The Islamic University-Gaza Graduates Studies Deanery College of Commerce Business Administration Department



The Role of Business Communication in Decision Making Process: Case Study - Palestinian Telecommunication Company (PalTel)

Submitted By Ziad Rafiq El-Shikhdeeb

Supervised By Professor: Yousif Hussein Ashour

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Dedication

To my beloved parents, wife, and children whom without them I could not finish this work

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List of Abbreviations

Number	Abbreviation	Meaning
1	ADSL	Asynchronous high density subscriber Line
2	ESS	Employee Self Services
3	IP	Internet Protocol
4	ISDN	Integrated Service Digital Network
5	ISPs	Internet Service providers
6	MCTs	Modern Communication Technologies
7	MSS	Manager Self Service
8	NGS	Next Generation System
9	PalTel	Palestine Telecommunications Company
10	VC	Video Conference
11	VPN	Virtual Private Network

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هدفت هذه الدراسة إلى التعرف على أثر الاتصالات الإدارية في عملية اتخاذ القرارات في شركة الاتصالات الفلسطينية من خلال بيان أثر كل من تقنيات الاتصال الحديثة و وسائل الاتصال الإداري ومهارات العاملين في الشركة على عملية اتخاذ القرارات. يتكون مجتمع الدراسة من جميع العاملين في شركة الاتصالات الفلسطينية في المستويات الإدارية الدنيا والوسطى والعليا والبالغ عددهم (446) موظف. ولتحقيق أهداف الدراسة تم اختيار عينة طبقية عشوائية حسب المستوى الإداري لضمان أن جميع المستويات الإدارية ممثلة تمثيلا جيدا في العينة، حيث بلغ حجم العينة (340) موظف تم توزيع عليهم استبانات أعدت خصيصا لهذا الغرض، وقد تم استعادة (279) استبانة منها، أي ما نسبته (82.1%) من الاستبانات الموزعة، حيث وجد أن سبعة منهم غير صالحة.

وقد توصلت هذه الدراسة إلى وجود علاقة ذات دلالة إحصائية بين تقنيات الاتصال الحديثة وعملية اتخاذ القرارات، حيث وجدت الدراسة أن تقنيات الاتصال الحديثة توفر سرعة الحصول على المعلومات اللازمة لاتخاذ القرارات وتعمل على زيادة فعالية الاتصال بين العاملين في الشركة، بالإضافة إلى أنها تحفز العاملين على المشاركة بأفكار هم مما يؤدي إلى توفير عدد كبير من البدائل لحل مشكلات العمل. كذلك توفر تقنيات الاتصال الحديثة قاعدة بيانات تساعد على فهم مشكلات العمل ومعايشة مراحل تطور ها وتساعد أيضا في تحديد مسؤوليات واضحة للعاملين، كذلك يتم الاستفادة من الانترنت في زيادة فرص الاتصال بالزبائن والوكلاء والموز عين.

كذلك توصلت هذه الدراسة إلى وجود علاقة ذات دلالة إحصائية بين وسائل الاتصالات الإدارية وعملية اتخاذ القرارات، حيث وجد انه يتم استخدام وسائل الاتصال الشفوي في حل المشكلات المعقدة وانه يتم استخدام وسائل الاتصال المكتوبة في حل المشكلات التي تحتاج إلى تحليل الرسائل، كما وجد انه يتم الاستفادة من استخدام أكثر من وسيلة اتصال في وقت واحد لضمان تحقيق الهدف المطلوب من الرسالة.

هذا وقد توصلت هذه الدراسة إلى وجود علاقة ذات دلالة إحصائية بين مهارات الاتصال لدى العاملين وعملية اتخاذ القرارات، حيث كانت مهارات الاستماع الجيد من أكثر المهارات تأثيرا على عملية اتخاذ القرارات، وقد وجد أن تحديد الهدف من عملية الاتصال مسبقا يزيد من كفاءة وفاعلية عملية الاتصال، ومن النتائج الهامة لهذه الدراسة التأثير الايجابي لعملية مشاركة العاملين في اتخاذ القرارات، بالإضافة إلى انه وجد أن مهارات العرض وإدارة الاجتماعات تزيد من عدد البدائل الممكنة لحل المشكلات وتزيد من جودة القرارات المتخذة، كما وجد أن الرسائل غير اللفظية تزيد من كفاءة عملية الاتصال وفي المقابل وجدت هذه الدراسة أن تقنيات الاتصال الحديثة جافة وتخلو من المشاعر وان العاملين يعانون من القلق أثناء عملية الاتصال.

وقد أظهرت نتائج هذه الدراسة وجود أثر لمتغير الجنس في علاقته مع محوري تقنيات الاتصال الحديثة ومهارات الاتصال لدى العاملين ومع جميع المحاور مجتمعة ولصالح الذكور باستثناء محور اختيار وسيلة الاتصال المناسبة، وبينت وجود أثر لمتغير المستوى الإداري مع محوري اختيار وسيلة الاتصال المناسبة ومهارات الاتصال لدى العاملين ومع جميع المحاور مجتمعة. وفي ضوء هذه النتائج خلصت الدراسة إلى عدد من التوصيات أهمها: ضرورة زيادة الاستثمار في مجال تطوير تقنيات الاتصال الحديثة، وضرورة تحسين الاتصال الداخلي بين المستويات الإدارية المختلفة ومواصلة تطوير مهارات الاتصال لدى العاملين.

Abstract

This study aims at investigating the effect of business communication on decision-making process in PalTel by examining the role of Modern Communication Technologies (MCTs), business communication methods, and employee's communication skills on decision-making process. The research population consists of all PalTel's employees in the low level management, middle level management, and top level management (446 in number). A stratified random sample method according to managerial level was utilized in order to ensure that particular managerial levels within the study population are adequately represented in the sample. Three hundred and forty employees were participated in a survey. A total of 279 questionnaires were returned for a response rate of 82.1%, and seven of them were not valid.

The results of this study revealed that there is a significant correlation between MCTs and decision-making process. MCTs found to make attaining information easier and to increase the efficiency through teamwork and effective decision-making. MCTs also found to motivate employees to participate with their ideas. Moreover, MCTs found to create records of discussion, which leads to creating database to document team members' expectations and responsibilities. Internet-based communication found to increase communication opportunities with stockholders. In addition, this study revealed that there is a significant correlation between business communication methods and decision-making process. Employees found to use oral communication methods for complex tasks. This study also found out that written communication methods are utilized to easily identify the problems encountered. Employees found to use the advantages of using more than one communication methods at the same time for sending important messages.

The analysis of this study revealed that there is a significant correlation between the personnel communication skills and decision-making process. Listening skills is ranked the highest communication format. Specifying the concerned objective before initiating the communication process found to improves the effectiveness and efficient of the communication process as whole. One of the important findings of this study was the positive effect of engaging the employees in decision-making process. Further, running effective meetings and successful presentations were found to increase the quality and quantity of the decisions. In addition, this study revealed that nonverbal messages enhanced the effectiveness of the communication process. On the other hand, the study revealed that MCTs are impersonal, some of the employees suffer from communication apprehension.

The results of this study also revealed that males responses are more agree than females for MCTs, Employee's communication skills, and all dimensions together. This study also found that that the respondents' Managerial Level has an effect on the respondents' agree to Communication methods, Employee's communication skills, and all dimensions together. The researcher recommends increasing the investments on MCTs, improving the organizational communication, and continuing developing the employee's communications skills.

Chapter One: General Introduction

CHAPTER OUTLINE

- 1.1 Introduction
- 1.2 Research Problem
- 1.3 Research Objectives
- 1.4 Significance of the Study
- 1.5 Hypothesis
- 1.6 Research Variables
- 1.7 Research Methodology

1.1 Introduction:

In a world where speed and adaptability can make or break a business, organization increasing is how companies win and keep on winning (Cook and Macaulay, 2004). What separates the winners is the ability to make the rest important decisions well-and then to make them happen. The key is not structure but rather an integrated organizational system. Decisions, if you can't make them; you won't be an effective manager. It requires getting the right people focused on those decisions at the right time. That's true whether the decisions involve the largest issues that a company faces (what's our strategy?) or more tactical, day-to-day concerns (should we buy more components now or next month? Should we accept this customer's return?)(Bateman and Snell, 2004).

Survival and long-term success will often depend on finding the right solution. To take the right decision is typically not a simple matter, as most decision problems are highly complex in nature. A key issue for all managers is how far they should share decisions with their team or colleagues (Adair, 2007). Integral to decision-making is the management and creation of shared meaning, focusing on the mastery of communication is inseparable from effective decision-making.

Communication is the lifeblood of every organization (Nelson and Economy, 2005). Communication is the specific process through which vital information moves and is exchanged throughout an organization. Information flows through both formal and informal structures and it flows downward, upward, and laterally (Schermerhorn et al. 2002). Today, more than ever before, communication plays a major role in how managers get important things done in timely, and high quality ways. If they can communicate effectively, they can overcome many challenges (Durham et al. 2005).

1.2 Research Problem:

In the present time, PalTel, which, is considered as one of the biggest foundations in Palestine, faces many challenges and threats that imposes on it deal with them seriously and properly. As business grows more complex, it's ability to act quickly and adapt to change can get stretched thin. It faces increasingly dynamic, complex and unpredictable environment where technology, the nature of competition, industry boundaries and the rules of the game are changing dramatically. It must deal with a playing field that has become global, while customers are separating into "micro segments". Data cascades into companies, at the risk of obscuring meaningful information. The need to control cost and increase efficiency coupled with increasing customer expectations mean that an effective organization is vital to succeed (Salaman and Asch, 2003).

One study found that, including meeting and interacting with customer and colleagues, managers spent 60% to 80% of their time communicating (Dessler, 2004). Managers that do not develop and encourage the use of such processes give up optional competitive advantages, and may underutilize company's strengths. More than before, organizations need to promote communication skills to facilitate precise decision-

making that keeps them competitive. Moreover, manager's need to understand that the role of communication on decision-making is growing as the technological advance offers them more communication options. As access to technologies such as computer chat and videoconferencing increases, decision makers are choosing to use or to avoid these media without knowing the impact of their choices on their decisions(Vickery and Hein, 1999). Thus, it is clear, the role that business communication plays in decision-making and hence the effect on the success of the organization. So, the researcher is conducting this study on business communication and its role on decision-making, as a result of his awareness of the importance of this study in improving the process of decision-making in PalTel. Accordingly we can say that the research problem is to identify to what extent can the use of business communication take part in improving the decision making in PalTel.

1.3 Research Objectives:

The present study seeks to measure the following objectives:

- 1. Determine the effect of MCTs on decision-making process in PalTel.
- 2. Determine the effect of communications methods on decision-making process in PalTel
- 3. Examine the effect of communications skills on decision-making process in PalTel
- 4. Realize the constraints that restrict proficiency of communications systems in process of decision-making process in PalTel.
- 5. Identify extent of discrepancy of sample's personnel vision to various study's pivots according to their individual and professional difference.

1.4 Significance of the study:

In this research, information about the effects of business communication on decision-making will be integrated in order to assess objective and subjective decision-making outcomes, across communication media richness (face-to-face) computer-mediated-communication, Video conference, telephone, E-mail ...etc, and to identify any obstacles at present and draw some recommendation that may help in improving the existing situation of using business communication system at PalTel. The results may also provide links with previous studies: for example, Almanye's (2006) work on implementing the new communication technology in public security and Zinta and Elaine's (2006) work on effect of different levels of media on the satisfaction in and perceived quality organizational communications.

1.5 Hypotheses:

Hypothesis 1: There is a significant correlation between the modern communications technologies and decision-making process in PalTel?

Hypothesis 2: There is a significant correlation between the business communications methods and decision-making process in PalTel?

Hypothesis 3: There is a significant correlation between the personnel communications skills and decision-making process in PalTel?

Hypothesis 4: There is a significant statistical difference of sample's personnel opinions of various study's pivots according to their individual and professional differences.

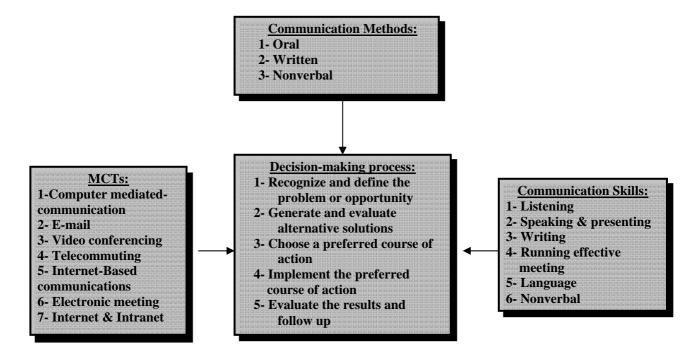
1.6 Research Variables:

This study has one dependent variable, which is decision-making process, and four independent variables which are:

- 1- Modern Communication Technologies.
- 2- Communication methods.
- 3- Personnel communications skills.
- 4- Professional and Personnel characteristics.

The theoretical underpinnings of the current study primarily come from the concepts developed in the fields of communications and decision-making. Based on these concepts, the following diagram is proposed (see Figure 1). In the diagram, there are three key dimensions of the business communication, which are MCTs, communication methods, and communication skills. This diagram proposes that these three dimensions of communication influence the decision-making process.

Figure 1 A diagram showing the relationship between the dependent variable and the independent ones



1.7 Research Methodology:

The analytical descriptive methodology was applied. The research population consists of all PalTel's employees in the low level management, middle level management, and top level management (446 in number). A stratified random sample method according to managerial level was used in order to ensure that particular managerial levels within the study population are adequately represented in the sample. Table (1) sheds more light on the distribution of study population according to managerial level:

Table 1: Distribution of population according to managerial level

Managerial level	Number of employees	Number of employees	Total
	at Gaza Strip	at West Bank	
Top Management	3	36	39
Middle Management	19	81	100
Low level Management	80	227	307
		Total	446

Chapter Two: Literature Review

CHAPTER OUTLINE

- 2.1 Business Communication
- 2.2 Managerial Decision Making
- 2.3 Business Communication and Decision Making at PalTel

2.1 Business Communication

The act of communicating is so basic and so fundamental that most people don't think much about it. It happens all day, every day and in every corner of the globe. It happens using the telephone, the fax machine and the computer. Thanks to modern satellite technology, it can even happen between two people standing on opposite poles of the earth. In virtually every way that matters, it could be argued that the world today is built to support communication.

