

Identifying and Analyzing the Dimensions and Components of Strategic Decision-Making for the Managers of Education Regions of Tehran City

Fereshteh Nikpour Sardahai¹, Efsandiar Doshman Ziari^{2*}, Firouz Kiumarsi³, Zohreh Esmailzadeh³, Leila Sharifian³

1. PhD student, Department of Educational Management, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran.

2. Assistant Professor, Department of Business Management, Islamshahr Branch, Islamic Azad University, Tehran, Iran.

3. Assistant Professor, Department of Educational Sciences, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran.

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Purpose: Strategic decision-making plays an important role in organizational functions and its effectiveness. As a result, the aim of this study was to identifying and analyzing the dimensions and components of strategic decision-making for the managers of education regions.

Methodology: This study in terms of purpose was applied and in terms of implementation method was mixed (qualitative and quantitative). The research population were experts in the field of educational management and human resources management and managers of educational regions of Tehran city in 2021 year, which according to the principle of theoretical saturation number of 14 people of them were selected as a sample with using the purposeful sampling method. The research tool was a semi-structured interview that lasted 75 to 120 minutes, and their validity was confirmed by the triangulation method and their reliability was obtained by the agreement coefficient method between two coders 0.88. The data were analyzed by methods of thematic analysis and DIMTEL technique.

Findings: The findings of the qualitative part showed that strategic decision-making for managers of education regions has 98 indicators, 23 components and 10 dimensions were include moral intelligence, individual skills, knowledge of organizational processes, cultural and value skills, knowledge of financial resources, power of change and transformation, knowledge and technology management, human resource management, intelligent planning and training. Also, the findings of the quantitative part showed that the dimensions of human resource management, intelligent planning, cultural and value skills, knowledge of financial resources, knowledge and technology management and training had more effective and the dimensions of knowledge of organizational processes, moral intelligence, individual skills and power of change and transformation had more influence.

Conclusion: The findings of this study have practical implications for specialists and planners of educational systems, especially in the education system, and they based on the results of the present study, can take an effective step towards strategic decision-making.

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* Corresponding Author Email: doshmanziari@gmail.com

1. Introduction

Education is a major concern for educational organizations around the world so much so that a significant portion of organizational promotion systems revolves around the education of human capital. Among educational organizations, the education system is one of the most remarkable institutions and pillars of society as it significantly influences all aspects of society in terms of individual, cultural, social, economic, and political growth (Bazgoli, Safari, & Imani, 2021). The education system needs to achieve a convenient understanding of transformation and recognize it due to its basic role in the promotion of the knowledge and culture of society and the need to align outlooks with and move toward the Document of Fundamental Transformation (Moghali, Darvish, Abbasi, & Mohammadi, 2016). Achieving the missions and ideals of educational organizations, including the education system, makes it necessary to implement their maximum capabilities and capacity. One of the most remarkable instances of such capacity is the management and leadership power, and the importance of decision-making is so high that many experts consider it synonymous with management and leadership (Assuad, Tvenge, & Martinsen, 2020). Decision-making is one of the most important and critical tasks of managers, and their success or failure in decision-making has a direct impact on the performance and effectiveness of organizations (Ordonez, Threlfall, Kendal, Hochuli, Davern, Fuller, et al., 2019). Decision-making is the process of detecting issues, challenges, and opportunities and endeavoring to select and implement convenient strategies to solve or implement them in an optimal manner (Samson & Bahnugopan, 2022).

Some issues and challenges in organizations require strategic decision-making, represented by the following six main characteristics: they need top-level managerial decisions, they require the allocation of a significant portion of organizational resources, they have a major impact on the organization's long-term prosperity, they are future-oriented, they typically have multi-task or multi-business consequences and influence the structure of an organization, and they make it necessary to consider factors that are external to the organization (Meissner, Poensgen, & Wulf, 2021). One such decision is strategic decision-making, referring to the process of making decisions that can result in the success or failure of an organization (Imran & Rautiainen, 2022). Due to its significant capacity and capability, strategic decision-making is utilized to respond to existing complexities and conflicting and uncertain circumstances and has a cognitive nature. Thus, it requires significant informational processes. In other words, the decisions are not just made by activating the existing knowledge and information of the memory; rather, the existing information needs to be meticulously evaluated, and new knowledge and information have to be created (Elbanna, 2018). People do not merely rely on their intuition and experience for strategic decision-making, but they implement various analytical processes and utilize their emotions and feelings in addition to intuition and experience (Calabrese, Costa, Levaldi, & Menichini, 2019). Routine decisions are made according to a regulated basis at the same that the commonplace tasks of an organization are carried out. On the other hand, strategic decisions are choices that form the general orientation of an organization by allocating resources, regulating significant events, or directing major actions at an organizational level (Hashemi, Moeinian, & Nargesian, 2020).

