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Research Article

Enhancing Organizational Agility in Municipal Waste Management: A Strategic Evaluation Approach for Kerman Municipality

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Abstract
The municipal waste management organization is one of the most important and influential urban management units in terms of the environmental quality of cities. Given the increasing waste generation rate and the organization's expanding activities at the city level, the organization's current traditional structure and implementation process do not meet the current needs and, consequently, fail to achieve the necessary efficiency. Therefore, this study aims to address the agility of the waste management organization in Kerman Municipality by employing strategic evaluation methods to examine the exit strategies and improve the organization's status. Four strategies, namely intelligent management and planning reform, financial program reform and capital attraction, training improvement and expertise enhancement, and ultimately, human resource development and augmentation, along with 47 internal and external factors categorized into strengths, weaknesses, threats, and opportunities, were examined based on the SWOT strategic evaluation method. Finally, by using the formation of the QSPM matrix and gathering expert opinions, the strategy of intelligent management and planning reform in the waste management organization of Kerman Municipality was identified as the first proposed solution for achieving organizational agility, with a score of 5.98. Additionally, the strategies of financial program reform and capital attraction scored 5.74, training improvement and expertise enhancement scored 4.25, and human resource development and augmentation scored 4.24, ranking second in importance.
Keywords: Organizational Agility, Kerman Municipality Waste Management Organization, SWOT Strategic Assessment Model, Urban Waste Management.

Introduction

In relatively large cities, significant amounts of household waste are generated daily. This waste not only incurs staggering costs for collection, transportation, and disposal but also poses significant environmental concerns such as water, air, and soil pollution, and the proliferation of insects, rodents, and disease carriers. Moreover, it jeopardizes the health of millions of individuals while also impacting the aesthetic appeal of cities by creating an unsightly and unpleasant image. Taking effective and fundamental steps in waste management is essential and should be a top

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priority in the agenda of responsible organizations. The Municipal Waste Management Organization is one of the most important service organizations within municipal governments throughout the country. It can be argued that the most essential and influential services provided by municipalities are delivered by this organization, and if its operations were to cease for several days, it would have a highly undesirable impact on urban life. The primary activities of these organizations have traditionally remained unchanged over the past decades. However, over time, technological advancements, urbanization, and the expansion of services have necessitated changes and transformations due to the observed problems and the organizational structure's lack of alignment with current needs. Slow decision-making, low efficiency, and the waste of energy and resources are among the most undesirable indicators for many municipal waste management organizations in Iran.

One of the approaches that can be taken to improve the performance of the waste management organization is to assess its performance based on strategic evaluation methods and propose a strategy suitable for each organization's conditions. One of the most suitable proposed methods is the SWOT analysis method (Voukkali and Zorpas, 2022). This method has been widely used in waste management studies for many years, and some of the most relevant studies are presented below.

The SWOT analysis method and the quantitative strategic planning matrix (QSPM) to evaluate the strategy of waste management in Babolsar City (Khanlaratbar, 2017). In this research, through a descriptive-analytical approach, internal and external factors affecting waste management in Babolsar were identified and weighted based on questionnaires and interviews with experts and stakeholders. The results indicated a greater emphasis on weaknesses over strengths and lower utilization of available opportunities compared to threats. In the next stage, 21 strategies were identified using the SWOT matrix, and their attractiveness was determined using the QSPM matrix. According to the results, the recycling strategy was identified as the superior strategy.

Vaezi and Daryabigi analyzed the environmental impacts and management strategies of urban waste transfer stations using a strategic factor analysis approach (Vaezi Heer and Dariabigi Zand, 2019). This study examined and evaluated the strengths, weaknesses, opportunities, and environmental threats of waste transfer stations in Tehran through the strategic factor analysis matrix (SWOT matrix). Ultimately, it focused on proposing and prioritizing ecological design strategies aimed at reducing and controlling pollution caused by waste transfer stations in Tehran.

Furthermore, the SWOT method was used to investigate the challenges and strategies for source separation of waste in Damavand County (Tavali et al., 2018). Given the importance of source separation in Damavand County, studies were conducted on waste collection and disposal methods. Based on the obtained information, the internal factors evaluation matrix was calculated as 2.451 and the external factors evaluation matrix as 2.158.