Effective communication occurs when the intended meaning of the source and the perceived meaning of the receiver are virtually the same (Schermerhorn et al. 2002). Although this should be the goal in any communication, it is not always achieved. Efficient communication occurs at minimum cost in terms of resources expended. Time, for example, is an important resource (Alamry and Alghalby, 2007).

On the other hand, if a company's employees lack communication skills, not only could teams not coordinate their efforts and individuals seek feedback from and communicate their successes to their managers, but also customers would have a pretty tough time placing orders, and services would have a pretty tough time being delivered. When this happens, the company will falter and ultimately fail (Nelson and Economy 2005). Managers and companies that do not develop and encourage the use of communication process give up potential competitive advantages and may underutilize company strengths (Vicker and Hein 1999).

This section discusses important communication concepts and some practical guidelines for improving communication effectiveness. Moreover, both interpersonal and organizational communication will be discussed.

2.1.1 Functions of Communication

Communication serves four major functions within a group or organization: control, motivation, emotional expression, and information. Communication acts to control member behavior in several ways. Organizations have authority hierarchies and formal guidelines that employees are required to follow. When employees, for instance, are required to communicate any job-related grievance to their immediate boss, to follow their job description, or to comply with company policies, communication is performing a control function. But informal communication also controls behavior. When work group tease or harass a member who produces too much (and makes the rest of the group look bad), they informally communicating with, and controlling, the member's behavior (Abedalbaqi 2003).

Communication fosters motivation by clarifying to employees what is to be done, how well they are doing, and what can be done to improve performance if it's subpar. Formation of specific goals, feedback on progress toward the goals, and reinforcement of desired behavior all stimulate motivation and required communication (Hareem, 2004).

For many employees, their work group is a primary source for social interaction. The communication that takes place within the group is a fundamental mechanism by which members shoe their frustration and feeling of satisfaction. Communication, therefore, provides a release for the emotional expression of feelings and for fulfillment of social needs (Robbins, 1996).

The final function that communication performs relates to its role in facilitating decision-making. It provides the information that individuals and groups need to make decisions by transmitting the data to identify and evaluate alternative choices (Robbins, 2003). No one of these four functions should be seen as being more important than the others. For groups to perform effectively, they need to maintain some form of control over members, stimulate members to perform, provide a means for emotional expression, and make decision choices. You can assume almost every communication interaction that takes place in a group or organization; perform one or more of these four functions.

2.1.2 The nature of communication

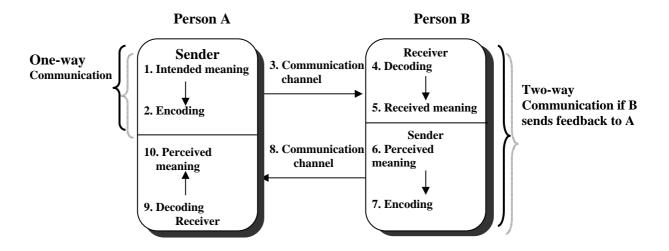
The Latin root of the word communicate is communicare, which means to make common or to share. Communication, therefore, is the transmission of information and meaning from one party to another through the use of shared symbols (Bateman and Snell, 2004). An Idea, no matter how great, is useless until it is transmitted and understood by others. Effective communication would exist when a thought or an idea was transmitted, so the mental picture perceived by the receiver was exactly the same as that envision by the sender (Robbins, 1996).

Figure (2) shows a general model of the communication process. The sender is a person or group trying to communicate with someone else. The sender seeks to communicate, in part, to change the attitudes, knowledge, or behavior of the receiver. A team leader, for example, may want to communicate with a division manager in order to explain why the team needs more time or resources to finish an assigned project. This involves encoding the process of translating an idea or thought into a message consisting of verbal, written, or nonverbal symbols, or some combination of them (Alamian 2005).

Such messages are transmitted or sent through various communication channels, such as face-to-face meetings, electronic mail, written letters and telephone communications or voice — mail, among others. The choice of channels can have an important impact on the communication process; some communication channels convey more information than others. The amount of information a medium conveys is called media richness. The more information or cues a medium sends to the receiver, the "richer" the medium. The richest media are more personal than technology, provide quick feedback, allow lots of descriptive language and send different types of cues. Thus, face-to-face communication is the richest medium because it offers a variety of cues in addition to words: tone of voice, facial expression, body language, and other nonverbal signals. It also allows more descriptive language, say, a memo does. In

addition, it affords more opportunity for the receiver to give feedback to and ask questions of the sender (Bateman and Snell, 2004).

Figure 2 A General Model of the Communication Process (Source: Bateman and Snell, 2004)



The telephone is less rich than face-to-face communication, electronic mail is less rich than yet, and memos are the least rich medium. In general, you should send difficult and unusual messages through richer media, transmit simple and routine messages through less rich media like memos, and use multiple media for important messages that you want to ensure people attend to and understand. In the earlier case of the team leader communicating with the division manager, for example, it can make quit a difference whether the message is sent face-to-face, in written memo, by voice-mail, or by Email.

The communication process is not completed just because a message is sent. The receiver is the individual or group of individuals to whom a message is directed. In order for meaning to be assigned to any received message, its contents must be interpreted through decoding. This process of translation is complicated by many factors, including the knowledge and experience of the receiver and his or her relationship with the sender (Alamian 2005).

The top half of the model in Figure (2) is operating in on-way communication, where, information flows in only one direction from the sender to the receiver, with no feedback loop. A manager sends a memo to subordinate without asking for response. A boss gives an order over the phone, when receiver provide feedback to the sender by encoding a message, in response to the sender's message, completing the Figure (2) models, two-way communication has to occurred.

The communication process often is hampered by noise or interference in the system that blocks perfect understanding. Noise could be anything that interferes with accurate communication ringing telephones, thoughts about other things, or simple fatigue or stress (Schermerhorn et al, 2002).

The model in Figure (2) is more than a theoretical treatment of the communication process. It points out the key ways in which communication can break down. Mistakes can be made at each stage of the model. A manager who is alert to potential problems can perform each step carefully to ensure more effective communication. The model also helps explain communication pitfalls, misperception, and the various communication channels.

2.1.3 Communication Barriers

Unfortunately, most of the stages in the process model have the potential to create distortion and therefore the sender's intended message dose not always get across to the receiver. In the encoding stage, words can be misused, decimal points typed in the wrong places, facts left out, or ambiguous phrases inserted. In the transmission stage, a memo gets lost on a cluttered desk, or words are spoken with ambiguous inflection. Decoding problems arise when the receiver doesn't listen carefully or reads too quickly and overlooks a key point. And, of course, receivers can misinterpret the conclusion from unclear memo, or a listener takes a general statement by the boss too personally.

More generally, it is important to understand the following sources of noise that are common to most interpersonal Exchanges: Communication Apprehension, physical distraction, cultural differences, semantic problems, absence of feedback, status effects, people's perceptual, and filtering processes.

2.1.3.1 Communication Apprehension:

Some people – an estimated 5 to 20 percent of the population – suffer from debilitating communication apprehension or anxiety. Communication apprehension is a very serious problem because it affects a whole category of communication techniques. People who suffer from it experience undue tension and anxiety in oral communication, written communication, or both. For example, oral apprehension may find it extremely difficult to extremely anxious when they have to use the telephone. As a result, they may rely on memos or letters to convey messages when a phone call would not only be faster but more appropriate (Robbins, 1996).

2.1.3.2 Physical Distractions:

Any number of physical distractions can interfere with the effectiveness of a communication attempt (Bateman and Snell, 2004). Some of these distractions are evident in the following conversation between an employee, Mohammad, and his manager. Okay, Mohammad, let's hear your problem (phone ring, boss picks it up, promises to deliver the report, "just as soon as I can get it done"). Uh, now where were we – oh, you are having a problem with marketing. They (the manger's secretary brings in some papers that need immediate signatures; he scribbles his name and the secretary leaves) ... you say they are not cooperative? I tell you what, Mohammad, why do not you (phone rings a gain, lunch partner drops by) ... Uh, take a stab at handling it yourself. I have to go now.

Besides what may have been poor intentions in the first place, Mohammed's manager allowed physical distractions to create information overload. As a result, the communication with Mohammad was suffered. This mistake can be eliminated by setting priorities and planning. If Mohammad has something to say, his manager should set aside adequate time for the meeting. In addition, interruption such as telephone calls, drop-in visitors, and the like, should be prevented at minimum, Mohammad's manager could start by closing the door to the office and instruct his secretary not to disturb them.

2.1.3.3 People's Perceptual

Perception is the process of receiving and interpreting in formation. As you know, such processes are not perfectly objective. They are subjective, as people's self-interested motives and attitudes toward the sender and toward the message create biased interpretations. People often assume that others share their views, and naturally pay more attention to their own views than to those of others (Alamian 2005).

However, perceptual differences get in the way of shared consensus. It helps to see others viewpoints as legitimate and incorporate others perspectives into your interpretation of issues. Generally, adopting another person's viewpoints is fundamental to working collaboratively. And at a more personal level, your ability to take other's perspectives can lead to higher assessments of your performance.

2.1.3.4 Cultural Differences

People must always exercise caution when they are involved in cross-cultural communication—whether between persons of different geographical or ethnic groupings within one country, or between persons of different national cultures.

A common problem is ethnocentrism—the tendency to believe one's culture and its values are superior to those of others. It is often accompanied by an unwillingness to try to understand alternative points of view and to take the values they represent seriously. This mindset can easily create communication problems among people of diverse backgrounds (Maher, 2000).

The difficulties with cross-cultural communication are perhaps most obvious in respect to language differences. Advertising messages, for example, may work well in one country but encounter difficulty when translated into the language of another. Problems may accompany with the introduction of Ford's European model, the "Ka," in Japan. In Japanese, Ka means mosquito and analysts wonder if a car that is named for a disease-carrying pest can ever sell well. Gestures may also be used quite differently in the various cultures of the world. For example, crossed legs in the United Kingdom are quite acceptable, but are rude in Saudia Arabia if the sole of the foot is directed toward someone. Pointing at someone to get their attention may be acceptable in Canada, but in Asia it is considered inappropriate (Dessler 2005).

2.1.3.5 Status Effects

Status differences in organizations create potential communication barriers between persons of higher and lower ranks. On the one hand, given the authority of their positions, managers may be inclined to do a lot of "telling" but not much "listening." On the other hand, we know that communication is frequently biased when flowing upward in organizational hierarchies. Subordinates may filter information and tell their superiors only what they think the boss wants to hear (Alamry and Alghalby, 2007). Whether the reason is a fear of retribution for bringing bad news, an unwillingness to identify personal mistakes, or just a general desire to please, and the result is the same: The higher-level decision maker may end up taking the wrong actions because of biased and inaccurate information supplied from below. This is sometimes called the MUM effect in reference to tendencies to sometimes keep "mum" from a desire to be polite and a reluctance to transmit bad news.

To avoid such problems, managers and group leaders must develop trust in their working relationships with subordinates and team members, and take advantage of all opportunities for face-to-face communications. Management by wandering around, or MBWA for short, is now popularly acclaimed as one way to achieve this trust. It simply means getting out of the office and talking to people regularly as they do their jobs. Managers who spend time walking around can greatly reduce the perceived "distance" between themselves and their subordinates. It helps to create an atmosphere of open and free-flowing communication between the ranks. As a result, more and better information is available for decision-making, and the relevance of decisions to the needs of operating workers increases (Schermerhorn et al, 2002)

2.1.3.6 Filtering processes

Filtering is the process of with holding, ignoring, or distorting information. Senders do this, for example, when they tell the boss what they think the boss want to hear, or give unwarranted compliments rather than honest criticism. Receivers also filter information they may fail to recognize an important message, or attend to some aspects of the message but not others (Abedalbaqi 2003).

2.1.3.7 Absence of Feedback

One-way communication flows from sender to receiver only, as in the case of a written memo or a voice-mail message. There is no direct and immediate feedback from the recipient. Two-way communication, by contrast, goes from sender to receiver and back again. In these constructive exchanges, information is shared between both parties rather than delivered from one person to the other. It is more accurate, fewer mistakes occur, and fewer problems arise. It is characterized by the normal interactive conversations in our daily experiences. Research indicates that two-way communication is more accurate and effective than is one-way communication, even though it is also more costly and time consuming (Schermerhorn et al, 2002). Because of their

efficiency, however, one-way forms of communication—memos, letters, E-mail, voice-mail, and the like are frequently used in work settings. One-way messages are easy for the sender but often frustrating for the receiver, who may be left unsure of just what the sender means or wants done.

2.1.3.8 Semantic Problems

Semantic barriers to communication involve a poor choice or use of words and mixed messages (Dessler 2004). The following illustrations of the "bafflegab" that once tried to pass as actual "executive communication" are a case in point:

- A. "We solicit any recommendations that you wish to make, and you may be assured that any such recommendations will be given our careful consideration."
- B. "Consumer elements are continuing to stress the fundamental necessity of a stabilization of the price structure at a lower level than exists at the present time."

One has to wonder why these messages weren't stated more simply as: (A) "Send us your recommendations. They will be carefully considered.", and (B) "Consumers want lower prices." In this regard, the popular KISS principle of communication is always worth remembering: "Keep it short and simple."

2.1.4 Organizational Communication

No organization exists solely in isolation with one member who has no contact with any one or anything. The exchange of ideas, information or instructions is a fundamental of all organizations. This exchange may take place internally between different sectors or departments, or externally with other organizations. Organizational Communication is the specific process through which information moves and is exchanged throughout an organization. Information flows through both formal and informal structures, and it flows downward, up ward, and laterally (Schermerhorn et al, 2002).

