Journal of International Trade, Logistics and Law, Vol. 11, Num. 2, 2025, 241-248

EFFECTIVE E-MARKETPLACE SELECTION: CRITIC METHODOLOGY IN TURKIYE

Mustafa YİĞİTOĞLU
Istanbul Ticaret University, Turkiye

Figen YILDIRIM
Istanbul Ticaret University, Turkiye

Received: Aug 18, 2025 Accepted: Sept 19, 2025 Published: Dec 01, 2025

Abstract:
The rapid development of digital technologies and societies' adaptation to digitalization has increased the importance of e-commerce in economic structures. With this transformation, e-marketplaces have become an effective and accessible sales channel, especially for SMEs, offering sellers the opportunity to trade without the need for a physical store. SMEs, which play an important role in terms of employment and production in Turkiye but generally operate in limited regions. Thanks to digital transformation, they now have the chance to compete in national and international markets, gaining strategic advantages such as reaching large customer bases with low operational costs, saving on physical store costs and benefiting from digital marketing, brand awareness and customer relationship management. In this context, the research aims to analyze the factors affecting the e-marketplace preferences of SMEs in Turkiye, to determine the criteria that play a role in these preferences and to provide strategic guidance to both SMEs and e-marketplace platforms. Within the scope of the research, ChatGPT was asked to score 7 multi-category e-marketplaces mentioned in the Competition Authority report according to the selection criteria using a 5-point Likert scale, and the responses received were analyzed using the CRITIC method. According to the results, the most important criterion in SMEs' e-marketplace selection was Logistics with 26.77 percent, Design Features came in second with 24.93 percent, Costs came in third with 15.14 percent, and Financial Features, Knowledge Transfer, Commercial Process and E-Marketplace Ecosystem shared the fourth and final place with 8.29 percent.

Keywords:
MCDM, CRITIC Method, E-marketplaces, Management Information Systems, Artificial Intelligence

1. Introduction

Nowadays, with the rapid development of digital technologies and the adaptation of societies to digitalization processes, the importance of e-commerce is gradually increasing. This transformation has fundamentally changed consumer habits and has greatly increased the shift from physical stores to online shopping. E-marketplaces, one of the sub-components of e-commerce, are structures where a large number of sellers offer their products and services to consumers on a digital platform. These online marketplaces allow sellers to continue their commercial activities by creating their own virtual stores without the need for a physical store. E-marketplaces have become an effective and accessible sales channel for both large-scale corporate brands and micro, small and medium-sized enterprises (Nikoletos et al., 2024; Susanti, 2022).

In Turkiye, the term SME (Small and Medium-sized Enterprises) is used to refer to enterprises with certain levels of employment and income. These enterprises generally include companies with fewer than 250 employees and annual net sales revenue or financial balance sheet below certain legal thresholds. SMEs play a critical role in the dynamic structure of the Turkish economy, both in terms of employment creation and production capacity. However, the majority of SMEs generally operate in limited geographical areas and local markets. With the acceleration of the digital transformation process in recent years, these enterprises have had the opportunity to go beyond traditional borders and compete in national and international markets (E-Commerce Information Platform, 2022).

As a result of digital transformation, the integration of SMEs into e-marketplaces has become increasingly critical. E-marketplaces offer SMEs the opportunity to reach a wide range of consumers at low operational costs. These platforms save on the costs of opening physical stores and operating costs, and also allow products to be offered for sale throughout Turkiye and even in foreign markets. In addition, e-marketplaces are not only a sales channel for SMEs, but also provide various opportunities in strategic areas such as digital marketing, brand awareness building and customer relationship management. In this context, e-marketplaces play a critical role in SMEs' digitalization processes (Hoo et al., 2024).

The main purpose of this research is to reveal the factors affecting the e-marketplace choices of SMEs, one of the main building blocks of the Turkish economy. The research aims to analyze the criteria that SMEs operating in Turkiye take into account when choosing local e-marketplaces and the level of importance of these criteria. The findings will guide SMEs in shaping their digital commerce strategies and help e-marketplace providers to develop more effective policies for SMEs.

