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Estimation of Identifying and Prioritizing Investment using EDAS Method

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Abstract

In both recipient and source economies given the mutually beneficial effects Liberalization in APEC that foreign investment should be given high priority this article proposes that. Asia-Pacific and between the region and the rest of the world Facilitating greater foreign investment flows, High growth in the region and Provides an alternative to quality of life. Risk analysis and specifically the strategic risk framework, for investment in Internet capabilities an alternative approach to prioritization is, it is cross-domain and for an analysis of whole-of-government functions Very suitable. Generate insights for full-force capability analysis Cyber risk for a new purpose this article explains the application of risk analysis. Single-valued complex neutrosophic EDAS (estimation based on distance from mean slope) model established and used in green supplier selection. Also, a single-valued complex Neutrosophic EDAS model established and all computational steps are depicted in detail. To examine the use of supplier selection proposed an extended EDAS method. With an intuitive fuzzy number a new EDAS method was proposed and applied. Alternatives are Technological factors (C1), Economic factors (C2), Political and legislative factors (C3), Total costs of investment (C4), Social (personnel) factors (C5), Suppliers (C6) and Ecological (environmental) factors (C7). Evaluation Parameter is biomedical micro electromechanical systems (Bio MEMS) (A1), Nano technology (A2), Biotechnology (A3) and Biomedical engineering (A4). In this type of analysis, EDAS methods determine for the best solution to the negative Short distance and very long distance to settlement, but Comparison of these distances doesn't underestimate the importance. As a result, Technological factors (C1) is first rank, and Total costs of investment (C4) is lowest rank.

Introduction

Ecosystems, we show how private companies and investment banks are structured. Our guidance is social, environmental and Allowing for a combination of economic considerations, this approach other security funding mechanisms or widely applicable to investment strategies. Interacting social, urban, technological and political perspectives represent a clear contradiction. When implementing expenditure on infrastructure investment in urban areas. Recruiting a wide variety of urban space Exposing variables with social content, technology and public institutions promote the need to develop motivating models and tools. There is no concise handbook to assist for road infrastructure investment needs Government institutions in giving priority. Managers an efficient and innovative prioritization technique should be sought, the projects undertaken by them are remarkable and resources are used more effectively. Scientific prioritization method for investment thesis. EDAS is one of the most frequently developed integrated decision-making models and the ranking system used. One of the main reasons why researchers often use the EDAS method is unlike other MCDM ranking methods; EDAS with respect to the mean solutions of each criterion uses different types of normalization. For example, an extended version of EDAS Under spaced gray numbers proposed to consider the uncertainty of the estimation process within its hierarchy. Under interval type-2 fuzzy set theory EDAS developed another extension of the method. For waste management problem Based on Fuzzy EDAS Created a decision making tool. In this study, to evaluate waste disposal technologies they focused on using the EDAS method. MACBETH to evaluate steam boiler technology alternatives and proposed a decision making tool based on EDAS methods. Under fuzzy set theory presented an EDAS-based MCDM model. The proposed decision-making model compares items Examined material selection problem to prioritize accordingly.

Investment

Private and public initiatives are making efforts in various sectors, and the total investment is not enough for average cities to achieve better well-being for their citizens. Few and increasingly reduced municipal and state budgets push inappropriate decisions or operate in the shadow of social pressure, lacking administrative tools to support decision-making processes when planning public investment. Having explained SRF application to general cyber risk, Safety planning and We can now turn to its use to inform investment. SRF is of investment in specific control measures To examine the big-picture impact is a structured method, And it is for comparing sets of control measures Very suitable. rather than measuring actual risk A less sensitive comparison to estimated base rates quantitative approach provides good data for comparisons. In addition to relationship interdependence, this type of Includes investment level as a significant predictor of relationship commitment.

