

EVALUATING THE PERFORMANCE OF PUBLIC INSTITUTIONS IN PROVIDING RAISING AND COLLECTING PROCESS OF SOLID WASTE SERVICES

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ABSTRACT

Institutions in general, and service institutions in particular, are interested in excellence in their field of work. Service institutions, whether in the public or private sector, continuously strive to raise the level of service performance by providing high-quality services and constantly working to improve operations in order to Earned the trust of beneficiaries, who are the permanent customers of these institutions. In public sector service institutions that have no competitors because their services are free of charge, the satisfaction of the service user (customer) is the primary goal. This is achieved by focusing on providing the user with excellent services that meet their expectations and desires. Therefore, these institutions are constantly seeking to identify the desires and aspirations of current and future customers, as well as to identify their needs and expectations towards the institution, especially given the revolution in information and communication technology (websites, social media sites, etc.) and other websites and communications) have enabled customers to view services offered around the world and compare them with those offered by service providers in the city where they live. It has become imperative for it to keep pace with global developments in the field of services, pay attention to service quality, and continuously evaluate its performance in order to provide distinguished service. The process of evaluating institutional performance in service provision, including solid waste collection and disposal, suffers from gaps and weaknesses in most service institutions. These gaps are evident in implementation processes and between actual and planned performance within the institution, according to the standards and performance indicators set by each institution in line with its objectives and vision. In addition, these institutions lack accurate data and experience in the process of evaluating service performance. The lack of experts and specialists in this field and the weak use of service indicators and standards that would raise the level of service provided if they were implemented correctly and used as a reference for the institution to improve and raise the level of its service performance.

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1. INTRODUCTION

Service is doing something special for a person, several people, or a place, such as serving a person or serving a

mosque, i.e., providing a service. It also comes in the form of public service, working in activities that are of public benefit, such as government administration (Omar, 2008). As for the concept of service, researchers

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have not found a suitable and clear definition that applies to the concept of service, despite its prevalence in our daily lives, due to the existence of services that are fully or partially linked to physical goods (such as hotel services), while there are services that are complementary parts of the marketing process of goods sold (such as maintenance services). There are types of services provided directly to customers that do not require a link to a commodity (such as municipal and health services), which puts organizations that provide direct services in a difficult position, as it is sometimes difficult to find an interpretation for this term, given that a service is a process that is not financially defined and is intangible. It is a specific concept of multidimensional and multidirectional human and intellectual activity. Accordingly, service has been defined from several perspectives by researchers. Al-Bakri (2002) defined it as any assistance that can facilitate the customer's achievement of their goals, whether that assistance is in the form of activities or results. Lovelock defined it as "economic activity that creates value and provides benefits to consumers at a specific time and place to achieve the desired exchange for the benefit of the service recipient" (Lovelock, et al., 2004). P. Kotler defined it as: "Any performance or action that can be achieved by the service provider to the service recipient, which is essentially intangible and does not involve the transfer of ownership. Its production may or may not be related to a physical product or any product (Kotler, 2006)." Al-Sumaydi and Youssef (2010) state that service represents a series of designed activities that enhance the level of satisfaction of beneficiaries. These services are provided by individuals or through devices through which consumers obtain the service.

2. LITERATURE REVIEW

On the service side, the definition of service by service organizations, such as municipal services, has been defined as "a municipal service necessary to ensure an acceptable and reasonable quality of life, which, if not provided, would endanger public health, safety, or the environment" (EThekwini Municipality, 2008). From the above, we find that the definition of procedural service that applies to the subject of this research is "an activity or set of intangible activities managed by senior management or a person in an administrative position, with the aim of achieving the public interest."