2. Literature Review

Purwanto et al. (2024) aims to review the literature examining the factors that influence sellers when choosing e-marketplaces to sell their products. It was conducted in line with the reporting elements specified for systematic review and meta-analysis. Among the articles published between 2018-2022, 125 articles were collected from databases such as IEEE Explore and Science Direct. As a result of the verification and testing process, 36 articles were found suitable for use as primary studies. As a result of the research, ten key factors affecting sellers' preference for e-marketplaces were identified: marketing and sales, platform features, trust, information quality, payment channels, service operations, ease of use, products, product reviews, and perceived risk (Purwanto et al., 2024).

In order to gain more benefits from digital marketplaces, Büyüközkan (2004) proposes the use of fuzzy logic based on multi-criteria evaluation to make e-marketplace selection more efficient under uncertain conditions. In this evaluation approach, Fuzzy Analytical Hierarchy Process (AHP) and Fuzzy DELPHI Methodologies are used to deal with the uncertainty and subjectivity arising from human experience in group decision-making processes. The application of this approach to a real case research is also demonstrated in the research (Büyüközkan, 2004).

Hossain et al. (2021) states that in recent years, e-marketplaces have played important roles in global economic development and offer great opportunities for both large and small firms to manage customer relationships through increased internet usage. Firms' participation in e-marketplaces leads to market expansion, internationalization and more efficient use of resources. The research aims to create a theoretical framework that examines the factors that affect e-marketplace entry, especially for small firms. An interpretive research approach was adopted and 23 semi-structured interviews were analyzed. In the research, a set of variables classified as technological, organizational and environmental factors were put forward by using inductive and deductive methods together. The theoretical framework provides a basis for examining the e-marketplace entry behavior of small firms in larger scale quantitative research and also serves as a guide. The research concludes that small firms can expand their markets and internationalize through participation in e-marketplaces (Hossain et al., 2021).

Stockdale & Standing (2002) reveals that despite the growing interest in e-marketplaces, there is still uncertainty about the benefits of participation, which creates difficulties for businesses to develop strategies, policies and procedures. The dynamic and ever-changing nature of electronic commerce may make some buyers and suppliers reluctant to participate in e-marketplaces. Although existing classification models attempt to identify appropriate marketplaces for different purchasing purposes, it is emphasized that these models do not remain valid in a rapidly changing digital environment. In this context, the research conducted a content analysis of research and practitioner articles to identify the issues that potential participants should consider in the selection process when considering purchasing products and services online. As a result, a structured decision-making framework is proposed based on business objectives, internal dynamics and facilitating elements offered by e-marketplace providers. This framework aims to bring a more systematic and strategic approach to the e-marketplace selection process of businesses (Stockdale & Standing, 2002).

3. Material and Method

3.1. Data Set Factors Affecting E-marketplace Selection

The criteria used in the CRITIC algorithm are summarized below:

Financial Features: During the strategic planning phase, financial features elucidate the funding mechanisms and quantitative objectives of the organization, thereby facilitating effective management and operation of the enterprise. Decision-makers must evaluate the organization's financial situation to identify potential risks or challenges related to investing in the enterprise. Innovations introduce novel concepts and creations, resulting in the development of new products in the marketplace. Creating a product requires the implementation of advertising and marketing strategies, which depend on the product type and market sector. Financial features within the investment domain are also significantly correlated with an organization's financial attributes, revealing levels of indebtedness or cash flow ratios pertinent to investments or funding directed towards the enterprise (Gangwani & Zhu, 2024).

Logistics: Logistics is a key part of supply chain management. It involves the systematic organization, execution and regulation of the efficient and effective movement and storage of goods and services, as well as the associated information, from the point of origin to the point of consumption. This ensures that customer demands are met (Bin Illyas Tan & bt Ibrahim, 2010, p. 483). The field of logistics is closely connected to the environmental impact of e-commerce, playing a key role in ensuring the sustainability of e-marketplace platforms throughout the procurement, transportation and distribution processes (Cano et al., 2022, p. 35).