Investment volume is defined as "the amount and importance of resources attached to a". Relationship-level investment is the more resources a person invests, that the person will cost too much to leave the relationship Logically related to commitment. In company-public contexts, Consumer dependence on a product service or Examples includes shareholders' financial involvement with the company. Although there are many BN applications, in evaluating agricultural investments the use of BNs has not been widely studied [20]. Cost of investment projects, to perform benefit and risk analysis we previously proposed the BN architecture [40]. This structure is investment impact, budget and adoption and a number of factors are taken into account, and including risk events the template provided a dynamic PN structure. Application of framework Illustrated using common has several limitations:

- For a particular investment to run the BN model, prior distributions of input distributions BN must be defined in the framework. Due to the paucity of data in this domain, various sources define these parameters online databases, Publications and Expert knowledge method should be used.
- Assessing risk factors and Understanding investment appraisal is an important part. However, ed et ed. Risks are modeled in a simple and holistic manner in the framework of [40]. Investment implications and including application of agricultural technologies Risks can affect various factors.
- Using the BN model, under multiple risk scenarios by predicting their consequences our method prioritizes investments. It is the combined uncertainty and Provides sensitivity analysis.

We calculate widely used investment outcome Net Present Value (NPV) and Return on Investment (ROI) including financial metrics climate change, under the uncertainty provided by financial and socio-political circumstances Uses to predict NPV and ROI BN model. It is primarily of yield uncertainty and Due to increased income from investment in agricultural practices. The project will be weather-resistant but vulnerable to social risks. To reduce political risks If possible it will provide an attractive investment option.

Prioritizing

It categorizes the types of problems to be solved in this process, provides guidelines on how to approach them logically, and explains their application. Identification of objectives, formulation of objectives for analysis, specific problems addressed Measuring the extent to which goals have been achieved and prioritizing objectives. Charts address a public/government problem related to homeland security and a business decision related to gaining more customers. In fact, in requirements engineering research Latest quick and Despite the welcome development, A simple, effective and efficient way to prioritize needs Managers still lack industry-proven techniques. How to establish requirements priorities and a recent study2 shows that few organizations know how to communicate; Another 3 requirements are in engineering research Prioritization has been identified as an important but neglected issue. Using genetic networks for predicting gene activity Algorithms developed first were candidate diseases we further show that genes perform well in prioritization. Essentially, recursive ranks and in diffusion algorithms such as Gaussian smoothing considering indirect links, greatly improves the correct identification of the disease. Thus, knowing some of the genes involved in a disease, networks provide a powerful tool for prioritizing additional potential candidate genes. Ultimately, the purpose of to manage environmental pollution to assist in regulatory and EPA programs, Toxicity is the development of methods to prioritize chemicals for further screening and testing. From this proven concept, Identify potential toxicities, reducing false negatives and for prioritizing subsequent tests a broad strategy with limited toxicological data a large number of environmental chemicals are completed three analytical approaches can be used. Based on the needs of a species prioritizing actions, Prioritize rehabilitation efforts May be one of the most common methods. Reasons for habitat change and an understanding of the importance of habitat changes for species of interest is required. Hence, to prioritize rehabilitation activities choosing a strategy, usually the Consideration should be given to prioritizing actions; including socioeconomic constraints A restructuring goal identifies core values.

EDAS method

Based on traditional EDAS model with BF information we have developed the EDAS model and set up the MCGDM process. In this model, we first apply the EDAS approach extending to BFNs. Next, we apply the original EDAS approach to MCGDM with BFNs. Finally, with BFNs To discuss an innovative approach We introduce a numerical example, Later on BF weighted average (BFWA) operator, We organize compare the BF Dom by weighted operator (BFDWA) operator and BF-like optimal operators. In MAGDM problem, TODIM, TOPSIS, VIKOR and similar methods are there are many traditional methods. Like TOPSIS and VIKOR As compared to conciliatory methods, Purpose of the EDAS system Measuring from the mean (PDA) positive distance and Using the negative distance from the mean (NDA) alternative is to find the best among the arrays. In recent years, many researchers and it has been studied by scholars. To examine the use of supplier selection proposed an extended EDAS method. With an intuitive fuzzy number proposed a new EDAS method and Used in solid waste disposal site selection. Extending the Worth a break EDAS method for neutrosopic synthesis He used it to prioritize goals. New improved Lost Dome Inns Score (GLDS) approach to measurement. GLDS technique At some point group use and Personal regret The score measures both. EDAS system With multi-criteria inventory problems Created as a classic. Used the EDAS approach to supplier selection. Solid waste disposal site selection issues are addressed. In the context of IFS A new EDAS approach based on Peng and Liu (2017) studied an EDAS model based on neutrosophic soft sets. Modified in type-2 fuzzy sets EDAS technique was used. In the same context, based on the EDAS approach A MCDM

model for normal distribution was developed. In the image fuzzy EDAS approach Screened green supplier selection for MCGDM issue. MAGDM Using the EDAS approach, Also used q-ROFHA and q-ROFHG operators.

