

EVALUATING ONLINE JOB SEARCH PLATFORMS WITH ANALYTICAL HIERARCHY PROCESS

Aygülen KAYAHAN KARAKUL
İzmir Kâtip Çelebi University, Turkey
aygulen.kayahan@ikcu.edu.tr
<https://orcid.org/0000-0002-8310-1709>

Ganime ÇALIŞKAN
Manisa Celal Bayar University, Turkey
caliskanganime@gmail.com
<https://orcid.org/0009-0004-8536-9903>

<i>Atf</i>	KAYAHAN KARAKUL, A.; ÇALIŞKAN, G. (2025). EVALUATING ON-LINE JOB SEARCH PLATFORMS WITH ANALYTICAL HIERARCHY PROCESS. <i>İstanbul Aydın Üniversitesi Sosyal Bilimler Dergisi</i> , 17(4), 487-507.
------------	---

ABSTRACT

The aim of this study is to evaluate and rank the most used online job search platforms in Türkiye by using the Analytic Hierarchy Process (AHP), one of the widely applied Multicriteria Decision Making (MCDM) methods. The research addresses the problem of platform selection for job seekers, employers, and policymakers in the context of increasing unemployment and the digitalization of job search processes. With the transition of employment-related activities to online platforms, determining the most effective channels becomes crucial. The study formulates the decision problem based on four main criteria derived from the literature on social media and digital platform selection. The alternatives evaluated are LinkedIn, Kariyer.net, İŞKURweb, and Instagram. According to the results of the research, LinkedIn ranks first (48%), followed by Kariyer.net (35%), İŞKURweb (9%), and Instagram (7%). These findings aim to provide useful insights for stakeholders in selecting the most efficient online job search platforms.

Keywords: *Multicriteria Decision Making, Analytical Hierarchy Process, Online Job Search Platforms.*

ÇEVİRİMİÇİ İŞ ARAMA PLATFORMLARININ ANALİTİK HİYERARŞİ PROSESİ İLE DEĞERLENDİRİLMESİ

ÖZ

Bu çalışmanın amacı, Türkiye’de en yaygın kullanılan çevrim içi iş arama platformlarını Analitik Hiyerarşi Süreci (AHP) yöntemiyle değerlendirerek sıralamaktır. Çok Kriterli Karar Verme (ÇKKV) yöntemlerinden biri olan AHP, karar vericilerin yargılarına dayalı olarak alternatifler arasında önceliklendirme yapılmasına olanak tanımaktadır. Araştırma, artan işsizlik ve iş arama süreçlerinin dijitalleşmesi bağlamında iş arayanlar, işverenler ve politika yapıcılar için en uygun platformun seçimi problemini ele almaktadır. İstihdam faaliyetlerinin çevrim içi platformlara kaymasıyla birlikte, en etkili kanalların belirlenmesi önemli hale gelmiştir. Karar problemi, sosyal medya ve dijital platform seçimi üzerine yapılan literatürden uyarlanan dört ana kritere göre yapılandırılmıştır. Değerlendirilen alternatifler; LinkedIn, Kariyer.net, İŞKURweb ve Instagram’dır. Araştırmanın sonuçlarına göre LinkedIn birinci sırada yer almıştır (%48), ardından Kariyer.net (%35), İŞKURweb (%9) ve Instagram (%7) gelmektedir. Bu bulgular, çevrim içi iş arama platformlarının seçiminde paydaşlara yol gösterici bilgiler sunmayı amaçlamaktadır.

Anahtar Kelimeler: *Çok Kriterli Karar Verme, Analitik Hiyerarşi Proses, Çevrimiçi İş Arama Platformları.*

INTRODUCTION

The increasing digitalization of labor markets has transformed individuals the ways of searching for jobs and employers seek candidates. However, the growing number of online platforms has created a new challenge: determining which platforms are the most effective, reliable, and user-friendly for job-related purposes. In Türkiye, there is limited research that systematically evaluates these platforms using scientific decision-making methods. This lack of structured analysis makes it difficult for stakeholders, particularly job seekers and policymakers, to make informed choices. Addressing this gap, the present study aims to evaluate the most used platforms through a multi-criteria decision-making approach.

Unemployment is one of the major socio-economic challenges for developing countries. It negatively affects economic growth, productivity,

and social stability, while also leading to psychological and financial distress for individuals (Yüksel, 2005; Osmani et al., 2021). Various factors such as rising labor costs, reduced industrial capacity, and high public expenditures contribute to increased unemployment rates (Murphy et al., 1997; Smitha and Zoegaa, 2009). Although the official unemployment rates in Türkiye have shown a downward trend in recent years, youth unemployment remains considerably high (TÜİK 2024a, TÜİK 2024b). Moreover, the exclusion of discouraged individuals who are no longer actively seeking employment may result in an underestimation of the actual unemployment rate (Stephen et al., 1999; Murphy et al., 1997).