There are Service characteristics:

- **Intangibility:** The service is intangible, meaning it has no physical existence. This means that the beneficiary of the service is unable to make a judgment or decision based on a tangible assessment, and that the intangible nature of the service is not clearly and objectively reflected when the consumer describes their feelings and experience in evaluating the performance of the service provided. (Grönroos, 2007)

- **Inseparability:** It means that there is a direct relationship between the service provider and the beneficiary, and that the beneficiary must participate or contribute to the production of the service (Zeithaml et al, 2010).
- **Variability:** This characteristic is characterized by instability and inefficiency compared to machines and tracks employee behavior in service provision (Fitzsimmons and Fitzsimmons, 2011).
- **Demand fluctuation:** There is instability in the demand for certain services, and there are annual, quarterly, or sometimes daily or hourly services. Due to the non-material nature of services, they cannot be stored, saved, or resold for future use (Gilmore, 2003).
- **The difference in the quality of service:** The quality of service provided varies from person to person, as individuals' performance capabilities also vary. There are many factors that affect service, including environmental factors, psychological factors, and factors related to working conditions. Therefore, the service process is considered complex, even though most establishments try to provide the best possible service to their customers. (Atiq, 2016).
- **Transfer of ownership:** The most important feature of services in terms of transfer of ownership is that ownership is not transferred. Compared to physical goods, the buyer can use the goods in their entirety, as well as store, sell, and consume them later. whereas the beneficiary of the service can only obtain and use it personally for a limited period of time in many cases, for example, renting a hotel room or collecting garbage from the streets. The beneficiary pays a sum of money in exchange for receiving this service (Boudiaf and Hennos, 2018).
- **Involve the beneficiary:** The beneficiary plays a key role in the provision and marketing of services. Therefore, the beneficiary should interact with service institutions and ask questions about the operations that take place, for example, in a bank, such as the interest earned on deposits and other banking services (Al-Samidai and Youssef, 2010).
- **Non-measurable:** Service institutions seek to offer promotions and benefits for the services they provide, and these promotions are not a measure of quality as long as the service is intangible and can only be known after experience (Al-Hajj and Al-Awda, 2011).

Services are classified according to multiple criteria specific to them into several categories (Al-Taie and Al-Alaq, 2019):

- **Simplified or Deep-rooted:** These can be divided into simplified services according to the customer and the intensity of the workforce, and deep-rooted services, some of which are marketable and others are not, as well as product services and consumer services. We conclude from the above classifications that services can be classified in many ways depending on the different criteria used by the

classifier. The most important criteria that can be used to classify services, according to Table 1 (Al-Majni and Al-Khadr, 2020), are as follows:-

Table 1. Classification of services

Type of service	Classification criterion
<ul style="list-style-type: none"> ✓ Service provided to individuals ✓ Service provided to institutions 	By consumer type
<ul style="list-style-type: none"> ✓ High participation service ✓ Low participation service 	Based on the degree of customer participation
<ul style="list-style-type: none"> ✓ Highly automated service ✓ Lowly automated service 	Service by automation
<ul style="list-style-type: none"> ✓ Service with high customer linkage and complex purchase ✓ Service with low customer linkage and easy purchase 	Service linked to the customer and type of purchase
<ul style="list-style-type: none"> ✓ Service based on service outputs ✓ Service based on service processes 	Service based on consumer ratings

Source: Al-Majani, Rania, Al-Khadr, Muhammad, 2020, *Marketing Services*, Syrian Virtual University, Syrian Arab Republic.

- **Public service:** A set of necessary activities aimed at the public interest, accessible to the largest segment of the population at a reasonable cost under similar circumstances, with a known duration, and supervised by the government (Debat, 2007). It is sometimes referred to as civil service, as it acts as an intermediary between citizens and the public administration for the purpose of meeting the needs and desires of individuals on the one hand and administrative bodies and public organizations on the other (Idris, 2001).

Many scientific sources refer to the distinctiveness of public service with its own principles (Abdulrazzaq, 2019; Aisha, 2018; Bakhlad, 2018; Bahmo & Abdelkader, 2019; Rounalt, 2001):

- **Continuity:-** The service is continuous and uninterrupted, as it serves the public interest and there is a genuine need that must be met.
- **Equality:-** It means fairness in the use of the service provided to its beneficiaries.
- **Relative liber:-** The service here is distinguished by its affordable price, which is close to free

