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DETERMINING DECISION CRITERIA IN SELECTING ERP COMPATIBLE BUSINESS PROCESS SOFTWARE IN THE DIGITAL TRANSFORMATION PROCESS

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Abstract

In today's digitalized business world, the effectiveness of Enterprise Resource Planning (ERP) systems in their business processes depends on the strategic selection of business-process software that supports these systems. This study aims to determine the decision criteria that companies using ERP consider when selecting business process software and to analyze the relative importance of these criteria. In the study, the opinions of five experts were solicited within the framework of multi-criteria decision-making using the Improved Fuzzy SWARA (IMF-SWARA) method. Experts were asked to evaluate according to ten criteria identified through a literature review. As a result of the analysis, integration capability, ease of use, and cost emerged as the top-priority factors. The findings are thought to contribute to both the literature and the sector. This study aims to contribute to the development of a strategic perspective for businesses in selecting business process management software with an ERP focus.

Keywords: Business Process Management (BPM) Software, Enterprise Resource Planning (ERP), Multi-Criteria Decision-Making (MCDM), Fuzzy SWARA

JEL Codes: M15, L86, C61

Dijital Dönüşüm Sürecinde ERP Uyumlu İş Süreçleri Yazılımı Seçiminde Karar Kriterlerinin Belirlenmesi

Öz

Günümüzün dijitalleşen iş dünyasında, işletmelerin iş süreçlerinde kullandığı Kurumsal Kaynak Planlama (KKP-ERP) sistemlerinin etkinliği, bu sistemleri destekleyen iş süreçleri yazılımlarının stratejik olarak seçilmesine bağlıdır. Bu çalışma, ERP kullanan firmaların iş süreçleri yazılımı seçiminde dikkate aldıkları karar kriterlerini belirlemeyi ve bu kriterlerin göreli önem derecelerini analiz etmeyi amaçlamaktadır. Araştırmada, Geliştirilmiş Bulanık SWARA (IMF-SWARA) yöntemi kullanılarak çok kriterli karar verme çerçevesinde beş uzman görüşüne başvurulmuştur. Literatür taraması ile belirlenen on farklı kriter

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üzerinden uzmanların değerlendirme yapması istenmiştir. Analiz sonucunda sırasıyla "entegrasyon yeteneği", "kullanım kolaylığı" ve "maliyet" en öncelikli faktörler olarak öne çıkmıştır. Elde edilen bulgular hem literatüre hem de sektöre katkı sağlayacağı düşünülmektedir. Bu çalışma, işletmelerin ERP odaklı iş süreçleri yönetimi yazılımı seçiminde stratejik bir bakış açısı geliştirmelerine katkı sağlamayı amaçlamaktadır.

Anahtar Kelimeler: İş Süreçleri Yönetimi Yazılımı, Kurumsal Kaynak Planlama (ERP – KKP), Çok Kriterli Karar Verme (ÇKKV), Bulanık SWARA

JEL Kodu: M15, L86, C61

1. INTRODUCTION

In the competitive environment shaped by digital transformation, businesses require integrated information systems to manage their processes effectively and efficiently. Businesses use ERP software to manage their functions in an integrated and systematic manner. However, ERP software has several limitations in terms of managing and organizing business processes. It is particularly inadequate in businesses that frequently employ approval mechanisms. At this stage, businesses require business process management software that is compatible with their ERP. Choosing the appropriate business process management software is a crucial decision-making problem that requires the combined evaluation of multiple subjective criteria. Resolving this decision problem will enable the effective management of business processes and enhance operational efficiency.

This study aims to identify the criteria that businesses using ERP software should consider when selecting business process management software and to determine the relative importance of these criteria. For this purpose, the Improved Fuzzy SWARA (IMF-SWARA) method, a subjective multi-criteria decision-making (MCDM) approach, was preferred. The IMF-SWARA method provides a straightforward means for expert evaluation. Compared with other MCDM methods such as AHP, ANP, and BWM, it requires at least pairwise comparisons (Alvand, Mirhosseini, Ehsanifar, Zeighami, & Mohammadi, 2021). In the IMF-SWARA method, experts' opinions have a greater influence than those in other methods (Zolfani & Saparauskas, 2013).

The study's findings are expected to provide a framework for businesses considering the adoption of business process management software. They are also expected to provide important information and practical implications for developers of business process management software.