2.1.4.1 Formal and Informal communications:

Information flows in organizations through both formal and informal channels of communication. The formal communication in an organization sets out the command structure and interrelationships between the departments within it. A company organization chart will usually out line the chain of command and responsibility and hence indicate the likely information flow within that organization. Flows of communication can move upward, downward. Horizontally or diagonally and often are prearranged and necessary for performing some tasks.

Informal communications tend to co-exist alongside the formal structures that are established by management. In this way individuals formal networks and information is communicated as people chat during tea breaks, over the photocopier and as they pass

in corridors. Such informal networks arise due to social needs and to fill the information gaps left by the formal communication (Hareem, 2004).

One familiar information channel is the grapevine or network of friendships and acquaintances through which rumors and other unofficial information are passed from person to person (Bateman and Snell 2004). Grapevines have the advantage of being able to transmit information quickly and efficiently. Grapevine also helps fulfill the need of people involved in them. Being part of a grapevine can provide a sense of security from "being in the know" when important things are going on. It also provides social satisfaction as information is exchanged interpersonally. The primary disadvantage of grapevine occurs when they transmit incorrect or untimely information; Rumors can be very dysfunction to both people and organization (Schermerhorn et al, 2002).

2.1.4.2 Communication Flows and Directions:

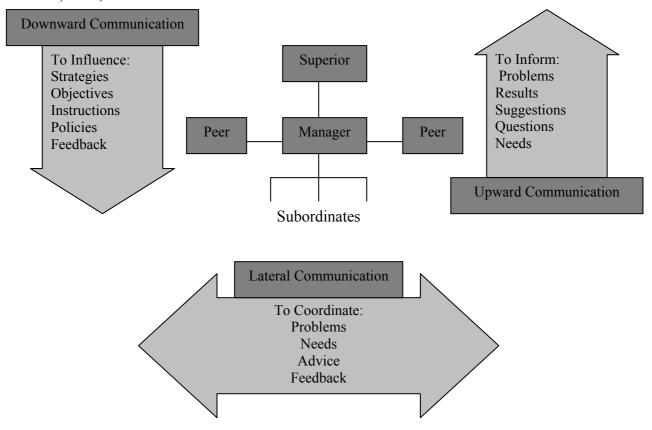
Communication can flow vertically or laterally. The vertical dimension can be further divided into downward and upward directions.

a) Downward Communication

Downward refers to the flow of information from higher to lower level in the organization hierarchy, as shown in Figure (3) Lower level personnel need to know what higher levels are doing and to be regularly reminded of a key policies, strategies, objectives, and technical developments. People must receive the information they need to perform their jobs and become loyal members of the organization. But they often lack adequate information. One problem is information overload; they are bombarded with so much information that they fail to absorb everything (Whetten and Cameron 2005). Much of the information is not very important, but it causes a lot of relevant information to be lost.

A second problem is a lack of openness between managers and employees. Managers may believe "No news is good news" "I don't have time to keep them informed of everything they want to know", or "It's none of their business, any way" some managers with hold information even if sharing it would be useful. Executives often are proud of their newsletters, staff meeting, videos, and other vehicles of downward communication. More often than not, the information provided concerns company sports teams, birthday and new copy machine. But today a more unconventional philosophy is gathering steam. Open book management is the practice of sharing with employees at all levels of the organization vital information previously meant for management's eyes only. This includes financial goals, income statements, budgets, sales, forecasts, and other relevant data about company performance and prospects (Bateman and Snell 2004).

Figure 3: Directions for information flows in organizations (Source: Schermerhorn et al, 2002)



b) Upward Communication

Upward communication is the flow of messages from lower to higher levels (Alamry and Alghalby, 2007). As shown in Figure (3) it serves several purposes. Upward communication keeps higher levels informed about what lower level employees are doing, what their problems are, what suggestions they have for improvement, and how they feel about the organization and their jobs. The problems common in upward communication are similar to those for downward communication. Managers like their subordinates, are bombarded with information and may neglect or miss information from below. Furthermore, some employees are not always open with their bosses; in other words filtering occurs upwards as well as downward.

People tend to share only good news with their bosses and suppress bad news, because they; (1) want to appear competent; (2) mistrust their boss and fear that if he or she finds out about something they have done they will be punished; (3) fear the boss will punish the message, even reported problem is not that person's fault; or (4) believe they are helping their boss if they shield him or her from problems. For these and other reasons, managers may not learn about important problems. Therefore, managers should facilitate upward communication. For example, they could have an open-door policy and encourage people to use it, have lunch or coffee with employees, or institute a program for productivity suggestions (Alamian 2005).

c) Lateral communication:

Such communication can take place among members of the same work group, among members of work groups at the same level, among managers at the same level, or among any horizontally equivalent personnel. Horizontal communication has several important functions. First, it allows sharing of information, coordination, and problem solving among units. Second, it helps solve conflicts. Third, by allowing interaction among peers, it provides social and emotional support to people (Hareem, 2004).

2.1.5 Communication as a Decision-Making Tool

At least one historian of corporate management has argued that increased availability and effectiveness of communication technology allowed management to develop as a systematic method of controlling business organizations (Whetten and Cameron 2005). Certainly, the practice of management consists primarily of communication activities, and most of that communication is devoted to decision-making processes of one kind or another.

2.1.5.1 Written Communication as a Decision-Making Tool

When documents are well written, their management function can be invisible. The writer and reader create a relationship, share information and take action. Although they will tend to describe themselves as implementing strategy, solving a problem, or making a decision, it was the successful interaction, effective articulation of ideas, and creation of shared meaning that allowed those decisions to be made. Written communication plays a special role in this process by virtue of its permanence, consistency, and precision:

The decision-making importance of documents becomes most apparent when they fail. When people neglect to prepare the reports and documentation the company needs to operate, or individuals cannot easily interpret and use them for communication, the efficiency and effectiveness of the entire organization can suffer.

2.1.5.2 Oral Discussion as a Decision-Making Tool

Given the significant advantages of written communication, it is perhaps surprising that the bulk of managerial decision-making is oral (Abedalbaqi 2003). For most practicing managers, the time and care required to create written documents is simply more than they can spend in the whirlwind of day-to-day activities. Instead, most decisions are made "on the fly" as small groups of individuals meet, consider a problem and its potential solutions, and agree on a plan of action.

Oral decision-making is particularly useful in facilitating an exchange of information, and in contextually grounding decisions. By definition, an oral communication event involves the give and take of a conversational exchange. The

immediacy of feedback, including the subtle physical cues that indicate confusion, disagreement or support, allows communicators to quickly verify that information has been successfully exchanged (Bateman and Snell 2004).

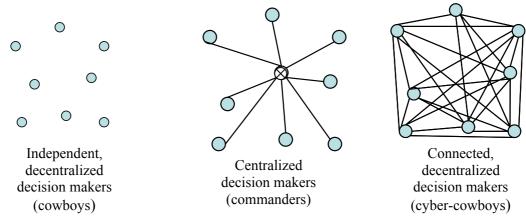
2.1.5.3 Visual Communication as a Decision-Making Tool

Visual diagram can be particularly helpful when it comes to explaining relationships between facts, things or idea. Words are a basic part of communication, but they come out in a long, long string. That can make it difficult to see the connections between something said in the first paragraph and something said in the last paragraph. A writer or speaker has to provide a new paragraph to explain the relationship—perhaps after the reader or listener has already forgotten the details of the first paragraph.

2.1.6 Communications Networks

The volume of communication an individual receives depends in part on his or her position in decision-making structure (see Figure 4). Independent, decentralized decision makers have the lowest communication needs. Local store managers or local banks managers may make their own decisions without conferring with other stores, branches, or headquarters. More centralized decision makers need and receive greater volume of relevant information from different sites and from people both inside and outside the firm. Having such a central location in a network helps your job performance-unless the network is made up of people who don't like each other and hinder each other's careers. Some decentralized decision makers are so interconnected that they require even more information than centralized ones. They make independent decisions, but their decisions must be based on vast amounts of information from remote sites available through electronic or other networks. As shown in Figure (4), information needs to be brought to all the decentralized decision makers, not just a single centralized one (Bateman and Snell, 2004).

Figure 4 Three Communication Networks (Source: Harem, 2004)



Note

O = Places where actions are taken and information is generated

X = Centralized decision maker

2.1.7 Improving Communication Skills

Good communication skills are fundamental to all relationships and a key to business success. When individuals do not speak clearly, listen accurately or assert themselves effectively, the result is reduced profit, diminished self-esteem and lowered company morale (Mckenna, 1998).

In a recent survey of recruiters from companies with more than 50.000 employees, communication skills were cited as the single more important decisive factor in choosing managers. the survey, conducted by the university of Pittsburgh's Katz Business School, points out that communication skills, including written and oral presentations, as well as an ability to work with others, are the main factor contributing to job success (Manktelow, 2004).

In every organization, the lion's share of business communication occurs in six different formats:

- 1- Listening
- 2- Speaking and presenting
- 3- Writing
- 4- Running Effective Meeting
- 5- Language
- 6- Nonverbal

Each format is used in greater or lesser frequency and is, therefore, more or less important to those in the organization (Nelson and Economy, 2005).

2.1.7.1 Listening

Improving listening may result in better relationships and better understanding of those with whom we communicate, provide information, stimulate new ideas, and motivate others to improve listening skills.

Here are some tips for becoming a better and more effective listener:

- 1. Ask questions. When you ask questions, you really do two different things. In the first case, you are showing the speaker that you are interested in what he or she speaker say. In the second case, you're ensuring that communication is clear and that you understand exactly what is being said.
- 2. A basic technique called reflection will help a manager listen effectively. Reflection is a process by which a person summarizes what the speaker says and then repeats it to him or her, the result is more accurate two-way communication (Nelson and Economy, 2005).
- 3. Be interested in the other person. Most people are pretty perceptive, and they can tell when (meaning you) is interested in what they have to say. when manager takes time to really listen to and get to know people, they think, "He's showing an interest in me" or " she values my idea and contribution " Trust develops (Bateman and Snell, 2004).

- 4. Avoid interruptions. Do not continually interrupt the speaker. Close the door. Stop receiving calls. Don't look out the window or papers on your desk. Respect the speaker by giving him or her you full attention (Maher, 2000).
- 5. Note all cues. Remember that not all communication is verbal. Facial expressions and gestures reveal feeling, too (Dessler, 2004).

2.1.7.2 Speaking and presenting skills

As a manager, you will be called on frequently to "stat your case" on a variety of issues. You will have information and perhaps an opinion or proposal to present to other. Typically, your goal will be to "sell" your idea (Bateman and Snell, 2004). Since we assume you already know how to speak, this section is going to focus on the art of making effective presentation. Following are some tips for getting ready for that:

- 1. Understand exactly what it is you want to accomplish. Why are you giving the presentation in the first place? What do you hope to accomplish during the presentation? What do you hope attendees will do after your presentation? Who will be in the audience, and what will they be hoping to gain from your presentation? Determine your goals for the presentation and the information your listeners will need to receive for you to achieve your goals (Nelson and Economy, 2005).
- 2. Do not write a speech. Reading from a written script is guaranteed to make you look stilted and dry while putting your audience to sleep. An outline provides you with the thought prompts you'll need during your presentation, allowing you to fill in the blanks yourself—making for a much more interesting presentation (Maher, 2000).
- 3. Write your introduction and conclusion. Every presentation needs a beginning (introduction) and an end (conclusion). Your introduction should do three things: (1) Explain to your audience what they're going to gain from your presentation, (2) explain to your audience Why the presentation is important to them, and (3) get your audience's attention. Similarly, your conclusion should also do three things: (1) Summarize your key points, (2) refer your listeners back to the introduction, and (3) inspire your audience to action. The next time you have the opportunity to experience a good presentation, see how the speaker uses these techniques to build compelling introductions and conclusions.
- 4. Practice, practice, practice. The old saying really is true: Practice makes perfect. If the presentation you're making is an informal one to your work team, you'll need little in the way of practice— you might need none at all. But if the presentation is to your board of directors, then putting some significant time into practice before you make your presentation is an investment that will surely pay off (Durham et al., 2005).

2.1.7.3 Writing

Most managers spend a significant portion of the workday generating e-mail, memos, and letters. They also frequently write reports, proposals, and requests for proposals. Thankfully, today's technology makes memo, letter and proposal writing much easier by providing reliable tools that check and even correct misspelled words and incorrect grammar use. Unfortunately, these tools are not fail proof and will require

your support. Making your knowledge in this area is very important. Here are some of the best ways to improve your writing skills:

- Think before you write. Before you start writing, you need to think seriously. It is extremely important to spend a couple of minutes just thinking about your purpose and your readers. Following some questions, you may wish to ask yourself in the prewriting phase; what do my readers know? What do they need to know? What decisions will be based on this information? Am I writing to increase knowledge? Am I trying to urge action? Know what motivates your readers (Vicker and Hein, 1999).
- Organize. Before you start to write, organize your thoughts and this can be accomplished by sketching out an outline of major points, or simply taking time to visualize the final written product (Maher, 2000).
- Make it short. Get to the point quickly, and make your points clearly. Take the reader into consideration. Take some time to revise your drafts. Go through your entire letter, memo, or report and delete all unnecessary words, sentences, and paragraphs. Use specific, concrete words rather than abstract phrases. Unless the document you are working on is a technical report containing page after page of test results (Bateman and Snell, 2004).