In response to this issue, enhancing the efficiency of employment channels has become increasingly important. With the advancement of internet technologies, online job search platforms and social media have gained significance alongside traditional methods. The effectiveness of these platforms plays a critical role in addressing unemployment. Selecting the most efficient online job search channels has thus become a decision-making problem involving multiple and often intangible criteria. This study aims to rank the most widely used online job search platforms in Türkiye by applying the Analytical Hierarchy Process (AHP), a widely accepted MCDM method suitable for addressing such complex and subjective problems (Barghash et al., 2017). The unemployment rates for youth and 15-24 years are given in Table 1.

Table 1.

Unemployment Rates for Youth

Unemployment Rates for over 15 years old				
2019	2020	2021	2022	2023
13.7	13.1	12.0	10.4	9.4
Unemployment Rates for over 15-24 years				
2019	2020	2021	2022	2023
25.2	24.9	22.6	19.4	17.4

Sources: TÜİK 2024a, TÜİK 2024b

It can be seen from Table 1 that the unemployment rates decline in Türkiye from 2019 up to 2023 but still the ratios are high. According to the regularly published “Turkish Labor Market Survey” by the Turkish Employment Agency (İŞKUR), demand-driven job search channels for open positions at workplaces are examined in detail across various categories such as

sector, occupation, gender, and education level. Analyses conducted over the years reveal that, among job search channels, applications through İŞKUR as well as passive job search methods involving relatives, spouses, and acquaintances are the most frequently used. Additionally, comparisons between supply-side job search channel data published by the Turkish Statistical Institute (TÜİK) up to 2015 and reports from İŞKUR are considered significant. The primary aim of this study is to identify which channels are more effective for employers in filling open positions, based on both supply and demand-side labor market research. Furthermore, the study seeks to evaluate whether job search channels demonstrate the expected level of formality and to assess İŞKUR's effectiveness in this regard (Tutar, 2023).

ONLINE JOB SEARCH PLATFORMS

“Job search via internet/social media”, which is one of the most popular job search platforms today, has become more widely used thanks to the developing internet technologies and the increasing presence of social media in people's daily lives (Campos et al., 2017). The virtual environment called social media is a social virtual network that brings two parties as unemployed and employer together and increases the interaction between them. The use of these virtual networks has also diversified the ways of using social media due to the shaping of people's habits of using social media and the high amount of time spent on social media. In addition to developing friendships on social media, people can establish social networks where they can promote their ideas, products and belongings (Vural & Bat, 2010) as well as searching for jobs or employees. Today, many people actively use social media and even spend a significant portion of their daily lives there. Using traditional job search methods in the process of finding a job increases the costs that job seekers must bear while job seeking, such as finding open jobs, making applications, and going to interviews (Tutar, 2015). Doing these through online job search platforms, on the other hand, significantly reduces these costs for the unemployed during the job search/finding phase. Both job seekers and employers participate in the same recruitment ritual. Therefore, their perspectives are different. For employers, for example, the meaning of recruitment is to determine who can participate in predetermined conditions of sociability. This is the other part of searching for employees in the online platforms. Today, recruiters of various firms find employees for their firms by reviewing resumes on various online job boards (Gerson, 2022). The use of online job search

platforms differs between large-scale firms and small-scale firms, and the selection of employees from online platforms is more common in large-scale firms (Campos et al., 2017).

Today, with the increase in the education level of societies, the usage level of online channels has increased (Karaoglu et al., 2021). Online job search platforms also exhibit diversity among themselves. *LinkedIn*, *kariyer.net* applications focus on employers and job seekers (Boyd & Ellison, 2008), while *Instagram* is open to a wider range of users. The proliferation of online job search platforms not only provides opportunities for job seekers but also helps to speed up the process of finding a job in times of high unemployment rates. Social media stands out as a tool that has the potential to accelerate job search processes and reduce unemployment by increasing young people's access to job opportunities (Kelleci & Türk, 2016). The increase and effective use of online platforms that can bring together job seekers and employers accelerates the job search and recruitment processes for both parties.

job search platforms are both tools used by the unemployed and actively used by employers in the process of finding employees (Tatar, 2023). Also, they allow users to express and distribute their information efficiently and effectively (Laukkarinen, 2023). The security of individual information is another important concept for the users of online platforms. Sayed Ahmed et al. (2024) improved some machine learning techniques which detect the fraud and cyberthreats in the online job searching area and consequently enhanced the user's security. There are also too much research that focuses on the cyber security of online platforms that will thrive with the improvement of artificial intelligence methods. So, the security of the online platforms and users will be more provided in the future.

Suvankulov & Lau (2012) indicated that in the mixed pool of employers and job seekers, human resources management units that carry out recruitment conduct research on other social networks used by candidates and make a positive or negative judgment about the candidate by examining the content shared through channels such as Twitter(X) and Facebook (Kluemper & Wang, 2016). In this way, using one of the social media channels for candidates provides advantages for both parties (Gaspareniene et al., 2021). Thus, the posts made by job seekers on social media channels as well as online job search platforms gain importance in the recruitment process, so it is more useful for employers to find employees in the online

job platforms since they can have more information from the social media sharing of job seekers, directly or with the linkages.

