Identifying the elements of measuring human resources productivity in the East Azarbaijan Province Gas Company (from the perspective of experts)

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Abstract

The aim of this study was to identify the factors affecting the measurement of human resource productivity in the East Azarbaijan Gas Company (from the perspective of experts). The present study was a qualitative, phenomenological approach with purposive sampling and in-depth semi-structured interviews with 14 experts. Data validation strategies were performed using multidimensionality, member review, and long-term researcher engagement during the interview. In this study, first open and partial codes were identified and by putting them together based on the relationships between them, central and more general codes were created. After this inductive process, open codes were re-identified and game codes that were later identified were selected selectively in They were subdivided into pivotal concepts or pivotal concepts that were later created and integrated. The text of the interviews was analyzed manually using the Smith method. Findings showed that the measurement of human resource productivity in East Azarbaijan Gas Company includes five indicators of service delivery, measurement of customer perception and satisfaction, measurement of community improvement and improvement, measurement of unwanted results, measurement of efficiency. Each index contains different components.

Keywords: Productivity Measurement, Human Resource Productivity, East Azarbaijan Province Gas Company

INTRODUCTION

The activities of any organization are influenced by a set of factors. Knowing and investigating these factors can help to improve activities and achieve organizational goals The organization has limited resources for its activities, which should be used in the best and produce the maximum amount of quality output with these limited resources. This raises organizational productivity, whose main goal is the optimal use of resources and facilities available to the organization. The basic element in creating and improving productivity is human Resources. The human resource factor is known as the agent of production of goods and services that directly participates in production on the one hand and on the other hand as an intelligent agent and coordinator of other factors of production. It has a special place among other factors of production. On the other hand, in the last decade, attention has been paid to human resources as human capital and empowering this resource in order to achieve the productivity of human resources. Today, one of the key issues in most organizations is the need to improve employee productivity. Rao has defined employee productivity as the emotional and intellectual commitment of employees to their organization in achieving success. According to Bloom and et al. , productivity is based on the idea that people can perform their tasks better every day with superior results. In the real situation, productivity is a part of the organization that

directly affects the profit and performance of the organization. . Labor productivity may be evaluated as the result of worker's work output in a certain period of time . The position of an organization mainly depends on the productivity of its workforce. Therefore, employee productivity is one of the important goals of business. On the other hand, in today's world, increasing the productivity of the workforce and maintaining it, is one of the most important goals for the managers of organizations. The mission of management and the main goal of managers of any organization is the effective and optimal use of various facilities such as labor, capital, materials, energy and information. In line with this mission, the optimal use of human resources (human resource productivity) is of particular importance. The most successful organizations and developed countries paid enough attention to this matter. Nevertheless, the progress of a society still depends on the effectiveness and efficiency of human resources. In the meantime, organizations, organs and social institutions play a significant role. If the motivated and capable human force is productive, it can use other resources efficiently and optimally and achieve all kinds of productivity and ultimately make the organization productive, otherwise stagnation and retardation of the contribution of passive and ineffective and demotivated human resource will occur. Productivity and its improvement is one of the main goals of any active and alive organization .) and the need to pay attention to the topic of employee productivity is because productivity is one of the factors that ensure the durability and survival of organizations in today's highly competitive world.

The rule of productivity culture leads to the optimal use of all the material and spiritual facilities of organizations and without adding new technology and manpower, it is possible to use the facilities and conditions with reproductive properties and creativity in achieving the goals of the organization.

Considering the importance and contribution of human resource productivity in the productivity of the public and organizational sectors, the measurement of human resource productivity is one of the important research topics in this field,

so that determining the appropriate model for measuring employee productivity can help managers to properly measuring individual productivity and determining functional weaknesses and strengthening it, ultimately increase organizational productivity.