2.1.7.4 Running effective meeting

While meetings are very important tool for generating ideas, expanding on thoughts and managing group activity, this contact with team members and colleagues can easily fail without adequate preparation and leadership. The success of the meeting is hinged on the skills displayed by the meeting leader. As a meeting leader to make sure your meeting and negotiation skills are fine-tuned and ready to take to the boardroom, the following important areas should be touched:

- Preparing Launch the meeting. To ensure everyone involved has the opportunity to provide their input, start your meeting off on the right foot by designating a meeting time that allows all participants the time needed to adequately prepare. Once a meeting time and place has been designated, make yourself available for questions that may arise as participants prepare for the meeting. If you are the meeting leader, make a meeting agenda, complete with detailed notes. In these notes, outline the goals and proposed structure of the meeting, and share this with the participants (Nelson and Economy, 2005).
- Managing the Meeting. Choosing the right participants is a key to the success of any meeting. Make sure all participants can contribute and choose good decision-makers and problem-solvers. Try to keep the number of participants to a maximum of 12, preferably fewer. When an agenda item is resolved or action is agreed upon, make it clear who in the meeting will be responsible for this. In an effort to bypass confusion and misunderstandings, summarize the action to be taken and include this in the meeting's minutes (Mina, 2002).
- Issuing Minutes. The style of the minutes issued depends on the circumstances, in situations of critical importance and where the record is important, then you may need to take detailed minutes. Where this is not the case, then minutes can be simple lists of decisions made and of actions to be taken with the responsible person identified (see Table 2).

Table 2: Responsibility of Actions

Individual	Responsible for action items:
Mohammed	3and 4 solo, 5 jointly with Ehab
Mumen	2
Ehab	1 solo, 5 jointly with Mohammad
Abeer	6

Generally, they should be as short as possible as long as all key information is shown, this makes them quick and easy to prepare and digest. It is always impressive if the leader of a meeting issues minutes within 24 hours of the end of the meeting, it is even better if they are issued on the same day.

2.1.7.5 Language

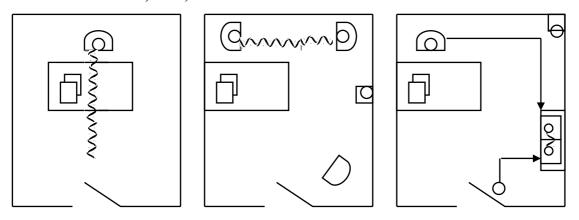
Words mean different things to different people. Word choice can enhance or interfere with communication effectiveness. In an organization, employees usually come from diverse backgrounds and, therefore, have different patterns of speech. Additionally, the grouping of employees into departments creates specialist who develop their own jargon or technical language when the receiver is unfamiliar with the jargon, misunderstanding result (Hareem, 2004). Therefore, whether speaking or writing, you should consider the receiver's background and adjust your language accordingly. When you are receiving, don't assume that your understanding is the same as the speaker's intentions. Japanese people use the simple word bai (yes) to convey that they understand what is being said; it does not necessarily mean that they agree (Bateman and Snell, 2004) when conducting business overseas, try to learn some thing about other country's language and customs.

2.1.7.6 Nonverbal

In verbal communication, an active dialogue is engaged with the use of words. At the same time; however, non-verbal communication takes place through facial expression, body position, eye contact, and other physical gestures. Often, nonverbal cues make a greater impact than other signals (Bateman and Snell, 2004). The following suggestions can help you send positive nonverbal signal:

- Use time appropriately. Avoid keeping your employees waiting to see you. Devote sufficient time to your meeting with them, and communicate frequently with them to signal your interest in their concerns.
- Make your office arrangement conducive to open communication. Nonverbal communication can also take place through the physical arrangement of space, such as that found in various office layouts. Proxemics, the study of the way space is utilized, is important to communication (Schermerhorn et al, 2002). Figure (5) shows three different office arrangements and the messages they may communicate to visitors.

Figure 5 Furniture placement and nonverbal communication in the office (Source: Schermerhorn et al, 2002).



"I am the boss!"

"I am the boss, but let's talk."

"Forget I am the boss, let's talk."

- Several nonverbal body signals convey a positive attitude toward the other person: assuming a position close to the person; gesturing frequently; maintaining eye contact; Smiling; having an open body orientation, such as facing the other person directly; uncrossing the arms; and leaning forward to convey interesting what the other person saying.
- Effectively use your body language. Research indicates that facial expression and tone of voice can account for 90 percent of the communication between two people (Bateman and Snell, 2002).

2.1.8 Electronic Communications

Electronic communications have revolutionized both the ability access other people and to reach them almost instantaneously. We have moved from the world of the telephone, mail, photocopying, and face-to-face meetings into one of voice-mail, E-mail, facsimile transmission, computer-mediated conferencing, and use of the Internet and Intranets. Managers use computers not only to gather and distribute data but also to talk with others electronically. In electronic decision rooms, software supports simultaneous access to shared files and allows people to share views and do work collectively.

Advances in electronic communication technology are allowing organizations to; (1) distribute information much faster than before; (2) make more information available than ever before; (3) allow broader and more immediate access to this information; (4) encourage participation in the sharing and use of information; and, (5) integrate systems and functions, and use information to link with environments in unprecedented ways (Whetten and Cameron 2005).

The potential disadvantages of electronic communications must also be recognized. To begin, the technologies are largely impersonal; people interact with machines, not with one another. Electronics also removes nonverbal communications from the situation—aspects that may otherwise add important context to an interaction.

In addition, the electronic medium can influence the emotional aspects of communication. Some argue, for example, that it is far easier to be blunt, overly critical, and insensitive when conveying messages electronically rather than face-to-face. The term "flaming" is sometimes used to describe rudeness in electronic communication (Schermerhorn et al, 2002). In this sense, the use of computer mediation may make people less inhibited and more impatient in what they say.

Another risk of the new communication technologies is information overload. In some cases, too much information may find its way into the communication networks and E-mail systems and basically overload the systems—both organizational and individual. Individual users may have difficulty sorting the useful from the trivial and may become impatient while doing so. In all this, one point remains undeniable: New communication technologies will continue to keep changing the nature of work and of office work in particular. The once-conventional office is fast giving way to new forms such as telecommuting and the use of electronic networks. Workers in the future will benefit as new technologies allow them to spend more time out of the traditional office and more time working with customers on terms that best fit individual needs (Dessler 2004).

2.2 Managerial Decision Making

One of the most important activities engaged in by any organization is decision-making: the process of deciding what action to take; it usually involves choice between options (Adair, 2007). Obviously, the quality and timeliness of decisions made and the processes through which they are arrived at can have an important impact on organization effectiveness. Every success, every mishap, every opportunity seized or missed is the result of a decision that someone made or failed to make. Never mind what industry you're in, how big and well known your company may be, or how clever your strategy is. If you can't make the right decisions quickly and effectively, and execute those decisions consistently, your business will lose ground (Rogers and Blenko, 2006).

Major business decisions are not simply choices, but processes through which groups of people harmonize their thinking such that they come to share perceptions, goals, and values. Many researchers have contributed to this field over the years. However, only recently have the roles of both knowledge and expertise in Decision-Making become better understood and more explicit as a result of work in cognitive sciences, psychology, knowledge management, and related fields (wiig, 2004).

This section discusses the kinds of decisions managers face, how they are made, and how they should be made.

2.2.1 Characteristics of Managerial Decisions

Managers face problems constantly, some problems that require a decision are relatively simple; others seem overwhelming. Some demand immediate action, while others take months or even years to unfold (Bateman and Snell, 2004).

2.2.1.1 Decision Environments

Problem-solving decisions in organizations are typically made under three different conditions or environments: certainty, risk, and uncertainty. Certain environments exist when have all the information you need, and can predict precisely the consequences of your action. When a person invests money in a savings account, for example, absolute certainty exists about the interest that will be earned on that money in a given period of time. Certainty is an ideal condition for managerial decision-making. But perfect certainty is rare (Hareem, 2004).

Risk environments exist when you can estimate the likelihood of various consequences, but still do not know with certainty what will happen. For instance, managers can make statistical estimates of quality rejects in production runs, or a senior production manager can make similar estimates based on experience. Risk is a common decision environment in today's organizations.

Uncertain environments exist when you has insufficient information to know how the consequences of different actions. Uncertainty is a key difficulty in decision-making (Simon, 2000). It forces decision makers to rely heavily on individual and group creativity to succeed in problem solving. It requires unique, novel, and often totally innovative alternatives to existing patterns of behavior. Responses to uncertainty are often heavily influenced by intuition, educated guesses, and hunches. Furthermore, an uncertain decision environment may also be characterized as a rapidly changing organizational setting in terms of (a) external conditions, (b) the information technology requirements called for to analyze and make decisions, and (c) the personnel influencing problem and choice definitions (Schermerhorn et al, 2002).

2.2.1.2 Types of Decisions

The many routine and nonroutine problems in the modern workplace call for different types of decisions. Routine problems arise on a regular basis and can be addressed through standard responses, called programmed decisions. These decisions have been encountered and made before. They have objectively correct answers and can be solved by using simple rules, policies, or numerical computation (Bateman and Snell, 2004). Examples of programmed decisions are reordering inventory automatically when stock falls below a predetermined level and issuing a written reprimand to someone who violates a certain personnel procedure.

If most important decisions were programmed, managerial life would be much easier. But managers typically face nonroutine problems. These nonprogramed decisions are new, novel, complex, and having no certain outcomes. There are varieties of possible solutions. The decision maker must create or impose methods for making the decision; there is no predetermined structure on which to rely (Alamry and Alghalby, 2007). An example is a senior marketing manager who has to respond to the introduction of a new product by a foreign competitor. Although past experience may help deal with this competitive threat, the immediate decision requires a creative solution based on the unique characteristics of the present market situation.

2.2.1.3 Conflict

Conflict, exists when the manager must consider opposing pressures from different sources, and this make the important decisions to become more difficult (Hareem, 2004). This conflict occurs at two levels. First, individual decision makers experience psychological conflict when several options are attractive, or when none of the options is attractive. For instance, a manager may have to decide whom to lay off, when he doesn't want to lay off anyone. Second, conflict arises between individuals or groups. The chief financial officer argues in favor of increasing long-term debt to finance an acquisition. The chief executive officer, however, prefers to minimize such debt and find funds elsewhere. The marketing department wants more product lines to sell to its customers, and the engineers want higher-quality products. But the production people want to lower costs by having longer production runs of fewer products with no changes. Few decisions are without conflict (Bateman and Snell, 2004).

2.2.2 Decision-making Process

In decision-making, there is a classic five-step approach that decision maker should find extremely helpful. That does not mean he would follow it blindly in all situations. It is a fairly natural sequence. Of thought, however, and so even without the formal framework he would tend to follow this mental path. The advantage of making it conscious is that it is easier to be swiftly aware when a step is missing or – more probably – has been performed without understanding or intention (Adair, 2007).

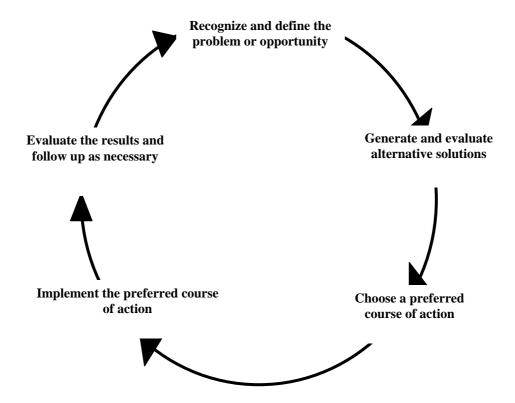
More formally, as Figure (6) illustrates, decision makers should (1) Recognize and define the problem or opportunity, (2) Generate and evaluate alternative solutions, (3) Choose a preferred course of action, (4) Implement the preferred course of action, and (5) Evaluate the results and follow up as necessary.

Step 1. Recognize and define the problem or opportunity

The first stage in the decision-making process is to recognize that a problem exists and must be solved. A discrepancy exists between some current state of affairs and some desired state. Such discrepancies- say, in organizational or unit performance- may be detected by comparing current performance against (1) past performance, (2) the current performance of other organizations or units, or (3) future expected performance as determined by plans and forecasts (Bateman and Snell, 2004). Recognizing that a problem exists is only the beginning of this stage. The decision maker also must dig in deeper and attempt to define the true cause of the problem (Alamry and Alghalby, 2007).

For example, a sale manager knows that sales have dropped drastically; he should not automatically reprimand his sales staff, add new people, or increase the advertising budget. He must analyze why sales are down and then develop a solution appropriate to his analysis. Asking why, of yourself and others, is essential to understand the real problem.

Figure 6: the Steps of Decision-making



A great deal of communication might be necessary for a group to quantify the problem, explore the extent of its effect, and determine whether other stakeholders have differing views of the problem. There should be agreement on the definitions and significance of the problem before the decision-makers proceed to finding solutions to it. It is a good principle not to make decisions in the absence of critically important information that is not immediately to hand, provided that a planned delay is acceptable.

The rapid growth of methods of communication such as faxes, voice mail, e-mail, junk mail and the internet has now contributed to a new disease: Information Overload Syndrome. A recent international survey of 1,300 managers listed the new disease's symptoms, which included a feeling of inability to cope with the incoming data as it piles up, resulting sometimes in mental stress and even physical illness requiring time off work. The survey found that such overload is a growing problem among managers – almost all of whom expect it to become worse (Adair, 2007).

Step 2. Generate and Evaluate Alternative Solutions

The second stage in the decision-making process is to explore alternative solutions to the problem identified in the previous stage. Decision-making experts call alternatives "the raw material of decision-making." (Dessler, 2004). This step really consists of two parts:

- Generating alternatives
- Evaluating alternatives

There are several ways to generate good alternatives. Following are three common ways to do that:

- 1- Brainstorming. Brainstorming can be done individually or in a group. Brainstorming requires an environment in which the participants (individuals or group members) are free to "think out loud." Participants blurt out as many ideas as possible within a specified time period. No evaluation of ideas is permitted so as to encourage the free flow of creative ideas. These ideas are recorded. When the specified time period ends, then evaluation of the ideas begin (Dessler, 2004).
- 2- Surveys. Surveys economically tap the ideas of a large group of respondents. Surveys present respondents with the problem and a series of alternative solutions.
- 3- Discussion groups. Discussion groups should consist of those who are directly involved in decision-making. In generating alternatives, the group members should: Be comprehensive. Avoid initial judgments (as in brainstorming). Focus on the problem, not on the personalities of the people involved in the decision-making process (Alateia, 2003).