Although there are blue-collar and white-collar distinctions among employees in business life, there are similarities between these different employee groups in the use of online job search platforms. Blue-collar workers who work in jobs that require physical labor, that is, manual labor, and white-collar workers who mostly perform jobs that require mental labor frequently use online job search platforms, even for different types of jobs (Cowan & Bochantin, 2011). For example, application costs and time utilization have decreased when an unemployed person uses online job seeking platforms. So, improving the usage of online job search channels will have a positive effect on individuals' lives as well as the economy.

LITERATURE REVIEW

It is a relatively new subject that emerged with the rising of the online platforms and social media in daily life in a few years in the digitalization era that has emerged in the recent years. There is no other research in the literature on the solution of the ranking problem of online job search channels using Multi-Criteria Decision Making (MCDM) methods. For this reason, the literature review has been held from a broader framework including social media channel selection and job selection with the MCDM methods.

Kwathani et al. (2015) used fuzzy AHP and TOPSIS for ranking the internet information search channels of personal ones, market dominated ones, neutral ones and experimental sources by using six criteria. They used the criteria of information content, design, access and transmission speed, user friendliness of search structure, update pace and perceived time.

Oralhan (2019) used Fuzzy DEMATEL to solve the problem of determining the importance of criteria that affect the selection of social media channels for businesses. She constructed a model for businesses which wants to give advertisements to social media channels consisting of the criteria.

Sudipa et al. (2020) used PROMETHEE II technique for the selection of social media channels for businesses in Indonesia. In their study alternatives are determined as *Facebook, Instagram, Line and WhatsApp*. They made a ranking of those alternatives under 5 criteria.

Rahman and Asadujjaman (2021) used TOPSIS method to select a job in Industrial Production Engineering with 11 criteria within 13 working sectors.

Saçan & Eren (2021) used AHP, ANP, PROMETHEE and TOPSIS methods to solve the problem of selecting a social media channel for a bank advertisement in Turkey. They determined 4 alternatives, 4 criteria and 12 sub-criteria for the selection of the social media channel to be advertised to organized for the sale of credit cards to customers between the ages of 18-25.

Akdeniz (2022) analyzed the criteria determining the social media addiction of housewives living in Bilecik province of Türkiye using DEMATEL method. In his study, he determined 15 sub-criteria under three main criteria. The relationships between the criteria of the study were determined by the DEMATEL method.

Demirtaş (2022) analyzed the participation of rectors of 129 public and 7 private universities in Turkey in social media platforms (*Twitter(X)*, *Instagram* and *Facebook*) and their habits of using these platforms. In the study, the ranking of university presidents was carried out by using equally weighted criteria such as the number of followers, the number of posts, the number of likes, and the average number of likes, using the MABAC method.

Türkal (2023) examined the extent to which 78 private (foundation) universities in Turkey use social media for access and interaction and how to evaluate this use in the context of corporate communication strategy. The researcher ranked universities with the TOPSIS method according to the numerical data obtained from the social media accounts of the private universities.

Janakipriya et al (2024) used TOPSIS for an online business to select an appropriate social media channel. According to the results *Facebook* is at the top (0.8122), followed by *Instagram* (0.7896), *Telegram* (0.7424), *YouTube* (0.7397), *Snapchat* (0.6655), *Discord* (0.5629), *LinkedIn* (0.5226), *Quora* (0.4916), *Pinterest* (0.4600), *WhatsApp* (0.4124) and *Twitter*(0.2556) in the descending order.

Nguyen and Pham (2025) used an extension of TOPSIS method for the

selection of online marketing channels to be helpful to the businesses to construct or improve their marketing strategies.

The literature has been carefully examined via the criteria that can be transformed from selection of social media channels to this research; the ranking of online job searching platforms has been done.

PURPOSE OF THE STUDY

The aim of the study is to construct a ranking between *LinkedIn*, *Kariyer.net*, *Instagram*, *İŞKURweb*, which are the most well-known online job search platforms for white-collar workers, and which are determined as the alternatives of this research. The ranking was based on the criteria adapted after the literature review on selecting social media channels.

METHOD AND MATERIAL

The Analytic Hierarchy Process (AHP) is a widely recognized and rational approach for structuring multi-criteria decision-making problems and selecting the most appropriate alternative (Barghash et al., 2017). In this study, four expert decision makers participated in the evaluation process. Although their expertise provides valuable insights, the limited number of decision makers represents a methodological limitation that may affect the reliability and generalizability of the results. Future research should consider involving a larger and more diverse group of decision makers to enhance the robustness and representativeness of findings.

