The Role of Administrative Communication Systems and Techniques in Serving Decision-Making: A Practical Case at the First Rusafa General Directorate of Education

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The present study aims at clarifying the relationship of influencing and being affected between communication and decision-making in the educational institutions, showing the influence of administrative communications on the process of decision-making in the certain administrations, and identifying the ability of decision-making centres to adopt an effective scientific approach to develop this process. The problem of the present study is in the extent to which modern communication systems and techniques contribute to serving the process of decision-making in the First Rusafa general directorate of education. The questionnaire method is used in the practical side of the present study as the main tool of collecting data. The field side of the present study focuses on the inductive approach. The present study starts with noticing the phenomenon in this field. Then the required data for the research are collected.

**Key words:** Administrative Communication Systems, Practical Case, Decision-Making
Introduction

Human beings always seek to communicate with others using different methods, each of which is compatible with the nature of the civilized stage that humanity is going through, in order to exchange the necessary experiences and information.

The various functions of administration; planning, organizing, taking decisions, coordinating, supervising, following up, and controlling are all performed through communications. The initiative in good and timely communication is behind the success of many official activities and works, especially in the organization.

The role of administrative communications in managing human resources acts within the institution to clearly identify administrative situations and problems, to develop appropriate solutions, and predicting all expectations and consequences thereof. To achieve the objectives of the present study, it is divided into five sections. Section one is devoted to the research methodology. Section two is devoted to communications, through concepts and importance of communications, types of communication, means and obstacles to communication. Section three is devoted to decision-making, concepts, stages, and types. Section four is devoted to the practical aspect. Section five is devoted to the conclusions and recommendations.

Section One
The Research Methodology
First; the Research Problem

Recently, the world has witnessed a tremendous development in the information and communications sector. This development changed the features of the new world, replaced functions instead of others, and caused technologies that changed the activities of society to emerge. Hence, the research problem can be formulated with the following question; To what extent do modern communication systems and technologies contribute to serving the decision-making process in the first Rusafa general directorate of Education?

Second, the Objectives

Defining the research problem, the present study aims at clarifying the relationship of influencing and being affected between communication and decision-making in the educational institutions, showing the influence of administrative communications on the process of decision-making in the certain administrations, and identifying the ability of decision-making centres to adopt an effective scientific approach to develop this process.
Third, the Hypothesis

The present study assumes that the employment of communication systems and technologies with all forms; written, oral, electronic, pictorial, or non-verbal means contributes to an effective influence in serving administrative decision-making in the first Rusafa general directorate of Education.

Fourth; the Significance

The significance of the present study comes from the significance of the topic. The process of making decisions is hugely influenced by the role of communication, which affects the functioning of institutions in today's world.

Fifth, the Research Community and Sample

The research community represents the Iraqi Ministry of Education. As for the sample, it represents the first Rusafa general Directorate of Education and its departments as a sample in the Ministry of Education.

Sixth, the Data Collection Method

The theoretical aspect of the present study is based on the inductive method, which is based on the references, sources, studies, relevant research and information drawn from the global information network (the Internet). The practical side follows the Quantitative Method, which is one of the basic approaches in social studies. This comes as a result of using the questionnaire method as a basic tool in collecting data.

Seventh, the Limits

1. The spatial limit; The First Rusafa General Directorate of Education.
2. The temporal limit; The research was completed during the year 2017.

Section Two

First, the Concept and Importance of the Communication Process

The process of communication is defined in several ways. Muhammad, 2002) defines it as (the process by which the message is transferred from a certain source to one or more recipients with the aim of changing behavior) (Muhammad, 2002: 54). Al-Amyan, 2010) defines it as the process or the way in which knowledge is transferred from one person to another until it becomes common between them, and leads to understanding between these
two people or more. Thus, this process has elements, components, a direction in which it is going, a goal it seeks to achieve, a field in which it acts and affects, (Al-Amyan, 2010: 65).

Al-Rubaie, (2012) defines it as “the process of exchanging ideas and information and the flow of instructions, orders and decisions between subordinates and workers with the aim of unifying their ideas and concepts in order to achieve the goals of administrative work” (Al-Rubaie, 2012: 113).

The American Training Association defines organizational communication as "the process of exchanging ideas and information in order to create a common understanding and trust between human elements in the organization" (Al-Bakri, 2012: 43).

Second; the Importance of the Communication Process

Communication is the basis of our daily life, as we exchange huge quantities and types of data and information, from asking about the conditions to exchanging feelings, conveying ideas, reviewing news, communicating views and providing information. There are the so-called informal communications, which are communications that are established by informal means and are not included in formal regulations and procedures but rather determined by personal connections and social relationships. This type of communication is characterized by its speed compared to official communications. Some studies have indicated that it is more than 75% of the time to transfer information, and Cm by relying on verbal means of communication. (Rubens, 2010: 45).