After you have generated alternative solutions, you must have some means of evaluating them. Fundamental to this process is to predict the consequences that will occur if the various options are put into effect. Of course, you must attempt to predict the effects on financial or other performance measures. Another part of evaluation is identifying contingencies alternative courses of action that can be implemented based on how the future unfolds (Alamry and Alghalby, 2007).

Step 3. Choose a preferred course of action

The third step in the decision-making process is to select one of the alternatives explored in Step 2 for implementation. The critical preliminary activity here is to establish the selection Criteria (Adair, 2007). After you have evaluated each alternative, one should stand out as coming closest to making the decision with the most advantages and fewest disadvantages. Important concepts here are maximizing, satisfying, and optimizing.

Maximizing is making the best possible decision. In other words, maximizing results in the greatest benefit at lower cost, with the largest expected total return. It requires searching thoroughly for a complete range of alternatives, comparing one to another, and then choosing or creating the very best. Satisfying is choosing the first solution that is minimally acceptable or adequate; the choice appears to meet a targeted goal or criterion. It means that a search for alternatives stops at the first one that is okay. Commonly, people do not expend the time or energy to gather more information. Instead, they make the expedient decision based on readily available information.

Let's say you are purchasing new equipment and your goal is to avoid spending too much money. You would be maximizing if you checked out all your options and their prices, and then bought the cheapest one that met your requirements. But you would be satisfying if you bought the first one you found that was within your budget and fail to look for less expensive options. Optimizing means that you achieve the best possible balance among several goals. Perhaps, in purchasing equipment, you are interested in quality and durability as well as price. So, you buy the one with the best combination of attributes, even though there may be options that are better on the price

criterion and others are better on the quality and durability criterion (Bateman and Snell, 2004).

Step 4. Implement the preferred course of action

The decision-making process does not end once a choice is made. The chosen alternative must be implemented. People who implement the decision must understand the choice and why it was made. They also must be committed to its successful implementation. These needs can be met by involving those people in the early stages of the decision process (Alamry and Alghalby, 2007). Managers should plan implementation carefully through developing an action plan, determining objectives, identifying needed resources, building a plan, and implementing the plan.

Step 5. Evaluate the results and follow up as necessary

The final stage in the decision-making process is evaluating the decision. This means collecting information on how well the decision is working. Quantifiable goals (a 20 percent increase in sales, a 95 percent reduction in accidents, 100 percent on-time deliveries) can be set before the solution to the problem is implemented. Then objective data can be gathered to accurately determine the success (or failure) of the decision (Bateman and Snell, 2004).

Decision evaluation is useful whether the feedback is positive or negative. Feedback that suggests the decision is working implies that the decision should be continued and perhaps applied elsewhere in the organization. Negative feedback, indicating failure, means that either (1) implementation will require more time, resources, effort, or thought or (2) the decision was bad one. If the decision appears inappropriate, it's back to the drawing board. Then the process cycles back to the first stage: (re)definition of the problem. The decision-making process begins anew, preferably with more information, new suggestions, and an approach that attempts to eliminate the mistakes made the first time around (Hareem, 2004).

2.2.3 Barriers to Decision-making

Full execution of the five-stage decision-making process is the exception rather than the rule in managerial decision-making. But research shows that when managers use such rational process, better decisions result. Mangers that make sure they engage in these processes are more effective (Bateman and Snell, 2004).

Why don't people automatically invoke such rational processes? It is easy to neglect or improperly execute these processes. The problem may be improperly defined, or goals misidentified. Not enough solutions may be generated, or they may be evaluated incompletely. A satisfying rather than maximizing choice may be made. Implementation may be poorly planned or executed, or monitoring may be inadequate or nonexistent. And decisions are influenced by subjective Psychological biases, time pressure, social realities, Organizational structure, and degree of certainty.

2.2.3.1 Psychological Biases

One set of barriers that influence decision-making stems from human nature itself. Decision makers are far from objective in the way they gather, evaluate, and apply information toward making their choices. Following are some examples that represent documented subjective biases:

a) The Availability Bias

Managers tend to use only the information available and give more weight to more recent behavior. This is because of that, the managers use information readily available from memory to make judgments. The bias, of course, is that readily available information may not present a complete picture of a situation. For example, if you had a perfect on-time work attendance record for nine months but then were late for work four days during the last two months because of traffic, shouldn't your boss take into account your entire attendance history when considering you for a raise?

b) Illusion of Control

It is a belief that one can influence events even when one has no control over what happen. Gambling is one example: Some people believe they have the skills to beat the odds even though most people, most of the time, cannot. In business, such overconfidence can lead to failure because decision makers ignore risks and fail to objectively evaluate the odds success. Relatedly, they may have an unrealistically positive view of themselves or their companies believe they can do no wrong, or hold a general optimism about the future that can lead them to believe they are immune to risk and failure (Bateman and Snell, 2004).

c) The Representativeness Bias

This is an example of the tendency to generalize from a small sample or a single event. The bias here is that just because something happens once, that doesn't mean it is representative that it will happen again or will happen to you. For example, just because you hired an extraordinary sales representative from a particular university, that doesn't mean that same university will provide an equally qualified candidate next time. Yet managers make this kind of hiring decision all the time (Alateia, 2003).

d) Framing Effects

Framing effects refer to how problems or decision alternatives are phrased or presented, and how these subjective influences can override objective facts. In one example, managers indicated a desire to invest more money in a course of action that was reported to have a 70 percent chance of profit than in one said to have a 30 percent of loss. The choices were equivalent in their chances of success; it was the way the options were framed that determined the managers' choices. Thus, framing can exert an undue, irrational influence on people's decisions.

e) The Anchoring Bias

Managers tend to make decisions based on an initial figure. The bias is that the initial figure may be irrelevant to market realities. For instance, mangers will often give their employees a standard percentage raise in salary, basing the decision on whatever the workers made the preceding year. They may do this even though the raise may be completely out of alignment with what other companies are paying for the same skills (Dessler, 2004).

f) The Escalation of Commitment Bias

If you really hate to admit you are wrong, you need to be aware of the whereby decision makers increase their commitment to a project despite negative information about it (Robbins, 2003). This is called escalating commitment—continuation and renewed efforts on a previously chosen course of action, even though it is not working. Decision makers may rationalize negative feedback as a temporary condition, protect their egos by not admitting that the original decision was a mistake, or characterize any negative results as a "learning experience" that can be overcome with added future effort. The self-discipline required admitting mistakes and change direction, however, is sometimes difficult to achieve.

Escalating commitments are a form of decision entrapment that leads people to do things that the facts of a situation do not justify. We should be proactive in spotting "failures" and more open to reversing decisions or dropping plans that do not appear to be working. But again, this is easier said than done. Good decision makers know when to call it quits. They are willing to reverse previous decisions and stop investing time and other resources in unsuccessful courses of action. Escalating commitment is reflected in the popular adage, "If at first you don't succeed, try, try, again." (Schermerhorn et al, 2002).

2.2.3.2 Time Pressures

While a certain amount of analysis is required to make informed, today's fast-changing business environment might not wait around for you to make a decision that takes too long. If you are slowing down the decision-making process in your organization to a snail's pace, there's a good chance that you've become someone who is resisting change rather than embracing it (Nelson and Economy, 2005). The most conscientiously made business decisions can become irrelevant and even disastrous if managers take too long to make them. A recent study of decision-making processes in microcomputer firms which are a high-tech, and fast paced industry, showed some important differences between fast –acting and slower-acting firms. The fast-acting firms realized significant competitive advantages without sacrificing the quality of their decisions (Bateman and Snell, 2004).

2.2.3.3 Social Realities

Many decisions are made by a group rather than by an individual manager. In slow-moving firms, interpersonal factors decrease decision-making effectiveness. Even the manager acting alone is accountable to the boss and to others and must consider the preferences and reactions of many people. Important managerial decisions are marked by conflict among interested parties. Therefore, many decisions are the result of intensive social interactions, bargaining, and politicking (Alamry and Alghalby, 2007).

2.2.3.4 Organizational structure

There may be so much organizational red tape that decision-making is limited to decision by president. Department managers may lack sufficient authority to make decisions and may be required to submit to a committee process for some decisions. Decisions made in other departments may, in turn, affect their own, but they may have no influence in those areas. There may be a lack of sufficient coordination in decision-making throughout the organization.

2.2.3.5 Degree of Certainty

Degree of certainty under which decisions are made tends to impose limits on choice. Under conditions of high certainty, the risk involved in decision-making is low and decisions may become routine (Hareem, 2004). After they have been standardized through the use of policies, procedures, and rules, routine decisions may be made at lower levels of the organization. Conditions of relative uncertainty obviously increase risk, and managers attempt to evaluate alternatives in terms of probable payoff (Alamry and Alghalby, 2007). Statistical analysis of data, market research, and forecasting are a few of the decision-making tools that may be employed in assessing comparative probability. Decisions made under great uncertainty involve the highest level of risk, and the burden for making such decisions belongs to the top echelons of the organization.

2.2.4 Group Decision-making

Important decisions are often made by accountable managers working within small groups of people, most, or all, of whom have information that could be utilized in the decision-making process. Obviously, several individuals who are involved in decision-making bring together a larger fund of experience, knowledge and creative insights. If enough time is available, groups usually make higher-quality decisions than most individuals acting alone (Goodwin and wright, 2004).

The basic philosophy behind using group to make decisions is captured by the adage "two heads are better than one." (Bateman and Snell, 2004). However, groups often are inferior to the best individual. How well the group performs on how

effectively it capitalizes on the potential advantages and minimizes the potential problems of using a group. Table (3) summarizes these issues.

Table 3 Pros and Cons of Using a Group to Make Decisions (Source: Harem, 2004)

Potential Advantages	Potential Problems
1. Larger pool of information.	1. One person dominates.
2. Diversity of information.	2. Time consuming.
3. Intellectual stimulation.	3. Satisficing.
4. Acceptance of the decision.	4. Ambiguous responsibility.
5. People are committed to the decision.	5. Groupthink.

2.2.4.1 Potential Advantages of Using a Group

Using groups to make a decision offers at least five potential advantages.

- 1. More complete information and knowledge. By aggregating the resources of several individuals, more input is applied to the decision process (Alamry and Alghalby, 2007).
- 2. Increased Diversity of views. The problem may be new to one group member but familiar to another (Robbins, 1996). Or the group may need to consider other viewpoints such as financial, legal, marketing, human resource, and so on to achieve an optimal solution.
- 3. Group discussion provides an opportunity for intellectual stimulation. It can get people thinking and unleash their creativity to a far extent than would be possible with individual's decision-making (Bateman and Snell, 2004).
- 4. Increased acceptance of the solution. People who participate in a group discussion are more likely to understand why the decision was made. This will be translated into more support for the decision and higher satisfaction among those required to implement it.
- 5. Higher level of commitment to the decision. Group discussion typically leads to a higher level of commitment to the decision.

2.2.4.2 Potential Problems of Using a Group

Of course, group decisions are not without drawbacks. Their major disadvantages include the following:

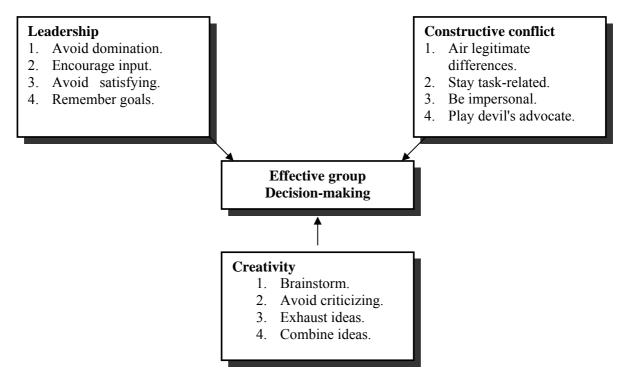
- 1. Domination by the few. Some times one group member dominates the discussion. Individual dominance has two disadvantages. First, the dominate person does not necessarily have the most valid opinions, and may even have the most unsound ideas. Second, even if that person's preference leads to a good decision, convening as a group will have been a waste of everyone else's time (Robbins, 1996).
- 2. Time consuming. It takes times to assemble a group. The interaction that takes place once the group is in place is frequently inefficient. The result is that groups take more time to reach a solution than would be the case if an individual was

- making the decision. This can limit management's ability to act quickly when necessary (Hareem, 2004).
- 3. Satisfying is more likely with groups. Most people don't like meetings and will do whatever they can to end them. This may include criticizing members who want to continue exploring new and better alternatives. The result is a satisfying rather than an optimizing or maximizing decision.
- 4. Ambiguous responsibility. Group members share responsibility, but who is actually accountable for the final outcome? In an individual decision, it is clear who is responsible. In a group decision, the responsibility of any member is watered down.
- 5. Pressure to avoid disagreement can lead to a phenomenon called groupthink. Groupthink occurs when people choose not to disagree or raise objections because they don't want to break up a positive team spirit. Pressure to go along with the group's preferred solution stifles creativity and the other behaviors characteristic of vigilant decision-making (Robbins, 2003).

2.2.4.3 Managing Group Decision-making

In order to take full advantage of the group as a decision-making resource, care must be taken to manage group dynamics to balance individual contributions and group operations. Effective managers should pay close attention to the group process, and they should manage it carefully. Figure (7) illustrates the requirements for effective managing group decision-making: (1) an appropriate leadership style; (2) the constructive use of conflict; and (3) the enhancement of creativity.