After discussing service as a general concept and the specific principles it encompasses, and within the framework of the research topic related to one of the activities of the municipality, the most important activities of the municipality will be presented, followed by one of the most important institutions that provides services to a large segment of beneficiaries, as hardly any citizen can do without these services given their extreme importance in the life of any citizen. The municipality is one of the public institutions that works to provide services and meet the needs and desires of citizens, as it is in direct contact with citizens, communicating with them and listening to them. Services are provided by

involving citizens in organizational processes and informing them through media outlets or through official decisions and documents, as well as keeping them informed about service delivery processes and receiving citizens. Facilitating tasks, simplifying procedures, and facilitating the flow of information between citizens and public institutions, public institutions, including municipalities, strive to provide various services to citizens in order to achieve comfort and well-being for society, as well as to keep abreast of citizens' interests. Ensuring positive interaction between citizens and public institutions. (Razika, 2010) This institution is headed by the municipal director, who has powers and responsibilities in accordance with the law and is assisted by several specialized departments responsible for engineering facilities, sanitation, organization, traffic, and various utilities such as electricity, water, and sanitation. It performs tasks at two administrative levels: central and decentralized (Abbasa, 2013). It should be noted here that municipal services are subsidized services, as municipalities play a major role in providing these public and basic services. This role varies from one community to another. The municipality is a government department and service provider that plays a major role in people's social and economic lives. There is no doubt that the role of municipalities is a great responsibility, and planning for this role and preparing well for it is also of great importance. This requires strategic planning that looks to the future and takes into account developments in society. The municipality is an institution affiliated with the Ministry of Construction, Housing, Municipalities, and Public Works, which was formed in 2003 and has four main functions that it works with its institutions to implement, as follows: (Official website of the Iraqi Ministry of Municipalities and Public Works):

- Services provided in the field of drinking water.
- Services provided in the field of sanitation.
- Services provided in the field of municipalities.
- Services provided in the field of urban planning.

Its role lies in the fact that the Ministry of Municipalities and Public Works is the main body responsible for national policy-making relating to all municipal services, except electricity and telecommunications. It is responsible for providing:

- ✓ Sewage treatment and solid waste collection
- ✓ Establishment of drinking water stations.
- ✓ Extension of municipal road networks and management of public real estate in determining land use.
- ✓ Planning and preparation of basic designs for cities.
- ✓ Establishing strategies for the development of cities and rural settlements and improving their environment.

Other services that support and complement the above services are also added, namely (Muzlum, 2020):

- ✓ Developing cities and surrounding villages and lighting internal roads in cities
- ✓ Beautifying streets with trees and signboards and creating parks for citizens.

✓ Organizing markets and maintaining city cleanliness.

the district multiplied by 250 m3 by the number of residents in the district multiplied by the number of work shifts. According to the standards of the Ministry of Municipalities, for every 100,000 residents, the standard capacity of septic tanks is 250 m3. This data was collected from the weighbridge records of the Samawah Municipality, and this indicator is measured as shown in Table 2.

3. DISCUSSION AND ANALYSIS

First: Septic Garbage compactor index: This index is measured by dividing the total capacity of septic tanks in

Table 2. Capacitor capacity index

Table of required data			description	Criterion value	Criterion name	Index name	Index description
776 m ³	Total storage capacity at the workplace	A	.A Total capacity of all Capacitor in the workplace * 250 m ³	100%	This indicator is measured by dividing the total capacity of the circuit * 250 m3 (standard capacity per 100,000 inhabitants) by the number of inhabitants in the district in number of meals * 100%.	Capacitor capacity index	SPS
250 m ³	Standard capacity per 10,000 people						
316426 people	Population of the district	B	B . Population in the district * Number of work meals				
1 daily	Number of working meals						
$\frac{\frac{A}{B} * 100\%}{\frac{773 * 250}{316426 * 1}} * 100\% =$					Index calculation		
61%					Index value		
Standard value – Index value					Calculate gap		
100%-61%					Gap value		
39%					Gap value		

The results obtained from measuring the capacity indicator show that it achieved a score of 61%, which indicates that the Samawah Municipal Directorate has

reached an average level of implementation, with a gap of 39%.