Multi-Criteria Decision-Making (MCDM) methods are widely used for the systematic evaluation of alternatives in various fields. These methods are particularly effective in complex decision-making areas such as human resource management. For instance, the selection process of metro drivers can be evaluated within this context. In sectors like transportation, where human life is directly at stake, personnel selection holds critical importance, far beyond considerations such as cost and time. Therefore, the selection of appropriate personnel should be approached as a multi-criteria decision-making problem. In one study, the recruitment process of metro drivers for a metropolitan municipality was analyzed, representing one of the first applications of its kind in the literature. The Analytic Hierarchy Process (AHP) was initially used to determine the weights of the criteria, and the candidates were subsequently ranked using Grey Relational Analysis (GRA) and the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). This comprehensive approach allowed for

the integration of multiple decision-making techniques (Özcan, İnan, & Korkusuz, 2020).

The Analytic Hierarchy Process (AHP) is one of the most widely used techniques among Multi-Criteria Decision-Making (MCDM) methods. Its ability to simultaneously evaluate both qualitative and quantitative data allows it to offer effective solutions to complex decision-making problems. AHP is particularly preferred in diverse fields such as human resource management, supply chain management, transportation, education, and public administration due to its capacity to transform subjective judgments of decision-makers into a systematic and consistent structure. Literature reviews on the applications of AHP indicate that the method is extensively utilized not only in academic research but also in practical decision-making contexts. In one comprehensive study, 150 AHP applications were reviewed, and 27 of them were analyzed in detail, highlighting the method's contributions to the decision-making process. These findings demonstrate that AHP provides a robust foundation for decision-making, offering a more comprehensive and structured analysis compared to alternative methods (Vaidya & Kumar, 2006).

Defining the decision problem: Alternatives, i.e. decision points and the criteria affecting these points are identified. When the number of alternatives is m and the number of criteria is n , this forms the dimension of the decision problem. This problem can be modeled by a matrix of size $m \times n$. This matrix is given in Equation 1.

$$A = a_{ij} = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ a_{m1} & a_{m2} & \vdots & a_{mn} \end{bmatrix} \quad (1)$$

Creation of the Matrix Showing the Comparison Between Factors: Decision Matrix A given in the Equation 1 is created with the criteria both in rows and columns. The diagonal values of this matrix are 1. For comparisons, Thomas Saaty's importance scale in Table 2 can be used. This scale scores the factors with a number value between 1 and 9. The main feature of this scale is that it allows for pairwise comparisons of intangible quantities that cannot be seen or handled. For this reason, this method is also called the pairwise comparison scale (Saaty, 1987).

Table 2.
Importance Scale

Importance Values Value Definitions	Importance Values Value Definitions
1	Both factors are of equal importance
3	Factor 1 is more important than Factor 2
5	Factor 1 is more important than Factor 2
7	Factor 1 has a very strong importance compared to Factor 2
9	Factor 1 has absolute superior importance compared to Factor 2
2,4,6,8	Intermediate values

Adopted from Saaty,1987.

In the Decision Matrix, created with the help of the pairwise comparison scale, the values above the diagonal are calculated as obtained from the table and the values below are calculated according to Equation 2 which are the multiplicative reciprocal of the above ones.

$$a_{ji} = \frac{1}{a_{ij}} \tag{2}$$

Determining The Importance Percentage of Criteria

Based on the values in Decision Matrix A, vector B is created for each factor using Equation 3 as in Equation 4. B vectors are added together to form matrix C as in Equation 5. By calculating the arithmetic mean of each row of the matrix C, the w_i vector is obtained as in Equation 6. The vector shows the degree of importance of each criterion.

$$b_{ij} = \frac{a_{ij}}{\sum_{i=1}^n a_{ij}} \tag{3}$$

$$B_i = \begin{bmatrix} b_{11} \\ b_{21} \\ \dots \\ b_{n1} \end{bmatrix} \tag{4}$$

$$C = \begin{bmatrix} b_{11} & b_{12} & \dots & b_{1n} \\ b_{21} & b_{22} & \dots & b_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ b_{n1} & b_{n2} & \dots & b_{nn} \end{bmatrix} \tag{5}$$

$$w_i = \frac{\sum_{i=1}^n c_i}{n} \tag{6}$$

Calculating the Percentage Values of the Alternatives for Each Criterion: The algorithm described above is applied for each alternative under each criterion. The mxm matrix created in this way is multiplied by

the weight vector W_i to obtain the evaluation scores for each alternative (İnel & Türker, 2016).

Consistency Analysis: One of the advantages of the AHP method is that it includes an algorithm to check whether there is an inconsistency during the completion of the scale. If the Consistency Ratio (CR) value obtained by consistency analysis is less than 0.10, the matrix obtained after the filled-in scale is consistent. The CR is calculated using Equations 7, 8, 9 and Table 3. Here, the CI represents the Consistency Index, and the RI represents the Random Index obtained from Table 3.

$$\lambda_{max} = \frac{1}{n} \sum_{i=1}^n \frac{\sum_{j=1}^n a_{ij} w_j}{w_i} \tag{7}$$

$$CI = (\lambda_{max} - n) / (n - 1) \tag{8}$$

$$CR = (CI) / (RI) \tag{9}$$

Table 3.
Random Index

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RI	0	0	0,58	0,90	1,12	1,24	1,32	1,41	1,45	1,49	1,51	1,53	1,56	1,57	1,59

The AHP algorithm can be used to determine the compromise decision of more than one decision maker. The Decision makers' answers on the pairwise comparison scale can be combined with different combining operators such as arithmetic mean or geometric mean. The final ranking represents the compromise solutions of decision makers.