Strategic decision-making refers to making long-term decisions that are important by nature, include significant activities, and influence the resources of an organization. Thus, a successful strategic decision is one that achieves effective results despite temporal and financial restrictions (Van Oudenhoven, Aukes, Bontji, Vikolainen, Van Bodegom, & Slinger, 2018). Strategic decision-making is an instrument to achieve goals and includes defining and determining the activity of an organization, its products, markets, tasks, and the policies required to implement the decisions to fulfill and achieve organizational goals (Massel & Kuzmin, 2019). To give another definition, strategic decision-making means adjusting the internal capabilities of an organization to its external environment by selecting the best option out of a set of possible and available options (Buehring & Bishop, 2020). Such decision-making includes a set of activities through which strategic issues are detected, interpreted, analyzed, and resolved (Strauch, Pidum, & Anyphausen-Aufseb, 2019). Strategic decision-making results in decisions that are unique, important, and valuable for the fulfillment of the overall goals of an organization. Moreover, such decisions are made in a competitive environment and are

important and critical for the organization, and they are oriented toward the future and the supreme and ideal goals of the organization (Hensel, Visser, Overdiek, & Sjoer, 2021). Few studies have been conducted on strategic decision-making so far, and a study pursuing the goal of detecting and analyzing its aspects and components was not found. Thus, the most relevant results are reported below.

Golchin Kouhi, Rezaei Soufi, and Keshavarz (2021) studied a value-laden strategic decision-making model with an Islamic approach and found four areas of characteristics and capabilities, including individual capabilities (represented by faith, piety, science, experience, reasoning, trusteeship, physical, cognitive, and mental capabilities, spiritual power, insight, contentment, resoluteness, courage, gentleness, consultation, showing love to the faithful and disassociating oneself from the cruel, honesty, having a good command of the collection and its surrounding environment, respecting hierarchies, realism, discipline, communicative capabilities, being ethical, and having religious and national commitment), seeking help from and connecting with God (various forms of worshipping, including praying, saying prayers, giving alms, repenting from one's sins, resigning, seeking help from God, and devotion to God), values related to strategic Islamic values (values developed through the hierarchy of the Islamic value-laden system), and the administrative conditions of strategic decision-making (values developed in sports, including the sports that produce maximum medals, the existence of talents, young human forces and the development of various sports, weaknesses like financial issues, inconvenient infrastructure and equipment, the absence of a legal and legislative system in sports, over-politicization, routineness, fear of deposition, the lack of creativity, failing to consider long-term results, maintaining the status quo, the absence of accurate indicators for evaluation, trying to keep powerful parties satisfied, failing to be plan-oriented, failing to allocate authorized resources, the organizational structure and administrative structure, opportunities like international competitions, global programs, international relations, scientific advancement and powerful human force, society's interest in sports, young populations, various forms of media and threats like the status of sports in the state and government, political interference in the allocation of resources and appointments, the country's economic condition, economic sanctions and restrictions, challenges to values, the influence of economic interested parties, competitors' effects, the lack of unity and coordination between responsible organizations, and social networks).

Taghavi, Haghighi Kafash, Khashei, and Ghazinoori (2020) studied a strategic decision-making model for knowledge enterprises and reported that the axial component of strategic decision-making for that model included the structured nature of the decision-making process, making decisions according to resources, advantages, and limitations, appropriate speed in making innovative decisions, agility in making and implementing decisions and offering feedback, making decisions based on information and analyses, the component of causal conditions included dynamicity and coordination across the components of an organization, capability in attracting financial resources, the ability to develop a product, the power of acting based on the analysis of markets, effective and dynamic strategic management systems, the integration and cohesiveness of the technology development team, and selecting elite figures and supporting and nurturing them, the contextual conditions included the ecosystem of technology and industry, the degree of maturity and learning in an organization, the macro-scale policies of technological and economic development, the clarity of organizational values, and the inefficiency of the sectors that influence technology, the component of intervening factors included the favorable attitudes of capital markets to the field of technology, prudent support given to the technological environment, the country's infrastructure and the coverage of technology, human resources' level of motivation and capability, laws and regulations that restrict technological activities, restrictions arising from sanctions and the lack of access, and brain drain, the component of strategies includes taking successful models as role models and developing according to them, making strategic coalitions, implementing the aspects of human resource management in a balanced manner, introducing lean structures, maintaining the informational and technical communication of marketing teams with the market, and the constant management of change and innovation, and the component of consequences included innovation in products and the related elements, promoting technological capacity, the sustainable maintenance and balanced development of the market, and smart strategic management.