Figure 7: Managing Group Decision-making (Source: Bateman and Snell, 2004)



1) Leadership style

The leader of a decision-making body must attempt to minimize the process losses that often occur in free-flowing meetings, such as a committee deliberation or a staff meeting on a specific problem. In these settings, the risk of social pressures to conformity, domination, time pressures, and even highly emotional debates may detract from the purpose at hand. At the same time, the leader should not allow the group to pressure people into conforming. The leader should alert to be to the dangers satisficing. Also, he should be attuned to indications that group members are losing sight of the primary objective: to come up with the best possible solution to the problem (Schermerhorn et al, 2002).

2) Constructive Conflict

Total and consistent agreement among group members can be destructive. It can lead to uncreative solutions, and a waste of the knowledge and divers viewpoints that individuals bring to the group. Thus, a certain amount of constructive conflict should exist. Some companies, including Sun Microsystems, Compaq, and United Parcel Service, take steps to ensure that conflict and debate are generated within their management teams (Bateman and Snell, 2004). Constructive conflict, results in positive benefits to individuals, the group, or the organization.

On the positive side, conflict can bring important problems to the surface so that they can be addressed. It can cause decisions to be considered carefully and perhaps reconsidered to ensure that the right path of action is being followed. It can increase the amount of information used for decision-making. And it can offer opportunities for creativity that can improve individual, team, or organizational performance. (Schermerhorn et al, 2002).

3) Encouraging Creativity

Creativity in decision-making involves the development of unique and novel responses to problems and opportunities. In a dynamic environment full of non-routine problems, creativity in crafting decisions often determines how well people and organizations do in response to complex challenges. We examined the group as an important resource for improving creativity in decision-making. A common used technique is brainstorming. In brainstorming, group members actively generate as many ideas and alternatives as possible, and they do so relatively quickly and without inhibitions (Dessler, 2004).

Four rules typically govern the brainstorming process. First, all criticism is ruled out. No one is allowed to judge or evaluate any ideas until the idea-generation process has been completed. Second, "freewheeling" is welcomed. The emphasis is on creativity and imagination; the wilder or more radical the ideas, the better. Third, quantity is wanted. The emphasis is also on the number of ideas; the greater the number, the more likely a superior idea will appear. Fourth, "piggy-backing" is good. Everyone is encouraged to suggest how others' ideas can be turned into new ideas or how two or

more ideas can be joined into still another new idea. Typical results include enthusiasm, involvement, and a free flow of ideas useful in creative problem solving (Robbins, 2003).

2.2.5 Organizational Decision-making

In organizations decisions are constantly made by individuals and groups (Gruning and Kuhn, 2005). To understand decision-making in organizations, a manager must consider a number of additional concepts and processes, including (1) Negotiation and Decision-making, (2) Decision-Driven Organization, (3) Organizational Constraints on Decision-making, and (4) How Decisions are made in Organizations.

2.2.5.1 Negotiation and Decision-making

Negotiation has special significance in work settings, where disagreements are likely to arise over such diverse matters as wage rates, task objectives, performance evaluations, job assignments, work schedules, work locations, and more. Negotiation is the process of communicating back and forth for the purpose of reaching a joint decision. This process can break down because of a telling problem—the parties don't really talk to one another, at least not in the sense of making themselves truly understood. It can also be damaged by a hearing problem—the parties are unable or unwilling to listen well enough to understand what each other is saying. Indeed, positive negotiation is most likely when each party engages in active listening and frequently asks questions to clarify what the other is saying. Each party occasionally needs to "stand in the other party's shoes" and to view the situation from their perspective (Goodwin and Wright, 2004).

2.2.5.2 Decision-Driven Organization

The defining characteristic of high-performing organizations is their ability to make good decisions and to make them happen quickly. The companies that succeed tend to follow a few clear principles. Some decisions matter more than others. The decisions those are crucial to building value in the business the ones that matter most. Some of them will be the big strategic decisions, but just as important are the critical operating decisions that drive the business day to day and are vital to effective execution.

. A company that makes good decisions quickly has a higher metabolism, which allows it to act on opportunities and overcome obstacles. The best decision makers create an environment where people can come together quickly and efficiently to make the most important decisions (Rogers and Blenko, 2006).

Decision roles trump the organizational chart. No decision-making structure will be perfect for every decision. The key is to involve the right people at the right level in the right part of the organization at the right time. A well-aligned organization reinforces roles. Clear decision roles are critical, but they are not enough. If an organization does not reinforce the right approach to decision-making through its measures and incentives, information flows, and culture, the behavior will not become

routine. Practicing beats preaching. Involve the people who will live with the new decision roles in designing them. The very process of thinking about new decision behaviors motivates people to adopt them. How clear decision roles, enhance organizational performance (Rogers and Blenko, 2006).

2.2.5.3 Organizational Constraints on Decision-making

The organization itself constrains decision makers, for instance, shapes their decisions to reflect the organization's performance evaluation and reward system and organizationally imposed time constraints. Previous organizational decisions also act as precedents to constrain current decisions.

a) Performance Evaluation

Managers are strongly influenced in their decision-making by the criteria by which they are evaluated (Hareem, 2004). If a division manager believes that the manufacturing plants under his responsibility are operating best when he hears nothing negative, we should not be surprised to find that his plants managers spend a good part of their time ensuring that negative information does not reach the division boss.

b) System-Imposed Time

Constraints Organizations impose datelines on decisions. For instance, department budgets need to be completed by next Friday. Or the report on new product developments to be ready for the executive committee to review by the first of the month. A host of decisions has to be made quickly in order to stay ahead of the competition and keep customers satisfied. Moreover, almost all important decisions come with explicit deadlines. These conditions time pressures on decision makers and often make it difficult, if not impossible, to gather all the information they might like before having to make a final choice (Adair, 2007).

c) Cultural Differences

Cultural background of the decision maker can have significant influence on his or her selection of problems, depth of analysis, the important placed on logic and rationality, or whether organizational decisions should be made autocratically by an individual manager or collectively in groups. For instance, Arab don't necessarily make decisions the same way that Canadians do (Robbins, 2003).

2.2.6 Computer-Mediated Decision-Making

As in nearly every other aspect of business life, computers have entered the area of decision-making, where they are useful not only in collecting information more quickly but also offering several advantages, including the benefits of anonymity, greater number of ideas generated, efficiency of recording and storing for later use, ability to handle large groups with geographically dispersed members, and in reducing roadblocks to group consensus (Schermerhorn et al, 2002).

Computer support for group decision-making, including developments with the Internet and with intranets, has broken the decision-making meeting out of the confines of face-to-face interactions. With the software now available, problems can be defined and decisions can be made through virtual teamwork by people in geographically dispersed locations. We know that group decision software can be especially useful for generating ideas. The growing use of electronic brainstorming is one example of the trend toward virtual meetings. Assisted by special software, participants use personal computers to enter ideas as will, either through simultaneous interaction or over a period of time. The software compiles and disseminates the results.

2.2.6.1 Advantages of Electronic Meetings

- Usually less costly than face-to-face meetings. There is no travel, accommodation, or meeting room costs involved.
- Less disruptive. Members can participate from the comfort of their own offices or homes. If it is not practical to start a virtual meeting on time, members can work on other things while they are waiting in their own offices or homes.
- Tend to be more efficient, focused, and businesslike than face-to-face meetings. Members are less likely to digress, ramble, or be casual about the meeting.
- Are ideal for simple decisions that need to be made between face-to-face meetings. A face-to-face meeting becomes something to look forward to, since it is more substantive issues (Mina, 2002)...

2.2.6.2 Disadvantages of Electronic Meetings

- It is difficult to respond to facial and vocal expressions. Members may be listening or reading the words, but may miss the ideas and the passion behind them. Therefore, the decisions may not be as holistic as they need to be.
- It is difficult to detect an emotional reaction to the discussion and respond to it with a supportive statement, without seeing the individual who may need this support.
- It is easy to tune out in a virtual meeting, without anyone knowing that you are doing it
- Virtual meetings do not engage people on a human or social level to the extent that face-to-face meetings do. The business may indeed be done efficiently, but without the social and human interaction, there is no real opportunity to build cohesion, teamwork, synergy, and loyalty to the organization.
- It is more challenging to maintain privacy and confidentiality in a virtual meeting, e.g., an e-mail exchange or an electronic meeting may offer less protection of information. Therefore, people may be less comfortable discussing sensitive issues (Mina, 2002).

2.3 Business Communication and Decision-making at PalTel

Established in 1995 as a public shareholding company, Palestine Telecommunications Company (PalTel) commenced its operations on the first, of

January 1997 as an operator and provider of all types of telecommunication services including fixed lines, cellular, Internet, data communications services, Payphones, and next generation services in addition to creating the backbone for other related telecom service. With a capital of JOD 131.625 million, PalTel has become one of the major foundations of the Palestinian economy, a pillar for its growth and progress, and a compass for investment. With a team of over 1560 employees, 15.6% of which are females, PalTel is considered the largest employer in the Palestinian market (PalTel's annual report, 2007).

PalTel strives to offer the best quality services at competitive tariffs. It has attained noticeable results at the local, national and international levels during the past few years. Accordingly, PalTel managed to improve its economic and competitive position to be able to match other internationally accredited telecommunications companies. PalTel continuously endeavors in developing and upgrading its commercial, operational and managerial capabilities and business activities. Moreover, PalTel is committed to developing its employee's standards and qualifications through training that is held locally or abroad and through workshops and conferences (www.paltel.ps).

2.3.1 Vision

Aiming at being the sector leader, through building a strong and advanced infrastructure for telecommunication sector and to enter international telecommunication technologies to provide a wide variety of telecommunication related products and services to all subscribers and customers in all Palestinian localities.

2.3.2 Mission

PalTel focused to reach the highest standards of advancement in serving its subscribers and providing them with the latest and up-to-date services in a timely manner and at affordable and cost effective levels. In addition, the company always aimed to realize good return expectations are met.

2.3.3 Strategy

PalTel continues operating according to an overall strategy and key business drivers that evolve around maximizing the customer's satisfaction. PalTel assure customer's satisfaction through providing up-to-date technology, and expanding as well as diversifying the services provided into integrated packages. By being committed to supplying the best available and affordable quality services to its subscribers and customers, PalTel aims at winning customer trust and loyalty. This is clearly seen through:

- 1. Improving the culture of the company in the field of serving the customers through increasing the care of them and the type of service provided.
- 2. Expanding the distribution of the fixed lines and its added services since it is has high quality and competitive price.
- 3. Continuous investment in the network backbone and infrastructure. and the genuine interest in spreading out internet, data culture, and literacy.
- 4. Providing a wide range of services to its subscribers with special focus on the Internet protocol (IP) including the voice and video services.
- 5. Building on its renowned local success, PalTel seeks to invest regionally and internationally.
- 6. Expanding the data and Internet services provided to the business sector into integrated packages.

2.3.4 Main objectives

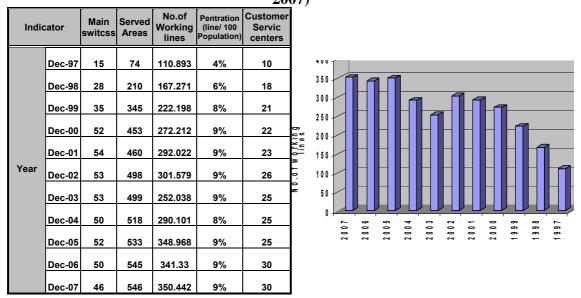
The main objectives are as following:

- a- Providing a wide variety of telecommunications related products and services to all subscribers and customers in all the Palestinian localities.
- b- Providing the latest and most advanced telecommunication, information systems, data, value added services and third generation technologies in order to be able to positively respond to customers demands in the various Palestinian localities.
- c- Realizing good return on investment and assuring that investors are kept informed of the company plans, short and long-term objectives and ensure them that their expectations are met.
- d- As part of its networking with the community and the Palestinian society at large, PalTel is actively involved and is continuously participating and contributing to the development efforts of building the new Palestinian society through providing support to unique social, educational, health, economic and telecommunications infrastructure activities and initiatives. The company sees this as part of its responsibility to create a modern society that will help position Palestine to be an active player worldwide and will help realize the Palestinians aspirations and ambitions.

2.3.5 Achievements and Main Difficulties

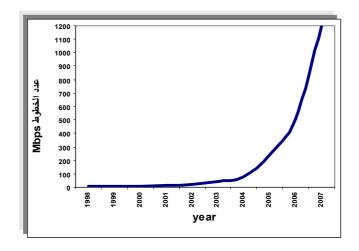
PalTel, during 2007, faced a lot of obstacles, difficulties and challenges due to closures and occupation policy. This, as a result, hindered PalTel's efforts and plans. Despite all that, PalTel with its strong will and persistence managed to successfully overcome these difficulties, and achieved the set goals. The previous years were rich with great achievements that empowered the company with more excellence and reliability. These efforts resulted in the increase of the number of subscribers from about 111 thousand subscribers at dec-1997 to about 350 thousand at dec-2007 as shown in Figure (8) (PalTel's annual report, 2007).

Figure 8 the increase in Fixed Lines subscribers (Source: PalTel's Annual Report, 2007)



Moreover, PalTel enhanced the utilization and penetration of the internet in Palestine by expanding the Asynchronous high Density subscriber lines (ADSL) project which enabled the majority of Palestinians to enjoy browsing the internet with a cost effective level and high quality Figure (9) shows the continuous increase in the number of ADSL subscribers and Internet speed.

Figure 9 the increase in ADSL subscribers and internet speed (Source: PalTel's Annual report, 2007)



The last years were full of obstacles and difficulties for PalTel. Despite that, PalTel with its steadfastness and determination, managed to overcome the restrictions and difficulties created by the occupation and siege accomplished goals and objectives.