Third, the Elements of the Communication Process

The most important elements of the communication process can be explained as below (Al-Ajmi, 2010: 81):

1. Thinking; It is the responsibility of the sender of the information. It refers to the information and instructions for performing the tasks and functions of the scientific departments that lead to its transmission to the addressee. Thinking represents the contents of the message later.
2. Transferring; It is the conversion of the ideas about which communication is wanted into some forms of communication. The conversion process is related to the thinking process, as it is difficult to separate what the sender thinks and the result of thinking about something that can be transferred between the sender and the addressee.
3. The message; The success of the communication process depends on the content of the message because of the ideas and information that could be interpreted. The message represents the true goal of the sender.
4. Message transmission; It is the means by which ideas (the contents of a message) can be transmitted to the addressee. The means of conveying the message is related to the method followed by the source of the communication or the sender of the information.
5. Awareness and understanding of the message; Understanding the message is achieved whenever the contents of the message are related to the interests of the addressee as there is a close relationship between the means and the individual's capabilities for perceptual awareness, so it is people who learn better through the experience of audio arrangement or actual practice.

From the foregoing, the components of the administrative communication process

The goals of communication vary according to the needs of the institution, (Yassin, 2005: 34):

1. Influencing the behavior of the connected parties. Otherwise, the communication process becomes just news or words.
2. The proper and democratic interaction between the head of the department and the associates with the aim of achieving the functions and tasks of the scientific departments.
3. The recipient should understand the intent that the sender should deliver and take a position on it because the communication process is not complete unless the response is achieved by the second party.
4. Directing, mentoring, and providing the associate with everything new in their field of life and work that helps them in personal and professional development.

Fourth; functions of the communication process.
The communication process performs many tasks, (Al-Zoghbi 2002: 89).
Communications have reliable functions to develop and improve the organization's system.
The most prominent administrative functions of communication are (Al-Orfi, 2002: 142):

1. Providing required and appropriate human and material inputs and working to develop them, while maintaining effective communication with the community.
2. Educational and cognitive functions: represented in achieving the institution's functions through focusing on scientific research and community service.
3. The emotional function; Through the communication process, staffs can inform the administration of their needs and convictions, compare trends and understand ambiguity about their tasks and duties.
4. The function of assisting in making decisions; Communication helps to provide information and transfer data to determine and evaluate available options, and then to reach rational decisions.
5. The function of supervision; As the administration controls the activities of its members through the use of official communication channels, these channels are a major regulatory means of oversight within the institution.

6. The function of development; As communication is one of the resources of development, it is a tool for human development, the development of knowledge, expertise, and experiences.

7. The function of producing a result or reaction; The reason for communication is to cause a reaction for the associate, represented by desirable behavior that achieves the interest and benefit of the organization (Al-Kharabsheh, 2001: 25).

On the other hand, (Al-Sakarna, 2010: 74) indicates that the main functions that communication operations perform within the organization are the process of directing the communication, the purposes that the communication serves, and theoretical issues. The results are as shown in the following table.

**Table 1: Purposes of communication.**

<table>
<thead>
<tr>
<th>Job (opportunity)</th>
<th>Orientation</th>
<th>Objectives</th>
<th>Focus and research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion</td>
<td>Feelings</td>
<td>Increased degree of acceptance of organizational roles</td>
<td>Satisfaction, conflict management, tension reduction and role-playing</td>
</tr>
<tr>
<td>Motivation</td>
<td>the influence</td>
<td>Commitment to organizational goals</td>
<td>Influence, power and coping, reinforcement and expectation theory, behavior modification.</td>
</tr>
<tr>
<td>Information</td>
<td>Technical</td>
<td>Providing the necessary data to make decisions</td>
<td>Decision-making, information processing, and decision-making theory</td>
</tr>
<tr>
<td>Control</td>
<td>Structure</td>
<td>Clarify duties, authority and responsibility</td>
<td>Organizational design</td>
</tr>
</tbody>
</table>

**Source:** (Al-Sakarneh, 2010: 74)

The table shows that communication is one of the administrative functions. It is the only component that plays a prominent and distinct role for all administrative functions. It helps the institution and workers to accomplish their jobs and tasks and generates confidence through understanding each other, which leads to raising their spirits and their capabilities for outstanding performance.
Fifth, Types of Communications

There are several types and categories of communications. Two main important types of communications will be mentioned below, (Al-Orfi and Abbas, 2002: 143):

Official Communications

They are the communications occurring through official lines of authority and they are approved according to written regulations and decisions. They may be internal (within the institution) or external (with other institutions). They are generally divided into three types as follows, (Alexander, 2005: 52):

A. Downward communications.
They are the connections that flow from the top of the organization to the bottom (from the manager to the various employees in the organization, including workers, employees, etc.). They aim to transfer orders, instructions, and decisions. (Al-Taie, 2006: 45).