Table 3. Capacitor efficiency index

Table of required data			description	Criterion value	Criterion name	Index name	Index description
776m ³	Total storage Capacitor at the workplace	A	Divide the total capacity of the workplace by the number of meals and the standard duration of the indicator.	%100	This indicator is measured by dividing the total capacity of the circuit by the number of meals in the standard period of the indicator by the population of the district *1.25 *100%.	Capacitor efficiency index	SPS
1 daily	No. of shift						
3month (90) day	Standard duration of the index	B	B . Population in the district *1,250				
316426people	Population of the district	C					
1.250 KG	Daily per capita disposal rate	D					
$\frac{A}{B} * 100\%$ $\frac{773 * 1 * 90}{316426 * 1.250} * 100\% =$					Index calculation		
%17,58					Index value		
Standard value – Index value					Calculate gap		
%17.58-%100					Gap value		
%82,42					Gap value		

This percentage reflects high performance for this indicator in the Samawah Municipality Directorate in terms of available capacity, considering that it operates once a day. According to the standard set by municipal institutions, every 100,000 people are served by 250 m³ of compactor capacity. Therefore, the actual compactor capacity required for Samawah is 541 m³, considering that the population of Muthanna Governorate in 2020 is 316,426. Second: Capacitor efficiency index: This index is measured by dividing the total compressor capacity of the circuit by the number of meals in the standard period, estimated at 90 days, or three months, by the population of the district *1.25 kg *100%. This index is measured as shown in Table 3. This data was collected from documents and records belonging to the municipality of Samawah.

The results obtained from measuring the efficiency index of compactor indicate that it achieved a score of 17.58%. This percentage shows that the Samawah Municipality Directorate has reached a low level of efficiency in terms

of compactor. The gap was 82.42%, which is a very large gap for a service institution. We find that this percentage reflects a very low performance for this indicator in the Samawah Municipality Directorate in terms of the efficiency of the available compactor, as their work is considered to be one meal per day.

Fourth: Mechanical sweeping efficiency index: This index is measured by dividing the number of sweepers in the department multiplied by 2 hours by the length of the streets swept mechanically multiplied by 1 km multiplied by the number of shifts. We find that the number (2 days) in the index refers to the division of (the length of the main streets in km by the speed of the machine multiplied by its productivity (km/day), which is 18 km/day according to the standard of the Ministry of Construction, Housing, and Public Municipalities. When dividing the longest main streets swept by automatic sweepers, which are 36 km long, this index is measured as shown in Table 4.

Table 4. Automatic sweeping efficiency index

Table of required data			description	Criterion value	Criterion name	Index name	Index description
9	no of Vacuum cleaner	A	. Divide no of Vacuum cleaner * 2 days	%100	This indicator is measured by dividing the number of street sweepers in the district*2 by the length of streets swept by machine*1 km*number of shift.	Automatic sweeping efficiency index	SPS
36/18= 2	B . Length of streets swept by machine 18/Productivity per machine	B	B . Length of streets swept by machine *1 km*Number of meals				
36Km	Length of streets swept by machine						
1	No of shift						
$\frac{A}{B} * 100\%$ $\frac{9*2}{36*1*1} * 100\% =$				Index calculation			
%50.00				Index value			
Standard value - Index value				Calculate gap			
%50-%100= 50%				Gap value			
%50.00				Gap value			

The results obtained from measuring the efficiency index of mechanical sweeping indicate that it achieved a performance of 50.00%. while the gap was 50.00%. We find that this percentage reflects the efficiency of mechanical sweeping compared to the length of streets that are swept mechanically, representing only the main streets without the side streets, at a rate of only two days per week, but applied daily once in the morning.

Fifth: Manual sweeping efficiency index: This index is measured by dividing the number of workers engaged in sweeping and waste collection by the number of working

hours on manually swept streets multiplied by 1 km multiplied by the number of meals. The standard for this index is that every 1 km is swept by 1 worker, and the length of manually swept streets is 275 km. The total number of streets includes main and secondary streets. The data was obtained from the Planning and Follow-up Division of the Samawah Municipality Directorate. The average number of actual working hours is estimated at about 5 hours per day, considering that the working hours are from 7 a.m. to 12 p.m., as shown in Table.5