The issue of manpower productivity has been a major concern for researchers as well as productivity practitioners for the past few decades. Recently, many employers or employees have focused on how different employee contributions and incentive programs can improve worker productivity. Also, productivity is considered as the main factor in economic growth. But there is a lot of room for research on how productivity contributes to this growth and measuring productivity. Undoubtedly, in measuring productivity, labor force is a very important factor. Because the human workforce is capable of thinking and has emotional fluctuations, and above all, it has the power of creativity and innovation, before any decision to increase productivity, the reactions of people, the relationships between them, and the attitude of the workforce should be checked. It has a great impact on productivity.

The researches conducted in other countries have considered different indicators as important in evaluating the productivity of human resources, which cannot be generalized to the organizations in question due to the difference in cultural, social and economic conditions. On the other hand, reports show that manpower productivity indicators in Iran are low compared to countries in the region and East Asia. Therefore, developing a successful strategy for improving human resources requires setting up a systematic method for measuring and evaluating it. Unlike other organizational resources, at the level of the gas company, human resources have a special importance and position, and unlike other organizational resources, they are known as intelligent and coordinating factors. Therefore, it is the most important factor in increasing or decreasing productivity in the gas company. If the employees in this company are motivated and capable, they can use other resources effectively and efficiently, otherwise it will cause stagnation and backwardness. In this regard, human resource managers should measure the productivity of human resources, but the basic problem is that

until now, the appropriate model for measuring the productivity of human resources has not been available to human resource managers, and therefore the productivity of human resources and its measurement have been inappropriately ignored.

And this practice ignores the individual abilities of the employees and reduces the work motivation of the employees And since individual productivity is considered the determining factor of organizational productivity, it is very important to deal with the issue of human resources productivity, and on the other hand, despite the research conducted in the field of productivity, most of the researches have investigated organizational productivity however individual productivity is neglected. With the understanding of the existing research gap, the investigation and determination of the elements of measuring the productivity of human resources at the level of the gas company of East Azarbaijan province, there has been proposed a paper as a research project at the level of this company. And considering that the gas company has its own goals and missions, it is necessary to analyze the productivity of human resources with a different approach from private or industrial organizations.

On the other hand, East Azarbaijan Gas Company, as one of the important and extensive sub-categories of the organization, has its own missions, conditions and requirements, which should be taken into account in measuring and analyzing the productivity of its human resources, hence the research has identified the elements of human resources productivity measurement in East Azarbaijan Gas company.

Research question:

From the expert's point of view, what are the elements of measuring the productivity of human resources in the gas company of East Azarbaijan province?

Research method:

This study was conducted with a qualitative research approach and scientific phenomenological method. This type of phenomenology emphasizes less on the interpretations of the researcher and more on describing the experiences of the participants. . In fact, in this method, the researcher puts aside all his mental assumptions and analyzes based on what the participants explain. In addition, one of Husserl's concepts, i.e. isolation, is emphasized, in which researchers put aside their experiences as much as possible in order to gain a new perspective on the phenomenon under investigation. Having a master's degree and a specialized doctorate in management, passing training courses related to productivity and having at least 15 years of relevant work experience were the criteria for entering the research. Sampling continued in a purposeful manner until the data was saturated and led to the selection of 14 experts as a sample. A semi-structured interview was used to obtain the required information. In order to maintain the accuracy strength of the data in this research, research questions were asked to the participants in different ways in order to reduce or eliminate the possibility of providing false information by education experts. . In this way, the stability of the answers was determined. Since the method of data collection in this research was the in-depth interview method, it was tried to conduct the interviews carefully and without bias in order to ask a sufficient amount of material about the questions . In such a way that if another researcher repeats the process in the same or similar situation, she will get the same answers or similar answers. Also, to ensure the reliability of the data analysis, the researcher referred to each of the experts and asked their opinion on whether the comprehensive and final description of the findings reflects their experience or not. In case of deletion or addition of material by experts, this issue is included in the final text of the data. In other words, it can be said that the main way of maintaining validity and reliability of data in this research was to record interviews and confirm the final descriptions by experts. Argumentative and inductive-deductive approach was used for data analysis. This means that first open and partial codes were identified and by putting them together based on the relationships between them, central and more general codes were created. After this inductive process, open codes were again identified and game codes were identified later. They were selectively placed under the

central concepts created or the central concepts that were created and integrated later. In fact, the analysis of the interviews started at the same time as the data was collected. Data were analyzed based on Smith's model. The analysis steps based on Smith's model are as follows:

- Initial contact with the data: that is, the text of the interviews was carefully listened to and written on paper.