B. Upward communications.
They are the communications issued by the employees of the institution to the manager. They include the results of implementing plans and explaining obstacles and difficulties in implementation, notes and opinions.

C. Horizontal communications.
They are the side communications taking place between individuals or groups at the opposite levels (such as the director’s communication with another manager or the employees with each other).

Converging or Pivotal Communications

They are the communications between managers and the work group in departments that are not affiliated with them (such as the director of the institution communicating with employees in another institution or head of activity in the organization with members of other activities) This type of communication achieves the ongoing interactions between the various divisions in the organization. It is usually an implicit Type of communication in the organizational maps.

Sixth, Means of Communication

There are many means or methods of communication. Yet, three important means will be mentioned below, (Al-Ajmi, 2010: 67):
1. Oral means.
They are the means by which information is exchanged between the caller and the called orally by means of the spoken and not written word (such as personal interviews, phone calls, seminars and meetings, and conferences).

2. Writing means.
They are the means by which information is exchanged between the caller and the called by means of the written word (such as regulations, publications, reports, circulars, notes, proposals, complaints, etc.). This method is the same in most government institutions. There are five conditions for the written message that all begin with a letter (c); It should be COMPLETE, COCISE, CLEAR, CORRECT, and COURTEOUS.

Written means are distinguished as they can be kept and refer to them when needed. They protect the information from misrepresentation. They are of low cost.

They are the means by which information is exchanged between the caller and the called by means of signs or gestures and behavior (facial expressions, movement of eyes, hands, sitting method, etc.). They are also called body language. These hints may be intentional or unintended from the source of communication. The percentage of using them in communication is approximately 90%, especially in messages that relate to feelings. The understanding of non-verbal messages differs due to the difference in cultures within the organization and within society as well.

**Seventh, the Elements of Effective Communication**

The effectiveness of communication depends on several factors or constituents. Among the most important of these factors is listening. It means politely listening to others with understanding, respect, and not interrupting them to understand the messages that they express in a verbal and non-verbal way. Almighty Allah says stressing the importance of listening to understand and remember; If the Qur'an is recited, listen to it, you may have mercy.) Al-A'raf: 204.

The manager’s listening to his/her employees is considered one of the most important elements of effective communication. The manager can, through listening, get to know what the employee wants to say, and the employee has the opportunity to fully express him/herself. (Al-Kharabsheh, 2001: 79).

The researchers believe that the director’s listening to his/her employees does not mean in any way that he/she refrains from talking to them, but it means that the manager gives the
employee the impression that his/her leader listens to everything he/she says and comprehends his/her words and his/her interest in him/her.

Many studies have found that one of the most important bad habits in listening that leaders should avoid is to notify the spokesperson that what he/she says is not important (such as being busy with a phone call or signing some letters).

The manager should also consider removing obstacles that affect listening, by using the following methods, (Dewberry, 2005: 69):

1. Using the clearance policy.
The manager should give the speaker the right space by providing respect, attention, and appropriate reactions, removing obstacles, barriers, and not jumping to incomplete generalizations or quick impressions before giving him/her the full opportunity to speak and understand the message he/she wishes to communicate.

2. Using the appropriate sign language.
With a smile, the manager should look at the speaker's eyes, move the head with approval, encourage continuing the conversation, use the appropriate session that makes the speaker feel comfortable and calm, reduce the voice, and ask the appropriate questions that make the speaker express him/herself.. Why ... how? .. What do you think ? ... What are your reactions to?..

3. Using the policy of assimilating others.
By providing the necessary respect, good listening, and appropriate responses, the director will be able to disperse the ability of others or their desire to oppose and put them in a position closer to being persuaded of his/her outlook and influenced by what he/she says, or at least, they take the neutral side.