Riggi and colleagues focused on municipal waste management, sustainability, and economic efficiency, highlighting successful global practices in 2018 (Rigi et al., 2018). Their descriptive-analytical research aimed to investigate waste management practices in Iran and address the associated challenges by presenting solutions based on successful international examples.

Salehi et al. (2018) examined the influential factors in household waste generation in Tehran, the operational process, and the challenges faced by waste management organizations after waste collection, adopting a systems dynamics approach (Salehi et al., 2018). After defining the problem, they analyzed the relationships between variables and illustrated them through cause-and-effect, state, and flow diagrams. The state and flow diagram of the system under study depicted the interactions among the economic, social, population, and waste management subsystems. Model validation and sensitivity analysis indicated the model's proximity to reality. One of the main

problems identified was pollution caused by landfilling and the scarcity of land for waste disposal. They proposed two solutions: increasing the budget for cultural promotion, advertising, and planning to enhance consumption culture, and focusing on planning and implementing source separation programs. The dynamic model used in this study revealed that the second solution was superior.

Budimana studied solid waste management technologies in Indonesian cities in 2017 (Budimana, 2017). Selecting an appropriate technology for waste volume reduction and utilizing waste as an energy source was crucial due to its inherent calorific value. However, none of the examined methods were environmentally feasible because they exceeded the CO2 emission standards set by the Environmental Protection Agency.

Paes et al. conducted a systematic SWOT analysis of organic solid waste management with a circular economy approach in 2019 (Paes et al., 2019). Their study employed SWOT analysis to identify the current status, strengths, weaknesses, opportunities, and threats of organic waste management based on circular economy principles, along with a comprehensive literature review and content analysis.

The main identified threats and weaknesses included logistic and supply chain costs, seasonal variations in waste, lack of homogeneity in organic waste materials, subpar product quality and efficiency compared to traditional alternatives, and the absence of technical standards and regulations. The main strengths identified were the potential to convert waste streams into valuable resources, environmental improvement, greenhouse gas emissions reduction, cost reduction, stimulation of collaborative projects, and the production of chemical and energy-based materials using biotechnology. It should be noted that these aspects strengthen companies that focus on green solutions.

Mor et al. assessed waste management strategies in Chandigarh, India, with a perspective on sustainable cities using SWOT analysis in 2016 (Mor et al., 2016). Their study critically analyzed current solid waste management methods in Chandigarh through the SWOT analysis of policy options aimed at better waste management. In 2017, Martínez and Piña examined solid waste management in Bogotá, focusing on the role of recycling associations and employing SWOT analysis (Martínez and Piña, 2017). They conducted a SWOT analysis of three recycling associations in Bogotá, aiming to assess and understand the informal sector's perspective on transitioning to authorized waste providers.

As evident from the literature review, analyzing the internal strengths and weaknesses of waste management organizations can provide valuable insights for planning reforms and agile actions. Evaluating external threats and opportunities become crucial for guiding organizational planning and roadmap development toward optimal objectives.

The waste management organization of Kerman City has always faced many challenges in the fields of management, finance, expert staff, attraction of citizens' cooperation, the establishment of communication between government and private organizations, and other matters. It is because of these challenges that until now this organization has not been able to implement a new program to change the situation and improve its performance from the traditional mode. Currently, the only strategy of this organization is to maintain the status quo and provide the minimum possible services (waste collection and burial). This issue has put the organization in a critical state in terms of finances and management, and there is no clear perspective for changing the current situation. Therefore, this study employs the SWOT model and the QSPM matrix to investigate internal strengths and weaknesses, as well as external threats and opportunities, to streamline this organization.

Material and Methods

Introducing the studied area

Kerman is one of the major cities in Iran and serves as the capital of Kerman Province in the southeast of the country. According to the 1395 census conducted by the Statistical Center of Iran, its population was recorded as 537,718 individuals. Based on observations and information obtained from the Municipality of Kerman, the average daily waste production per person in the city is estimated to be 750 grams. Official statistics indicate that approximately 350 to 400 tons of waste are collected daily, with this amount tripling during the final days of the year. The Waste Management Organization of Kerman operates 74 waste collection vehicles and employs 228 workers in the waste collection sector.