- Identifying and labeling themes: The themes that define each part of the text were determined and labeled

- Clustering of themes: relationships were established between themes and themes were connected to each other to obtain a comprehensive theme or cluster.

A summary table was written for each participant, in which clusters and sub-themes were written. The clusters of all participants were combined in one table - The research report and its interpretation was written. Data coding was done manually.

Findings

Measurement of services provided, measurement of customer perception and satisfaction, measurement of community improvement and improvement, measurement of unwanted results, measurement of efficiency. The findings of each index are presented below.

Code	Sub-themes	Main themes	main cluster
S5	Service integrity	Features of the services provided	measurement of services provided
S1, S3, S6	the quality of service		
S1	Timeliness of service		
S5	Continuity of service		
S6	The price or cost of the service		
S8	The usefulness of employees' efforts	Features of service delivery	
S3	Service delivery speed		
S12	Variety of service delivery methods		
S13	Convenient service delivery hours		
S8	Proper behavior		
S8	Efforts to improve services		
S11	Keep promises		
S6	Time wasted to receive services		

main cluster 1: measurement of services provided

The analysis of the interviews showed that the first main cluster of human resources productivity in the gas company of East Azarbaijan province is the measurement of the services provided.

This cluster includes two main themes of provided service features and service delivery features.

The characteristics of the provided services include five sub-themes of service accuracy, service quality, timely service delivery, service continuity, and service price or cost.

The characteristics of service delivery include eight sub-themes of usefulness of employees' efforts, speed of service delivery, variety of service delivery methods, suitable hours of service delivery, appropriate treatment, efforts to improve services, keeping promises, wasted time to receive services.

Participant (1) stated: "What is important in measuring the productivity of human resources in the gas company is the characteristics of the services provided by them.

One of the most important features is the quality of services and timely services provided to citizens.

Participant (5) stated: "What can be defined as an indicator in measuring the efficiency of gas services is the continuity of services that are provided, in addition to that, the services that are provided must be correct services because the service if presented incorrectly, it will cause rework and waste of time."

Participant (3) stated: "Our criterion in evaluating the productivity of human forces is the quality of services provided by them in the first stage, and the speed at which services are provided in the second stage, some services are on time but not fast enough. Participant (8) said: "Well; When it comes to employees or human resources, their proper treatment while providing services, the amount of effort they have and the usefulness of their efforts are important issues. Participant (13) stated: "One of the criteria in measuring the productivity of human resources in the gas company is service delivery times. One of the most important complaints of customers is the hours of service." Participant (11) stated: "The gas company sometimes makes promises that these promises are either not implemented or are implemented late, and this calls into question the efforts of most employees." Participant (12) stated: "In providing services to customers, sometimes the use of different methods can respond to needs, and the use of a specific and unchangeable method is not acceptable in this industry." Participant (6) stated: "The service provided by human resources is received by customers, and for customers in receiving the service, the quality of service and the price or cost spent to receive the service and also the time spent for it does is important."

ک	Sub-themes	Main themes	main cluster
S14	Being responsive to customers	Customer satisfaction	Measuring customer perception and satisfaction and providing information
S3	Number of complaints filed		
S9	Responding to customer complaints		
S6	The number of customers in the service queue		
S1	Understanding the needs of specific customers		
S8	Ease of understanding the information provided	Provide information to customers	
S11	Quality of information for decision making		
S11	Suitability of information to customer needs		
S12	Comprehensibility of forms and instructions		
S10	Stability of the information provided		
S8	Specify the exact type of service		

main cluster 2: Measuring customer perception and satisfaction and providing information