Gholipour Souteh, Moradi, Goodarzi, and Abbasi (2020) studied a strategic decision-making model for financing research projects at universities and detected 33 measures across 10 main constructs, including internal and external communication, the idea-to-product chain, arrangements before the implementation of a strategy or financing requirements, determining the strategy of financing research projects at universities, the strategy of modifying structures, financial strategy, cooperative strategy, human resource strategy, the strategy of optimizing research results, and monitoring and evaluation.

Calabrese, Costa, Levialdi, and Menichini (2019) studied sustainability in strategic decision-making and found that paying attention to components and prioritizing the attitudinal characteristics of a decision-maker, the volume of information available to a complex environment, and the simultaneous combination of them are effective on strategic decision-making.

Mahjub, Naderi, Kharazi, and Entezari (2018) studied financial strategic decision-making at universities and concluded that the construct included the components of weak financial autonomy and reliance on governmental resources, the absence of an integrated system to support decision-making, the gap between financial decision-making processes and the desirable state, making decisions based on incomplete information and insufficient attention to systematized work, pressure on the state and students in terms of financing, the absence of convenient financing methods, the inadequacy of resources, the allocation of resources in an old and traditional manner based on per capita expenditures, failing to implement operational budgeting based on prime cost and the performance of units, non-participatory decision-making in a top-down manner in the pyramid of the university, interference and the lack of cohesion in the programs due to the lack of policymaking and decision-making bodies and the absence of an integrated model for policymaking and decision-making, the impossibility of making strategic plans and decisions, the influence of political, cultural, social, and economic factors on financial decision-making at university, and the influence of knowledge, information, thoughts, perceptions, values, emotions, feelings, personalities, and risk-taking tendencies in financial decision-making.

The COVID-19 pandemic showed that all organizations, including the education system, are always vulnerable to crises. Thus, it became evident that rapid, accurate, and timely decisions that took all aspects into account were critical, and such conditions made decision-making very difficult. Consequently, the adoption of a strategic decision-making framework is essential for any expanding, developing, and advancing organization, and this, no doubt, requires studies that aim to detect and analyze the aspects and components of strategic decision-making for managers as in all organizations, including the education system, the responsibility of decision-making is handed over to managers. Another significant consideration is that strategic decisions contain major critical recommendations for organizations and may be concerned with the adoption of new resources, organizing others, or changing the position of other figures. In the education system, which is responsible for educating and training future generations, such decisions are much more highlighted. Based on the above content and the role played by strategic decision-making in the performance of an organization and its effectiveness, the present study aimed to detect and analyze the aspects and components of strategic decision-making for the managers of the districts of the Tehran Office of Education.

2. Methodology

The present study was an applied one in terms of purpose and implemented a mixed-methods (qualitative and quantitative) approach. The population of the study was made up of experts in the fields of educational administration and human resource management, as well as the managers of the districts of the Tehran Office of Education, Tehran, Iran. Then, 14 participants were selected for the present study using the purposive sampling technique according to the principle of theoretical saturation. According to the principle of theoretical saturation, there is no particular rule or principle for the sample size before conducting a study, and sampling is carried out until the findings reach saturation, and the new samples cannot add anything novel to the findings of interviews with the previous interviewees. In the purposive sampling technique, researchers select participants who help them achieve inclusive and exclusive information. Moreover, in the purposive

sampling technique, researchers select their samples according to a particular set of criteria, and the criteria adopted in the present study included writing relevant books or articles, having taught at a university for at least three years, and having a Ph.D. degree in educational administration and human resource management. The instruments for data collection were semi-structured interviews with elites, the questions of which were designed based on the theoretical foundations of the study after consulting with professors in the field. After identifying the elites and making arrangements with them, the researcher asked the questions one after the other and recorded the most significant parts of their responses. Moreover, in order to prevent the loss of information, the interviews were recorded for further analysis after attaining the interviewees' consent. The interviews were carried out according to the above procedure until the elites or new samples could not add anything novel to the previous materials. The average duration of the interviews was 75-120m, and they were conducted during the summer and fall of 2021. The validity of the interviews was confirmed using the triangulation method, and their reliability was determined at 0.88 based on inter-coder agreement.