**Section Three**

**Decision Making**

Decision-making is one of the core tasks and basic functions of the manager. The amount of success achieved by any institution depends primarily on the ability and efficiency of administrative leaders, their understanding of administrative decisions and methods of taking them, their concepts that guarantee the guiding of decisions and their effectiveness, the realization of the importance of clarity and time, and the work on Following up its implementation and evaluation.
**First, The Concept of Decision-Making**

The decision-making process represents the essence of the activity of the individual and the group in their private lives or in their field of work. It is considered a component of life. Decision-making is one of the core tasks and essential functions of the manager. It depends on the extent of their understanding of the matters and their understanding of the essential substantive solutions, (Al-Amiri, 2008: 152).

(Ibrahim, 1999) defines it as the process by which the best available alternatives are chosen to solve a specific problem or face a situation that requires that, after studying the expected results of each alternative and its effect on achieving the required goals within the parameters of the regulatory environment, (Ibrahim, 1999: 46).

(Askar, 2009) defines it as "choosing from among the group of available alternatives the appropriate alternative or solution". He believes that decision-making comes in the sense of solving the problem and he says "Given that decision-making begins with a problem and ends with a solution to this problem, the decision-making or problem-solving is used for the same Meaning "(Askar, 2009: 79).

(Mustafa et al, 2007) state that the decision-making process is a choice among certain alternatives, and the choice is preferable to the most appropriate, according to the requirements of the situation and the time available to ensure the achievement of goals effectively (Mustafa et al, 2007: 102).

From the foregoing, it becomes clear that the administrative decision-making process is a human activity that requires orderly and conscious thinking as (Al-Sheikh, 2006: 10) states that effective decision-making process is distinguished by:

1. Cumulative; A process that invests the accumulated experience and information and does not suddenly start without introductions.
2. It does not arise from a vacuum, but rather takes place in a real organization to face concrete and tangible situations and problems.
3. It does not depend on the capabilities of the person making the decision, as he/she cannot isolate him/herself from the multiple influences surrounding the situation inherent in it.
4. It is the product and outcome of the decision-maker's interaction with other subordinates and stakeholders, whether the interaction is direct or indirect.
5. It takes place in an atmosphere that is conducive to creativity, in which information, research and investigation capabilities, freedom of thought, and taking positions and making them transparent are available.
Second, the Importance of Decision-Making

Decision-making is the focus of the administrative process, as it is a cross-cutting process in all administrative functions and activities. When the administration exercises the planning function, it makes certain decisions at every stage of the plan’s development, whether when setting a goal, drawing policies, preparing programs, determining appropriate resources, or choosing better ways and methods to operate it. When the administration performs the oversight function, it also makes decisions regarding determining the appropriate criteria for measuring business results and the modifications it will make to the plan and work to correct mistakes, if any. Thus, the decision-making process takes place in a continuous cycle with the continuation of the administrative process itself (Darwish, 2008: 67).

Third, Steps of Decision-Making

There is no comprehensive model agreed upon by researchers in the field of decision-making. Based on the foregoing, the researchers offer steps for decision-making:

1. Defining the problem; The decision-making process usually begins with the observation of the emergence or existence of a problem or there is an opportunity for decision-making laws regarding the individual, group or institution. The problem must be identified and confronted, determining its importance, not confusing it with its symptoms and causes, and the appropriate time to address its solution and make effective and appropriate decisions regarding it (Al-Amri, 2008: 146).

The following are the most important types of problems facing decision-makers (Al-Nimr, 2010: 215):

A. Systems problems; This division includes the group of problems resulting from poorly designed work systems or caused by external factors that lead to the ineffectiveness of operating systems. Systems problems take many forms, including weak information systems, problems and disruptions in work procedures, weak quality control, and problems in working conditions.

B. Humanitarian problems; This classification includes many problems as it deals with the complex human side as well as human relations. The following human problems can be observed: weak sense of belonging, problems of motivation, conflicts between individuals, weak cooperation and coordination, weak discipline, the emergence of blocs between individuals and not working with a one team spirit.

C. Commercial problems; Commercial problems take many forms and have a predominant character, which is the financial determinants and exploitation of commercial resources. Commercial problems include insufficient allocations in the budget, an increase in the level
of expenses and costs, weak liquidity rates, and finally a weak exploitation of the institution's resources.

The problem can take a complex nature from more than one type of problem, that is, the problem by its nature has a human dimension and a commercial dimension, or the result of a defect in the work system.

The scientific method for this is to diagnose the problem by classifying it first into the aforementioned divisions of problems (commercial and humanitarian systems). From this standpoint, it can be precisely defined.

For example, the unemployment problem in a country can be attributed to it being 90% an commercial problem because of poor salaries, and 10% to a systemic problem in terms of poor working conditions.

