. 5	competency advantages 1 level
-1	4	competency deficiency 1 level
2	3. 5	competency advantages 2 level
-2	3	competency deficiency 2 level
3	2. 5	competency advantages 3 level
-3	2	competency deficiency 3 level
4	1. 5	competency advantages 4 level
-4	1	competency deficiency 4 level

2. Grouping core and secondary factors. After determining the weight of the gap value of the required criteria, each criterion is grouped into two groups, namely core factors and secondary factors.

   a. Core factor

   Core factors are aspects (competencies) that stand out/are most needed. To calculate the core factor, the formula is used:

   $$\text{NFC}: \frac{\Sigma NC}{\Sigma IC} \qquad (1)$$

   Description:
   NCF = Average core factor value
   NC = Total number of core factor values
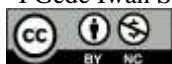   IC = Number of core factor items

   b. Secondary Factor (Supporting factor) Secondary Factor is items other than aspects in the core factor. To calculate the secondary factor, the formula is used:

   $$\text{NSF}: \frac{\Sigma NS}{\Sigma IS} \qquad (2)$$

   Description:
   NSF= Average value of SF
   NS = Total number of SF values
   IS = Number of items SF

*I Gede Iwan Sudipa

3. Calculation of Total Value From the calculation of core factors and secondary factors from each aspect, then calculate the total value of each aspect that is estimated to affect the performance of each profile. To calculate the total value of each aspect, the formula is used:

$$N = (X)\%NCF + (Y)\%NSF \qquad (3)$$

Description:
N = Total score for each aspect
NCF = Average core factor value
NSF = Average value of secondary factor
(X)% = Percentage value of the core factor
(Y)% = Percentage value of SF

Ranking The final result of the profile matching process is a ranking that is sorted from the largest total value to the smallest.

METHOD

Research Stages

The difficulty of evaluating MSMEs' viability using the Profile Matching Method is identified as the first phase in the process. Determining this feasibility enables evaluation of MSME business features against preset criteria through the use of profile matching. Making decisions is difficult since there are a lot of variables that must be taken into account in order to determine an MSME's eligibility. The gathering of primary and secondary data is the following stage. Under such circumstances, a decision-making judgement based on obtained criteria and alternative data must be designed using the profile matching method.

Decision Model Overview

An overview is a workflow that will be built in general in a model. Through the overview of this model, it can be seen how the functionality of the method and the calculation process of the Profile Matching method in determining the feasibility of MSME businesses. The overview can be seen in Figure 1.
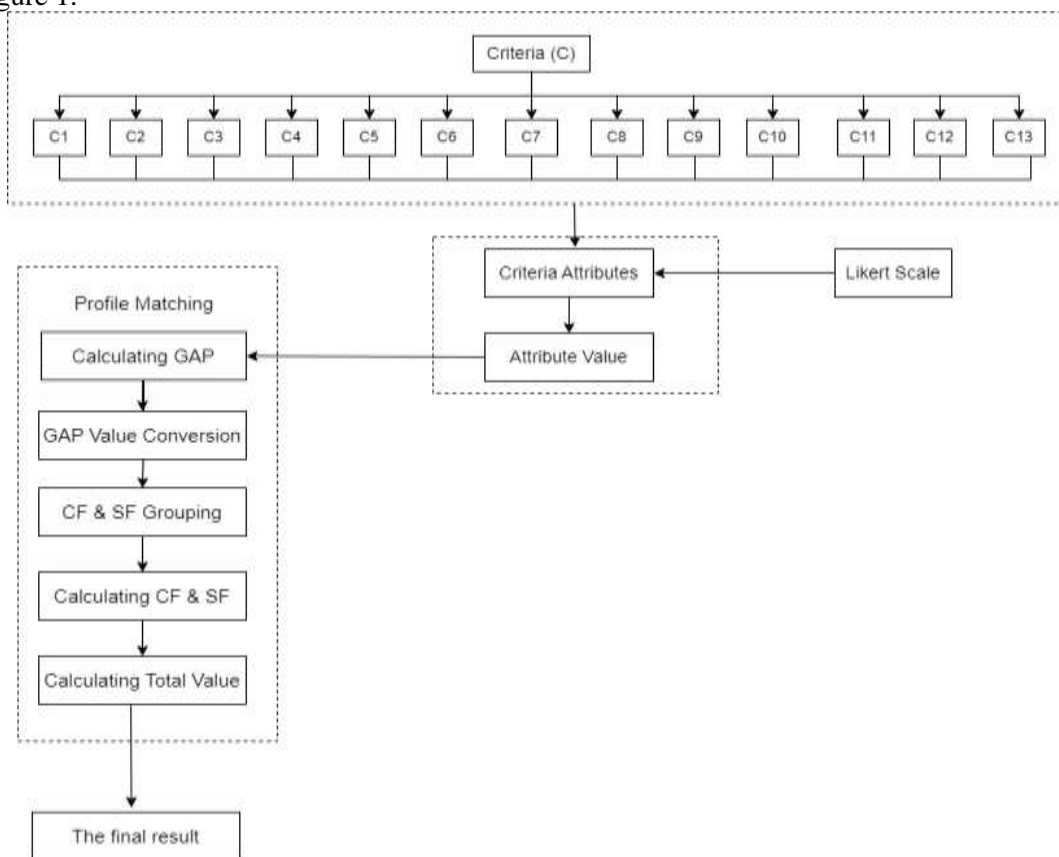