Data Set

In the digitalizing and rapidly developing world, the internet shows itself in every aspect of society. Especially in the business world, online job search platforms have become frequently used within the scope of the study of social media channels. For the ranking of alternatives via the determined criteria the Decision Makers first signed the Informed Voluntary Consent Forms which provides the protection of ethical values.

The online job search channels that were ranked in the study are *LinkedIn*, *Kariyer.net*, *Instagram* and *İŞKURweb* Brief descriptions of these channels are given below:

A: LinkedIn is a business-oriented platform that helps people to expand their professional network. Here they can create a profile, write detailed information about themselves, share their experiences and skills in their account, and communicate with employers.

B: Kariyer.net is one of Turkey's leading online job platforms. Companies publish their job postings here. Users can create CVs, search for current jobs and apply for them. In other words, it is an online job search platform used by both job seekers and employers.

C: Instagram is one of the social media platforms that also function as a business platform, providing a space where users can share content and announce various job opportunities through stories or posts.

D: İŞKURweb is website of public institution under the Ministry of Labor and Social Security that regulates the labor market and aims to reduce unemployment. İŞKUR provides various supports such as bringing job seekers together with the employers, providing unemployment insurances, organizing vocational training and development programs, and aiming to increase employment.

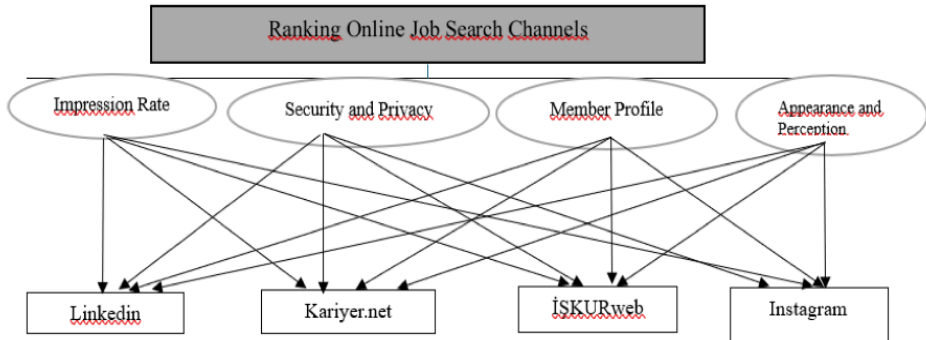
After determination of the alternatives the criteria of the research has been determined via the literature on the selection/ranking or evaluation of social media channels or websites. The criteria, codes and explanations used in the study are given in Table 4.

Table 4.
Codes and Explanations of the Criteria

Code	Criteria	Description
K1	Impression Rate	It refers to the widespread use of the platform and includes information such as click-through rates and the number of registered members (Ngai, 2003; Oralhan, 2019)
K2	Security and Privacy	It means ensuring data security of users in the online environment (Sayed Ahmed et al, 2024)
K3	Member profile	It shows how well users match the profile of the job seeker in terms of age and education level (Ngai, 2003) consisting of other information content (Khatwani, 2015)
K4	Appearance and Perception	It means to have a good design, being user friendly (Ngai, 2003, Khatwani, 2015) consisting of access and transmission speed.

As can be seen in Table 4, the studies in literature were taken into consideration while determining the criteria in the study. The AHP has a unique hierarchical structure. The adaptation of this structure to the criteria and alternatives in this study is given in Figure 1.

Figure 1.
Hierarchical Structure of the Problem



ANALYSIS AND FINDINGS

The Saaty scale was applied to four Decision Makers who had used online job search platforms. The data obtained from the Decision Makers (DMs) were subjected to Consistency Analysis. The results of the Consistency Analysis are given in Table 5.

Table 5.
Consistency Analysis Results

	Consistency Index (CI)	Consistency Ratio (CR)
DM1	0.05579	0.061988
DM2	0.02320	0.025778
DM3	0.03949	0.043876
DM4	0.05823	0.064704

According to the results given in Table 5, Consistency Ratios for all DMs are less than the upper limit value of 0.10, so the answers are consistent. In the next stage, the opinions of the Decision Makers regarding the criteria were combined with the geometric mean operator since there is no lost value of judgments when combined with this operator. The combined Decision Matrix is given in Table 6.