2. Information collection; Real understanding of the problem and suggesting suitable alternatives to solve it requires collecting data and information related to the problem. Therefore, the manager depends on taking the decision regarding the volume of information collected about this problem. Some management scientists have classified the types of data and information that the manager uses into (Askar, 2009: 89):

- Primary and secondary data and information.
- Quantitative data and information.
- Qualitative data and information.
- Things and facts.

3. Defining alternatives; The number and type of alternative solutions depends on several factors:

**Finding Alternatives**

This stage begins by looking first for known alternatives, i.e. those that were used as solutions to existing or previous problems. If it appears that the alternative is inappropriate, then unknown solutions that require creative thinking are explored, and some successful solutions or alternatives may be excluded as a result of many obstacles including money, time, Government systems, or technological potential, (Sheikh, 2006: 88).

**Evaluating the Alternative**

Evaluating alternatives in the future requires any assessment of the pros or cons of each alternative, as well as determining the probability of distribution of the results of each
alternative by making use of previous experiences and predictions through integration between ideas and checking the results of solutions, because intuition is a psychological process that transmits perceptions subconsciously.

**Choosing the best Alternative**

This step represents the climax of the decision-making process by choosing an alternative from a group of alternatives and achieving the best results. It may include a high degree of risk to the decision-maker. So, the decision-making process may be difficult. It is sometimes painful for the decision-maker. It is difficult to reach an optimal alternative test (despite the development of mathematical and statistical methods of analysis). (Askar, 2009: 145).

4. Implementing the solution; This step in making decisions includes applying what was chosen to solve the problem, i.e. an alternative implementation or solution process which is not an easy process. The task of implementing the solution is entrusted to a person or persons who have sufficient skills to implement this solution while giving them opportunities for validity and flexibility that enable them to implement the solution.

5. Following up on the implementation of the solution; When the solution is implemented, it must be monitored and followed up to determine its effectiveness in treating the problem. The following-up shows us the correctness of our proper choice to solve the problem. (Ibrahim, 1999: 95).

**Fourth, Types of Decision-Making**

Decisions can be classified according to the following (Nadra, 2005: 87):

1. Programmed decisions.
Decisions are considered programmed, if the criteria for judging them are clear, sufficient information is often available about them, it is easy to identify alternatives, there is relative confirmation about the chosen alternatives, they are frequent, routine and well-defined decisions, and with known and predetermined procedures for dealing with them.

2. Unprogrammed decisions.
The need to take them appears when the institution first faces the problem, there is no prior experience of how to solve it, and there are no clear criteria for evaluating alternatives to choose between them. Therefore, the conditions that prevail in this case are the conditions of uncertainty regarding alternatives to the results of alternative actions. As a result of these characteristics, each decision is made according to the requirements, conditions, and characteristics of the problem. There are no uniformed patterns for solving this type of
problems. The distinction between the two types of decisions is explained in the following table (Brough, 2010: 281).

**Table 2: Classification of decisions.**

<table>
<thead>
<tr>
<th>Basics of differentiation</th>
<th>Programmed decisions</th>
<th>Unprogrammed decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>nature</td>
<td>Routine and frequent</td>
<td>Irregular and non-recurrent</td>
</tr>
<tr>
<td>ruling criteria</td>
<td>Clear</td>
<td>Personal judgment can be used</td>
</tr>
<tr>
<td>Identifying alternatives</td>
<td>Easy</td>
<td>It is somewhat difficult</td>
</tr>
<tr>
<td>Decision making conditions</td>
<td>Make sure</td>
<td>Relative uncertainty</td>
</tr>
<tr>
<td>the information</td>
<td>Available</td>
<td>Too few and not enough</td>
</tr>
<tr>
<td>Solution tools</td>
<td>Quantitative methods and ready-made computer programs</td>
<td>Experience, advanced computer software</td>
</tr>
</tbody>
</table>

**Source:** (Brough, 2010: 281) acted.

**Fifth, Decision Impediments**

The decision-making is not an easy process. It constitutes a major challenge for managers in various business institutions, especially in a rapidly changing and complex environment. This process needs great care in order for the decision to be correct. This complexity comes from many sources, (Al-Nimr, 2010: 54):

1. Multiple standards adopted in decision-making.
2. The intangibility and clarity of many elements that are related to alternatives or options that are developed to choose the best ones.
3. Risk and uncertainty.
4. The long-term content of the decision.
5. The need for specialists from different branches of knowledge and professions.
6. The interference of many people, groups, and departments in the decision-making process and take it. It is rare for a decision to be made by a single director in all its stages.
7. Various attitudes, values, and aspirations of individuals or groups involved in decision-making.
8. Unintended or expected results.