Fig. 1. Overview of the DSS Model

*I Gede Iwan Sudipa

Figure 1 above is a description of the decision-making model for assessing the feasibility of MSMEs using the profile matching method. In the figure above, it is explained that decision making will enter criteria data consisting of 13 criteria, each criterion has an attribute value and criterion attribute value, the attribute value is in the form of a Liket scale. After that, enter the calculation of the profile matching method by determining the GAP value, then converting the GAP value, then grouping and calculating the core factor & secondary factor values for each aspect of the population and continuing with the process of calculating the total value of each aspect, after that the calculation of the ranking by adding up the total value, the final results of ranking MSMEs will appear.

RESULTS & DISCUSSIONS

Alternative Data Analysis

Next steps Before applying the calculations, it will first determine the alternatives and criteria obtained from the results of interviews and observations of MSME business actors in Singapadu Village, Gianyar District, Giayar Regency, Bali. From the results of this data collection, alternative MSME results are obtained, which can be seen in table 2 below.

Table 2
Alternative Data

Code	Alternative
A1	MSME 1
A2	MSME 2
A3	MSME 3
A4	MSME 4
A5	MSME 5
A6	MSME 6
A7	MSME 7
A8	MSME 8
A9	MSME 9
A10	MSME 10

Based on Table 2, the determination of alternatives in the design of the MSME feasibility assessment model has 10 alternatives.

Criteria Analysis

The assessment criteria were obtained from the results of interviews and observations with MSME business actors in Singapadu village, Gianyar. Based on the results of interviews and observations of MSME managers in Gianyar Village, Bali and strengthened by the literature review, this study uses 13 criteria to assess the feasibility of MSME businesses. Each of the above criteria has an attribute with a value scale that facilitates the process of calculating alternative values.

Explanation of Assessment Criteria

Criterion (C1) is that MSMEs must produce products with high quality standards and ensure that they meet consumer expectations and are able to compete in the market. This includes close monitoring of the production process, selection of quality raw materials, and implementation of best manufacturing practices. Criterion (C2) i.e. Low percentage of damaged or defective products is important for MSMEs. This can be achieved through effective quality control systems, maintenance of production equipment, and training of employees in practices that reduce the risk of product damage. Criterion (C3) is that MSMEs need to monitor and understand the level of market demand for their products. Criterion (C4) is that MSME products must have a positive image in the market. This can be achieved through marketing strategies that prioritize competitive advantage, product differentiation and added value of MSME products. Diverse product criteria (C5) allow MSMEs to reach a wider market segment. Flexible

product offerings can increase your appeal and competitiveness in the market. Criterion (C6) MSMEs should strive to achieve stable or increasing revenue every month. Criterion (C7) is that MSMEs need to manage operational costs efficiently to ensure operational sustainability and achieve adequate profit margins. Criterion (C8) is that MSMEs need to have effective strategies to overcome the impact of inflation, including dealing with increases in raw materials and operational costs. Diversification of raw material sources and careful financial planning will help MSMEs face the challenges of inflation. Criterion (C9) is that the ability to continuously innovate and develop products is key to the sustainability of MSMEs. This includes monitoring market trends, product research and development, and rapid response to changing consumer needs. Criterion (C10) is that the selection of quality raw materials is very important to produce quality MSME products. The availability and sustainability of raw material supply must also be considered. Criterion (C11) is that MSMEs should use marketing media effectively including relevant online and offline platforms. Criterion (C12) is that high brand awareness and strong branding provide a competitive advantage. MSMEs need to build a consistent brand image and use marketing strategies to introduce their products to the target market. Criterion (C13) i.e. The ability to complete orders on time is very important. This includes efficient supply chain management. The criteria data can be seen in table 3 below.