Knowledge Transfer: According to knowledge-based theory, the challenges associated with knowledge transfer are closely linked to how easily this knowledge can be codified, and this in turn influences the strategic decisions that e-service firms make regarding the entry modes they use when entering international markets. Knowledge that is well-defined and easily codifiable does not require elaborate transfer mechanisms (Hendrikse & Nilsson, 2023, p. 346). Digital marketing service providers must mitigate the risk of information overload and ensure their reports are written in clear language to help clients understand the results. Implementing meetings or allocating time for knowledge transfer about the importance of the results, alongside providing opportunities for clients to ask questions, can enhance understanding and reduce the perception that poor performance is being hidden. This proactive approach could also foster transparency and strengthen the client-provider relationship (Sutherland et al., 2024, p. 11).

Commercial Process: Traditional business transactions encompass a variety of activities, including face-to-face meetings, contract execution, fund transfers via banking institutions and the logistics of delivering goods. E-commerce has overcome the limitations imposed by spatial and temporal constraints, enabling contracts to be negotiated and executed at any time and from any location. In this context, the requirement for both parties to be physically present is eliminated, with contracts and payments conducted digitally (Zheng et al., 2009, p. 136). A commercial process can be characterized as an automated workflow encompasses all activities from the initiation of a product order to its final delivery. The sequence begins when the customer submits an order and continues until the product reaches its destination. Advanced automation technologies reduce the need for human involvement throughout the process, thereby reducing costs and increasing efficiency (Pagnon, 2017, p. 1).

Design Process: The design process involves creating a systematic framework that starts with examining user needs and expectations. The focus is on improving the user experience and usability, particularly on e-commerce platforms. Initially, the process involves determining how users interpret information by applying open and closed card sorting methodologies. This informs the construction of the information architecture. Next, a comprehensive site map and wireframes are developed to establish the website's basic structure. The final stage involves conducting usability assessments to determine whether users can navigate the site easily. Throughout these stages, visual consistency is maintained and the user experience is enhanced by carefully selecting appropriate color palettes, typography and call-to-action elements (Ali, 2024, p. 386).

Costs: E-commerce has become an integral part of modern business practices. It involves buying and selling goods and services through electronic channels, primarily the internet. E-commerce offers businesses numerous advantages, one of which is reducing operational expenses. E-commerce businesses can minimize labor and ancillary costs in various areas, including document preparation, reconciliation, mail processing, telecommunications, data entry, overtime and auditing expenses. E-commerce can facilitate the management of operational costs, thereby reducing individual transaction expenses (Sharma, 2023, p. 2902).

E-marketplace Ecosystem: The contemporary e-marketplace framework has evolved as a result of advances in Internet technologies. It plays an important role in the global economic environment (Chang et al., 2019, p. 429). Although many SMEs are struggling with e-commerce adoption, understanding of the e-marketplace environment is important. The opportunities to extend trading beyond traditional market boundaries make all firms vulnerable to new sources of competition. Many smaller firms that supply large organizations are being forced into the e-environment to retain their trading partners, while other firms seek to extend their markets or to enhance their businesses by trading beyond their traditional customer bases. A recognition of both benefits and barriers that firms face in entering the e-marketplace ecosystem will enable SMEs to more effectively plan their participation and realize the benefits of e-marketplace trading. Where firms follow an established partner online, they can gain further benefits and seek new relationships if they understand the environment in which they find themselves and use their e-competencies to actively participate in what the e-marketplace has to offer (Stockdale & Standing, 2004, p. 309).

3.2. Multi-Criteria Decision Making (MCDM) Methods

A Multi-Criteria Decision Making (MCDM) approach allows multiple perspectives to be considered in the decision process. An analyst working with this method determines many evaluation criteria based on various perspectives. MCDM aims to improve the quality of decisions made by making decision processes more systematic, logical and transparent, especially in situations with complex and multidimensional problems. For this reason, it has become one of the most frequently used decision-making methods in scientific studies, business and public administration. A decision-maker applying this method in real life should, as a first step, accurately analyze and define the situation they are facing. At this stage, many factors are considered and evaluated, such as who are the stakeholders affecting the decision process, which action alternatives are available, which criteria are prioritized and decisive, and the quality and reliability of the available information. The systematic consideration of all these elements is the basis for defining MCDM as a structured decision-making approach (Zavadskas & Turskis, 2011, p. 405).