**Sixth, the Difference between Problem Analysis and Decision-Making**

There is a difference between problem analysis and decision making. Problems can be solved without making any decision, just as decisions can be taken without problems solving. A supervisor may decide to use one of the new forms to sign by employees every morning in
order to control the delay process. The decision is made, but the delay problem may not be solved if the reason is the poor morale. Therefore, the causes of the problem should be analyzed first. It may be clear from the analysis that the cause of the problem falls outside the scope of the supervisor's responsibility. Therefore, he/she can do nothing but inform the senior management (Askar, 2009: 155).

**Seventh, the Collective Decision-Making Method**

The business environment has become more complex and has many changes affecting decision-making. Initially, decisions were made by managers individually or with very limited participation due to environmental stability, abundance of resources, ease of forecasting of demand and lack of competitors. However, due to the huge size of the competition, the multiplicity of institutions, the large number of exhibits, the increase in the competition unit, and the demand for workers to participate in taking decisions even through indirect pressure methods on managers, it was necessary to take part in the decisions and take the consultation between the director and subordinates. (Darwish, 2008: 122).

There are advantages of collective decision making, (Mustafa et al., 2009: 146):

1. Emphasis on the principle of Shura; The principle of Shura is one of the origins of life in Islam. Almighty Allah says; (and consult them on the matter).
2. Reaching better decisions.
3. Accessing more alternatives.
4. Acceptance.
5. Raising the morale of the parties involved in decision-making.

**Section Four**

*The Practical Side*

*First, the Research Community*

The directorates affiliated with the Ministry of Education are chosen as a community for the research as they have a number of managers, heads of departments, and a group of employees who are subjects to research variables represented by decision-making and communications. The directorates of the Ministry of Education cooperate with the researchers.

*Second, The research sample*

The research sample was selected in a deliberate way for a number of employees whose job grades ranged from a manager of department, head of department, and head of division in the
General Directorate of education/ First Rusafa. 50 forms were distributed and then they were retrieved completely without deficiency. Thus, the rate of retrieval of the sample is (100%). The following table shows a description of the sample according to gender.

**Table 3:** Search sample by gender.

<table>
<thead>
<tr>
<th>No.</th>
<th>Sex</th>
<th>Number of individuals in the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>TOTAL</td>
<td>50</td>
</tr>
</tbody>
</table>

The following table shows the academic achievements of the research sample.

**Table 4:** The academic achievements of the research sample

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Number of individuals in the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ph.D.</td>
<td>2</td>
</tr>
<tr>
<td>2 M.A.</td>
<td>5</td>
</tr>
<tr>
<td>3 BA</td>
<td>12</td>
</tr>
<tr>
<td>4 Diploma</td>
<td>31</td>
</tr>
<tr>
<td>5 Total</td>
<td>50</td>
</tr>
</tbody>
</table>

The following table shows the years of experience of the research sample.

**Table 5:** Years of experience of the research sample.

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of individuals in the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>8</td>
</tr>
<tr>
<td>From 5 years to 9 years</td>
<td>20</td>
</tr>
<tr>
<td>From 10 years to 14 years</td>
<td>16</td>
</tr>
<tr>
<td>From 15 years to 19 years</td>
<td>4</td>
</tr>
<tr>
<td>20 years and over</td>
<td>2</td>
</tr>
</tbody>
</table>

**Third, the Research Tools**

1. Questionnaire.
2. The SPSS statistical program.
The Likert quinary scale was used in answering the items as shown in the following table.
Table 6: Likert quinary scale.

<table>
<thead>
<tr>
<th>Totally disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Fourth, Presenting, Analyzing, and Interpreting the Results at the Level of the Sample

The results of the field study are presented and analyzed relying on the frequency distributions of the answers of the members of the study sample, the percentages thereof, up to the arithmetic mean, the standard deviation and the relative importance of each item of the questionnaire. The present study relied on the quinary (Likert) scale in the sample responses. The level of each variable is confined between (1-5) by three levels. It includes a level around (the hypothetical medium), as it ranges between (2.5 - 3.5). It is high (above the hypothetical medium), if it reaches above (3.5), and it is low and weak (Below the hypothetical mean), if it reaches below (2.5), knowing that the hypothetical (standard) mean is (3).

Fifth, Diagnosing the Reality of the Variables

Table (7) and Figure (2) refer to the arithmetic circles, standard deviations, and the relative importance related to the viewpoint of the researched sample regarding the questions answered, as the aforementioned table reflects a general arithmetic mean for a variable of (3.36) which is about the standard mean of (3). The general standard deviation and the relative importance were around (0.18) (66%).