The services provided by the Waste Management Organization primarily involve the collection of household waste bags from residential doorsteps, their transportation to an off-site mechanical processing facility outside the city, and ultimately the bulk burial of the waste in excavated landfills. The current waste management system of Kerman Municipality is a traditional and outdated system that imposes a heavy financial burden on the municipality. The revenue generated from recycling and source separation booths located within the city is minimal compared to the expenses incurred in the waste management sector.

SWOT model

The SWOT method is a strategic planning tool used to assess the internal and external situation of an organization in the field of environmental engineering. SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. Besides its general application in strategic planning, this method is also employed in analyzing organizational status (Benzaghta et al., 2021).

In strategic planning, the vision, mission, objectives, strategies, program titles, and activities are defined for the desired organization or association. The vision and mission are determined based on the highest decision-making authority's perspective (which can be considered the approved articles of association by the general assembly) (Leigh, 2009). The objectives are also established based on the defined mission. The mission identifies the overall tasks and scope of the organization's activities, while the objectives represent the paths to achieving this mission. To determine strategies, an examination is conducted of the strengths, weaknesses, opportunities, and threats by considering both internal and external factors. Based on this analysis and utilizing the SWOT matrix, strategies are extracted. Each strategy specifies the approach to achieving one of the objectives.

The identification of internal and external stakeholders assists in identifying contributing factors. Subsequently, specific plans are formulated for each strategy, requiring time scheduling and budget allocation.

- SO Strategy (Aggressive-Maximum, Maximum)

This strategy pertains to the internal state of an organization and evaluates its positive aspects (capabilities and strengths). It has the potential to foster synergy within the organization. Every organization aspires to be in this position to maximize the utilization of its capabilities and seize opportunities. Activities such as conferences, sharing successful experiences, and designing training courses like knowledge management and learning organizations can prove beneficial in this regard.

- WO Strategy (Adaptive-Minimum, Maximum)

This strategy focuses on the internal state of an organization and assesses its negative aspects (weaknesses). The second objective of this strategy is to reduce weaknesses and enhance opportunities. Sometimes, due to fundamental weaknesses, organizations are unable to take advantage of available opportunities. Therefore, designing training courses to eliminate weaknesses can empower the organization to make the most of opportunities.

- ST Strategy (Proactive-Maximum, Minimum)

This strategy pertains to the external state of an organization and evaluates its positive aspects (opportunities) to the external environment. It is designed based on the organization's capabilities against threats, to enhance existing capabilities and mitigate threats through the design of training courses.

- WT Strategy (Defensive-Minimum, Minimum)

This strategy focuses on the external state of an organization and assesses its negative aspects (potential threats). The goal of this strategy is to minimize threats as much as possible. An organization facing bankruptcy can utilize various strategies such as dissolution, merger, and survival efforts through the implementation of courses such as strategic management.

Finally, the overall framework of the factors and variables of the SWOT model can be illustrated in Figure 1.

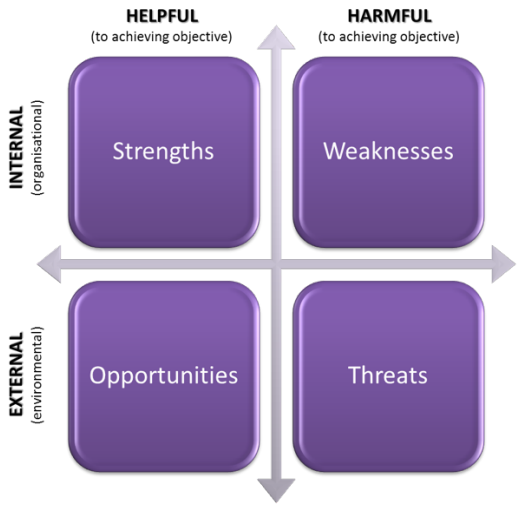

Figure 1. SWOT evaluation matrix

QSPM Matrix

The Quantitative Strategic Planning Matrix (QSPM) is a tool used to analyze scenarios and select the best scenario for strategy implementation in SWOT analysis. This tool is widely used in organizational strategic planning (Sumiarsih et al., 2018). Essentially, one of the evaluation, monitoring, and control methods for strategy implementation is the use of QSPM. This method determines the feasibility of selected strategic options and prioritizes these strategies (Zulkarnain et al., 2018).