2. BUSINESS PROCESS MANAGEMENT SOFTWARE SELECTION

Business Process Management (BPM) refers to systems developed to design, monitor, analyze, and evaluate an organization's business processes. It is also commonly known as a Business Process Management System (BPMS). The selection of BPM software is a crucial decision that can provide operational efficiency and competitiveness in a business environment (Calegari & Delgado, 2018). In this context, selecting the right BPM software is crucial for ensuring the business's sustainability.

Numerous studies have been conducted on this important decision. Štemberger et al. (2019) evaluated the selection of BPM software using the Analytic Hierarchy Process (AHP), one of the MCDM methods. Their findings identified "integration with other products," "total cost of ownership," and "support" as the most influential criteria. In another study, Rouhani and Ravasan (2016) applied fuzzy TOPSIS as an alternative MCDM method. The study examined 48 functional and non-functional criteria. Similarly, Lima et al. (2017) adopted the Flexible and Interactive Tradeoff (FITradeoff) multi-criteria approach and applied it to the BPM software selection process. Their study revealed that "objective," "participants' functional roles," and "data collection technique" were the most influential factors. Kocaoğlu et al. (2021) employed the NGT, Delphi, and AHP methods for selecting BPM software. A multi-stage approach was used in the study. The most important criteria were determined to be "security", "content management", and "integration and workflow management".

3. METHODOLOGY

This section outlines the research methodology employed to establish the decision criteria for selecting BPM software for

ERP-focused businesses and to determine their relative weights. Figure 1 illustrates the research methodology's flow.

Figure 1. Research Framework



3.1 Improved Fuzzy Step-Wise Weight Assessment Ratio Analysis (SWARA)

The SWARA method is utilised to determine the relative importance of criteria in decision-making problems (Keršulienė et al., 2010). This approach enables experts to rank and evaluate criteria based on subjective judgment (Çakır & Akar, 2017). To achieve consistency in determining the importance weights, experts first identify the most significant criterion during the evaluation phase and then assign relative values to each criterion. In this manner, consistent weights are assigned to each criterion in assessments based on expert opinion (Moniri et al., 2021). However, the classical SWARA method becomes inadequate when addressing decision-making problems that involve uncertain or complex information. Consequently, the Fuzzy SWARA method has been developed. The Fuzzy SWARA method enables more realistic and reliable evaluations by allowing experts to assess complex, uncertain decision-making problems using linguistic expressions (Mavi et al., 2020). Fuzzy SWARA was developed by Vrtagić et al. (2021), incorporating methodological innovations, and is referred to as the Improved Fuzzy SWARA (IMF-SWARA). The Improved Fuzzy SWARA (IMF-SWARA) method offers a robust and structured solution for complex decision-making processes. The IMF-SWARA method provides flexible and practical solutions, particularly for real-life problems.

The IMF SWARA method is a hybrid model that combines fuzzy logic with the SWARA technique to evaluate the relative importance of criteria and sub-criteria in a fuzzy environment. The main steps of the IMF-SWARA method are outlined below (Vrtagić et al., 2021):

- **Step 1.** According to the study's purpose, decision-makers rank the criteria in order of importance.
- **Step 2.** The most important criterion has been determined. Other criteria are compared to the first criterion and scored using the fuzzy linguistic scale shown in Table 1.

 Table 1. Fuzzy Language Scale for Improved Fuzzy SWARA

Linguistic Expression	Fuzzy Numbers
Absolutely less important (ALS)	(1, 1, 1)
Dominantly less important (DLS)	(0.50, 0.67, 1)
Much less important (MLS)	(0.40, 0.50, 0.67)
Really less important (RLS)	(0.33, 0.40, 0.50)
Less important (LS)	(0.29, 0.33, 0.40)
Moderately less important (MDLS)	(0.25, 0.29, 0.33)
Weakly less important (WLS)	(0.22, 0.25, 0.29)
Equally important (ES)	(0, 0, 0)

Kaynak: (Vrtagić et al., 2021)

Step 3. The coefficients are calculated as follows (Equation 1). \tilde{k}_i

$$\tilde{k}_j = \begin{cases} 1 & j = 1\\ \tilde{s}_i + 1 & j > 1 \end{cases} \tag{1}$$

Step 4. Fuzzy weight coefficients (\tilde{k}_j) is calculated (Equation 2)

$$\tilde{q}_j = \begin{cases} \frac{\tilde{q}_{j-1}}{\tilde{r}} & j > 1 \end{cases} \tag{2}$$

Step 5. Calculate the relative weights of the evaluation criteria (\widetilde{w}_i) (Equation 3)

$$\widetilde{w}_j = \frac{\widetilde{q}_j}{\sum_{i=1}^n \widetilde{q}_i} \tag{3}$$

Step 6. The fuzzy weights calculated in the last step should be converted to crisp values (Equation 4).