Table 5. Manual sweeping efficiency index

Table of required data			description	Criterion value	Criterion name	Index name	Index description
275	Number of workers employed in street cleaning, based on 1 km/1 worker, assuming that these streets are cleaned manually and are 275 km long .	A	A.Divide the number of workers employed * cleaning by the number of meals.	%100	This indicator is measured by dividing the number of workers employed in sweeping and waste collection by the number of meals along the length of streets swept manually *1 km* number of working hours.	Manual sweeping efficiency index	SPS
1 daily	No, of shift						
311km	The total length of paved side and main streets that are swept manually at a rate of 1 km per worker per year.	B	B . Length of streets swept manually *1 km*Number of working hours				
5hour	No of work time						
$\frac{A}{B} * 100\%$				Index calculation			
$\frac{275*1}{311*5*1} * 100\% =$							
%17.68				Index value			
Standard value – Index value				Calculate gap			
$\%17.68-\%100=$				Gap value			
%82.32				Gap value			

The results obtained from measuring the manual sweeping efficiency index indicate that it achieved a performance of 17.68%, while the gap was 82.32%. . We find that this percentage reflects the efficiency of manual sweeping, which includes sweeping and lifting dust, collecting waste from the street, and collecting it in a collection place, either with manual carts or containers. Sixth: preparation Container street index: This indicator is measured by dividing the actual provision of containers by the standard provision. We find that one container is placed for every 100 meters of length, and

Table 6. Preparation Container street index

Table of required data			description	Criterion value	Criterion name	Index name	Index description
971	Number of containers actually filled	A	A. Divide the actual preparation of containers	%70	This indicator is measured by dividing the actual container throughput by the standard throughput.	preparation Container street index	SPS
1con.	All 100 m	B	B .no containers Standard				
3110	311						
3110	.no .container Standard						
$\frac{A}{B} * 70\%$				Index calculation			
$\frac{910}{3110} * 70\% =$							
%20.48				Index value			
Standard value – Index value				Calculate gap			
$\%20.48-70\%=$				Gap value			
%49.52				Gap value			
%29.26				value Index from%100			
%70.74				Gap value from %100			

The results obtained from measuring the street container provision index indicate that it achieved a level of 20.48%, while the gap was 49.52% when the index value was 70%. We find that this percentage reflects the

therefore we find that the streets of Samawah need 3,110 containers, considering that the streets served are 311 kilometers long. The actual provision by the Samawah Directorate for 2021 is approximately 910 containers for 2020. This indicator is measured at 70% as it does not cover 100%. The data was obtained from the records of the Storage Division of the Samawah Municipality Directorate. This indicator is measured as shown in Table. 6

shortage of equipped containers in the Samawah district compared to the length of the streets. We find that the actual equipment is insufficient compared to the actual need. For the purposes of the study and to obtain equal

percentages for all indicators, the value of the indicator and its gap were converted to a value of 100%. achieving an achievement of (29.26%), while the gap was (70.74%).

Seventh: Waste bag supply index: This index is measured by dividing the actual supply by the standard supply. We find that each residential unit needs seven bags per week. and the number of bags distributed weekly is estimated

at 150,000. There are 23,238 residential units in the Samawah district, so the standard number of bags is 162,666. This indicator is measured at 80% as it does not cover 100% of the district. The data used to measure this indicator was obtained from the bag factory unit of the Samawah Municipality Directorate. This indicator will be measured as shown in Table 7.

Table 7. Waste bag supply indicator

Table of required data			description	Criterion value	Criterion name	Index name	Index description
150000	No of actual bag supply	A	A. Division of actual bag preparation	%80	This indicator is measured by dividing actual supply by standard supply.	Waste bag supply indicator	SPS
Weekly 7 bag	all 1 house						
6* (work hour) 5 bag 250* day	Weekly						
162666	Standard number of bags per week	B	B .Standard supply				
$\frac{A}{B} * 100$					Index calculation		
$\frac{150000}{162666} * 80\% =$							
%73.77					Index value		
Standard value – Index value					Calculate gap		
$\% 73.77 - \%100 =$					Gap value		
6.23					Gap value		
%92.21					value Index from%100		
%7.79					Gap value from %100		

The results obtained from measuring the waste bag provision index indicate that it achieved a high level of achievement (73.77%), while the gap was (6.23%). Although the bag factory is old and assuming that these bags are distributed weekly to all residential neighborhoods, for the purposes of the study and to obtain equal ratios for all indicators, the value of the indicator and its gap were converted to a value of 100%. An achievement of 92.21% was applied. while the gap was (7.79%).