TABLE 1. Data Set for Investment Prioritizing

	A1	**A2**	**A3**	**A4**
Technological	15.67	13.53	29.15	22.05
Economic	29.12	18.09	33.69	27.30
Political and legislative	24.08	18.56	29.18	23.10
Total costs of investment	12.98	12.98	34.56	14.98
Social (personnel)	23.17	20.87	24.60	17.59
Suppliers	33.33	13.59	27.96	18.89
Ecological (environmental)	27.09	18.65	31.97	25.89
AVj	23.63429	16.61000	30.15857	21.40000

Table 1 shows the Investment Prioritizing using EDAS method here the Alternative: Technological factors (C1), Economic factors (C2), Political and legislative factors (C3), Total costs of investment (C4), Social (personnel) factors (C5), Suppliers (C6) and Ecological (environmental) factors (C7). Evaluation Prameter: biomedical micro electromechanical systems (BioMEMS) (A1), Nano technology (A2), Biotechnology (A3) and Biomedical engineering (A4) Are presented in the above tabulation. From the above table the other values are being calculated.

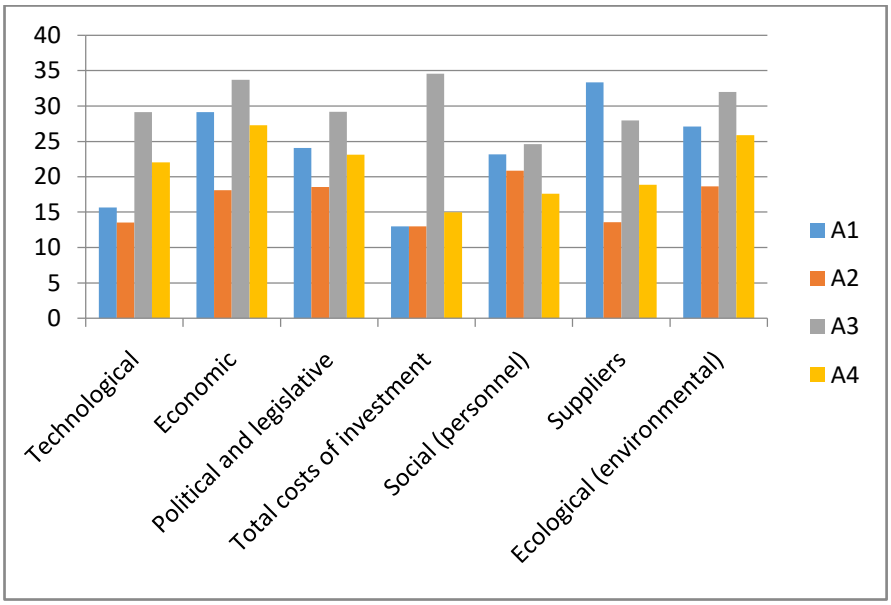

FIGURE 1. Investment Prioritizing

Figure 1 shows the graphical representation Investment Prioritizing Alternative: Technological factors (C1), Economic factors (C2), Political and legislative factors (C3), Total costs of investment (C4), Social (personnel) factors (C5), Suppliers (C6) and Ecological (environmental) factors (C7). Evaluation Parameter: biomedical micro electromechanical systems (BioMEMS) (A1), Nano technology (A2), Biotechnology (A3) and Biomedical engineering (A4).

TABLE 2. Positive Distance from Average (PDA)

Technological	0.00	0.00	0.03	0.00
Economic	0.23	0.09	0.00	0.00
Political and legislative	0.02	0.12	0.03	0.00
Total costs of investment	0.00	0.00	0.00	0.30
Social (personnel)	0.00	0.26	0.18	0.18
Suppliers	0.41	0.00	0.07	0.12
Ecological (environmental)	0.15	0.12	0.00	0.00

Table 2 shows the positive distance from the average it calculate from the average of the first table these value are calculated for the later calculation to get the final rank.