The matrix utilizes information obtained from various stages of strategic management and planning and, like other strategic methods, requires good judgment, expertise, and awareness. QSPM is employed to evaluate the feasibility and sustainability of proposed solutions in the face

of environmental conditions and the existing situation. If a strategy in this matrix cannot withstand internal and external conditions, it should be excluded from the prioritized list of strategies.

The steps of the Quantitative Strategic Planning Matrix (QSPM) are explained further below. This matrix constitutes the third phase of the strategic planning framework. QSPM is an analytical technique for identifying strategies with higher desirability. The inputs of this phase are derived from the outputs of the first and second phases. QSPM serves as a tool for selecting alternative strategies and relies on the assessment of the desirability of important internal and external factors (David et al., 2017). However, performing this task requires a high level of discernment.

To develop a strategy using the QSPM method, the following steps should be implemented and executed (Kuc et al., 2021; Zulkarnain et al., 2018):

Step One: List the external opportunities and threats, as well as the internal strengths and weaknesses of the company, in the right column of the QSPM matrix. This information should be directly derived from the EFE and IFE matrices. The QSPM matrix should include a minimum of 10 critical success factors for external success and 10 critical success factors for internal success.

Step Two: Assign scores to each critical success factor. These scores are based on the IFE and EFE matrices and are placed in the second column opposite the critical success factors.

Step Three: Consider the formulated strategies from Step Two, which involve integration and combination, and write down the feasible and implementable strategies in the top row of the QSPM matrix. If possible, group similar strategies together.

Step Four: Determine the attractiveness scores (AS) and define them as numerical values indicating the relative attractiveness of each strategy. The attractiveness score is obtained by considering the simultaneous impact of critical success factors and the following question:

"Does this factor influence the selection of the mentioned strategy"?

If the answer to this question is positive, then that strategy is compared to the key factor. Attractiveness scores should be assigned specifically and based on the relative attractiveness of each strategy compared to other strategies. The attractiveness scores are as follows:

- Not attractive: Score 1
- Somewhat attractive: Score 2
- Moderately attractive: Score 3
- Highly attractive: Score 4

Step Five: Calculate the total attractiveness scores. This is done by multiplying the score of each factor by the attractiveness score in each row, representing the relative attractiveness of that strategy. A higher score indicates a greater attractiveness of the strategy.

Statistical population

In this study, a total of 10 experts and managers from Kerman Municipality, as well as university professors with relevant expertise, were utilized to identify the factors and indicators in the analysis of SWOT. After collecting their opinions, the indicators were categorized into four groups: strengths, weaknesses, threats, and opportunities. Subsequently, to form the QSPM matrix, the scores of the matrix were obtained from a statistical population of 20 individuals, including the 10 individuals used in the previous phase, along with 10 new individuals in the field of industry and organizational management. It is worth mentioning that the number of individuals employed in the SWOT and QSPM methods for scoring and polling purposes is determined based on their accessibility and collaboration.

Results and discussions

To develop a SWOT model, following field visits and interviews with employees and individuals associated with the waste management organization of Kerman Municipality, indicators related to internal factors were identified based on the organization's situation, and they are presented in Table 1. A total of 9 strengths and 15 weaknesses were identified.

Table 1. Indicators related to internal factors

Weaknesses	Strengths
Abundant workforce	Conducting comprehensive research and studies in waste management
Updated expertise of the organization's professionals	Organizing in-service training workshops
Lack of practical university majors	Employees have higher average age and proficiency in work processes
Decrease in the organization's budget relative to inflation and increased expenses	Description of diverse services and extensive operational responsibilities of the organization
Weak and non-transparent annual financial planning of the organization	Enhanced knowledge and education levels of employees
Failure to employ up-to-date intelligent systems for contractor supervision	Utilization of a motivated and young workforce
Low wages and decreased work motivation	Availability of waste management equipment and machinery
Lack of comprehensive waste management plan	Adequate quality of the burial site in terms of climatic conditions and soil characteristics
Administrative bureaucracy and slow decision-making process	Update of the organizational chart
Lack of knowledge and experience transfer within the organization at both technical and managerial levels	
Inadequate condition of data repositories and documentation of specialized information	
Absence of an HSE (Health, Safety, and Environment) unit within the organization	
Failure to implement organizational ISO standards	
Underutilization of intelligent and up-to-date infrastructures	
Intelligent transformation of the organization's information and data into efficient and smart structures	