By measuring the indicators in Tables (8-9) related to service standards, which include nine service indicators, we can obtain the overall average for service performance standards by adding the values of the nine indicators and dividing them by their number. The overall average of service performance standards is used to measure the gap in service performance standards by subtracting the overall average value of service performance standards from the gap value, estimated at 100%, as shown in Table 8.

Table 8. Actual rate of application of service performance standards

% Value of gap	% Value of index	Name of index	index
39	61	Index of Capacitance	SPS
82,42	17,88	Capacitor efficiency index	
38,89	61,11	Efficiency index of sweeping	
41.46	58.54	Waste collection service efficiency index based on waste generated	
0,09	99,91	index Capacitor Broken	
50	50	Automatic sweeping efficiency index	
82,32	17,68	Manual sweeping efficiency index	
70,74	29,26	preparation Container street index	
7,79	92,21	Waste bag supply indicator	
	56,53		Annual rate of actual implementation of service performance standards ASPS
	%56.53-%100 %43.47	%100	Gap Value (service performance standards)

Table 8 shows that the overall rate of actual implementation of service performance standards is 56.53%. as we find that the Samawah Municipality Directorate has reached slightly above half of the service performance standards and there is a gap in the overall rate of service performance standards of 43.47%.

Figure 1 shows the actual rate of application of the SPS service performance standards for the nine indicators related to service performance standards, estimated at 56.53%.

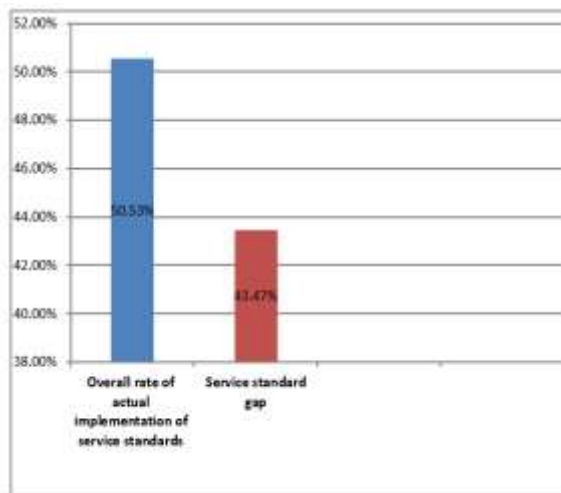


Figure 1. Actual rate of application of service performance standards compared to the gap in service performance standards

This percentage is low compared to the population of the governorate and the amount of waste produced per capita as a result of various human activities. We find that the highest applied indicator is the indicator of broken compactors, followed by the indicator of waste bag preparation, the indicator of compactor efficiency, and the indicator of compactor capacity efficiency, with percentages of 99.91%, 92.21%, 61.11%, and 61%, respectively. The indicators begin to decline in terms of the efficiency of waste collection services according to the waste generated, the automatic sweeping indicator, the street container preparation indicator, the efficiency of compactors, and the efficiency of manual sweeping, with percentages of 58.54%, 50.00%, 29.26%, 17.88%, and 17.68%, respectively, as shown in Figure 2.

Figure 2 shows the overall rate of application and the gap in service performance standards. We find that the rate of application is above 50% in the Samawah district, which falls under the responsibility of the Samawah Municipality/ Parks and Gardens Division, did not reach half. Table 7 shows the gap analysis prepared by the researcher in a workshop held at the Samawah Municipality Directorate for senior management and all relevant departments, as shown in Appendix (1) to analyze the reasons for the gap and assign a weight to each factor contributing to that gap:

Details of the criterion Factors affecting the value of the gap								Standard Details						
Political interference	Security conditions	Administrative powers	Technical obstacles	Capacity buildings	Infrastructure	Financial Affairs	HR							
-1 Some political interference in the development of service projects	-1 Security conditions are good and stable within the governorate and do not pose an obstacle to the implementation of projects.	-1 Administrative and financial obstacles to securing sufficient funding to equip the Directorate with modern equipment and machinery.	-1 Many important and strategic projects involving asphalt paving have been halted.	-1 Lack of training courses for technical and engineering staff in cleaning departments for the purpose of developing the concept of service.	-1 The current shortage of Container and sweepers in the municipal garage and the municipality's inability to procure modern equipment commensurate with the volume of municipal work.	-1 Insufficient financial allocations for the purchase of equipment, including sweepers, Container, and cleaning materials to cover the service.	-1 The shortage of workers compared to the population of the city center, where every 100,000 inhabitants are served by 500	Factors affecting the value of the gap	%43.47	Gap value	%50.53	Index value	%100	Criteria value