Here, \tilde{A} is a triangular fuzzy number, where "l", "m", and "u" represent the lower value, middle value, and upper value, respectively.

$$d(\tilde{A}) = \frac{(l+4m+u)}{6} \tag{4}$$

Basic mathematical operations on triangular fuzzy numbers A_1 (l_1 , m_1 , u_1) and A_2 (l_2 , m_2 , u_2) (Denklem 5-8).

$$A_1 + A_2 = (l_1 + l_2, m_1 + m_2, + u_1 + u_2)$$
(5)

$$A_1 - A_2$$
aspect = $(l_1 - u_2, m_1 - m_2, u_1 - l_2)$ (6)

$$A_1 \times A_2 = (l_1 \cdot l_2, m_1 \cdot m_2, u_1 \cdot u_2) \tag{7}$$

$$A_1 \div A_2 = (l_1/u_2, m_1/m_2, u_1/l_2)$$
 (8)

The list of studies using the improved fuzzy SWARA method is presented in Table 2.

Table 2. Improved Fuzzy SWARA Literature

Year	Writer/s	Purpose / Issue	Method/ Contribution
2020	Agarwal et al.	Strategic solution to supply chain problems	Fuzzy SWARA Fuzzy WASPAS
2020	Ansari et al.	Assessing solutions to mitigate sustainable remanufacturing supply chain risks	Fuzzy SWARA Fuzzy COPRAS
2020	Mishra et al.	Evaluation of sustainability criteria in bioenergy production	Fuzzy SWARA COPRAS
2020	Sahebi et al.	Analysis of obstacles to institutional transformation and solution suggestions	Fuzzy SWARA
2020	Mardani et al.	Examining the challenges of adopting digital health applications during the COVID-19 era	HFS-SWARA WASPAS
2021	Kamali Saraji et al.	To assess the barriers to the development of sustainable business model innovation (SBMI)	Fuzzy-SWARA CRITIC COPRAS

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2021	Zolfani et al.	Evaluating logistics villages in Turkey	Hybrid IMF SWARA Fuzzy MABAC		
2021	Mohammadian et al.	A new portfolio matrix for policy makers to determine IoT applications in the agricultural sector	IVF-TN SWARA ARAS		
2022	Kara & Yalçın	Selection of authorized customs consultancies (CBC) by businesses	Fuzzy SWARA F-RAFSI		
2022	Akpınar	Evaluation of alternatives in a real machine selection scenario	Fuzzy SWARA Fuzzy ARAS		
2022	Vojinović et al.	Analysis for assessment of the healthcare system	IMF SWARA FDWGAPESTEL		
2023	Singh et al.	Addressing the challenges of Lean Six Sigma 4.0 implementation in SMEs	Fuzzy SWARA Fuzzy WASPAS		
2023	Stojanović et al.	Supplier selection for project organisations	IMF SWARA		
2023	Karami et al.	Contractor selection in construction projects	Interval-Valued Fuzzy (IVF)- SWARA IVF- CoCoSo		
2023	Wang et al.	Choosing electric vehicles for logistics activities	Fuzzy SWARA MARCOS		
2023	Kundakçı & Arman	The problem of choosing a consulting firm	IMF-SWARA F-CODAS		
2024	Atlı and Senir	Green supplier selection for agricultural pesticides	IMF SWARA Fuzzy WASPAS		
2024	Lo et al.	Prioritization of supplier risk factors	Pythagorean Fuzzy- SWARA PF-TOPSIS integration		
2024	Silahtaroğlu et al.	Analysis of critical drug supply risks	Fuzzy M-SWARA DEMATEL		

2024	Pajić et al.	Strategic warehouse location selection	IMF SWARA and MARCOS
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Table 2 presents the use of the Fuzzy SWARA method in studies across various fields. The studies in Table 2 demonstrate the applicability of Fuzzy SWARA and its improved variants across a wide range of fields. Furthermore, the SWARA method is frequently used in conjunction with other methods (F-RAFSI, F-ENTROPY, ARAS, CoCoSo, MARCOS, F-CODAS, TOPSIS, and DEMATEL) in studies addressing the determination and selection of criteria weights.