The following were some of the main difficulties that PalTel had to deal with and concur:-

1- The segregation wall has created new complications which directly affected the infrastructure of PalTel in several areas. There was a need for building new infrastructure, which required additional hard work for PalTel's engineers and

- employees who had to work under very hard and risky conditions in order to ensure the continuity of service for areas under siege. This required providing alternative locations for serving the customers and fulfilling their needs.
- 2- PalTel's staff especially maintenance technicians faced mobility and traveling restrictions and difficulties created by the occupation. At instances, staff had difficulties in reaching the worksite due to Israeli checkpoints spread all over Palestine especially in the southern area.
- 3- PalTel staffs were exposed to several dangers and aggression: Zuhdi Al-Masri was shot by one Israeli sniper and suffered sever wounds while performing his duty in Nablus.
- 4- Many essential imported shipments, deliveries, and materials stocked and blocked for more than a year at Karni Main Israel border check point until this current day.
- 5- Certainly with no any doubt the frequent demonstrated continues Israeli martial invasions at most Gaza areas and territories caused and resulted in making huge destructions, demolitions, loses, and damages in most PalTel external access network; For example, Biet-Hanoon access network was completely destroyed three times by the invasions, and cost PalTel high Budget to maintain and build it again.
- 6- Indeed Israeli degraded curfew on the entire areas of Gaza, which exceeded more than one year, caused tremendous loses, shortages, and lacks in the most important needed materials and items. Those in used for both PalTel's access network and internal backbone infrastructures. In additional the curfew paralyzed all technical, HR, and commercial activates and maintenance operations, even training targets of PalTel team were badly effected.

In spite all the above mentioned obstacles and damages PalTel teams and personals overcome that situation by developing their own skills and thoughts in achieving the main PalTel's goals. Some of their ideas were to manufacturing the essential needed maintenance materials locally at Gaza factories, for example, Plastic Disruption Boxes, and Card Readers of Pay-Phone, and External Cabinets were produced successfully, other were the use of the modern communications technologies tools such as Video Conference, E-Mail, and computers' internetworking technologies, which PalTel uses and implements in solving and dealing quickly with the most above obstacles and risks.

2.3.6 Modes of Communications Used by PalTel

2.3.6.1 Traditional Communication

Before we consider modern communications technologies, it will be useful to look at some of the basic features of more traditional communication method that used by PalTel. This provides contrast with MCTs.

a) Face-to-Face Interaction

PalTel's employees are very familiar with face-to-face situations, where communication is immediate and any response or feedback is also immediate. In addition they are able to use body language and voice tone in the communication to help

add extra emphasis to particular points or to convey doubts and feeling. As there is no other form of communication where employees can make this claim, PalTel sets face-to-face communication apart as being special. One of the disadvantages of this tool is that both the communicator and the receiver must be in the same place at the same time.

b) Telephone

This tool is used at PalTel to fulfill many of the advantages of face-to-face interaction in that there is immediacy both in conveying the information and response, and voice tone can be used to enhance the message. But there are also some of the disadvantages. The possibility of misunderstanding is probably even as there is no body language to clarify meaning. Whilst both communicator and receiver are not in the same place, they must be present at the same time. Answer machines and voice mails give some flexibility in this respect. We will shortly see that the telephone features strongly in some MCTs.

c) Letters

This traditional method is used for getting information to people without being in the same place at the same time and it is really suited for formal communication such as initial introduction, contracts and specifications.

d) Memos

This means of communication allows employees to get basic information to others within the company. The assumption is that the recipient will understand the full context. Nowadays, memos have been replaced by electronic mail (e-mail).

e) Fax or Facsimile

Fax is a method of sending a hard (paper) copy of some document over the telephone. It allows letter type communication without the delay of carrying the specific piece of paper from the communicator to the recipient. The original document needs to be read electronically and it is the electronic version that is transmitted over the telephone system. At the receiving end, the electronic document is printed onto paper before becoming accessible to the recipient.

2.3.6.2 Modern Technology Communication

A variety of MCTs ranging from simple applications like fixed telephone, to more advanced tools, like the internet-based inter-organizational systems which have been adapted by PalTel for meeting its communication needs & purposes. These MCTs have been already become an important alternative to traditional communication media, such as memo, fax and original mail.

Following headline items are a brief description of the most widely used communication tools and how these techniques are used at PalTel:-

1) E-mail

E-mail is probably the most commonly used communication tool for sending and receiving updated files, duties, records, informational data, applications, and tasks within PalTel and its boundaries. It is an asynchronous method of electronically transmitting texts, graphs, audios, videos and other types of sharing files from one computer terminal to another as one formal network (Dessler, 2004).

Moreover, the used e-mail system at PalTel has several features that facilitate employees' tasks, such as, allowing them to transceiver information to many people & parties simultaneously, in order to store & back up a huge number of contacts details for example, their names, e-mails, addresses, phone numbers, mobile numbers, est., .Moreover that also providing them to use an advanced calendar of making new appointments, daily events, and meeting requests. E-mail most useful applications at PalTel are the following business' purposes:

- Task- related use, which allows employees to disseminate information, obtain feedback, solve problems, and coordinate with each other parties.
- Social-related use, which enables employees to participate in interesting educational/entertainment activities, create and maintain personal contact, and seeks job's diversion.
- Broadcast use, which permits user to distribute & announce on line information to many people simultaneously.

2) Videoconferencing (V.C.)

This communication tool allows PalTel to bring two or more people from different locations' areas to watch, see, talk and hear each other at the same time on line, also sometimes involving a sharing computer applications' facility beyond this service. This Videoconference system has a screen monitor, a camera, a microphone, and output speakers. Integrated Services Digital Network (ISDN) technology is used at PalTel to make the connection core link of the V.C. technology. It is economical, professional and high quality of service backbone tool. PalTel uses the benefits of this communication medium in the following ways:

- Enhancing the access connections among headquarters at Nablus, Ram-Allah and Gaza Region, especially where a live visit is not possible because of Israeli closure & curfew.
- Improving the participants' communication and presentation skills as each participant can share, communicate and aware of the other involved members' thoughts and ideas.
- Saving time and resources, video conferencing is usually easier than on site visiting journey, so communications can be more appropriate and cost effective.
- Motivating & moderating the members' and the employees' skills in making quick, reliable, and convenient decisions.

3) Virtual Private Network (VPN)

Virtual private network uses internet technology. Whether the individual is sited at a desk in Head office or in a back room of their own house is of no consequence to the technology. Communication is just as fast and just as complete. PalTel used this technology to give its employees the access to its archives, libraries, e-mail, and software applications. PalTel considerably benefits from this communication medium in the following fields:-

- a- Increasing the productivity in the manner of employees' efforts and head managers of making, the right fast concerned actions & instructions.
- b- Reducing the total costs and time effective those involve in grouping up and gathering the related parties and members from many different locations, sites, and cites in one brilliant network.

4) Chatting Room

Chatting room methodology is also a frequent in use tool for holding common meetings for most PalTel's managers. It allows managers from a plenty of places and sites to share the meeting by calling the chatting room number from their own offices telephone sets. This process is secured by a password. Every one should enter his/her name to access the Chatting room; any shared member can be indicated of someone new enters to the meeting. PalTel's managers have been able to reduce costs for their corporate meetings by using the chatting room, and saving many administrative procedures to achieve that purpose. That helps and supports of taking a quick related in advanced steps & actions in solving problems and issues.

5) Internet-based inter-organizational system (NGS)

PalTel technical team has implemented this Internet technology, which capable of supporting an updated, organized on time applications and requests of all related new, faulty, transfer, disconnected and freezed ADSL, VPN, private Internet, Leased Lines and multi-services deals for all concerned parties such as, Internet Service Providers ISPs, Commercial & financial Dep., Technical personals, and main head managers. Next Generation System (NGS) gives PalTel the facility of inter-firm communication needs. It enables PalTel to customize & feedback recent database records of all its multimedia services applications and cases in the manner of showing and analysis the numbers of active, on waiting demand lists, and cancelled lines.

Trading partners can obtain as much relevant information as they desire from PalTel main computer servers through the internet NGS tool. Such precisely tailored information made these trading partners serve the company more effectively & efficiently. NGS is one of the most essential intercommunication mechanisms. Which build up updated official bonds and ties among all the related parties, members, departments, teams, managers, and ISPs. It combines and assists all the different PalTel's categories, departments, and head managers through one unique network table to implement and make the right reliable quick cost effective decisions and instructions to other concerned members.

6) Human Resource program

PalTel increasingly depends on MenaMe internet-based network to link its employees electronically, and to, therefore, provides instantaneous communicational & organizational sidewise. Since almost all employees already have internet access, PalTel decided to use the Internet's low-cost and interactive features to create an Internet-based employee communication network. PalTel added a communication application which later called by MenaME source to its internet system. MenaME is an employee self services program that consists of two major parts.

The first part is the Employee Self Services (ESS), which is the employees' portal with the HR Department. Each employee can inquire his personal profile and transactions, submit a request from his managers, view and print his salary slip, file in his training needs, and plan his annual reaction ahead. The second part is the Manager Self Services (MSS), which is the managers' portal with the HR department. Each manager can monitor his employees under his supervision, analyze their needs, and submit some requests from the HR department for improving his employees' abilities and skills

7) Oracle Financial System

Oracle Financial System captures all the transactions related to inventory management, procurement, suppliers, capital projects, fixed assets, customers, cash management and general accounting and provides accurate and timely financial reports. PalTel is considered one of the first companies that has implemented oracle successfully in Palestine (PalTel's Annual report, 2004).

8) Intranet

The Intranet that is used by PalTel provides a single point of access to internal systems and documents by using a Web interface. Intranet is used to create online repositories of information, which is continually updated. Moreover, Intranet provide a rich set of tools for creating collaborative environments in which members of PalTel can exchange ideas and share information. Information from many different sources and media, including text, graphs, video and even digital slides cab be displayed, shared, and accessed across the company through a simple common interface.

Chapter Three: Previous Studies

CHAPTER OUTLINE

- 3.1 Introduction
- 3.2 Arabic Studies
- 3.3 International Studies
- 3.4 Conclusion

3.1 Introduction

Business communication and decision-making have been examined with many different research strategies. In this chapter, we will shed more lights on some of Arabic and International studies.

3.2 Arabic Studies

3.2.1 (Al- Manye, 2006):

This study aimed at assessing the situation in public security establishment in Kingdom of Saudi Arabia regarding the implementation of communication technology, and tried to identify any obstacles facing the improving of decision-making process, which in turn facing the level of performance of the employees. The research applied the analytical descriptive method. A small random sample that represents 40% of the society was chosen.

The research found that the implication of communication technologies has a great impact on the efficiency of the employees in the establishment. The major obstacles that hinder the use of these technologies are the shortage in the number of the equipments. In addition, the employee, do not receive adequate training to use the equipment properly. Finally, the available equipment suffer from lack of updating and preventive maintenance, consequently most of them remain out of order most of time.

3.2.2 (Al – Buheisy 2005):

This study aimed at explaining the advantages of using new technologies such as Internet, Intranet and Extranet by the Palestinian firms and the role that this technologies can play at the decision-making process. Moreover, the author of this study has tried to discover the level of using such technology by the Palestinian firms thorough an empirical study. The author has applied the analytical descriptive method. 126 employees from the Palestinian firms participate in a survey, 38% were commercial, 18% were industrial, 37% were services, and 7% were trading. 71 out of the participants responded with a response rate of 56.3 percent.

The results of this study show us that only a small part of the Palestinian firms use (partially) this technology, also it indicates us that the firm size, mangers qualifications, training courses obtained by them and their English level are key words in using this technology in these firms.

3.2.3 (Al – Shehri, 2004):

This research aimed at examining the role of administrative communication in performance from the point view of criminal security staff members in Riyadh city. This researcher used the survey analytical methodology via social survey by

questionnaire as a research instrument to collect data. A comprehensive survey has been used by applying the questionnaire on the total population, which consisted of criminal security staff members in Riyadh city (122 employees).

This research found that administrative communication plays an important role in solving criminal security staff member's problems through the following positively reflected aspects: accuracy in providing employees with suitable instructions to face problems and saving time and effort. Moreover, this research found that communication technologies play an important role in improving staff member's occupational performance level. This research suggests future studies to examine the effect of administrative communication in facing security problems at other Arab countries.

3.2.4 (Al- Zoghby 2004)

This study aimed of recognizing the extent of communication skills availability of the head managers at government of institutions for stat of Al- karak from the subordinates point view, then examined the effect of that on the administrative communication efficiency. A random sample that represents (25%) of the society which consists of all the employees of public sector of the stat of Karak (704 employees) has been chosen. 357 questionnaires have been distributed, 272 out of them responded with a response rate of (76.2) percent.

The results indicated that the degree of both communication skills availability and nonverbal messages skills availability are moderated. This study also found that there is a statistical significant correlation between administrative communication skills and administrative communication efficiency, as well as, between the nonverbal messages elements and administrative communication. The research suggested future studies in Jordon to examine other variables in Jordon to examine other variables that effect the administrative communication such as informal communication.

3.2.5 (Abu Al- Ghanam 2002):

This study aimed at investigating the effect of nonverbal messages in the administrative communication efficiency on the stat directorates in Deban. To achieve the purposes of the study, the researcher designed a questionnaire. A small random sample that represent (48.48%) of the society has been chosen. The sample of the study consisted of 350 employees. (305) out of them responded, with a response rate of (87.14) percent.

The study revealed that there is a statistical significance correlation between nonverbal messages and the efficiency of the administrative communication. Also, there is a statistical significant correlation between the responses perception of the nonverbal messages and the modified variables (leadership type, information characteristics, department, and organizational design), as well as, between the responses perception of the administrative communication efficiency and the modified variables. This study suggested future studies examine the effect of nonverbal messages on the organizational culture.

3.2.6 (Al- Hawamda 2002):

This study aimed at examining the effect of decisions information characteristics on the ability of organizations to adapt to the task environment. The sample of this study consisted of all administrators in the biggest companies in the southern region of Jordan (cement, potash, salt, and phosphates). A total of (335) questionnaires were distributed, of which (245) retuned and were found suitable for statistical analysis. Descriptive static, Simple Regression Analysis multiple and stepwise Regression were conducted to test the hypotheses.