		-2 Limiting the authority and powers of the head of the administrative unit and the municipal director in addressing	-2 The small share of gas allocated to the Samawah Municipal Directorate in return for the services		-2 Lack of equipment, such as work materials, sweep, and carts, and their inadequacy for actual needs.	-2 Weakness of financial allocations obtained in the form of self-financing												
		-3 Administrative routine for obtaining the share of gas from institutions supporting the work of the municipality	-3 The ratio of paved to unpaved streets is very high, which hinders the sweeping		-3 Opening new lines for the waste bag factory to increase the number of bags distributed.	-3 Decrease in monthly salaries for workers in the cleaning sector												
1	0	3	3	1	3	3	2	The amount of influence of the cause on the value of the gap										

Appendix (1) Workshop held letter No. (15571) dated 25/4/2021 at the Samawah Municipality Directorate, Samawah District, Muthanna Governorate.

According to the impact scale, it appears that some factors have a significant impact on the gap, while others have less impact, as shown in Figure 2.

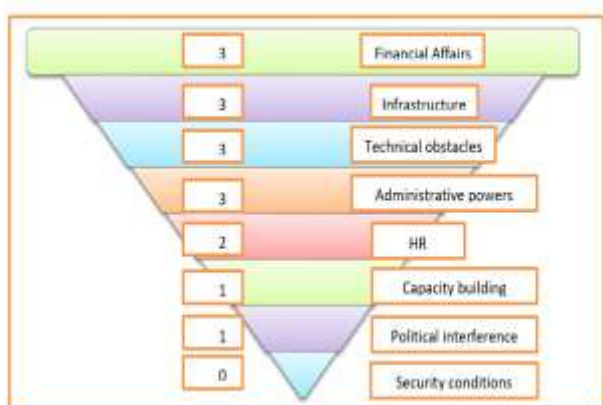


Figure 2. Sequence of causes of the gap in service performance standards

We note from Figure 2 that the lowest percentage of reasons was given a weight of 0 in terms of the ranking of reasons, which is attributed to the stability of the security situation within the governorate, and a weight of 1 was given to reasons related to political interference due to the weakness of political interference in capacity building, as most government institutions are not interested in training and capacity building for their staff. The reasons (human resources) were given a weight of (2) due to the presence of human resources in the institution, while the highest weight (3) was given to the reasons (financial affairs, infrastructure, technical obstacles, administrative powers). Therefore, emphasis should continue to be placed on developing short- and long-term solutions to address and reduce the gap, which has a significant impact on the work of the Samawah Municipality Directorate. The solutions were discussed with senior management and experienced staff in this field, and solutions were reached, as shown in Table 9.

Table 9. Proposed solutions to reduce the gap in service performance standards

Long-term solutions (annual or five-year plan)	Short-term solutions (1-6 months)
Allocate funds to important areas in the department's budget after agreement with the ministry, with provisions that can be utilized in the future without delay and without affecting municipal work.	Transfer funds from the department's budget from non-essential items to more important items.
Appointing experienced and competent employees on a contract basis who can be of benefit to the directorate.	Rely on current staff and try to improve their salaries with bonuses and overtime.
Allocating funds for the purchase of modern machinery within the municipal budget and selling it annually to make up for the shortfall in the efficiency of Container and sweepers.	Take advantage of idle machinery by taking spare parts to working machinery as much as possible.
Establish technical workshops within the municipal garage and appoint specialists to work in them in order to reduce the amount of money spent on repairs.	Contract with private workshops to repair machinery as quickly as possible without delay, thereby affecting daily work.
Increase bag production by establishing new production lines to fill the shortage in bag distribution, to be sold sequentially and without affecting the department's budget.	Launch campaigns to clean the streets as needed, using the department's budget to cover the cost of manual or mechanical sweeping.