Table 3
Criteria Data

Criteria (C)	Criteria Name	Ideal Value Criteria
C1	The level of product quality produced by MSMEs	3
C2	Rate of damaged or defective products	3
C3	Level of demand for products produced by MSMEs	4
C4	Level of MSME products in the market	4
C5	Level of diversity of product types	3
C6	Average Income per month	4
C7	Average operating cost per month	3
C8	The effect of inflation on MSMEs	4
C9	MSME product innovation and development	4
C10	Raw Material Quality Level	3
C11	MSME marketing media	4
C12	Product Marketing and Branding Level	3
C13	Ability to fulfill orders on time	4

Based on table 3, it can be explained that there are 13 criteria for assessing business feasibility, where there is an ideal value for each criterion obtained from the attribute value of the criteria using a scale of value 1 = very less, value 2 = less, value 3 = sufficient, value 4 = good and value 5 = very good.

Application of Profile Matching Method
Calculation of the Profile Matching method to get the final score and ranking, the stage for calculating the profile matching method, starting with the collection of alternative values (A) for each criterion (C), as shown in table 4 below.

Table 4
MSME Alternative Initial Value

Criteria	Alternative									
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
C1	3	4	2	5	4	3	2	4	4	2
C2	1	2	3	1	3	2	4	2	5	4
C3	4	2	3	1	5	5	2	4	4	3
C4	3	2	4	1	4	4	2	3	3	4
C5	5	4	3	5	4	3	3	5	5	2
C6	5	3	3	5	4	1	1	2	2	1
C7	2	3	1	3	2	3	4	5	5	3
C8	1	3	2	3	1	4	3	4	4	4
C9	4	3	5	4	3	5	2	2	4	2
C10	5	3	4	5	3	2	4	4	3	1
C11	4	3	5	2	4	1	3	3	3	3
C12	4	3	5	3	2	4	3	2	2	1
C13	4	2	5	3	2	4	4	4	3	2

Based on table 4, it can be explained that the alternative value for each criterion is obtained from the observation of sculpture entrepreneurs in Singapadu village, Gianyar.

Weight Value Calculation
After obtaining the GAP on each respondent's data, the next step is that each respondent's profile will be given a value weight with a benchmark based on the GAP value weight table.

Table 5
GAP Weight

Criteria	Alternative									
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
C1	0	1	-1	2	1	0	-1	1	1	-1
C2	-2	-1	0	-2	0	-1	1	-1	2	1
C3	0	-2	-1	-2	1	1	-2	0	0	-1
C4	-1	-2	0	-3	0	0	-2	0	-1	0
C5	2	1	0	2	0	-1	0	2	2	-1
C6	1	-1	-1	1	0	-3	-3	-2	-2	-3
C7	-1	-2	-2	0	-1	0	1	2	2	0
C8	-3	-1	-2	-1	-3	0	-1	0	0	0
C9	0	-1	1	0	-1	1	-2	-2	0	-2
C10	1	0	1	2	0	-1	1	1	0	-2
C11	0	-1	1	-2	0	-3	-1	-1	-1	-1
C12	1	0	2	0	-1	1	0	-1	-1	-2
C13	0	-2	1	-1	-2	0	0	0	-1	-2

Table 6
Value Weight

Criteria	Alternative									
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
C1	5	4.5	4	3.5	4.5	5	4	4.5	4.5	4
C2	3	4	5	3	5	4	4.5	4	3.5	4.5
C3	5	3	4	3	4.5	4.5	3	5	5	4
C4	4	3	5	2	5	5	3	5	4	5
C5	3.5	5	5	3.5	4.5	4	5	3.5	3.5	4
C6	4.5	4	4	4.5	5	2	2	3	3	2
C7	4	3	3	5	4	5	4.5	3.5	3.5	5
C8	2	4	3	4	2	5	4	5	5	5
C9	5	4	4.5	5	4	4.5	3	3	5	3
C10	4.5	5	4.5	3.5	5	4	4.5	4.5	5	3
C11	5	4	4.5	3	5	2	4	4	4	4
C12	4.5	5	3.5	5	4	4.5	5	4	4	3
C13	5	3	4.5	4	3	5	5	5	4	3

Table 6 is a value that has been converted into a GAP value according to the GAP weight in table 1.