The analysis of the interviews showed that the second main cluster of human resources productivity in the gas company of East Azarbaijan province is the measurement of customer perception and satisfaction and the provision of information. This cluster includes two main themes of satisfying customers and providing information to customers. Customer satisfaction includes five sub-themes of being responsive to customers, the number of complaints submitted, responding to customer complaints, the number of customers in the service queue, and understanding the needs of specific customers. Providing information to customers includes six sub-themes: ease of

understanding the information provided, quality of information for decision-making, compatibility of information with the needs of customers, comprehensibility of forms and instructions, stability of the information provided, and precise specification of the type of service. Participant (14) stated: "An employee must be able to obtain the satisfaction of the customers of the gas company, and any employee whose level of customer satisfaction is higher than him has been more productive." In fact, it should be responsive to customers." Participant (9) said: "The customer can always complain about the services provided, but what is important is receiving complaints and responding to them." Participant (3) said: "In service organizations, the standard is always the customer. "Any employee that has fewer customer complaints is a successful employee." Participant (1) stated: "In addition to the quality of the service, understanding the customer and his needs is a priority.

It should be possible to understand the needs of customers through a proper process." Participant (6) said: "Time is very important in service delivery. If the gas company has a large number of customers in the service queue and cannot respond to the needs of customers in time, it has not been effective."

Participant (11) stated: "The gas company, managers and all its human resources, in addition to being equipped with comprehensive and sufficient information, should be able to provide appropriate information to customers to make a decision on choosing a service." Participant (12) stated: "All forms and instructions should be understandable to the public. Otherwise, the client will remain in doubt and will not know what to pursue".

Participant (11) stated: "The information provided to the customer should be in line with his needs. Now a lot of information is provided to the client, but his need is something else." Participant (10) stated: The client should always receive something fixed and the information provided to him should be fixed. Participant (8) stated: One of the effectiveness criteria is the exact specificity of a service. The gas company provides all kinds of services in the field of gas to the citizens, but each person has a specific need, and the type of services provided must be clearly defined, and each customer can easily understand the information and services.

Code	Sub-themes	Main themes	Main cluster
S9, S11	Creating equality in the distribution of benefits of gas services	Service improvement	**Measuring the improvement and promotion of society**
S6	Increasing compliance with laws and regulations in the gas department		
S13	Creating quality control standards for gas services		
S13	Increasing public welfare and quality of life	Community improvement	
S10	Increasing the trust of citizens		
S5	Increasing the amount of knowledge in the field of gas		

Main cluster3: Measuring the improvement and promotion of society

The analysis of the interviews showed that the third main cluster of human resources productivity in the gas company of East Azarbaijan province is the measurement of improvement and promotion of society. This cluster includes two main themes of service improvement and community improvement. Satisfying customers includes three sub-themes, creating equality in the distribution of benefits of gas services, increasing compliance with laws and regulations in the gas administration, and creating quality control standards for gas services.

Community improvement includes three sub-themes of increasing public welfare and quality of life, increasing citizens' trust and increasing the amount of knowledge in the field of gas.

Participant (9) said: "Do all people use gas services in the same way in this country?" In my opinion, this is one of the most important criteria for measuring efficiency in gas services. Participant (11) stated: "Using gas services is the right for all people, and the mission of the gas company is to provide this service to all people and to have justice in service delivery."
Participant (6) said: "When we talk about the productivity of human resources, we talk of human, and this human must be able to act properly when his action is based on rules and regulations." Participant (13) stated: "The long-term effects of a service delivery is an important criterion by which productivity can be measured. Effective human resources always seek to create standards and do not want to deviate from those standards at any cost."

Another long-term work in the field of service is to create prosperity in people's lives. "You can imagine how well people's well-being has increased with the arrival of gas, and how standard services in this field can improve people's quality of life." Participant (10) stated: "The main capital of service departments and companies are people. If people are satisfied with these companies and trust them, this shows that the company's human resources have performed well, "If they don't, it shows that they have not done well."
Participant (5) said: "The annual statistics of people who die due to lack of information about gas is very high. Although the cost of these accidents is due to people's carelessness, a large part is also due to lack of sufficient knowledge.