MCDM methods come into play especially in situations where there are multiple options and these options need to be analyzed according to different, sometimes even conflicting, evaluation criteria. Many real-life problems are too complex to be solved according to a single criterion. In such cases, MCDM approaches provide decision-makers with the opportunity to make a systematic and balanced evaluation. The method allows each alternative to be analyzed in detail according to many different criteria and thus helps to identify the most appropriate option. Conflicting interests or incompatibilities between alternatives can be addressed in a healthier way thanks to the multidimensional evaluation capacity of MCDM. With these features, MCDM both facilitates the decision-making process and ensures that the solution is based on objective and rational grounds. Therefore, it stands out as an effective method widely used in environments where complex and multi-criteria decisions need to be made (Emovon & Oghenenyerovwho, 2020, p. 2).

MCDM methods are preferred analytical tools, especially in situations where there are multiple alternatives and these alternatives need to be evaluated based on different and sometimes conflicting decision criteria. In today's increasingly complex decision environments, evaluations based on a single criterion are inadequate; therefore, MCDM techniques come to the forefront in solving problems that require multidimensional analysis. Some of the commonly used MCDM methods are as follows: Analytic Hierarchy Process (AHP), Technique for Order Preference by Similarity to Ideal Solution (TOPSIS), CRITIC (Criteria Importance Through Intercriteria Correlation) and Multi-Attribute Utility Analysis (MAUA).

3.3. CRITIC Method

The weights of the criteria are influenced not only by the intrinsic properties of the criteria, but also by the personal views and perspectives of the decision maker. In this context, the decision maker's experience, knowledge and perception of the problem often play an important role in deciding how important each criterion is. Therefore, various subjective weighting methods have been developed based on the personal evaluations of decision makers. However, such subjective approaches may raise concerns about how reliable the weightings are. This is because personal opinions and perceptions may sometimes be inconsistent with objective facts, which may call into question the accuracy and validity of the results. In order to avoid such uncertainties and reliability problems, objective weighting methods based on more objective and mathematical foundations have been developed and used to obtain more reliable results in decision-making processes (Kazan & Ozdemir, 2014, p. 209).

CRITIC method is a technique developed to objectively determine the relative importance of the criteria considered in the decision process in MCDM problems. This method was first introduced to the academic literature in 1995 by Diakoulaki and his colleagues. The CRITIC method takes into evaluation the impact of criteria on the decision process by taking into account the variation of each criterion within the data set (through standard deviation) and its relationship with other criteria (through correlation coefficients). In this way, it attempts to obtain objective weight values that are independent of subjective judgments. In short, the CRITIC method offers both a variability and a correlation-based approach, helping to determine the weights of criteria in the decision-making process in a healthier way.

The application stages of the CRITIC method can be summarized in 5 steps (Diakoulaki et al., 1995).

Step 1: Creating the Decision Matrix

$$X = \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1m} \\ x_{21} & x_{22} & \dots & x_{2m} \\ \dots & \dots & \dots & \dots \\ x_{n1} & x_{n2} & \dots & x_{nm} \end{bmatrix}$$

Step 2: Creating the Normalized Decision Matrix

x_j^{max} = The maximum value of the jth criterion among the alternatives

x_j^{min} = The minimum value of the jth criterion among the alternatives

$$r_{ij} = \frac{x_{ij} - x_j^{min}}{x_j^{max} - x_j^{min}} \qquad j = 1,2,3,\dots,n$$

$$r_{ij} = \frac{x_j^{max} - x_{ij}}{x_j^{max} - x_j^{min}} \qquad j = 1,2,3,\dots,n$$

Step 3: Calculating the Pairwise Correlations Between Criteria

$$\rho_{jk} = \frac{\sum_{i=1}^{n}(r_{ij} - \overline{r_j})(r_{ik} - \overline{r_k})}{\sqrt{\sum_{i=1}^{n}(r_{ij} - \overline{r_j})^2 \sum_{i=1}^{n}(r_{ik} - \overline{r_k})^2}} \qquad j,k = 1,2,3,\dots,n$$