Table 6.
Combined Pairwise Comparison Matrix for Criteria

	Impression Rate	Security and Privacy	Member profile	Appearance and Perception
Impression Rate	1.00	1.61	2.59	4.88
Security and privacy	0.62	1.00	1.24	5.44
Member profile	0.39	0.81	1.00	2.93
Appearance and Perception	0.20	0.18	0.34	1.00

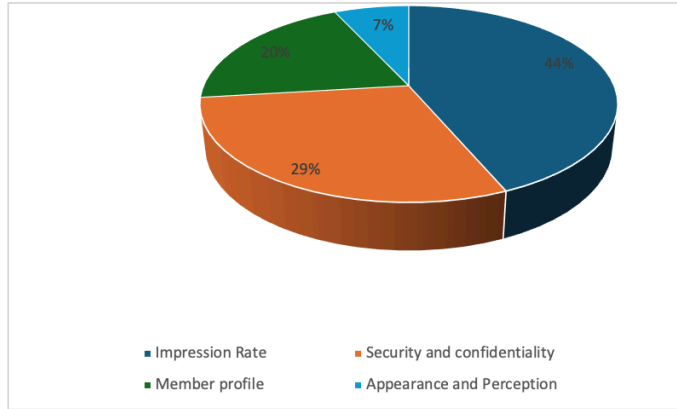
In the next stage, the AHP algorithm given in Equations 3-6 was applied. The resulting normalized decision matrix and criteria weights are given in Table 7.

Table 7.
Normalized Decision Matrix

	Impression Rate	Security and privacy	Member profile	Appearance and Perception	Weights
Impression Rate	0.45	0.45	0.50	0.34	0.44
Security and privacy	0.28	0.28	0.24	0.38	0.29
Member profile	0.18	0.23	0.19	0.21	0.20
Appearance and Perception	0.09	0.05	0.07	0.07	0.07

As seen in Table 7, the most effective criterion was found to be Impression Rate with 44% followed by Security and Privacy with 29%, Member Profile with 20% and the last criterion was Appearance and Perception with 7%. The pie distribution graph of the criteria weights is given in Figure 2.

Figure 2.
Weight Distributions of the Criteria



The Pairwise Comparison Matrices for the alternatives combined with the geometric mean operator, are given in Table 8.

Table 8.
Combined Decision Matrices

Impression Rate				
	A	B	C	D
A	1.00	1.97	6.85	6.48
B	0.51	1.00	4.56	5.92
C	0.15	0.22	1.00	0.96
D	0.15	0.17	1.05	1.00
Security and Privacy				
	A	B	C	D
A	1.00	1.16	6.65	1.99
B	0.86	1.00	5.54	4.36
C	0.15	0.18	1.00	0.61
D	0.50	0.23	1.63	1.00
Member Profile				
	A	B	C	D
A	1.00	2.69	7.30	3.48
B	0.37	1.00	6.03	5.10
C	0.14	0.17	1.00	0.85
D	0.29	0.18	1.17	1.00

Appearance and Perception				
	A	B	C	D
A	1.00	5.73	4.82	5.54
B	0.17	1.00	4.24	4.79
C	0.21	0.24	1.00	1.51
D	0.18	0.21	0.66	1.00

In the next stage, the data in Table 8 were subjected to the normalization process with the formula given in Equation 3 and then the relative weights of each alternative according to each criterion were calculated using Equations 4, 5 and 6. The results are given in Table 9.

Table 9.
Normalized Decision Matrix and Relative Weights of Alternatives

Impression Rate					
	A	B	C	D	Relative Weights
A	0.55	0.59	0.51	0.45	0.52
B	0.28	0.30	0.34	0.41	0.33
C	0.08	0.07	0.07	0.07	0.07
D	0.08	0.05	0.08	0.07	0.07
Security and Privacy					
	A	B	C	D	Relative Weights
A	0.40	0.45	0.45	0.25	0.39
B	0.34	0.39	0.37	0.55	0.41
C	0.06	0.07	0.07	0.08	0.07
D	0.20	0.09	0.11	0.13	0.13
Member Profile					
	A	B	C	D	Relative Weights
A	0.56	0.67	0.47	0.33	0.51
B	0.21	0.25	0.39	0.49	0.33
C	0.08	0.04	0.06	0.08	0.07
D	0.16	0.04	0.08	0.10	0.09
Appearance and Perception					
	A	B	C	D	Relative Weights
A	0.64	0.80	0.45	0.43	0.58

B	0.11	0.14	0.40	0.37	0.25
C	0.13	0.03	0.09	0.12	0.09
D	0.12	0.03	0.06	0.08	0.07

The final ranking of the alternatives was obtained by multiplying the relative weights of the alternatives with the weights of the criteria and the results are given in Table 10.

Table 10.

Result Ranks and Importance Weights of Alternatives

Alternative	Weight	Rank
A: LinkedIn	0.48	1
B: Kariyer.net	0.35	2
C: İŞKUR	0.09	3
D: Instagram	0.07	4

According to the results given in Table 10, LinkedIn ranked first with 48%, Kariyer net ranked second with 35%, İŞKURweb ranked third with 9% and Instagram ranked last with 7%. According to the ranking results, LinkedIn is the first choice as an active job search channel. Instagram is in the last choice although it contains job advertisements, this may be caused by its low security and privacy.