Open specialized workshops for manufacturing containers to reduce the money spent on purchasing containers and to benefit from the technical staff employed on a contract basis.	Implement projects to provide household containers to reduce waste dumped on the streets.
Allocate funds to important areas in the department's budget after agreement with the ministry, with provisions that can be utilized in the future without delay and without affecting municipal work.	Launch extensive campaigns to distribute bags to households, preferably at the district level rather than randomly.
Appointing experienced and competent employees on a contract basis who can be of benefit to the Directorate.	
Allocating funds for the purchase of modern machinery within the municipal budget and selling it annually to make up for the shortfall in the efficiency of Container and sweepers.	

4. DISCUSSION OF RESULTS

The study results clearly indicate a significant gap in the service performance standards of the institution under review at the general level. This gap is primarily attributed to the lack of adequate funding for critical service areas, in addition to the weakness of preventive and corrective maintenance programs for machinery. Street paving campaigns have also been neglected due to delays in related projects such as sewage, rainwater drainage, electricity, communications, and internet networks. Furthermore, the assessment results revealed a notable gap in service coverage standards, resulting from weak public awareness campaigns, the failure to enforce penalties on violators, poor daily waste collection efforts, and the spread of slums and agricultural areas. Most specialists and experts pointed out a set of proposed solutions to minimize this gap—some short-term and others long-term—with the aim of developing logical and practical strategies to bridge or reduce it.

There was a general consensus that financial and infrastructural factors have the most significant impact on creating performance gaps, as service institutions, particularly municipal ones, rely heavily on funding to execute their tasks. With sufficient financial support, these institutions can establish the infrastructure necessary to sustain effective service delivery. Technical obstacles were also found to have a considerable impact on most performance indicators, except environmental ones, where the effect was moderate. This is due to the presence of large green spaces within the city’s master plan and outside informal areas, as well as the establishment of a dedicated parks and gardens division that manages several public parks accessible to citizens without restriction.

Based on these findings, the research recommends that institutions place greater emphasis on administrative and organizational thinking, particularly regarding performance measurement, efficiency, effectiveness, and productivity. These indicators are vital for identifying imbalances and weaknesses in institutional performance, thereby enabling efforts to minimize gaps and correct deficiencies. The research also highlights the importance of adopting scientific measures and indicators for assessing vital performance, using them as tools for both evaluation and training. Employing mathematical and statistical methods in performance analysis and measurement can contribute to the development of

accurate and efficient standards for performance evaluation.

Moreover, service institutions should focus on the performance evaluation process and develop mechanisms for needs assessment and data updating regularly, in accordance with international standards and indicators. This practice helps identify project requirements and areas of weakness, allowing for the formulation of strategic plans that enhance institutional performance. The study also recommends the establishment of joint teams composed of municipal representatives and local residents within residential areas to evaluate the performance of municipal departments, communicate complaints promptly, and ensure quick responses. Such collaboration would foster continuous improvement in service delivery and facilitate the identification and resolution of key challenges. Finally, the research emphasizes the necessity of following scientific plans based on recognized academic approaches to assess the root causes of gaps in government institutions, identify the most significant contributing factors, and address them systematically through evidence-based and sustainable solutions.

5. CONCLUSION

In light of the above conclusions and recommendations, it appears that improving institutional performance can only be achieved through the adoption of a scientific methodology based on modern administrative and organizational thinking, which relies on measurement and analysis based on key performance indicators, efficiency, effectiveness, and productivity. It has become necessary for institutions, especially service providers, to adopt accurate mechanisms for measuring performance and identifying weaknesses and gaps, enabling them to develop useful strategic plans that contribute to improving the quality of services provided to citizens. The involvement of all stakeholders, including employees, experts, and citizens, contributes effectively to building a realistic picture of institutional performance and enhances opportunities for developing the work environment and achieving continuous improvement. This goal can only be achieved through the application of dynamic performance measurement systems based on sound scientific standards and metrics, and the use of accurate statistical methods and internationally recognized indicators .Hence, the research concludes by

emphasizing the need for government institutions to adopt a modern approach to evaluation and development, including the establishment of joint evaluation teams, periodic data updates, and working according to well-

studied strategic plans, in order to ensure institutional excellence and respond to the aspirations of beneficiaries with high efficiency and effectiveness.

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