Step 4: Calculating the Amount of Information

$$C_j = \sigma_j \sum_{k=1}^{m}(1 - t_{jk}) \qquad j = 1,2,3,\dots,m$$

$$\sigma_j = \sqrt{\frac{\sum_{i=1}^{m}(r_{ij} - \overline{r_j})^2}{m}} \qquad j = 1,2,3,\dots,m$$

Step 5: Obtaining the Criteria Weights

$$W_J = \frac{C_J}{\sum_{k=1}^{m} C_k} \qquad j,k = 1,2,3,\dots,m$$

4. Data Analysis

There are 7 multi-category e-marketplaces operating in Turkiye (Sarıçiçek et al., 2022). ChatGPT, an artificial intelligence application, was used to objectively score these e-marketplaces according to the e-marketplace selection criteria determined within the scope of the research. Since it is very difficult to know the working conditions of all e-marketplaces, to have experience in these e-marketplaces and to be at a level of knowledge that can compare these e-marketplaces, it is thought that an AI application that can access all platform information and user comments on the internet and has a knowledge of the working conditions of all e-marketplaces can make a more objective and fair evaluation. In this regard, ChatGPT was asked to evaluate the situation from the perspective of an SME according to a 5-point Likert scale. The responses were evaluated with the CRITIC method. 7 e-marketplaces are represented by 7 colors of the rainbow. The results of the analysis are shown below.

Table 1. CRITIC Analysis of E-marketplace Selection

	FF	L	KT	CP	DF	C	EME
Decision Matrix							
Red	4	5	4	4	4	3	4
Orange	5	5	5	5	4	3	5
Yellow	5	5	5	5	4	2	5
Green	3	4	3	3	3	4	3
Blue	2	3	2	2	2	5	2
Indigo	4	4	4	4	4	3	4
Violet	3	3	3	3	4	3	3
Normalized Decision Matrix							
Red	0,6667	1,0000	0,6667	0,6667	1,0000	0,6667	0,6667
Orange	1,0000	1,0000	1,0000	1,0000	1,0000	0,6667	1,0000
Yellow	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000
Green	0,3333	0,5000	0,3333	0,3333	0,5000	0,3333	0,3333
Blue	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
Indigo	0,6667	0,5000	0,6667	0,6667	1,0000	0,6667	0,6667
Violet	0,3333	0,0000	0,3333	0,3333	1,0000	0,6667	0,3333
Correlation Coefficient Matrix							
FF	1,0000	0,8800	1,0000	1,0000	0,7887	0,8549	1,0000
L	0,8800	1,0000	0,8800	0,8800	0,5718	0,6399	0,8800
KT	1,0000	0,8800	1,0000	1,0000	0,7887	0,8549	1,0000
CP	1,0000	0,8800	1,0000	1,0000	0,7887	0,8549	1,0000
DF	0,7887	0,5718	0,7887	0,7887	1,0000	0,9226	0,7887
C	0,8549	0,6399	0,8549	0,8549	0,9226	1,0000	0,8549
EME	1,0000	0,8800	1,0000	1,0000	0,7887	0,8549	1,0000
Correlation Coefficients							
FF	0,0000	0,1200	0,0000	0,0000	0,2113	0,1451	0,0000
L	0,1200	0,0000	0,1200	0,1200	0,4282	0,3601	0,1200
KT	0,0000	0,1200	0,0000	0,0000	0,2113	0,1451	0,0000
CP	0,0000	0,1200	0,0000	0,0000	0,2113	0,1451	0,0000
DF	0,2113	0,4282	0,2113	0,2113	0,0000	0,0774	0,2113
C	0,1451	0,3601	0,1451	0,1451	0,0774	0,0000	0,1451
EME	0,0000	0,1200	0,0000	0,0000	0,2113	0,1451	0,0000
Results							
Standard Deviation of NM	0,3709	0,4499	0,3709	0,3709	0,3934	0,3171	0,3709
CRITIC Coefficients	0,1767	0,5707	0,1767	0,1767	0,5314	0,3228	0,1767
Criteria Weights	0,0829	**0,2677**	0,0829	0,0829	0,2493	0,1514	0,0829