Concerning the procedure carried out in the present study, first, the questions of interviews with the elites were designed according to the theoretical foundations of the study after consulting with several professors. Then, the elites were identified and contacted to make arrangements for their participation in the study. The goals, significance, and necessity of the study were explained to them, and after making sure that hygiene protocols to safeguard the COVID-19 would be observed and the researcher would act according to ethical principles, including confidentiality, the privacy of personal information, and the anonymity of the reported findings – among others - they were asked to give their consent to participate in the study (participating in the interviews and recording them). The interviews were conducted in a place determined beforehand, and the interviewer recorded the most significant aspects of the interviews. Moreover, the interviews were recorded for further analysis. Then, the notes taken during the interviews were read to the interviewees so that they could corroborate them and prevent the incorporation of erroneous findings. In other words, after the interviews were carried out, first, they were transcribed, and, later, a copy of the extracted codes was sent for the interviewees to get their approval. In the next stage, the preliminary themes were identified, and similar ones were classified together, making up the preliminary classes. The classes were merged and formed components and dimensions. In the next stage, all detected dimensions and components were sent to the elites to receive their opinions, and the resulting data were analyzed using the thematic analysis and DEMATEL technique.

3. Findings

In the present study, 14 elites participated, 8 of whom were faculty members in educational administration and human resource management (57.14%) and 6 were managers of the districts of the Tehran Office of Education (42.86%). Table 1 provides the results of the thematic analysis of the dimensions and components of strategic decision-making for the managers of the districts of the Tehran Office of Education.

Table 1. The results of the thematic analysis of the dimensions and components of strategic decision-making for the managers of the districts of the Tehran Office of Education

Dimension	Component	Indicators
Moral intelligence	Organizational ethics	Flexibility, professional ethics, organizational commitment and trust, organizational charters and ethical policies, and the negation of state domination and constraints
	Personal ethics	Honesty, responsibility in safeguarding public properties, refraining from acting idiosyncratically, being conscientious, exercising discipline at work, and being responsive to people
Individual skills	Skill in smart goal-setting	Exercising realism in setting goals, being aware of competitors' goals in setting goals, determining the mainstream strategy of

		education, helping the implementation of strategies in the process of goal setting, setting goals based on the market and the functional responsibilities of education, tracking and surveying goals
	Environmental intuitive thinking	Seeking opportunities intelligently, systemic thinking, understanding situations based on learning and cognitive concepts
	Social intelligence	Setting the functional goals of strategic decisions by negotiating and reaching an agreement with managers, planning on how to make decisions on the level of districts, reaching an agreement with people involved in one's field of responsibility and identifying priorities and activities, analyzing information to understand trends and transformations, and evaluating the current and future needs of professional roles
	Policymaking	Management policies in a society, laws dominating education, macro-scale policymaking, the culture of society, adopting motivational and cooperative policies
Understanding organizational processes	Understanding structural processes	Familiarity with automated administrative processes, familiarity with the manner of selecting and appointing managers in the education system, familiarity with managers' responsiveness in the education system, and familiarity with various types of directly communicating information through diverse databases
	Understanding the process of development and advancement	Optimization and the homogeneity of organizational processes in the education system, the homogeneity of organizational processes, supporting organizational processes, and shortening the time required to carry out a task
	Understanding corrective organizational processes	Detecting processes that facilitate the achievement of organizational goals, having a thorough command of organizational processes, regulating backup activities for the advancement of processes, and organizational agility during the transformation of organizational processes to respond to internal changes
Cultural and value-laden skills	Religious values and beliefs	Understanding the religious beliefs of society, understanding the values that dominate society, and understanding individual beliefs among students and teachers
	Cultures dominating the education system	Understanding the mythical beliefs of society, understanding ancient culture, and understanding the alien cultures that dominate parents and students
Understanding financial resources	Financial knowledge	Automatic financial resources, analyzing financial information, and being informed of the revenues of private schools
	Utilizing financial resources	The manner of working with financial reporting systems, advanced accounting, full automation across all accounting processes, operational and financial budgeting
The power to change and transform	Understanding change and transformation	Acknowledging changes in the education system, welcoming changes, endeavoring to make changes, and being flexible to changes

	Planning according to change and transformation	Operational planning according to changes, determining and detecting useful strategies with regard to changes, taking notice of emerging patterns, departing from past decisions toward future decisions, planning to utilize present opportunities, and planning to make new initiatives
Knowledge and technology management	The application of knowledge	Knowledge-sharing capability, knowledge expansion, ability to use knowledge, the establishment of knowledge, and ability to execute knowledge management processes
	The application of IT	Ability to use IT, familiarity with IT, ability to control information, ability to collect and organize information, and ability to analyze information
Human resource management	Recruiting and supplying human resources	Employing people with high emotional intelligence, selecting and employing human resources based on their intelligence, and employing people with high technical capabilities
	Training and developing human resources	Boosting the strategies of human resource knowledge, boosting knowledge societies, developing intellectual capital, boosting individual skills, and boosting social skills
Smart planning	Program type	Short-term planning, midterm planning, and long-term planning
	The application of programs in decisions	Making decisions for individual organizational planning, boosting personal development programs in the education system, boosting group development programs in the education system, and utilizing modern planning systems
Education	Understanding educational systems	Understanding smart education systems, familiarity with decisions in line with virtual education, and detecting modern educational fields
	Types of education	Educating the manner of decision-making during crises, motivational education, permanent education for the managers of the districts of the education office concerning strategic decision-making, and education via mass media