The external factors are presented in Table 2, and the indicators related to these external factors are provided based on the waste management organization's status in Kerman, as well as the conducted inspections and interviews. In total, 13 opportunities and 10 threats were identified.

Table 2. Indicators related to these external factors

Threats	Opportunities
Weakness of suburban industries in waste management	Collaboration with academic and scientific institutions in the field of waste management and public health
Weakness of NGOs in cooperation and engagement with citizens	Collaboration with relevant government agencies in the field of waste management and public health
The decreased trust of citizens in source separation schemes	Development of online businesses related to waste management
Weakness of municipal laws and regulations in updating organizational needs	Possessing the only mechanized recycling center in the province
Presence of unauthorized waste collection workshops and competition with the organization	Effective communication with supervisory and law enforcement agencies in the county
Increased pressure from higher-level government entities to accelerate and improve service delivery	Increase in waste production due to urban development
Decreased public engagement and interaction with citizens	Increase in consumerism and per capita waste generation
The intervention of non-specialized entities such as the city council in specialized decision-making	Effective communication with other municipalities in major cities and knowledge transfer
Impact of political decisions by the city council on the organizational management and supervision process	The attraction of private investors and their willingness to collaborate
Increase in waste management service rates	Improvement of the state of new technologies in urban waste management
	Development of city-level advertising
	Organizing and regulating unauthorized waste collectors in the city
	Expansion of collaboration with industry units to provide waste management services

The following presents proposed strategies in four options based on the organization's future approaches and the concepts of the SWOT model, briefly discussing them:

- Strategy SO in SWOT analysis (Maximax strategy):

The aim of this strategy (Strengths – Opportunities) is to make the best use of identified strengths while focusing on external opportunities. Proposed strategy for the Waste Management Organization of Kerman Municipality: Human resource development and enhancement.

- Strategy WO in SWOT analysis (Minimax strategy):

The Weaknesses – Opportunities strategy is employed to mitigate the impacts of organizational weaknesses by utilizing available opportunities. Proposed strategy for the Waste Management Organization of Kerman Municipality: Improving education and enhancing expertise.

- Strategy ST in SWOT analysis (Maximin strategy):

In the Strengths – Threats strategy, the focus is on developing measures to overcome (reduce or eliminate) external threats by leveraging the organization's strengths and capabilities. Proposed strategy for the Waste Management Organization of Kerman Municipality: Reforming management and implementing intelligent planning.

- Strategy WT in SWOT analysis (Minimin strategy):

The objective of the Weaknesses – Threats strategy is to make decisions that minimize the identified weaknesses in the face of threats. Proposed strategy for the Waste Management Organization of Kerman Municipality: Financial program improvement and attracting investment.

Furthermore, based on the identified factors in the SWOT analysis (Tables 1 and 2) and their calculations through the QSPM analysis, along with the opinions and ratings of experts and specialists, the results are presented in Table 3.

The attractiveness level of each strategy was calculated and presented in Table 4.

As observed from the comparison of calculation results in Figure 2, the strategy of intelligent management and planning improvement has been identified as the most suitable solution for organizational agility in the Waste Management Organization of Kerman Municipality with a score of 5.98. In the next step, the strategies of financial program enhancement and capital attraction with a score of 5.74, education improvement and expertise advancement with a score of 4.25, and finally, development and human resource increase with a score of 4.24 were identified in the order. It should be noted that the development of all these strategies is the ideal state, but prioritization and gradual implementation can align better with the actual and realistic situation of the organization due to limited resources and time. Additionally, it is necessary to mention that the first and second strategies have very close scores compared to each other, while the difference between the third and fourth strategies is greater than the two previous strategies. Therefore, financial program enhancement and capital attraction also hold significant importance alongside intelligent management and planning improvement and should receive special attention in the plans of the organization.