Table (7) Frequencies, ratios, mean, standard deviation, and the relative importance of communication systems and techniques in effective decision-making items.

<table>
<thead>
<tr>
<th>Paragraphs</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>The Internet and e-mail are often used in the department's decision-making process.</td>
<td>15%</td>
<td>29%</td>
<td>52%</td>
<td>4%</td>
<td>49%</td>
<td>2.44</td>
<td>0.80</td>
</tr>
<tr>
<td>The employment and use of the</td>
<td>1%</td>
<td>12%</td>
<td>30%</td>
<td>13%</td>
<td>60%</td>
<td>2.99</td>
<td>0.53</td>
</tr>
</tbody>
</table>
Table (7) and Figure (2) refer to the arithmetic milieu, the standard deviations and the relative importance related to the viewpoint of the study sample regarding (communication systems and techniques in the effectiveness of decision-making). The aforementioned table reflects a general arithmetic mean around the standard mean; (2.80). The dispersion has an average harmony in the answer confirmed by the general standard deviation of (0.48). The relative importance on the scale of this variable of the sample was (66%), but in terms of questions, this variable was measured by four questions, as shown in table (7). The results about it were among the highest level of answers. It achieved The second level as the mean
value for it reached (2.99), which is about the value of the hypothetical mean of (3), and an average dispersion between answers confirmed by the standard deviation (0.53), and the importance ratio reached (60%). This confirmed that the sample members are aware of the importance of communication and its impact on the decision-making process. The percentage obtained by this question indicates that there is a wide use of communications within the directorate in the decision-making process. The first question which states (the Internet and e-mail are often used in the decision-making process in the directorate) has achieved the lowest answer level as the mean value of it was (2.44). It was dispersed above the average among the answers, confirmed by the standard deviation of (0.80). The importance rate reached (49%). This indicates the limited use of the Internet in the decision-making process due to lack of confidence towards the managers of the Internet. It can be noted that all items have received medium answers in the answers.

2. Administrative means of communication in the decision-making process.

Table (8) and Figure (3) refer to the arithmetic circles, standard deviations, and the relative importance related to the viewpoint of the researched sample regarding (administrative communication means in the decision-making process). The aforementioned table reflects a general arithmetic mean around the standard mean (3.05). It was (3.05). The dispersion has a good harmony in the answer confirmed by the general standard deviation of (0.29). The relative importance on the scale of this variable from the sample was (61%), but in terms of questions, this variable was measured by six questions, as shown in Table (6) . The results about it were among the highest level of response. The median value for it reached (3.61), which is about the value of the hypothetical mean of (3), and an average dispersion between answers confirmed by the standard deviation (0.29). The importance rate reached (61%). The respondents confirmed the role of the administrative means of communication in The decision-making process. The eighth item which states (the use of facial and hand expressions in the decision-making process) has achieved the lowest level of response. The mean value for it reached (2.12). The dispersion is above average between the answers confirmed by the standard deviation (0.60). The importance ratio reached (42%).
Table 8: Frequencies, ratios, mean, standard deviation and the relative importance of items for administrative means of communication in the decision-making process.

<table>
<thead>
<tr>
<th>Paragraphs</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using reports, proposals and complaints in the decision-making process</td>
<td>1</td>
<td>1%</td>
<td>3</td>
<td>3%</td>
<td>13</td>
<td>35%</td>
<td>27</td>
<td>56%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>5%</td>
<td>72</td>
<td>72%</td>
<td>3.61</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of personal interviews in the decision-making process</td>
<td>0%</td>
<td>6%</td>
<td>28</td>
<td>59%</td>
<td>16</td>
<td>25%</td>
<td>0%</td>
<td>62%</td>
</tr>
<tr>
<td></td>
<td>3.08</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use seminars, meetings and conferences in the decision-making process</td>
<td>0%</td>
<td>0%</td>
<td>29</td>
<td>59%</td>
<td>21</td>
<td>41%</td>
<td>0%</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>3.41</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use facial and hand expressions in the decision-making process</td>
<td>4</td>
<td>13%</td>
<td>31</td>
<td>63%</td>
<td>15</td>
<td>25%</td>
<td>0%</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>2.12</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of advertisements and awareness campaigns in the decision-making</td>
<td>0%</td>
<td>13%</td>
<td>35</td>
<td>70%</td>
<td>2</td>
<td>5%</td>
<td>0%</td>
<td>54%</td>
</tr>
<tr>
<td>process</td>
<td>2.81</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>61%</td>
<td>3.05</td>
<td>0.29</td>
<td></td>
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</tr>
</tbody>
</table>
The Results

The responses of the sample members to the section of communication systems and techniques in the effectiveness of decision-making reveal the following.