Code	Sub-themes	Main themes	Core cluster
S2	Failure to respond to customers and citizens	Unwanted results in relation to customers	**Measuring unintended outcomes**
S1	Creating distrust in customers and citizens		
S7	Increasing the wasted time of citizens		
S11	Imposing low quality costs		
S5	Distribution of letters and unnecessary formalities	Unwanted results related to the organizational process	
S14	Environmental pollution		
S13	Non-compliance with rules and regulations		
S12	Parallel work and lack of coordination with other organizations		

Core cluster4: Measurement of unintended outcomes

The analysis of the interviews showed that the fourth main cluster of human resources productivity in the gas company of East Azarbaijan Province is the measurement of unwanted results. This cluster includes two main themes of unwanted results related to customers and unwanted results related to the organizational process.
Unwanted results related to customers include four sub-themes of non-responsiveness to customers and citizens, creating distrust in customers and citizens, increasing wasted time

of citizens, and imposing low quality costs. Unwanted results related to the organizational process include four sub-themes of letter scattering and unnecessary formalities, environmental pollution, non-compliance with laws and regulations, and parallel work and lack of coordination with other organizations.
Participant (2) said: "Sometimes when I go to the gas company to solve a problem, I do not receive a proper answer to my question. This is something that may not be seen at all in the examination of the human resources of an office, but it has a great impact on the mind of a citizen about receiving services.
Participant (1) said: "One of the problems that our society is always involved in is mistrust. Has

anyone from the government authorities ever tried to see how much people trust or distrust a government organization, such as the gas company? Participant (7) said: "In my personal opinion, time is very important in providing service.

I myself work with people who are punctual, although good work has been done in non-face-to-face services and the level of response has increased, but we have to accept that a lot of citizens' time is wasted in face-to-face services."

Participant (11) said: "In buying a product, the important thing is the price or cost that is paid for it. It doesn't matter, it's the same in services, if the gas company imposes a lot of costs on citizens and its services are not of high quality, human resources are not productive at all."

Participant (5) said: "At the same time, we should not skip the administrative formalities to provide a service easily. Sometimes the human resources of the gas company are so involved in distributing letters and some unnecessary

administrative procedures that they forget the main service and its value. Participant (14) stated: "Gas is one of the energies that was created with the purpose of environmental health and with this purpose it entered various industries. It is not right for this industry itself to become an industry that harms the environment. pollute the life".

Participant (13) said: "Fortunately, we have made good progress in the field of laws and regulations. The rules and regulations of the gas company are comprehensive. If the human resources of the gas company follow the rules and regulations, they will be productive, and if they do not follow them, they will not be productive. Participant (12) stated: "In Iran's administrative system, the services of different organizations are aligned with each other, and parallel work and lack of coordination with other organizations will be sources of productivity in the human resources of the gas company."

Code	Sub-themes	Main themes	Main cluster
S3	Added value of capital	Added value of capital	
S3	Added value of labor		
S7	The value of goods and services and the cost of resources spent		**Measuring efficiency**
S7	Added value and equipment resources spent		
S13	Service output and capital input	Service effectiveness	
S13	service output and labor input		
S9	The amount of services provided and the budget spent		
S9	Average service delivery time and service unit cost		

Main cluster 5: Measuring efficiency

The analysis of the interviews showed that the fifth main cluster of productivity measurement in the gas company of East Azerbaijan Province is the measurement of efficiency. This cluster includes two main themes of added value and effectiveness of services.