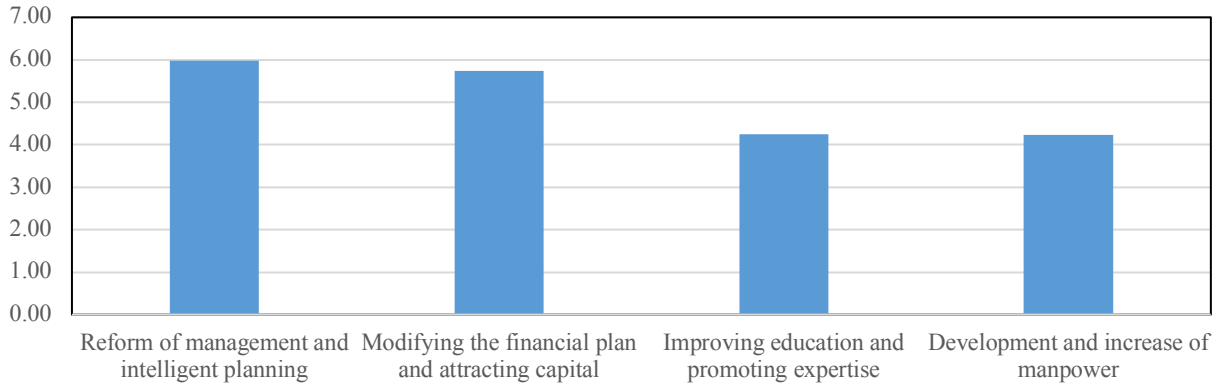

Figure 2. The attractiveness level of proposed strategies for the agility of the Waste Management Organization of Kerman Municipality

Table 3. The percentage of influence of identified factors on different strategies

	Internal and External Factors	Group		Normalized significance coefficient	Effectiveness percentage
1	Weakness of municipal laws and regulations in meeting organizational needs updating	Threat	External	0.08	3.81%
2	Administrative bureaucracy and slow decision-making process	Weakness	External	0.07	3.44%
3	The presence of unauthorized waste collection workshops and competition with the organization	Threat	External	0.07	3.39%
4	Reduction of the organization's budget relative to inflation and increased expenses	Weakness	Internal	0.06	3.05%
5	Weak and non-transparent annual financial plan of the organization	Weakness	Internal	0.06	3.05%
6	Weakness of NGOs in collaborating and engaging citizens	Threat	External	0.06	2.97%
7	Increased pressure from upper-level government institutions to accelerate and improve service delivery	Threat	External	0.06	2.97%
8	The impact of the city council's political decisions on the organizational management and supervision process	Threat	External	0.06	2.97%
9	The high average age of employees and their mastery of organizational processes	Strength	Internal	0.05	2.67%
10	Weakness in the up-to-date expertise of organizational experts	Weakness	Internal	0.05	2.67%
11	Lack of practical university programs	Weakness	Internal	0.05	2.67%
12	Failure to utilize up-to-date intelligent monitoring systems for contractors	Weakness	Internal	0.05	2.67%
13	Collaboration with academic and scientific institutions	Opportunity	External	0.05	2.54%
14	Development of online businesses related to waste management	Opportunity	External	0.05	2.54%
15	Attracting private investors and their willingness to cooperate	Opportunity	External	0.05	2.54%
16	Organizing unauthorized urban waste collectors	Opportunity	External	0.05	2.54%
17	Collaboration with industrial units to provide waste management services	Opportunity	External	0.05	2.54%
18	Involvement of non-specialized institutions such as the city council in specialized decision-making	Threat	External	0.05	2.54%
19	Increasing the waste management service rate	Threat	External	0.05	2.54%
20	Conducting informative workshops while providing services	Strength	Internal	0.05	2.29%
21	Updating the organizational chart	Strength	Internal	0.05	2.29%
22	The higher number of human resources	Weakness	Internal	0.05	2.29%
23	Inappropriate condition of data centers and inadequate documentation of specialized information	Weakness	Internal	0.05	2.29%
24	Having only one mechanized recycling center in the province	Opportunity	External	0.04	2.12%