According to the results provided in Table 1, concerning the strategic decision-making of the managers of the districts of the education office, 98 indicators, 23 components, and 10 dimensions, including moral intelligence, personal skills, understanding organizational processes, cultural and value-laden skills, understanding financial resources, the power to change and transform, knowledge and technology management, human resource management, smart planning, and education, were identified. In the following section, the results of data analysis using DEMATEL to detect the effective and impressionable aspects are provided. The results of the direct matrix of the dimensions of strategic decision-making for the managers of the districts of the Tehran Office of Education are offered.

Table 2. The results of the direct matrix of the dimensions of strategic decision-making for the managers of the districts of the Tehran Office of Education

0 = no effect 1 = very low impact 2 = low impact 3 = high impact 4 = very high impact	Knowledge and technology management	Human resource management	Understanding organizational processes	Understanding financial resources	Smart planning	Moral intelligence	Education	The power to change and transform	Individual skills	Cultural and value-laden skills
Knowledge and technology management	00/0	14/2	71/2	29/2	71/1	71/2	14/2	00/2	71/2	71/2
Human resource management	00/2	00/0	43/3	86/1	29/2	86/2	14/2	00/2	14/3	43/3
Understanding organizational processes	86/1	29/2	00/0	14/2	57/1	57/2	71/1	43/2	86/2	57/2
Understanding financial resources	86/1	57/2	57/2	00/0	00/2	86/2	14/2	14/2	71/2	00/3
Smart planning	43/2	00/2	00/3	43/2	00/0	14/3	86/1	29/2	00/3	71/2
Moral intelligence	29/2	86/1	71/2	14/2	14/2	00/0	00/2	86/1	29/2	71/1
Education	00/2	57/2	71/2	57/2	14/2	86/2	00/0	14/2	86/2	57/2
The power to change and transform	86/1	14/2	71/2	71/2	00/2	57/2	57/1	00/0	57/2	71/2
Individual skills	00/2	57/1	43/2	29/2	14/2	57/2	86/1	00/2	00/0	29/2
Cultural and value-laden skills	14/2	57/2	00/3	00/2	86/1	00/3	57/2	86/1	57/2	00/0

In Table 2, the results of the direct matrix of the dimensions of strategic decision-making for the managers of the districts of the Tehran Office of Education are illustrated. Moreover, Table 3 provides the results of the normalized matrix of strategic decision-making for the managers of the districts of the Tehran Office of Education.

Table 3. The results of the normalized matrix of strategic decision-making for the managers of the districts of the Tehran Office of Education

Normalized matrix using DEMATEL	Knowledge and technology management	Human resource management	Understanding organizational processes	Understanding financial processes	Smart planning	Moral intelligence	Education	The power to change and transform	Individual skills	Cultural and value-laden skills
Knowledge and technology management	00/0	08/0	11/0	09/0	07/0	11/0	08/0	08/0	11/0	11/0
Human resource management	08/0	00/0	14/0	07/0	09/0	11/0	08/0	08/0	12/0	14/0
Understanding organizational processes	07/0	09/0	00/0	08/0	06/0	10/0	07/0	10/0	11/0	10/0
Understanding financial resources	07/0	10/0	10/0	00/0	08/0	11/0	08/0	08/0	11/0	12/0
Smart planning	10/0	08/0	12/0	10/0	00/0	12/0	07/0	09/0	12/0	11/0
Moral intelligence	09/0	07/0	11/0	08/0	08/0	00/0	08/0	07/0	09/0	07/0
Education	08/0	06/0	11/0	10/0	08/0	11/0	00/0	08/0	11/0	10/0
The power to change and transform	07/0	08/0	11/0	11/0	08/0	10/0	06/0	00/0	10/0	11/0
Individual skills	08/0	06/0	10/0	09/0	08/0	10/0	07/0	08/0	00/0	09/0
Cultural and value-laden skills	08/0	10/0	12/0	08/0	07/0	12/0	10/0	07/0	10/0	00/0

In Table 3, the results of the normalized matrix of the aspects of strategic decision-making for the managers of the districts of the Tehran Office of Education are offered. Table 4 provides the results of the total DEMATEL matrix of relationships for the strategic decision-making of the managers of the districts of the Tehran Office of Education.