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Added value includes four sub-themes: added value of capital, added value of labor, value of goods and services, and cost of spent resources, added value and equipment of spent resources. Service effectiveness includes four sub-themes of service output and capital input, service output and labor input, the amount of service provided and the budget spent, the average service delivery time and service unit cost.
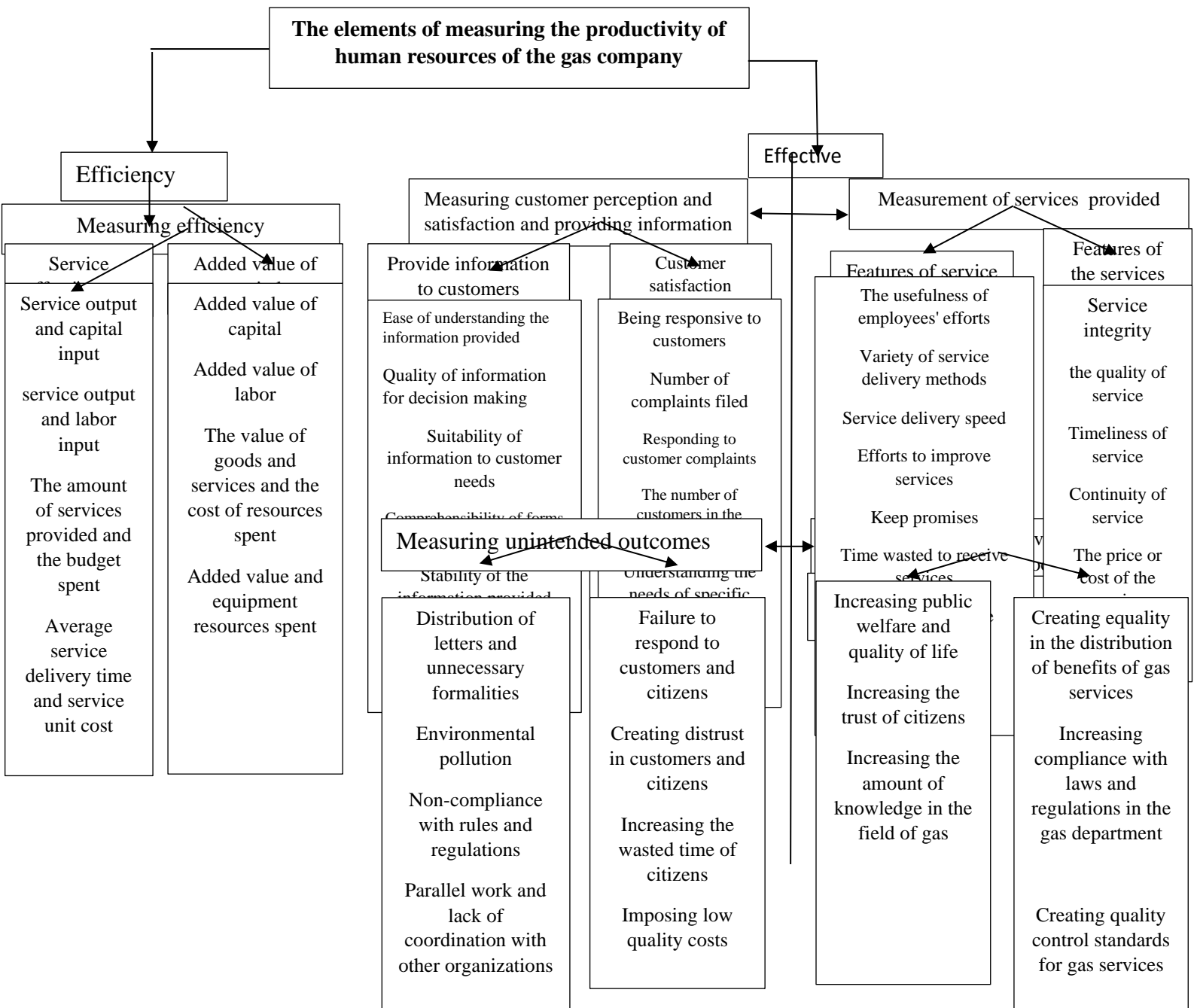
Participant (3) stated: "Another criterion in measuring productivity is efficiency, and efficiency includes the added value that capital

and labor create for the organization." Participant (7) said: "Productivity becomes meaningful with efficiency. In measuring efficiency, the value of goods and services and the cost of resources spent and the added value and equipment of resources spent are calculated. Participant (9) stated: "It is clear that in measuring productivity, we must measure the effectiveness of services. The amount of services provided and the budget spent, and the average service delivery time and service unit cost should be determined.

Participant (13) stated: "In determining productivity, service output and capital input and service output and labor input are usually measured."