Internal and External Factors		Group		Normalized significance coefficient	Effectiveness percentage
25	Decreased public trust in source separation schemes	Threat	External	0.04	2.12%
26	Performing research and studies in waste management	Strength	Internal	0.04	1.91%
27	Enhancing the knowledge and qualifications of employees	Strength	Internal	0.04	1.91%
28	Low salary levels and decreased work motivation	Weakness	Internal	0.04	1.91%
29	Lack of intelligent and up-to-date infrastructure	Weakness	Internal	0.04	1.91%
30	Intelligent structuring and optimization of organizational data	Weakness	Internal	0.04	1.91%
31	Collaboration with relevant government institutions in waste management and public health	Opportunity	External	0.03	1.69%
32	Effective communication with supervisory and law enforcement agencies in the city	Opportunity	External	0.03	1.69%
33	Improving the status of new technologies in urban waste management.	Opportunity	External	0.03	1.69%
34	Describing a variety of services and having numerous operational responsibilities	Strength	Internal	0.03	1.53%
35	Possessing waste management equipment and machinery	Strength	Internal	0.03	1.53%
36	Suitable quality of the disposal site in terms of climatic conditions and regional soil	Strength	Internal	0.03	1.53%
37	Lack of a comprehensive waste management plan	Weakness	Internal	0.03	1.53%
38	Loss of one HSE position within the organization	Weakness	Internal	0.03	1.53%
39	Lack of compliance with organizational ISO standards.	Weakness	Internal	0.03	1.53%
40	Increase in waste production due to urban development	Opportunity	External	0.03	1.27%
41	Increase in consumption and per capita waste generation	Opportunity	External	0.03	1.27%
42	Weakness in waste management by suburban industries	Threat	External	0.03	1.27%
43	Decreased public engagement and interaction with citizens	Threat	External	0.03	1.27%
44	Lack of knowledge and experience transfer within the organization at technical and managerial levels	Weakness	Internal	0.02	1.15%
45	Effective communication with other municipalities of major cities and knowledge transfer	Opportunity	External	0.02	0.85%
46	Development of city-wide advertising campaigns	Opportunity	External	0.02	0.85%
47	Utilization of a motivated and young workforce within the organization	Strength	Internal	0.02	0.76%
Total				2	100.00%

Table 4. The final weight and prioritization of the proposed strategy

Priority	Attractiveness	Selected Strategy
1	5.98	Intelligent management and planning improvement
2	5.74	Financial program enhancement and capital attraction
3	4.25	Education improvement and expertise advancement
4	4.24	Development and human resource increase

The differences in scores among strategies are relatively close. Based on the personal opinions of the authors and the experience gained during the collection of information and questionnaires, an opinion can be made about this issue. Since the waste management organization of Kerman municipality has challenges in all the discussed areas and the interviewees emphasized the necessity of reforming all of them, therefore, the closeness of the points obtained for the attractiveness of each strategy is an expression of this position. Of course, due to the difference in the final marks obtained (even though the marks are close to each other), priority can be obtained for the organization's future planning. However, the narrow scoring difference among strategies addressed the potential uncertainty associated but might not impact the decision-making process.

Conclusion

In this research, an attempt was made to address the agility of the Waste Management Organization of Kerman Municipality by using strategic evaluation methods to examine the exit and improvement strategies and their current status. Four strategies were identified based on the SWOT model strategies and were evaluated based on 47 internal and external factors in four categories: weaknesses, strengths, threats, and opportunities. Ultimately, using the QSPM matrix formation and expert opinions, the strategy of intelligent management and planning improvement was identified as the most suitable solution for organizational agility in the Waste Management Organization of Kerman Municipality. Therefore, as the first step in improving the situation of the Waste Management Organization, the process of management and decision-making should be made intelligent. Sound and intelligent decision-making can provide the organization with a suitable and efficient path and ensure that even with the current conditions of the organization in terms of human resources and financial resources, actions are taken that are appropriate and proportional to the city's needs in future organizational plans. In the next stage, actions can be taken to strengthen the other three strategies based on the obtained priorities and enhance the organization from the perspective of these strategies.

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