Table 4. The results of the total DEMATEL matrix of relationship for the strategic decision-making of the managers of the districts of the Tehran Office of Education

Total DEMATEL matrix of relationships	Knowledge and technology management	Human resource management	Understanding organizational processes	Understanding financial resources	Smart planning	Moral intelligence	Education	The power to change and transform	Individual skills	Cultural and value-laden skills
Knowledge and technology management	37/0	45/0	58/0	48/0	42/0	58/0	44/0	44/0	57/0	55/0
Human resource management	47/0	40/0	65/0	50/0	47/0	63/0	47/0	48/0	63/0	62/0
Understanding organizational processes	42/0	44/0	46/0	46/0	40/0	55/0	41/0	44/0	56/0	53/0
Understanding financial resources	45/0	48/0	60/0	41/0	44/0	60/0	45/0	46/0	59/0	58/0
Smart planning	48/0	47/0	63/0	52/0	38/0	63/0	45/0	48/0	62/0	59/0
Moral intelligence	42/0	41/0	54/0	44/0	40/0	44/0	40/0	41/0	52/0	48/0
Education	44/0	43/0	59/0	50/0	44/0	59/0	36/0	45/0	58/0	55/0
The power to change and transform	43/0	45/0	58/0	49/0	43/0	57/0	41/0	37/0	56/0	55/0
Individual skills	41/0	40/0	53/0	45/0	40/0	54/0	40/0	41/0	44/0	50/0
Cultural and value-laden skills	45/0	47/0	60/0	48/0	43/0	60/0	46/0	45/0	58/0	46/0

In Table 4, the results of the total DEMATEL matrix of relationships for the strategic decision-making of the managers of the districts of the Tehran Office of Education are offered. Table 5 provides the results of the total DEMATEL matrix of relationships for the strategic decision-making of the managers of the districts of the Tehran Office of Education.

Table 5. The results of the total DEMATEL matrix of relationships for the strategic decision-making of the managers of the districts of the Tehran Office of Education

Dimension	Symbol	Effectiveness	Effectiveness rank	Impressionability	Impressionability rank
Knowledge and technology management	C1	5	5	88/3	8
Human resource management	C2	1	1	93/3	7
Understanding organizational processes	C3	8	8	17/5	1
Understanding financial resources	C4	4	4	26/4	5
The power to change and transform	C5	7	7	94/4	4
Moral intelligence	C6	10	10	14/5	2
Education	C7	6	6	79/3	9
Smart planning	C8	2	2	77/3	10
Individual skills	C9	9	9	07/5	3
Cultural and value-laden skills	C10	3	3	94/3	6

In Table 5, the aspects of human resource management, smart planning, cultural and value-laden skills, understanding financial resources, knowledge and technology management, and education were effective, while understanding organizational processes, moral intelligence, individual skills, and the power to change and transform were impressionable. Figure 1 presents the effective and impressionable aspects of strategic decision-making for the managers of the districts of the Tehran Office of Education.