TABLE 3. Negative Distance from Average (NDA)

Technological	0.33698	0.18543	0.00000	0.03037
Economic	0.00000	0.00000	0.11710	0.27570
Political and legislative	0.00000	0.00000	0.00000	0.07944
Total costs of investment	0.45080	0.21854	0.14594	0.00000
Social (personnel)	0.01964	0.00000	0.00000	0.00000
Suppliers	0.00000	0.18182	0.00000	0.00000
Ecological (environmental)	0.00000	0.00000	0.06006	0.20981

Table 3 shows the negative distance from the average it calculate from the sum of the average of the first table these value are calculated for the later calculation to get the final rank.

TABLE 4. Weight

Technological	0.25	0.25	0.25	0.25
Economic	0.25	0.25	0.25	0.25
Political and legislative	0.25	0.25	0.25	0.25
Total costs of investment	0.25	0.25	0.25	0.25
Social (personnel)	0.25	0.25	0.25	0.25
Suppliers	0.25	0.25	0.25	0.25
Ecological (environmental)	0.25	0.25	0.25	0.25

Table 3 shows the Investment Prioritizing weight value is same

Table 5. Weighted Positive Distance from Average (PDA)

Technological	0.00000	0.00000	0.00836	0.00000
Economic	0.05803	0.02228	0.00000	0.00000
Political and legislative	0.00471	0.02935	0.00811	0.00000
Total costs of investment	0.00000	0.00000	0.00000	0.07500
Social (personnel)	0.00000	0.06412	0.04608	0.04451
Suppliers	0.10256	0.00000	0.01823	0.02932
Ecological (environmental)	0.03655	0.03070	0.00000	0.00000

Table 5 shows the Weighted PDA the values of weighted PDA are positive distance average value.

TABLE 6. Weighted Negative Distance from Average (NDA)

Technological	0.08425	0.04636	0.00000	0.00759
Economic	0.00000	0.00000	0.02927	0.06893
Political and legislative	0.00000	0.00000	0.00000	0.01986
Total costs of investment	0.11270	0.05464	0.03649	0.00000
Social (personnel)	0.00491	0.00000	0.00000	0.00000
Suppliers	0.00000	0.04545	0.00000	0.00000
Ecological (environmental)	0.00000	0.00000	0.01502	0.05245

Table 6 shows the Weighted Negative Distance from Average (NDA) are negative distance average value.

TABLE 7. Values of SPi, SNi, NSPi and NSNi

	SPi	SNi	NSPi	NSNi
Technological	0.00836	0.13820	0.05404	0.32197
Economic	0.08030	0.09820	0.51907	0.51821
Political and legislative	0.04218	0.01986	0.27262	0.90256
Total costs of investment	0.07500	0.20382	0.48479	0.00000
Social (personnel)	0.15471	0.00491	1.00000	0.97590
Suppliers	0.15011	0.04545	0.97028	0.77699
Ecological (environmental)	0.06726	0.06747	0.43475	0.66898

Table 7 shows the SPi, SNi ,NSPI and NSNI the Investment Prioritizing Alternative: Technological factors (C1), Economic factors (C2), Political and legislative factors (C3), Total costs of investment (C4), Social (personnel) factors (C5), Suppliers (C6) and Ecological (environmental) factors (C7). Evaluation Parameter: biomedical micro electromechanical systems (BioMEMS) (A1), Nano technology (A2), Biotechnology (A3) and Biomedical engineering (A4) are presented in the above tabulation. This table used to calculate the average for positive and negative values seeing in figure 2.