The elements of measuring the productivity of human resources of the gas company

Efficiency

Effective

Measuring efficiency

Measuring customer perception and satisfaction and providing information

Measurement of services provided

Service

Added value of

Provide information to customers

Customer satisfaction

Features of service

Features of the services

Service output and capital input

service output and labor input

The amount of services provided and the budget spent

Average service delivery time and service unit cost

Added value of capital

Added value of labor

The value of goods and services and the cost of resources spent

Added value and equipment resources spent

Ease of understanding the information provided

Quality of information for decision making

Suitability of information to customer needs

Comprehensibility of forms

Stability of the information provided

Being responsive to customers

Number of complaints filed

Responding to customer complaints

The number of customers in the

Understanding the needs of specific

The usefulness of employees' efforts

Variety of service delivery methods

Service delivery speed

Efforts to improve services

Keep promises

Time wasted to receive services

Service integrity

the quality of service

Timeliness of service

Continuity of service

The price or cost of the

Measuring unintended outcomes

Distribution of letters and unnecessary formalities

Environmental pollution

Non-compliance with rules and regulations

Parallel work and lack of coordination with other organizations

Failure to respond to customers and citizens

Creating distrust in customers and citizens

Increasing the wasted time of citizens

Imposing low quality costs

Increasing public welfare and quality of life

Increasing the trust of citizens

Increasing the amount of knowledge in the field of gas

Creating equality in the distribution of benefits of gas services

Increasing compliance with laws and regulations in the gas department

Creating quality control standards for gas services

Diagram 1: The elements of measuring the productivity of human resources of the gas company

Discussion and conclusion

With global changes and transformations and the change of industrial economy to service economy and the rapid development of service organizations, the role of service organizations in the growth and development of societies has increased. Service organizations in Iran as the support of production organizations play an important role in the success or failure of the production system, and improving their productivity has a great impact on the country's economy and improves the quality of life of the people in the society. In addition to this, Iranian society has witnessed significant and tremendous changes in various fields during the last few decades, these changes have affected the governments due to their extent, complexity, intensity and speed in the age of information explosion and increasing pressure. He has imposed on them for more productivity. Productivity is a comprehensive and general concept, the increase of which has always been considered by politicians, economists and statesmen as a necessity to improve the standard of living, more prosperity, peace and comfort of the society.

Productivity management process includes measurement, implementation, evaluation and correction. Measuring productivity in the government sector and improving it is one of the important topics in the management of government organizations, especially regulatory and policy-making institutions. The need to improve productivity at three levels: national, government and organization. At the national level, competition is possible through higher productivity. With the growth of productivity, living standards increase.

An increase in the level of productivity leads to an increase in economic power, and an increase in economic power can lead to an increase in political power. Improving productivity at the government level has been the focus of various societies, as "Holzer" states, a productive society is based on a productive government. With the increase in living standards, people demand better services from the government, in response to this demand, more achievements should be realized using less resources. . With the growth of productivity, the government is able to provide better and more social services and has the ability to do better and develop more effective and efficient programs.

In addition, measuring productivity at the level of policy-makers and drafters of government statutes and laws can be used as a guide and plays an important role in improving government policies and programs and selecting general managers and low-level managers. The use of productivity for the government's regulatory bodies is also discussed, it is an effective tool for control and improves decisions, increases responsiveness to the society and increases the transparency of the government's performance, as a result, people's trust in the government increases.

In addition, measuring productivity improves the performance of government organizations and ultimately improves budgeting. Measuring productivity at the organization level can improve the following: strategic planning and operational planning, allocation of budget and organizational resources, specifying client expectations, specifying opportunities for improvement (especially quality improvement) and specifying activities which need to be revised, comparison of individuals, units, organizations and industries in order to help management decisions, comparison of the organization's performance with internal standards (process control and improvement), comparison of the organization's performance with external standards, a tool for self-evaluation of organizations Guidance government to continue or stop basic organizational programs for determining salaries and wages.