Core Factor and Secondary Factor Calculation Results

After getting the GAP value of each criterion by adjusting the needs, the next rare is to group each criterion as shown in table 7 below.

Table 7
CF and SF Value Grouping

Criteria		Alternative									
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
CF (60%)	C1	5	4.5	4	3.5	4.5	5	4	4.5	4.5	4
	C3	5	3	4	3	4.5	4.5	3	5	5	4
	C5	3.5	4.5	5	3.5	5	4	5	3.5	3.5	4
	C7	4	3	3	5	4	5	4.5	3.5	3.5	5
	C9	5	4	4.5	5	4	4.5	3	3	5	3
	C11	5	4	4.5	3	5	2	4	4	4	4
SF (40%)	C2	3	4	5	3	5	4	4.5	4	3.5	4.5
	C4	4	3	5	2	5	5	3	5	4	5
	C6	4.5	4	4	4.5	5	2	2	3	3	2
	C8	2	4	3	4	2	5	4	5	5	5
	C10	4.5	5	4.5	3.5	5	4	4.5	4.5	5	3
	C12	4.5	5	3.5	5	4	4.5	5	4	4	3
	C13	5	3	4.5	4	3	5	5	5	4	3

In table 7 there is a core factor and secondary factor grouping table, the value of the core factor and secondary factor is obtained from the weight of the GAP, the percentage value in CF & SF can change as needed.

*I Gede Iwan Sudipa

Table 8
Total CF and SF values

Alternative	NCF	NSF
MSME 1	27.5	27.5
MSME 2	23	28
MSME 3	25	29.5
MSME 4	23	26
MSME 5	26.5	29
MSME 6	25	29.5
MSME 7	23.5	28
MSME 8	23.5	30.5
MSME 9	25.5	28.5
MSME 10	24	25.5

In table 8 there is the total value of the core factors and secondary factors that have been grouped.

Ranking Value

The final result for the calculation process of the profile matching method is to rank each proposed MSME. The following are the final results of the ranking values in the final profile matching process.

Table 9
Final Ranking Score

Alternative	Total value	Ranking
MSME 1	27.50	2
MSME 2	25.00	8
MSME 3	26.80	3
MSME 4	24.20	10
MSME 5	27.80	1
MSME 6	26.80	3
MSME 7	25.30	7
MSME 8	26.30	6
MSME 9	26.70	5
MSME 10	24.60	9

Based on table 9, it can be explained that the total value of the results of ranking MSME alternatives, there is a total value of the feasibility of MSME businesses, where there is Rank 1, rank 2 and rank 3 are considered feasible because according to the results of observations MSMEs with ranks 1 to 3 have high scores and have exceeded the targets that MSMEs must achieve. MSMEs with rank 4 to 10 still need evaluation or coaching because the value obtained according to the criteria is still lacking and has not yet reached the MSME target.

After each MSME gets the final score as shown in the table above, it can be determined the ranking or ranking of each MSME based on the highest final result value so that the higher the final result value, the higher the opportunity to get the title of the best MSME. From the table above, it can be concluded that the MSME that gets the highest final score is MSME 5 with a value of 27.80.
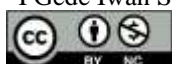
CONCLUSION

The conclusion of this research shows that the business feasibility selection process uses 13 criteria with 10 alternative MSMEs in the Singapadu area, Gianyar. The process of assessing the feasibility of MSME businesses applying the Profile Matching method is able to produce the best alternative ranking through the process of weighting criteria, grouping core factors and secondary factors, as well as calculating the total value and ranking the final value of 10 alternative MSMEs, with MSMEs getting the highest final result value, namely MSME 5 with a value of 27.80. The ranking results show that the order of alternatives ranking 1, 2 and 3 is declared to have business feasibility, while alternatives ranking 4 to ranking 10 still need evaluation in terms of the value of business feasibility criteria. Suggestions for further researchers are expected to be able to add sub-criteria and selection attributes so that decision making is more complex so that ranking results can be more objective.

REFERENCES

Arianton, K., Meitriana, M. A., & Haris, I. A. (2019). Studi Kelayakan Usaha Budidaya Rumput Laut Pada Kelompok Bina Karya Di Desa Patas, Kecamatan Gerokgak, Kabupaten Buleleng. *Jurnal Pendidikan Ekonomi* , *11*(2), 573–582.

Aristamy, I. G. A. A. M., Sudipa, I. G. I., Yanti, C. P., Pratistha, I., & Waas, V. D. (2021). An Application of a Decision Support System for Senior High School Scholarship with Modified MADM Method. *2021 6th International Conference on New Media Studies (CONMEDIA)*, 54–59.