A. There is a limited use of the Internet and e-mail in the decision-making process in the directorate, which obtained (49%) of the responses of the sample members, which is considered a low percentage. This is due to the poor communications of the Internet on the one hand and lack of confidence in it on the other hand.

B. The employment and use of the communication technology currently present in the directorate contributes to improving the level of decision-making, which got (60%), which is the highest percentage in this section due to the prevalence of the means of communication represented by smart phones, ease of use, and speed.

C. The communication technology currently available in the directorate contributes to reducing the time and effort required to make decisions. This item has obtained (59%) of the total items of the section, which also indicates the widespread use of modern means of communication and often smart phones in the decision-making process.

D. The communication technology currently available in the directorate contributes to duplication in decision-making. This item has obtained (56%) of the answers of the research sample, which is also somewhat high due to the lack of commitment by some employees to the official working hours and reliance on communications in their implementation process.

As for the section of administrative means of communication in the decision-making process, the answers of the sample members were as follows.

A. The use of reports, suggestions, and complaints in the decision-making process. This item has obtained (72%), which is the highest percentage in this section due to the fact that the sample members are workers in the headquarters of the directorate. The work of these institutions is often based on periodic reports and suggestions.

B. The use of personal interviews in the decision-making process. This paragraph has obtained (62%) of the total items in this section, which indicates that personal interviews have an impact on the decision-making process.

C. The use of seminars, meetings, and conferences in the decision-making process. This item has obtained a percentage of (68%) which is also somewhat high. That is due to the fact that the directorate is of a service nature and often holds meetings and seminars inside and outside the directorate to work to raise its performance.

D. The use of facial and hand expressions in the decision-making process. This item has obtained a percentage of (42%) which is the lowest item in this section due to the nature of the work of this directorate and it is of an office and administrative nature and a series of references. Expressions and hand movements and others are rarely used in Decision-making processes.
Section Five

Conclusions and Recommendations

First, the Conclusions

1. Communication refers to a social process based on the exchange of opinions and ideas in order to transfer knowledge and experiences between two or more parties through various means.

2. The information development witnessed by the times has become an imperative for institutions to resort to the use of modern technology in the communication process as a framework for their advantages in accelerating and developing this process, and overcoming spatial and temporal barriers, especially in light of the new form of organizing modern institutions that are characterized by their large size and capabilities.

3. The communication process faces some difficulties and obstacles that can limit its effectiveness and the effectiveness of the decision-making process. There are obstacles related to the means and channels of communication, and there are organizational obstacles, psychological and social obstacles, and environmental obstacles.

4. There is a strong relationship between the effectiveness of communication systems and the decision-making process. It is not possible to reach an effective and correct decision in the absence of effective communication.

5. Answering the item (often the Internet and e-mail are used in the decision-making process in the Directorate), got (49%) of the responses of the sample members, which is considered a low percentage. This indicates a poor communication on the Internet on one hand and lack of confidence in it on the other hand.

6. The responses of the respondents ranged in the section of (communication systems and techniques in effective decision-making), between (60%) and (58%). This is a fairly acceptable percentage, as Iraq is one of the countries that adopted modern means of communication late compared to neighboring countries due to wars, blockades, and consequences.

7. The response of the respondents ranged between (42%) and (72%) in the section of administrative communication in the decision-making process. It is noted that this section had obtained a higher percentage than the previous section since the Directorate is still in
some of its departments operating in the old manner in communication. The decision-making process is dependent on office work, and not relying on modern communication techniques.

**Second, the Recommendations**

1. The importance of internal communication should be highlighted by the members of the research sample through formations and conferences related to the administrative and organizational aspect, and not be limited to technical aspects only as seen in many institutions.
2. Enhancing the team spirit in work, building confidence and strengthening it among workers in the organization.
3. Employing the prevailing informal contacts in its various social forms in the interest of the institution and its main goals.
4. Intensifying field visits for the purpose of activating communication with individuals and encouraging them, and touching their needs to meet the possible ones, and resorting to a culture of dialogue.
5. Respecting the opinions and suggestions of the members of the institution, which would enhance the spirit of belonging and creativity among workers.
6. Resorting to using all appropriate methods and means of communication and not limiting them to a professional category only, so that the other group does not feel marginalized.
7. Inculcating the concept of decision-making in the minds of workers and highlighting its importance in the collective decision-making process.
References


Abdulmuhsin, A. (2006). Concepts of administrative creativity and its role in decision-making, a presentation of the Organizational Innovation Conference held at Umm Al-Qura University, Riyadh.