3.2. Data

The first step in selecting suitable BMP software for a business is to identify the appropriate criteria. A literature review was conducted for this purpose. The resulting criteria are listed in Table 3.

Table 3. Literature on Criteria

No	Criteria	Source
C1	Cost	Rouhani & Zareravasan, 2016; Kohlenbach, 2018
C2	Security	Rouhani & Zareravasan, 2016
СЗ	Integration	Rouhani & Zareravasan, 2016; (PAT Research, 2018)
C4	Reporting Ability	Rouhani & Zareravasan, 2016; Silva et al., 2014
C5	Ease of Use	Kohlenbach, 2018; Silva et al., 2014
C6	Technical Features and Performance	Rouhani & Zareravasan, 2016; Kohlenbach, 2018; Silva et al., 2014
C7	Reference and Company Awareness	Rouhani & Zareravasan, 2016
C8	Test Features (Simulation)	PAT Research, 2018
С9	Support Services (Document, Company)	Ma, Kim, Seo, Leem, & Moon, 2012; Silva et al., 2014
C10	Ready Templates for ERP	Silva et al., 2014

Cost (C1): One essential aspect for businesses is the budget allocated to software. This criterion includes licence fees,

version updates, and installation costs, which form part of the total cost of ownership of BPM software.

Security (C2): The confidentiality of information within processes is vital for businesses. This criterion encompasses the data and information security measures (such as encryption, authorization, and security certificates) of BPM software.

Integration (C3): Businesses utilise different systems together in many of their processes. This criterion encompasses the technical features of BPM software, including data exchange, API support, and compatibility with third-party software.

Reporting Ability (C4): Tracking and analyzing processes are essential for businesses. Reporting on business processes is crucial for identifying and rectifying deficiencies. This criterion demonstrates the reporting capabilities of BPM software.

Ease of Use (C5): The user factor is critical for software. The user's engagement with the software is important for project success. This criterion encompasses design and compatibility features that enhance the usability of BPM software.

Technical Features and Performance (C6): Business processes are inherently rapid mechanisms. A bottleneck at a single point in the process will affect many processes. The performance of BPM software is also essential for the correct progression of business processes. This criterion is technical and considers software performance data.

Reference and Company Awareness (C7): In addition to a system's existing features, the references of the software house that developed it are crucial. This criterion considers the software development company's reputation within the industry, its previous clients, and user references.

Test Features (Simulation) (C8): Businesses cannot directly use their business processes in critical processes. From this perspective, the software must allow the design of the testing process. This criterion covers the testing and simulation capabilities of BPM software.

Support Services (C9): Businesses have a dynamic structure. They must be able to receive support for any difficulties that may arise during the design or use of BPM software. This criterion covers the software house's technical and other support services, user documentation, and training materials.

•ERP Compatible Ready-Made Templates (C10): This criterion evaluates ERP templates (current, stock, invoice, check, promissory note, bank, cash, production, etc.) that come integrated into the software or can be easily added.

Five expert evaluators with experience in BPM software were selected to evaluate the criteria. These experts possess at least 10 years of work experience.

3.3. Findings of The Study

Experts evaluated the criteria in accordance with the specified guidelines. Data were collected using a questionnaire prepared explicitly for the fuzzy SWARA method. The experts' responses to the criteria are presented in Table 4.

Table 4. Expert Reviews

Expert 1		Expert	2	Expert	3	Expert 4		Expert	5
Order of Importa nce	Evaluat ion	Order of Impor tance	Evalu ation	Order of Impor tance	Evalu ation	Order of Impor tance	Evalu ation	Order of Impor tance	Evalu ation
кз		K10		КЗ		K4		K1	ES
К1	DLS	K5	ES	K5	WLS	K1	LS	КЗ	ES
К2	WLS	КЗ	ES	К6	ES	K2	WLS	К6	WLS
К5	WLS	K2	ES	К9	MLS	K5	ES	K5	MDL S
К6	ES	К9	ES	K8	ES	К6	RLS	K2	ES
К9	ES	К6	MLS	K10	WLS	КЗ	WLS	K4	LS
К8	MDLS	K1	LS	K1	WLS	K7	MDL S	К9	ES
K10	WLS	K4	LS	K4	ALS	K8	DLS	K8	RLS
К4	DLS	K7	LS	K7	ES	К9	MLS	K7	WLS
К7	DLS	K8	LS	K2	MLS	K10	ALS	K10	ALS

Experts evaluated the criteria. The calculations for evaluating the criteria by Expert 1 are presented in Table 5.