Badrul, M. (2021). Penerapan Metode Profile Matching Untuk Menunjang Keputusan Seleksi Pegawai Baru. *PROSISKO: Jurnal Pengembangan Riset Dan Observasi Sistem Komputer*, *8*(1), 75–82. https://doi.org/10.30656/prosisko.v8i1.2815

Cahyani, N., Hardiyanti, S., & Nurzahputra, A. (2017). Penerapan Metode Net Present Value (NPV) pada Decision Support System Analisis Kelayakan Usaha Mikro Kecil dan Menengah. *Seminar Nasional Ilmu Komputer*, *1*(October 2017), 271–279.

Darpi Nurhayati, S. (2022). Sistem Pendukung Keputusan Pendeteksi Kerusakan Komputer Pada Universitas Al-Khairiyah. *J-Tekin*, *1*(1), 24–30.

Faizal, E. (2019a). Classification of Students Based on Academic Ability Using Profile Matching and Linear Interpolation Weighting. *International Journal of Computer (IJC) International Journal of Computer (IJC*, *34*(1), 72–94.

Faizal, E. (2019b). Classification of Students Based on Academic Ability Using Profile Matching and Linear Interpolation Weighting CORE View metadata, citation and similar papers at core.ac.uk provided by International Journal of Computer (IJC-Global Society of Scientific Re. *International Journal of Computer (IJC) International Journal of Computer (IJC*, *34*(1), 72–94. http://ijcjournal.org/

Harianto, R. A., Rony, Z. T., Syarief, F., Wijayaningsih, R., & Santoso, B. (2022). PRODUCT INNOVATION BASED ON MARKET-ORIENTATION TO INCREASE ENVIRONMENTAL SUSTAINABILITY. *Procedia Environmental Science, Engineering and Management*, *9*(2), 309–318.

Istu, I., & Gunawansyah, G. (2022). Sistem pendukung keputusan kelayakan penerima bantuan UMKM dengan metode simple multi attribute rating teachnique (SMART). *Hexatech: Jurnal Ilmiah Teknik*, *1*(2), 71–75.

*I Gede Iwan Sudipa

https://jurnal.arkainstitute.co.id/index.php/hexatech/article/view/849%0Ahttps://jurnal.arkainstitute.co.id/index.php/hexatech/article/download/849/644

Kharisma, L. P. I., Yahya, S. R., Handayanto, R. T., Gunawan, I. M. A. O., Handika, I. P. S., Hatta, H. R., & Syamil, A. (2023). *METODE SPK FAVORIT DI MASA DEPAN: Teori dan Contoh*. PT. Sonpedia Publishing Indonesia.

Kurniawati, R. D., & Ahmad, I. (2021). Sistem Pendukung Keputusan Penentuan Kelayakan Usaha Mikro Kecil Menengah Dengan Menggunakan Metode Profile Matching Pada Uptd Plut Kumkm Provinsi Lampung. *Jurnal Teknologi Dan Sistem Informasi (JTSI)*, *2*(1), 74–79. http://jim.teknokrat.ac.id/index.php/JTSI

Mahendra, G. S., Wardoyo, R., Pasrun, Y. P., Sudipa, I. G. I., Putra, I. N. T. A., Wiguna, I. K. A. G., Aristamy, I. G. A. A. M., Kharisma, L. P. I., Sutoyo, M. N., & Sarasvananda, I. B. G. (2023). *IMPLEMENTASI SISTEM PENDUKUNG KEPUTUSAN: Teori & Studi Kasus*. PT. Sonpedia Publishing Indonesia.

Pantatu, S. F., & Drajana, I. C. R. (2022). Sistem Pendukung Keputusan Penerima Bantuan UMKM Menggunakan Metode MAUT. *Jurnal Nasional Komputasi Dan Teknologi Informasi (JNKTI)*, *5*(2), 317–325. https://doi.org/10.32672/jnkti.v5i2.4207

Putri, N. P. M. E., Sudipa, I. G. I., Wiguna, I. K. A. G., Sarasvananda, I. B. G., & Sunarya, I. W. (2024). Decision Making Model for Temple Revitalization in Bali Using Fuzzy-SMARTER Combination Method. *Sinkron: Jurnal Dan Penelitian Teknik Informatika*, *9*(1), 61–74.