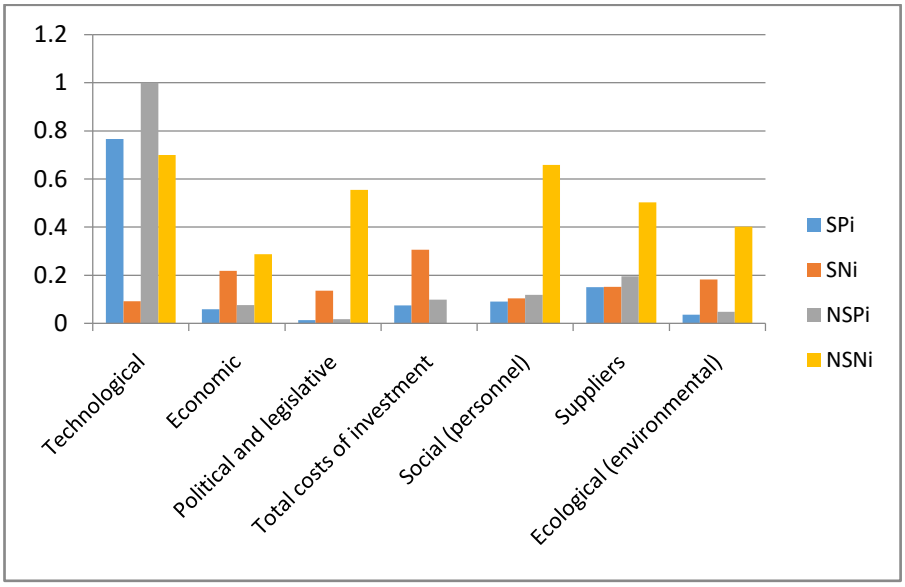

FIGURE 2. Values of SPi, SNi, NSPi and NSNi

TABLE 8. ASi and Rank

	ASi	Rank
Technological	0.18801	7
Economic	0.51864	5
Political and legislative	0.58759	3
Total costs of investment	0.24240	6
Social (personnel)	0.98795	1
Suppliers	0.87363	2
Ecological (environmental)	0.55187	4

Table 8. shows The final result of the paper is that the Technological is ranked 7th, the Economic 5rd rank, The Political and legislative 3rd Rank, Total costs of investment 6th rank, Social (personnel) first rank, Suppliers 2nd rank, Ecological (environmental) 4th rank.

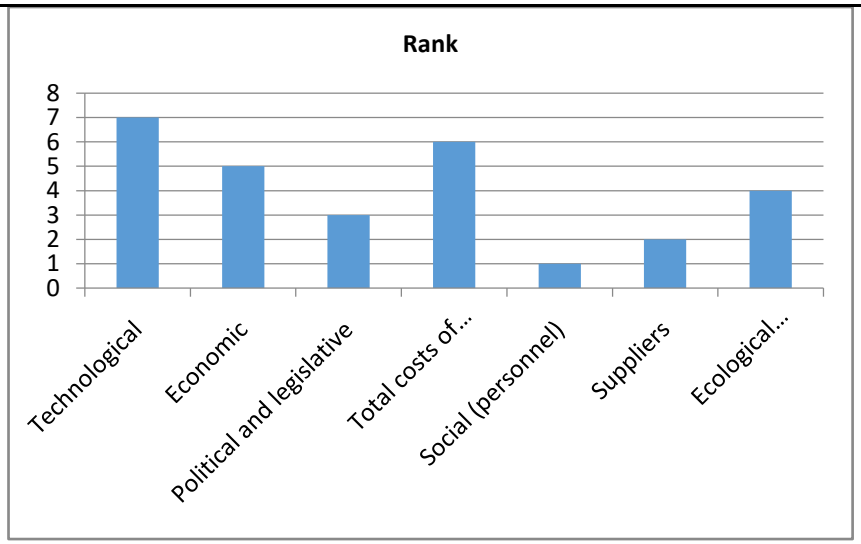

FIGURE 3 ranking

Figure 4 shows the Investment Prioritizing Final Rank. This Social (personnel) is the first rank, the Technological is the lowest rank.

Conclusion

In this study, for various values of for threat management strategies to maximize benefits we develop a prioritized approach. We modify the PTM tool, It is so far plants and to reduce threats to wildlife Used to prioritize strategies. at Taman National Indonesia for many values By prioritizing the management of threats We demonstrate our approach. Indonesia is in Asia The highest species There is endemism, Many species are under threat of extinction. The final objective of this study Fuzzy AHP and EDAS Integrating is to provide an integrated FMCDM model. To do this, the selection criteria used in Fuzzy AHP Determine the priority weights, because it is based on pair wise comparisons and allows the use of linguistic variables. Then, the EDAS system uses the ranking of 3PLs. The second objective of this study is to and to assess the performance of 3PL providers it's about finding the best provider and creating an effective decision-making tool. As far as we know, No such study has been conducted to solve supplier selection problems of 3PLs using methodology. Also, check compatibility This integrated model in Afyonkarahisar (Turkey) Provides a case study of four 3PL providers. The contribution of this study to the existing literature is twofold. Fuzzy combines AHP and EDAS method No research to our knowledge. This The final result of the paper is that the Technological is ranked 7th, the Economic 5rd rank, The Political and legislative 3rd Rank, Total costs of investment 6th rank, Social (personnel) first rank, Suppliers 2nd rank, Ecological (environmental) 4th rank

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