CONCLUSION

This study contributes to the existing literature by providing a novel and systematic evaluation of online job search platforms in Turkey using the Analytic Hierarchy Process (AHP), a widely recognized Multicriteria Decision-Making (MCDM) technique. Unlike prior studies that often focus on individual platform features or descriptive analyses, this research integrates multiple qualitative and quantitative criteria derived from social media channel selection literature to construct a comprehensive decision model. The development and validation of this model, supported by consistency checks of decision-makers' judgments, offer a robust methodological framework for platform ranking in the context of digital employment. Moreover, by focusing on platforms relevant to the Turkish labor market, the study fills a regional research gap and provides actionable insights for policymakers, job seekers, and employers. This contribution is particularly significant given the accelerating digital transformation of

job search processes and the increasing need for evidence-based policy interventions to tackle unemployment. The findings not only enrich academic understanding but also have practical implications for enhancing labor market efficiency through targeted support of effective online job platforms.

REFERENCES

- Akdeniz, D. (2022). Sosyal medya bağımlılığının DEMATEL yöntemiyle incelenmesi: ev kadınları örneği [Examination of social media addiction by DEMATEL method: the example of housewives]. Unpublished Master Thesis: Bilecik Şeyh Edebali University, Post Graduate Education Institute.
- Boyd, D. M., & Ellison, N. (2008). Social network sites: definition, history and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 214-224.
- Barghash, M. A., Al-Qatawneh, L., Ramadan, S., & Dababneh, A. (2017). Analytical hierarchy process applied to supermarket layout selection. *Journal of Applied Research on Industrial Engineering*, Vol 4(4), pp. 215-226.
- Campos, R., Arrazola, M., & Hevia, J. d. (2017). Finding the right employee online: determinants of internet recruitment in Spanish firms. *Applied Economics*, 50 (1), 79-93.
- Cowan, R., & Bochantin, J. E. (2011). Blue-collar employees 'work/life metaphors tough similarities, imbalance, separation and opposition. *Qualitative Research Reports in Communication*, 12(1), 19-26.
- Demirtaş, M. C. (2022). Üniversite rektörlerinin sosyal medya kullanımlarının MABAC yöntemi ile değerlendirilmesi [Evaluation of university rectors' use of social media by MABAC Method]. *Marmara University Öneri Journal*, Vol 17(57), pp.102-147.
- Gaspareniene, L., Matuliene, S., & Zemaitis, E. (2021). Opportunities of job search through social media platforms and its development in Lithuania. *Business: Theory and Practice*, 22 (2), pp. 330- 339.
- Gerson, I. (2022). Genres are the drive belts of the job market. *Journal of Cultural Economy*, Cilt 15(6), pp. 768- 781.
- İnel, M. N., & Türker, M. V. (2016). Ulusal inovasyon performansının ölçümü için çok nitelikli karar verme teknikleri ile bir model denemesi

[A model essay for measuring national innovation performance with multi attribute decision making methods] *Marmara University Journal of Economics and Administrative Sciences*, Vol 38(2), pp. 147-166.

Janakipriya, K., Raja, S., Gada, R., Joyson, A.M., Ravindran, D. (2024). Optimizing social media selection for online businesses: a TOPSIS method approach In: El Khoury, R. (eds) *Anticipating Future Business Trends: Navigating Artificial Intelligence Innovations. Studies in Systems, Decision and Control*, Vol 535. Springer, Cham

Karaoglu, G., Hargittai, E., & Nguyen, M. H. (2021). Inequality in online job searching in the age of social media. *Information, Communication & Society*, Vol 25(4), 1-19.

Kelleci, S. Ü., & Türk, Z. (2016). Genç işsizliğin incelenmesi: OECD ülkeleri ve Türkiye karşılaştırması. [Investigation of youth unemployment: comparison of OECD countries and Türkiye] *Hak-İş International Journal of Labor and Society*, Vol 5(13), pp. 10-25.

Kluemper, D. H., & Wang, A. M. (2016). Social media use in HRM. *Research in Personnel and Human Resources Management*, Vol 34, pp.153-207.

Khatwani, G., Anand, O., Kumar kar, A. (2015). Evaluating internet information search channels using hybrid MCDM technique. In: Panigrahi, B., Suganthan, P., Das, S. (eds) *Swarm, Evolutionary, and Memetic Computing. SEMCCO 2014. Lecture Notes in Computer Science*, Vol 8947. Springer, Cham.

Laukkarinen, M. (2023). Social media as a place to see and be seen: exploring factors affecting job attainment via social media. *The Information Society*, Vol. 39(4), pp.199-212.

Murphy, K.M., Topel, R. (1997). Unemployment and nonemployment. *The American Economic Review*, Vol. 87(2), Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association, pp. 295-300.