Rony, Z. T., Sofyanty, D., Sarie, F., Sudipa, I. G. I., Albani, A., & Rahim, R. (2023). Evaluating Manufacturing Machines Using ELECTRE Method: A Decision Support Approach. *International Conference on Mechatronics and Intelligent Robotics*, 567–578.

Santika, P. P., Handika, I. P. S., Widiartha, K. K., & Aristana, M. D. W. (2022). KOMPARASI METODE AHP–ROC DALAM PENENTUAN PRIORITAS ALTERNATIF TERBAIK. *Jurnal Krisnadana*, *1*(3), 59–67.

Saraski, S. A., Lubis, A. N., Putri, R., Parapak, A., Komputer, I., Matematika, F., Ilmu, D., Alam, P., & Medan, U. N. (2022). Sistem Pendukung Keputusan Dalam Menentukan Dosen Favorit Menggunakan Metode Profile Matching. *Jurnal Teknologi Dan Sistem Informasi (JTSI)*, *3*(1), 46–53. http://jim.teknokrat.ac.id/index.php/JTSI

Sari, A. P., & Oktavia, T. (2023). DSS Using MABAC,MOORA For Selection of Majors According to Students' Interests. *SinkrOn*, *8*(2), 1040–1050. https://doi.org/10.33395/sinkron.v8i2.12335

Setrojoyo, S. M., Sutrisno, S., Ng, S., Darmo, I. S., & Astuti, N. (2023). Differences in Perceptions Between Small Businesses and Large Businesses on the Effectiveness of HR Management in Achieving Business Goals: Based on Field Evidence. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, *8*(6), 11.

Sofiah, E., & Septiana, Y. (2017). Sistem Pendukung Keputusan Feasibility Study Untuk Menilai Kelayakan Sebuah Bisnis. *Jurnal Wawasan Ilmiah*, *8*(1), 1–7.

Sudarmo, S. (2020). Excellent Human Resource Management in Business Practices: Achieving Sustainable. *Sudarmo, S.(2020). Excellent Human Resource Management in Business Practices: Achieving Sustainable. International Journal of Humanities, Literature & Arts*, *3*(1), 93–98.

*I Gede Iwan Sudipa

Sudarmo, S. (2021). Understanding the challenges and opportunities of micro, small, and medium enterprises during covid-19 pandemic in Indonesia: a systematic review. *International Journal of Business, Economics and Management*, *4*(1), 54–62.

Sudipa, I. G. I., Setyawati, E., Fajriana, F., Moedjahedy, J., Adicandra, I., & Rahim, R. (2022). Optimizing Decision Making in Manufacturing: An Analysis of the Effectiveness of a DSS Using the Weighted Product Method. *JINAV: Journal of Information and Visualization*, *3*(2).

Sudipa, I. G. I., Wardoyo, R., Hatta, H. R., Sagena, U., Gunawan, I. M. A. O., Zahro, H. Z., & Adhicandra, I. (2023). *MULTI CRITERIA DECISION MAKING: Teori & Penerapan Metode Pengambilan Keputusan dengan MCDM*. PT. Sonpedia Publishing Indonesia.

Sugiana, I., Hadiana, A. I., & Sabrina, P. nurul. (2022). Pengambilan Keputusan untuk Memilih UMKM yang Layak Mendapatkan Bantuan Menggunakan Metode Simple Additive Weighting (SAW). *Snestik*, 351–356.

Sugiartawan, P., Yudiana, I. M., & Prakoso, P. I. (2021). Group Decision Support System Fuzzy Profile Matching Method With Organizational Citizenship Behaviour. *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, *15*(4).

Umar, R., Yudhana, A., & Dernata, J. (2022). The Admission Decision Support System for Muhammadiyah Student Association Cadres Using the Profile Matching Method. *JUITA: Jurnal Informatika*, *10*(1), 53–58.

Wiratama, I. K., Fuadi, T. M., Pratiwi, E. Y. R., Kurniawan, D., & Sudipa, I. G. I. (2022). Selection Participants Of Science Olympic In Elementary School Using Fuzzy–Profile Matching Method. *Jurnal Mantik*, *6*(2), 1850–1858.

Yanti, C. P., Awantari, P. P. S., Sudipa, I. G. I., & Ginantra, N. L. W. S. R. (2021). Komparasi Metode Simple Additive Weighting dan Profile Matching dalam Penentuan Pemberian Beasiswa di SMA Negeri 1 Abiansemal. *JURIKOM (Jurnal Riset Komputer)*, *8*(6), 300–307.

*I Gede Iwan Sudipa