In Table 1, the e-marketplace alternatives in Turkiye are compared according to the e-marketplace selection criteria according to the responses given by the ChatGPT application, an Artificial Intelligence Large Language Model (LLM). According to the results, Logistics (L) (26.77%) ranks first among the e-marketplace selection criteria of SMEs determined by CRITIC method. Design Features (DF) (24.93%) ranked second and Costs (C) (15.14%) ranked third. Financial Features (FF), Knowledge Transfer (KT), Commercial Process (CP) and E-Marketplace Ecosystem (8.29%) share the fourth and last place.

5. Conclusion

E-marketplaces are digital trading environments that enable SMEs to reach large markets and promote their products to a wider audience. These platforms enable SMEs to easily perform operations such as setting up an online store, logistics, payment transactions and customer relationship management. SMEs operating in e-marketplaces play an important economic and strategic role. Since many SMEs operate with limited resources, taking advantage of the opportunities offered by digitalization is one of the key factors that ensure the sustainability of these businesses.

CRITIC method, one of the MCDM Methods, was used to determine the level of importance of e-marketplace selection criteria in the selection of e-marketplaces by SMEs. The data used in the analyses were obtained from the responses given by ChatGPT, an AI application.

According to the results of the analysis, it is seen that Financial Features, Logistics, Knowledge Transfer, Commercial Process, Design Features, Costs and E-marketplace Ecosystem criteria are all effective in the e-marketplace selection of SMEs, although at different levels of importance.

The findings show that the most important criterion in the e-marketplace preferences of SMEs is the logistics criterion with a rate of 26.77%. The Design Features criterion ranked second with 24.93%, while the Costs criterion ranked third with 15.14%. The fourth and last place is shared by Financial Features, Knowledge Transfer, Commercial Process and E-Marketplace Ecosystem criteria with 8.29%.

References

Ali, S. (2024). A New Design Strategy to Increase Usability in E-Commerce Web Sites. International Design Journal, 14(3), 375–386. https://doi.org/10.21608/idj.2024.348739

Bin Illyas Tan, M. I., & bt Ibrahim, I. S. (2010). A Survey on Supply Chain Management and E-Commerce Technology Adoption among Logistics Service Providers in Johor. International Journal of Business, Human and Social Sciences, 4(5).

Büyüközkan, G. (2004). Multi-criteria decision making for e-marketplace selection. Internet Research, 14(2), 139–154. https://doi.org/10.1108/10662240410530853

Cano, J. A., Londoño-Pineda, A., Castro, M. F., Paz, H. B., Rodas, C., & Arias, T. (2022). A Bibliometric Analysis and Systematic Review on E-Marketplaces, Open Innovation, and Sustainability. Sustainability, 14(9), 5456. https://doi.org/10.3390/su14095456

Chang, Y.-W., Lin, K.-P., & Shen, C.-Y. (2019). Blockchain Technology for e-Marketplace. 2019 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops), 429–430. https://doi.org/10.1109/PERCOMW.2019.8730733

Diakoulaki, D., Mavrotas, G., & Papayannakis, L. (1995). Determining objective weights in multiple criteria problems: The critic method. Computers & Operations Research, 22(7), 763–770. https://doi.org/10.1016/0305-0548(94)00059-H

E-Commerce Information Platform. (2022). 2022 Statistics (Jan - Dec). Ministry of Trade of the Republic of Turkiye. https://www.eticaret.gov.tr/istatistikler

Emovon, I., & Oghenenyerovwho, O. S. (2020). Application of MCDM method in material selection for optimal design: A review. Results in Materials, 7, 100115. https://doi.org/10.1016/j.rinma.2020.100115

Gangwani, D., & Zhu, X. (2024). Modeling and prediction of business success: A survey. Artificial Intelligence Review, 57(2), 44. https://doi.org/10.1007/s10462-023-10664-4