Nguyen, PAH., Pham, K. (2025). Evaluating and choosing the online marketing channels by interval-valued neutrosophic TOPSIS approach. In: Thuan, N.H., Duy, DP., Le, HS., Phan, T.Q. (eds) *Information Systems Research in Vietnam*, Volume 3. Springer,

Oralhan, B. (2019). Sosyal medya platformu seçimini etkileyen kriter

ağırlıklarının bulanık DEMATEL yöntemiyle belirlenmesi [Determining criteria weights that affect social media platform selection with fuzzy DEMATEL approach]. *IBAD Journal of Social Sciences*. November 2019 Special Issue, pp. 408-420.

Osmani, A. G., Islam, R., Rahman, H., & Al-Amin. (2021). Incidence and determinants of educated-youth unemployment in rajshahi city of Bangladesh. *Economic Insights Trends and Challenges*, 73-82.

Özcan, İ., İnan, U. H., & Korkusuz, A. Y. (2020). Çok Kriterli Karar Verme Yöntemleriyle Metro Sürücüsü Seçimi. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi*, 1185-1202.

Rahman M., Asadujjaman, M.D. (2021). Multi-criteria decision making for job selection. 2021 International Conference on Decision Aid Sciences and Application (DASA). Sakheer, Bahrain, pp. 152-156.

Saaty, R.W. (1987). The analytic hierarchy process-what it is and how it is used. *Mathematical Modelling*, 9, Issues 3–5, 161-176.

Saçan, B. C., & Eren, T. (2021). Sosyal medya reklam platformu seçimi: çok ölçütlü karar verme yöntemleri ile bir uygulama [Social media advertising platform selection: an application with multicriteria decision making methods]. *Journal of Turkish Operations Management*. Vol 5(2), pp. 721- 738.

Sayed Ahmed, H.I., Naiem, S.A., Elkabbany, G.F., Abdallah, M.S., Cho, Y.I. (2024). Securing online job platforms: a distributed framework for combating employment fraud in the digital landscape. *International Journal of Safety and Security Engineering*, Vol. 14 (6), pp. 1647-1665.

Şahin, L. (2007). Türkiye işgücü piyasasının yapısal özellikleri ve işsizlik sorunu [Structural characteristics of the turkish labor market and the unemployment problem]. *Journal of Social Policy Conferences*, Vol 53, pp. 543-575.

Smith, R. & Zoega,G (2009). Keynes, investment, unemployment and expectations, *International Review of Applied Economics*, 23(4), 427-444.

Sudipa, G.I, Astria, C., Irnanda,K.F., Windarto, A.P., Daulay, N.K., Suharso & W., Wijaya, H.O.L. (2020). Application of MCDM using PROMETHEE II technique in the case of social media selection for online businesses. *IOP Conf. Series: Materials Science and Engineering* 835, 012059

Suvankulov, F., & Lau, M. C. (2012). Job search on the internet and its outcome. *Internet Research* Vol. 22, No 3, 298- 317.

Tatar, M. (2023). İşsizlik ile mücadelede iş arama kanallarının etkinliği: İŞKUR örneği [effectiveness of job search channels in fighting unemployment: İŞKUR example] *Eurasian Journal of Social and Economic Research (EJSER)*, Vol 10(3), pp. 1-12.

Tutar, K. (2023). Türkiye İşgücü Piyasasında İş Arama Kanallarının Niteliği. *Sosyal Siyaset Konferansları Dergisi*, 143-153.

TÜİK. (2024b). TÜİK işgücü istatistikleri [Laborforce Statistics]. downloaded from official website of Turkish Statistics Institute: <https://data.tuik.gov.tr/Kategori/GetKategori?p=istihdam-issizlik-ve-ucret-108&dil=1> on 05.05.2025.

Türkal, İ. (2023). Vakıf üniversitelerinin sosyal medya kullanımlarının TOPSIS yöntemi ile değerlendirilmesi [Evaluation of foundation universities' social media usage through TOPSIS method]. *Gümüşhane University e-Journal of Faculty of Communication*, Vol 11(2), pp. 1783-1815.

Vaidya, O. S., & Kumar, S. (2006). Analytic hierarchy process: An overview of applications. *European Journal of Operational Research*, 1-29.

Vural, Z. B. & Bat, M. (2010). Yeni bir iletişim ortamı olarak sosyal medya : ege üniversitesi iletişim fakültesine yönelik bir araştırma [Social media as a new communication environment: research on Ege university Faculty of Communication]. *Journal of Yasar University*, Vol 5(20), pp. 3348-3382.

Yüksel, İ. (2005). İşsizlik olgusunun psikolojik boyutu: görgül bir araştırma [The psychological dimension of the unemployment phenomenon: an empirical study]. *Journal of Ankara Üniversitesi SBF Journal*, Vol 60 (3), pp. 255- 274.

Vaidya, O. S., & Kumar, S. (2006). Analytic hierarchy process: An overview of applications. *European Journal of Operational Research*, 1-29.