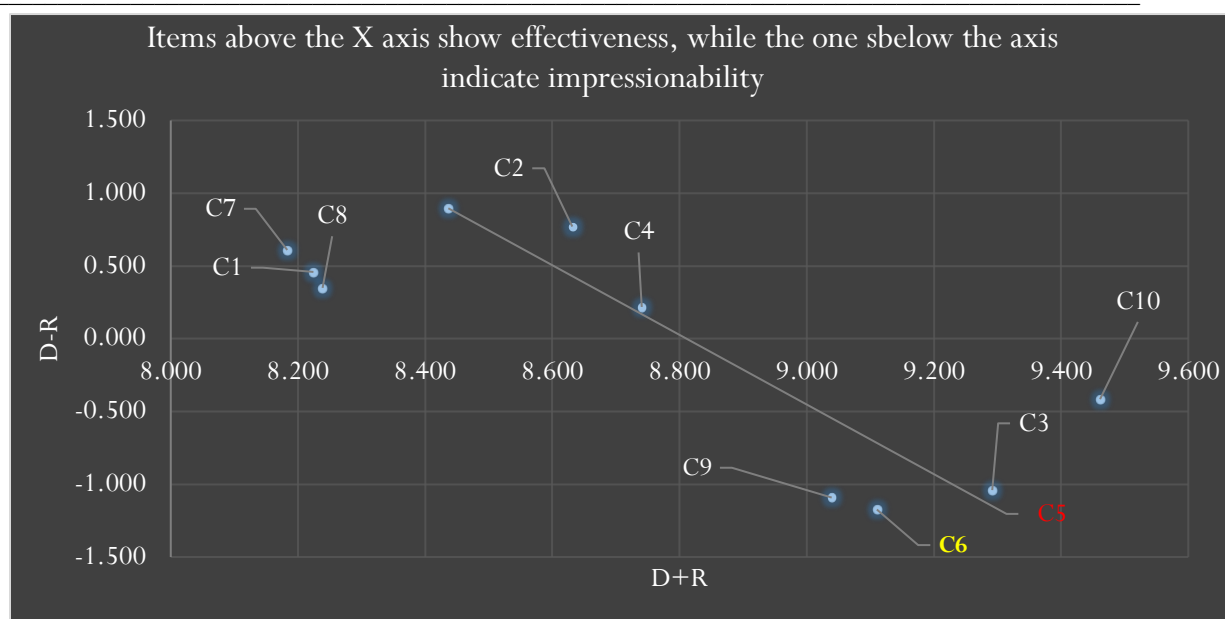


Figure 1. The effective and impressionable aspects of strategic decision-making for the managers of the districts of the Tehran Office of Education

4. Discussion

In the modern world, decision-making becomes harder and more complicated as organizations become larger and larger, and environments become more and more uncertain. The existence of strategic decision-making means that decisions made according to the capacity of organizational resources and the related threats and opportunities become more critical. Managers perpetually face the issue of selection and decision-making in organizations, and such choices and decisions play a pivotal role in the future of employees and organizations. Thus, due to the significant role of strategic decision-making in organizational performance and its effectiveness, the present study endeavored to detect and analyze the aspects and components of strategic decision-making for the managers of the districts of the Tehran Office of Education.

The findings of the present study showed that strategic decision-making for the managers of the districts of the Office of Education had 98 indicators, 23 components, and 10 dimensions, including moral intelligence, individual skills, understanding organizational processes, cultural and value-laden skills, understanding financial resources, the power to change and transform, knowledge and technology management, human resource management, smart planning, and education. Moreover, it was shown that human resource management, smart planning, cultural and value-laden skills, understanding human resources, knowledge and technology management, and education were effective, while understanding organizational processes, moral intelligence, individual skills, and the power to change and transform were impressionable.

As no study on the aspects and components of strategic decision-making was available, the findings of the present study were somehow in line with the findings of Golchin Kouhi et al. (2021), Taghavi et al. (2020), Gholipour Souteh et al. (2020), Calabrese et al. (2019), and Mahjoub et al. (2018). However, due to the existence of major differences between them, sufficient care needs to be taken into consideration.

In explaining the findings of the present study, it can be deduced that modern organizations are influenced by the complicated atmosphere of the modern world and face the challenge of uncertainty in decision-making, permanent changes, agitations, and endeavors to be present on regional and global spheres as a major concern. Due to the complicated nature of the modern world, the above challenge makes the need for strategic decision-making in organizations more and more highlighted. Strategic decision-making in an educational organization puts emphasis on making strategic decisions that need to be based on extensive environmental changes, the dynamicity of competition at educational centers, the weaknesses and strengths of an

environment in functional terms, and administrative values. Thus, developing strategies that are compatible with all of the above factors is a critical matter. Strategic decision-making in organizations is converging creative thoughts toward a single idea, enabling an organization to move toward the development of a method that can make everybody content in the future. Strategic decision-making is important in terms of actions, resources, and predetermined plans and influences the success or failure of organizations. Such decisions are implemented in circumstances where managers have sufficient power and control.

In general, the present study detected 98 indicators, 23 components, and 10 dimensions for the strategic decision-making of the managers of the districts of the Tehran Office of Education. The aspects included moral intelligence, individual skills, understanding organizational processes, cultural and value-laden processes, understanding cultural and value-laden skills, understanding financial resources, the power to change and transform, knowledge and technology management, human resource management, smart planning, and education. Out of the above 10 aspects, six aspects, including human resource management, smart planning, cultural and value-laden skills, understanding financial resources, knowledge and technology management, and education, were considered effective aspects. On the other hand, four aspects, including understanding organizational processes, moral intelligence, individual skills, and the power to change and transform, were considered impressionable aspects. Thus, based on the above findings, the following practical suggestions are made:

1. Ethical criteria needs to be profoundly considered in the appointment of managers, and managers who are familiar with and act according to the aspects and components of strategic decision-making should be selected as the managers of the districts of the Office of Education.
2. Managers should be committed to acting according to ethical principles in running errands and making organizational decisions.
3. A self-evaluation form based on the aspects and components of strategic decision-making has to be distributed among the managers of the districts of the Office of Education so that they can evaluate themselves.
4. Workshops need to be organized for the managers of the districts of the Office of Education based on the results of the above self-evaluation forms concerning the aspects and components of strategic decision-making.
5. Planning in the education system needs to shift from a centralized mode to a semi-centralized one.
6. In-service courses need to be organized to make managers familiar with the methods of strategic decision-making.