Table 5. Calculating Criteria Importance Weights (Expert 1)

Crite ria	\tilde{s}_{j}		\widetilde{k}_{j}			\widetilde{q}_{j}			\widetilde{w}_{j}			Weight		Fina 1 Weig ht
СЗ					1	1	1	1	1	1	0.2 55	0.2 84	0.3 32	0.28 7
C1	DLS	0.5	0.6 7	1	1.5 0	1.6 7	2.0 0	0.5 00	0.5 99	0.6 67	0.1 28	0.1 70	0.2 21	0.17 1
C2	WL S	0.2 2	0.2 5	0.2 9	1.2 2	1.2 5	1.2 9	0.3 88	0.4 79	0.5 46	0.0 99	0.1 36	0.1 81	0.13 7
C5	WL S	0.2	0.2 5	0.2 9	1.2 2	1.2 5	1.2 9	0.3 00	0.3 83	0.4 48	0.0 77	0.1 09	0.1 49	0.11
C6	ES	0	0	0	1.0	1.0	1.0	0.3 00	0.3 83	0.4 48	0.0 77	0.1 09	0.1 49	0.11
С9	ES	0	0	0	1.0	1.0	1.0	0.3 00	0.3 83	0.4 48	0.0 77	0.1 09	0.1 49	0.11
С8	MD LS	0.2 5	0.2 9	0.3 3	1.2 5	1.2 9	1.3 3	0.2 26	0.2 97	0.3 58	0.0 58	0.0 84	0.1 19	0.08 6
C10	WL S	0.2 2	0.2 5	0.2 9	1.2 2	1.2 5	1.2 9	0.1 75	0.2 38	0.2 94	0.0 45	0.0 67	0.0 97	0.06 9
C4	DLS	0.5	0.6 7	1	1.5 0	1.6 7	2.0 0	0.0 88	0.1 42	0.1 96	0.0 22	0.0 40	0.0 65	0.04
C7	DLS	0.5	0.6 7	1	1.5 0	1.6 7	2.0 0	0.0 44	0.0 85	0.1 31	0.0 11	0.0 24	0.0 43	0.02 5

Table 6 summarizes the final importance weights. The experts' answers were integrated using the geometric mean.

Table 6. Final Weight

	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Geome tric Mean	Final Weight	Rank
C1	0.169	0.070	0.149	0.175	0.071	0.117	0.130	3
C2	0.135	0.023	0.120	0.109	0.142	0.090	0.099	5
СЗ	0.078	0.205	0.250	0.175	0.142	0.158	0.175	1
C4	0.226	0.035	0.036	0.082	0.053	0.066	0.073	7
C5	0.135	0.164	0.096	0.109	0.142	0.127	0.140	2
C6	0.097	0.164	0.096	0.140	0.094	0.115	0.127	4
C7	0.060	0.035	0.022	0.047	0.040	0.039	0.043	10
C8	0.036	0.109	0.075	0.058	0.030	0.055	0.061	9
C9	0.024	0.109	0.096	0.082	0.142	0.078	0.087	6
C10	0.039	0.087	0.060	0.023	0.142	0.058	0.065	8

The final ranking resulting from the analysis is presented in Table 7.

Table 7. BMP Selection Criteria

Order of Priority	Criteria	Weight
1	Integration	0.175
2	Ease of Use	0.140

3	Cost	0.130
4	Technical Features and Performance	0.127
5	Security	0.099
6	Support Services (Document. Company)	0.087
7	Reporting Ability	0.073
8	Ready Templates for ERP	0.065
9	Test Features (Simulation)	0.061
10	Reference and Company Awareness	0.043

According to the experts, the three most important criteria were integration, ease of use, and cost. The least essential criteria included "ready-made templates", "test features", "references and company awareness". Integrating business process software with ERP and similar systems is crucial for effective operations.

4. RESULT

Businesses require software to design, manage, analyse, and organise their business processes effectively and efficiently. Among these software solutions, ERP is the most essential. However, ERP software is insufficient for managing business processes. Businesses with particularly complex processes require business process management software. BPM software is crucial for tracking and controlling business processes that involve dynamic approval mechanisms.

This study evaluates BPM software for businesses that use ERP during the digital transformation process. In this regard, it aims to establish the decision-making criteria for selecting BPM software. In this study, ten criteria were identified through a literature review and ranked according to expert opinions; the relative importance of each criterion was calculated using the IMF-SWARA technique.