Hendrikse, G. W., & Nilsson, J. (2023). Board Structure Variety in Cooperatives. In G. W. Hendrikse, G. Cliquet, I. Hajdini, A. Raha, & J. Windsperger (Eds.), Networks in International Business (pp. 13–23). Springer International Publishing. https://doi.org/10.1007/978-3-031-18134-4_2

Hoo, L. R., Kusumawati, Y. A., & Lasmy. (2024). Enhancing MSME Competitiveness Through E-Commerce. 2024 International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS), 370–375. https://doi.org/10.1109/ICIMCIS63449.2024.10957680

Hossain, Md. I., Azam, M. S., & Quaddus, M. (2021). Small firm entry to e-marketplace for market expansion and internationalization: A theoretical perspective. Journal of International Entrepreneurship, 19(4), 560–590. https://doi.org/10.1007/s10843-021-00297-5

Kazan, H., & Ozdemir, O. (2014). Financial Performance Assessment of Large Scale Conglomerates Via Topsis and Critic Methods. International Journal of Management and Sustainability, 3(4), 203–224. https://doi.org/10.18488/journal.11/2014.3.4/11.4.203.224

Nikoletos, G., Papoutsoglou, I., Spanos, G., Nizamis, A., Lalas, A., Votis, K., & Tzovaras, D. (2024). Digital marketplaces in European research landscape: A systematic literature review. Open Research Europe, 4, 223. https://doi.org/10.12688/openreseurope.18657.1

Pagnon, W. (2017). The 4th Industrial Revolution – A Smart Factory Implementation Guide. International Journal of Advanced Robotics and Automation, 2(2), 1–5. https://doi.org/10.15226/2473-3032/2/2/00123

Purwanto, E., Mohd, F., Long, Z. A., & Purnomo, S. (2024). Factors that Influence Sellers in Selection E-Marketplaces: A Systematic Literature Review. In A. Ismail, F. N. Zulkipli, H. S. Husin, & A. Öchsner (Eds.), Tech Horizons: Unveiling Future Technologies (pp. 15–22). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-63326-3_3

Sarıçiçek, C., Yüksek, C., Ayhan, B., Yılmaz, S., Göktepe, F., & Erol, Ş. (2022). E-MARKETPLACE PLATFORMS SECTOR REVIEW FINAL REPORT (p. 392). Turkish Competition Authority.Sharma, A. (2023). Role of E-Commerce in Reducing Operational Cost. International Journal of Multidisciplinary Research in Science, Engineering, Technology & Management (IJMRSETM), 10(8).

Stockdale, R., & Standing, C. (2002). A framework for the selection of electronic marketplaces: A content analysis approach. Internet Research, 12(3), 221–234. https://doi.org/10.1108/10662240210430900

Stockdale, R., & Standing, C. (2004). Benefits and barriers of electronic marketplace participation: An SME perspective. Journal of Enterprise Information Management, 17(4), 301–311. https://doi.org/10.1108/17410390410548715

Susanti, D. O. (2022). THE ELECTRONIC MARKET (MARKETPLACE) ON ELECTRONIC TRADE (E-COMMERCE) IN INDONESIA. NOTARIIL Jurnal Kenotariatan, 7(1), 24–31. https://doi.org/10.22225/jn.7.1.2022.24-31

Sutherland, K., Mulcahy, R., Burgess, J., Lawley, M., & Fox, D. (2024). Digital Marketing Outsourcing Relationships Between SMEs and Service Providers: An Agency Theory Perspective. Australasian Marketing Journal, 14413582241303978. https://doi.org/10.1177/14413582241303978

Zavadskas, E. K., & Turskis, Z. (2011). MULTIPLE CRITERIA DECISION MAKING (MCDM) METHODS IN ECONOMICS: AN OVERVIEW / DAUGIATIKSLIAI SPRENDIMŲ PRIĖMIMO METODAI EKONOMIKOJE: APŽVALGA. Technological and Economic Development of Economy, 17(2), 397–427. https://doi.org/10.3846/20294913.2011.593291

Zheng, Q., Li, S., Han, Y., Dong, J., Yan, L., & Qin, J. (2009). Security Technologies in E-commerce. In Q. Zheng (Ed.), Introduction to E-commerce (pp. 135–168). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-49645-8_4