Considering the positive effects of productivity measurement in the government sector and its major role in improving productivity, the necessity of a productivity measurement system in Iran's government organizations is inevitable. While most managers focus on financial efficiency and do not pay much attention to the effectiveness of the organization. Analysts of the

government sector criticize the efforts of government organizations to focus more on the economic concept of productivity measurement. Some people emphasize the role of productivity measurement in increasing government transparency, and others believe that collecting key data and improving it in the government sector and providing this information to government policy makers and implementers and stakeholders. It can improve decision making.

Productivity can be defined as the effective and efficient use of resources to achieve efficiency. Effectiveness is defined as the level of efficiency, and efficiency is defined as the ratio of efficiency (or output) to data. The use of efficiency and effectiveness in the definition of productivity makes it more comprehensive compared to efficiency, and this is approved by many believers.

To the extent that some of them believe that limiting productivity to efficiency causes ambiguity and does not provide accurate information to the organization. in the gas company; In addition to measuring effectiveness and efficiency, equality should also be measured. For-profit organizations emphasize more on efficiency measurement, while the gas company, as a government organization, emphasizes more on effectiveness, and only in government organizations is attention paid to the standard of equality.

In productivity measurement, performance measurement is a key point that government organizations should pay attention to.

To measure effectiveness, long-term returns and outputs must be distinguished from each other. Long-term returns measure the ultimate goals of organizations. Such goals cover periods of three to five years and sometimes more.

Output is defined as direct returns that show the immediate results of the strategy, which are often called short-term returns; The first problem in measuring the effectiveness is to specify the key outputs and outcomes. The results of the programs are usually not clear, managers can determine the important results of the organization by asking employees and stakeholders when assuming a new responsibility.

In this way, the importance of different outputs and outcomes is determined according to the needs of customers and clients. The second issue is that sometimes it is very difficult to measure the benefits, the usual strategy in these cases is to first focus on the benefits that can be measured and then use the subjective evaluation of customers and citizens to collect data about this. It is a type of efficiency measurement.

Efficiency is also measured in different ways

In a simple approach, efficiency is obtained by specifying all returns and dividing them by all data. This type of measurement is called comprehensive efficiency. Comprehensive efficiency needs all the reported costs, including salaries, overhead, materials, etc., but most efficiency measurement focuses on one efficiency, which is called partial efficiency.

This measurement is useful in some situations, but examining partial performance indicators separately can be misleading. In some cases, efficiency measurement has been interpreted as cost-benefit estimation or cost-effectiveness estimation. In the cost-benefit or cost-effectiveness analysis, all costs and benefits must be specified. In order to measure productivity, the amount of work should also be measured. Workload is measured by evaluating activities or strategies.

To measure the effectiveness, four dimensions were proposed, the dimension of measuring customer perception and satisfaction has an important priority, today the gas company, like the private sector, must take steps towards customer satisfaction, the research conducted in many countries also confirms this point that the organization Those bound to higher productivity have increasingly focused on customer satisfaction and put customer orientation at the top of their performance. Customer satisfaction can be achieved by crystallizing it in the goals and missions of the organization, finding the necessary knowledge about their needs, the organization's commitment, and using customer feedback. Measuring the services offered to the society and the organization's customers is one of the other important indicators of the productivity of human resources of the gas company.

The services provided and customer satisfaction are closely related to each other, so that an increase in one can lead to an increase in the other.

In this section, special attention should be paid to four important areas including cost, quality, time and innovation. The organization's efforts should be aimed at reducing costs, increasing quality, faster response and more innovation.

Measuring the improvement and upgrading of the society's conditions is also one of the other indicators of measuring the productivity of human resources in the gas company. In this part, the organization examines the society's conditions in terms of its missions in order to measure the productivity. The very important role of organizations in the growth and improvement of society's conditions, all the efforts of organizations should be in the direction of applying the indicators mentioned in this section.

Measuring the unwanted and negative results from the supply of the organization's services is also one of the other indicators for measuring the productivity of human resources in the gas company. Considering the efforts of organizations to reduce unwanted and undesirable results, this dimension is less important than other

dimensions of effectiveness. Therefore, it is suggested to pay attention to the criteria presented for each of the elements of measuring productivity.

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