The findings indicate that "Integration", "Ease of Use", and "Cost" are the most critical factors for businesses. Expert opinions indicate that integration within BPM software is highly valuable. This integration extends beyond ERP and is multifaceted. Especially for businesses that use multiple

systems simultaneously, BPM software plays a crucial role in integrating these systems into business processes. Another important criterion is "Ease of Use." BPM software, such as ERP, is used exclusively by personnel with expertise in the relevant field. It is used effectively across all business processes. Therefore, the analysis demonstrates the importance of selecting software that is easy to use. Another important criterion was identified as "Cost."

Cost is a top priority for businesses when selecting software. Cost-benefit analysis is frequently used in software selection. The least important criteria were "Ready Templates for ERP," "Test Features (Simulation)," and "Reference and Company Awareness." This suggests that experts focused on the application's usability and features rather than the company's ready-made knowledge and templates the it Furthermore, the software company's references were not identified as a crucial criterion. Furthermore, a review of previous studies yielded results similar to those reported by Štemberger et al. (2019). Integration and cost were identified as important criteria in both studies. Furthermore, Kocaoğlu et al. (2021) highlighted integration as an important criterion in both studies.

This result demonstrates that technical features, user experience, and compatibility with digital infrastructures should be taken into consideration when selecting software. Seemingly low-priority criteria may differ across industrial and organizational contexts.

If the study were repeated with different experts or criteria, different results could be obtained. This is considered a limitation of the study.

The study contributes to the academic literature and provides a roadmap for decision-makers managing ERP processes. Future studies could examine the impact of sectoral differences, company size, and user experience on software selection. Furthermore, testing the developed model using different MCDM methods could improve decision-making accuracy.

Etik Beyanı: Bu çalışmanın tüm hazırlanma süreçlerinde etik kurallara uyulduğunu beyan ederim. Aksi bir durumun tespiti halinde Akademik İzdüşüm Dergisinin hiçbir sorumluluğu olmayıp, tüm sorumluluk çalışmanın yazarlarına aittir.

Destek ve Teşekkür: Bu araştırmanın hazırlanmasında herhangi bir kurumdan destek alınmamıştır.

Katkı Oranı Beyanı: Araştırmanın tüm süreci makalenin beyan edilen tek yazarı tarafından gerçekleştirilmiştir.

Çatışma Beyanı: Araştırmanın yazarları olarak herhangi bir çıkar çatışma beyanımız bulunmamaktadır.

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DETERMINING DECISION CRITERIA IN SELECTING ERP COMPATIBLE BUSINESS PROCESS SOFTWARE IN THE DIGITAL TRANSFORMATION PROCESS

Extended Summary

Aim:

ERP systems are used by businesses to effectively and efficiently manage all their departments. ERP software, however, needs to be further supplemented for business processes. Such systems are referred to as business process management (BPM) software. The present study primarily focuses on selecting suitable BPM software for business process management (BPM)-focused organizations with existing ERP systems. Consequently, this study aims to identify the criteria of relevant BPM software and establish their importance.

Method(s):

There are many BPM software programs available in the sector that have diverse features. The business process for BPM software is a subjective decision made under a combination of variables. Thus, the research method adopted for the study was the Improved Fuzzy SWARA (IMF-SWARA), a Multi-Criteria Decision Making (MCDM) method. Through a literature review, ten different criteria were identified. Five sector experts with at least 10 years of experience were then interviewed. Fuzzy linguistic scales of experts' rating were applied to the criteria. The final criteria ranking was achieved by assigning weight values to each criterion, as determined in the analysis

Findings:

Based on these observations, the three decisive factors influencing the choice of BPM software are "integration capability," "ease of use," and "cost." Besides, "technical features," "performance," "security," and "support services" were rated high on the importance scale. The lowest scoring criteria were "ERP-compatible ready-made templates," "test features," and "company references."

More importantly, function-related parameters were more influential in the selection of BPM software in firms focused on ERP.

Conclusion and Discussion:

The study results reveal that integration, ease of use, and cost are three critical factors for selecting BPM software for ERP-oriented organizations. These results demonstrate that integration with other business software systems is essential for BPM software. Equally, it seems that the software should be easy to understand. Cost was also revealed as another key factor for business. Conversely, it suggests that company references are not significant when selecting BPM software and that testing features are unnecessary. Although the scope of the study is more limited, using five experts and a subjective methodology, it is nevertheless expected to add to the literature and practice. It would be recommended in future research to retest the study with other criteria, specialists, and methods.