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References

- Assuad CSA, Tvenge N, Martinsen K. (2020). System dynamics modelling and learning factories for manufacturing systems education. *Procedia CIRP*. 88: 15-18.
- Bazgoli H, Safari M, Imani MN. (2021). Identifying and ranking the influential and influential factors on the development of cultural capital in the education system. *Journal of Cultural Management*. 15(51): 1-19. [Persian]
- Buehring J, Bishop PC. (2020). Foresight and design: New support for strategic decision making. *The Journal of Design, Economics and Innovation*. 6(3): 408-432.
- Calabrese A, Costa R, Levialdi N, Menichini T. (2019). Integrating sustainability into strategic decision-making: A fuzzy AHP method for the selection of relevant sustainability issues. *Technological Forecasting and Social Change*. 139: 155-168.
- Calabrese A, Costa R, Levialdi N, Menichini T. (2019). Integrating sustainability into strategic decision-making: A fuzzy AHP method for the selection of relevant sustainability issues. *Technological Forecasting and Social Change*. 139: 155-168.
- Elbanna S. (2018). The constructive aspect of political behavior in strategic decision-making: The role of diversity. *European Management Journal*. 36(5): 616-626.
- Gholipour Souteh R, Moradi M, Goodarzi M, Abbasi M. (2020). Strategic decision making model for financing research projects in public universities (Case study: University of Tehran). *Journal of Public Administration*. 12(3): 404-426. [Persian]
- Golchin Kouhi M, Rezaei Soufi M, Keshavarz L. (2021). Developing a strategic value-focused decision making model with an Islamic approach in sport management of Iran. *New Trends in Sport Management*. 8(31): 9-26. [Persian]
- Hashemi MS, Moeinian A, Nargesian A. (2020). Understanding the role of ownership structure in the board strategic decision-making process: A multiple case study of state-owned, pseudo-private and private banks in Iran. *Journal of Public Administration*. 12(3): 550-583. [Persian]
- Hensel R, Visser R, Overdiek A, Sjoer E. (2021). A small independent retailer's performance: Influenced by innovative strategic decision-making skills? *Journal of Innovation & Knowledge*. 6(4): 280-289.
- Imran S, Rautiainen A. (2022). Effects of contextual variables on strategic investment decision-making styles: An empirical study from Pakistan. *Asia Pacific Management Review*. 27(1): 1-9.
- Mahjub H, Naderi A, Kharazi SK, Entezari Y. (2018). Strategic financial decision making in comprehensive public universities. *Quarterly Journal of Research and Planning in Higher Education*. 24(2): 53-83. [Persian]
- Massel LV, Kuzmin VR. (2019). "Situation polygon" as an intelligent environment for strategic decision-making support in development of Russian energy sector. *Procedia Computer Science*. 156: 308-318.
- Meissner P, Poensgen C, Wulf T. (2021). How hot cognition can lead us astray: The effect of anger on strategic decision making. *European Management Journal*. 39(4): 434-444.
- Moghali A, Darvish H, Abbasi N, Mohammadi F. (2016). Study and ranking the factors influencing on transformational organization model in Fars education organization (Case study: Fars province education organization). *Public Management Researches*. 9(31): 29-50. [Persian]
- Ordóñez C, Threlfall CG, Kendal D, Hochuli DF, Davern M, Fuller RA, et al. (2019). Urban forest governance and decision-making: A systematic review and synthesis of the perspectives of municipal managers. *Landscape and Urban Planning*. 189: 166-180.
- Samson K, Bhanugopan R. (2022). Strategic human capital analytics and organisation performance: The mediating effects of managerial decision-making. *Journal of Business Research*. 144: 637-649.
- Strauch M, Pidun U, Anyphausen-Aufseß DZ. (2019). Process matters – How strategic decision-making process characteristics impact capital allocation efficiency. *Long Range Planning*. 52(2): 202-220.
- Taghavi M, Haghighi Kafash M, Khashei V, Ghazinoori SS. (2020). A model for strategic decision making in commercialization of technology in KBOs. *Basij Strategic Studies Quarterly*. 22(85): 93-124. [Persian]
- Van Oudenhoven APE, Aukes E, Bontji LE, Vikolainen V, Van Bodegom PM, Slinger JH. (2018). 'Mind the Gap' between ecosystem services classification and strategic decision making. *Ecosystem Services*. 33(1): 77-88.