The study found that there is a statically significant relationship between the characteristics of information and the ability of the companies to adapt to the task environment, and the information of characteristics of information explained about (78.1%) of the variance from the independent variable. This study suggested future research to examine the relationship between the decisions information characteristics such as the bias, trust satisfaction and the ability of organizations to adapt to the task environment.

3.2.7 (Al-Lozi, 1999):

This Study investigated the competency of administrative communications at Jordanian governmental institutions as conceived by its employees in relation to gender, experience, job level and qualification. In this study a total of 658 employees from 12 governmental institutions (93337 working employees) were chosen randomly. The research instrument consisted of two parts: personal information about research subject which formed the independent variables, and a questionnaire to identify their conception of administrative communications competency which consisted of four major areas: Openness, validity, and explicitness of communication system; communicating the necessary information and in good time; Fitting in with aspirations, expectations and values; and choosing the appropriate method for communication behavior.

The research findings showed a positive level of employee's conceptions of Administrative Communications competency in general. The field of openness, validity, and explicitness of communication system reflected the highest level while the field of communicating the necessary information and in good time was the lowest. The result also showed that there were no considerable effects of either academic rank or experience in relation with the competency of Administrative Communications. It was also found that the conceptions of male employees towards communication competency were higher than those of female employees in all fields of study except for choosing the appropriate method for communication behavior. In addition, job level had an effect in the field of fitting in with aspirations, expectations, and values; and communicating the necessary information and in good time and in favor of managers, whereas it had no considerable effect with its relation to the other two fields.

The research suggests future studies to explore the effect of new variables on administrative communications efficiency in general and specially on the formal and informal communications. Moreover, this research suggests making the same study in the private sector in Jordan.

3.3 International Studies

3.3.1 (Smyth, 2008):

This article discussed the meaning and value of employee engagement. A research was undertaken by the author of this article as a temporary organizational fellow with McKinsey of & co. among 59 organizations worldwide. This research concluded that the primary driver resulting in engaged leaders and employees is the appetite and ability of leaders at every level to engage their subordinates in every decision-making and bigger-ticker change. In other word, to share their power and reach down to those who deliver the service or make change happen on the front line.

Power sharing from the author point view means admitting as a leader that you don't know all the answers, and being able to lead, and manage or supervise as a guide. More over, the author also found that leaders who engage the right groups in every day decisions and in designing and executive change will benefit both in terms of the quality of decisions and the speed of execution that derives from people who feel ownership of the out come. Finally, the author explained the hereunder seven key points that leaders should remember about employee engagement:

- 1- Past Patterns are the best predictors of future behavior.
- 2- Leader's approaches to employee engagement are often instinctive and irrational.
- 3- The primary driver of employee engagement is opening up decision-making.
- 4- Look within for good examples of employee engagement.
- 5- Look for obstacles to change among the senior leadership.
- 6- Engage people in solving crises as well as identifying opportunities.
- 7- Engagement is a terrific opportunity for communicators.

3.3.2 (Berry, 2006):

This article examines 25 years of business communication and management literature to reach and understanding of how computer- Mediated Asynchronous Communication CMAC can improve organizational communication team processes and decision-making. This article found that CMAC has brought about radical changes in understanding communication teamwork and decision-making. Computer-Mediated teams do not have to be co present in time or space to collaborate, share information or make decision. CMAC allows the creation of virtual teams and input from the many instead of just the few.

CMAC teams can quickly be changed in size to include additional experts as needed or to from sub teams. CMAC can allows time for research or for seeking outside counsel and discussion and information are easily shared electronically among a large number of team members. CMAC creates permanent and evolving record of discussions, creating a database to document the expeditions and responsibilities of team members. This article raises several questions that need further clarification and research such as:

- a- How can organization create a sense of urgency and responsibility within CMAC teams so that decisions made?
- b- How is motivating team members different in CMAC teams compared with synchronous face-to-face teams?

3.3.3 (Byrne and May, 2006):

This study examines the effect of different levels of media (from lean to rich) on the satisfaction in and perceived quality of organizational Communications, as well as perceived quality of urgent news. In this study 598 employees from the US based offices of a thriving high technology oriented organization participate in a survey. 162 managed at least one other individual, the rest were individual contributors with no management responsibility, 65% were males, 30% females, while 5% chose not to indicate their gender; 52.8% indicated they had been with the organization between one and 5 years, 24% between 6 and 10 years; 24% reported between 31 and 40 years of age and 26% reported being between 41 and 50 years of age.

The results of this study showed that employees derived most of their satisfaction with the information they received about their job from rich communication channels such as face-to-face meetings, phone conversations, and departmental meetings with their bosses. Lean communication mechanisms such as the quarterly meeting, the employee newsletters, or written memos and notices contributed a small addition to their satisfaction level in information about their jobs. E-mail and the internet (moderate communication mechanism) contribute nothing in additional to the rich and lean media.

The study found the opposite results for information about the company and urgent news. Employees were more satisfied with information about the company when it delivered via lean communication media as compared to tech media. This study also found that employees rated their perceived quality of information received from their supervisor higher when it received via a rich medium as compared to lean medium.

3.3.4 (Michie et al., 2006):

This study explored the interviewing processes that link top management team (TMT) diversity and organizational performance. This study proposed a model that incorporated both moderating and mediating influences by using Fiol's concept of unified diversity and employing an information processing perspective of strategic decision-making; and they tested the hypotheses using data from specific strategic decisions faced by 85 top-level decision-making teams within the health care industry.

Results of this study were found to support the expectation of the authors; the goal consensus moderates the relationship between informational diversity and decision quality within the management teams. In addition, team member collaboration was found to partially mediate this effect. The authors of this research suggest future studies to examine the potential moderating and mediating roles of team process variables of top management teams, such as decision speed, commitment and some forms of shared

framing which could be tested as possible mediators of effects of TMT informational diversity on decision processes.

3.3.5 (Caballer et al, 2005):

This paper analyzed the direct and combined effects of the communication media ad time pressure in group work on the effective's responses of team members while they were performing intellective tasks. A laboratory experiment was carried out with 124 subjects: all of whom were graduate students of psychology. The majority of the participants were female (n= 101, 81 percent), and the average age was 21.3 years. The subjects were randomly placed in 31 groups of four members each. A 2X3 factorial design with three media (face-to-face, video- conference, and e-mail) and time pressure (with and without time pressure) was used to determine the direct and combined effects of these two variables on group members satisfaction with the process and with the results, and on members commitment with the decision.

Of the 31 groups, ten groups worked in a face-to-face condition, ten groups worked in the e-mail condition, and 11 groups worked in the videoconference condition, half of the groups in every condition worked under time pressure, and the other half worked without a time limit. Participants were randomly assigned to the direct and combined effects of these two variables on group members' satisfaction with the process and with the results, and on member's commitment with the decision.

Result show a direct effect of communication media on satisfaction with the process, with confirm the prediction of the media-task fit model, and a negative effect of time pressure on satisfaction with group results and commitment to those results. Most interestingly, the interaction effects for the three dependent variables are significant and show that the most deleterious effects of time pressure are produced in groups working face-to-face, while groups mediated by videoconference improve their affective responses under time pressure.

3.3.6 (Dearing, 2005):

This article suggested eight simple practices to increase the quality and quantity of output from leadership team meetings. These eight tactics will help leaders make and communicate clear decisions about their organizations:

- 1- Know the Agenda in Advance. Pick a day at a reasonable interval before the meeting, and make it the due date for the agenda. Communicate the agenda deadline to all direct reports.
- 2- Have a process. Use the same process for every leadership team meeting. Don't follow the process so rigidly that it becomes a liability.
- 3- Identify Decisions. At the beginning of the meeting, turn each agenda item into a question. Then have the whole team focus on answering that question. This approach greatly simplifies decision-making.
- 4- Set a Decision-making Threshold. Remember that different threshold pose different trade offs. Picture a continuum, with a single decision maker on one

- end, and 100% team consensus on the other. Be willing to change your threshold if necessary to get the job done.
- 5- Put Staff Experts to Work. Before the meeting, put a staff member in charge of each decision to be made. Ask them to create tight, concise briefs Summarizing the following; the decision to be made; the main pros and cons; and implications of the possible outcomes.
- 6- Summarize Decisions. Never leave a decision or subject and go on to the next without writing out the basics of what the team decided.
- 7- Create a Record. Have someone take notes of your meeting. Choose a note taker who has knowledge of the team.
- 8- Assign Communication. At the end of every meeting, review the outcomes. Decide who should communicate what, to whom, for each item. Set firm "communicate by" dates.

3.3.7 (Pissarra and Jesuino, 2005):

This study examined the effect of the technology and anonymity condition on the quality, quantity and diversity of the generated ideas, as well as on group member's satisfaction. The study used 2*2 factorial design combining two group support system tools (topic commenter VS Electronic brainstorming) X anonymity (anonymity of sources VS identification of sources). A total of 150 volunteer college undergraduates have participated in this study; 60 male and 90 female with an average of 20.653 years old

The results of this study showed a positive effect of anonymity on the satisfaction of group members, on the number of good ideas and on the semantic diversity. It was Cleary found that anonymity positively affects group's performance in idea generation, reducing the evaluation effect and the fear of disagreeing. A marginal effect on satisfaction was also found to be related with the type of tools. Contrary to expectations, this study found that electronic brainstorming didn't generate greater diversity of ideas. Moreover, this study found that there was an impact of technology on the flow of ideas and on the emergence of new conceptual categories.

3.3.8 (Cai, 2003):

This study examined the decision theory, particularly in terms of the antecedents and consequences of adopting and implementing inter-organizational internet communication and related decision-making processes. The author first identified the following three key dimensions of internet communication behaviors based on the relevant literature review: frequency, diversity, and formality. Then the author conducted a series of one-to-one telephone interviews. Finally, the author collected data from 284 Chinese manufacturing firms and analyzed the data using structural equation modeling technique.

The results of both interviews and structural equation model test revealed that the frequency and diversity of internet communication played an important role in determining the level of purchasing performance, while formality was critical to managing information flows over the internet and preventing potential internet information security risks. Further, this study showed that two factors, such as perceived internet security risks and norms of internet information sharing, significantly influenced internet communication behaviors. Finally, this study suggested future research to test proposed model of this study in a different country setting and in the context service companies.

3.3.9 (Johnson, 2003):

This research examined how media richness affects decision-making, subjective judgment, and risk propensity. In this research, different communications channels are used in a laboratory setting (3*2 factorial design) to investigate how media richness affects decision-making under certainty. One hundred and eighty four (184) students were recruited from the student population at Baruch College, city university of New York. Subjects were randomly assigned one of two roles, either buyer or seller, and paired for participation. At the start of the experiment, Subjects completed a questionnaire, which elicited information about their abilities to make inferences from information communicated by a telephone or a computer. This questionnaire was also used to gather demographic information. After the questionnaire was completed, subjects were given instructions on how to complete the experimental task.

This research found that increasing or decreasing richness of media dose not uniformly alter decision-making constructs, such as message significance, message reorientation, and subjective judgment. The findings indicate, among other things, that individuals tend to center their decision-making on fewer unrelated ideas or less divergent perspectives in rich media; and that irrespective of the risk induced preference situation, individuals tend to ascribe more importance and meaning to messages conveyed when using an instant messaging communications systems.

3.3.10 (Colquitt et al, 2002):

This study examined the effects of computer-assisted communication on team decision-making performance as function of the team's openness to experience. Seventy – nine teams performing multiple cue probability learning tasks were randomly assigned to 1 of 2 experimental conditions; a) Verbal communication or (b) computer-assisted communication (which combined verbal and computerized communication).

The results indicated that access to computer-assisted communication improved the decision-making performance of teams. More over, the beneficial effects of openness in computer-assisted conditions were mediated by the efficiency with team's integrated verbal and computerized forms of communications.

3.3.11 (Citrin, 2001):

This study examined the impact of communication media characteristics on information quality perceptions in an industrial purchasing context. A mail survey of 1000 of the purchasing managers from the transportation equipment manufacturers in the United States was conducted to gather cross-sectional data. This survey was designed to examine the impact of communication media characteristics, such as speed and quality of feedback, and the presence of multiple cues on information quality perceptions in a business-to-business purchasing context.

This study found that feedback quality is an important predictor of all the different dimensions of information quality (clarity, relevance, accuracy, and timeliness) for the three communication media examined (salesperson, technical literature, and web information sources). Feedback speed was found to affect significantly perceptions of information accuracy and timeliness only. The impact of multiple cues was somewhat less uniform and varied with the information quality dimension and the medium conveying the information.

This study raise that marketers need further research to provide valuable information to examine the impact of the different dimensions of information quality on the use of that information for different stages in the purchase decision-making process; such as information search, alternative evaluation, and product/vendor choice.

3.3.12 (Cortesi, 2001):

This study investigated the effect of communication channel (face-to-face, audio-conferencing, and videoconferencing) on group composition (group size, gender, age, and organizational level), participation (level and equality of participation, and performance (achievement, efficiency, and satisfaction). The field study investigated "traditional" groups facing real, not experimentally contrived, problems. They worked on two types of meeting tasks including convergent tasks, which require more interpersonal interaction and produce more conflict (such as decision-making), and divergent tasks, which require less interpersonal interaction and produce less conflict (such as idea generation).

The study used a multi-method approach and included both qualitative and quantitative data collection procedures. These including structured non-participant observation during meetings, as well as group member's surveys following the meetings. The study was accomplished over the period of six month at a 400-employee research organization located in the northeastern United States.

This study found that communication channel had a significant effect on group composition. Participation and performance were also highly dependent on channel. Group members participated more often in face-to-face meetings but more equally in

audioconferecing. Groups produced more ideas face-to-face and were least efficient using videoconferencing to generate ideas and decisions. Finally, group satisfaction was perceived to be highest for face-to-face meetings. This study recommended a future studies to consider the effect of newer Internet-based communication technology on composition, participation, and performance.

3.3.13 (Huisman, 2001):

This study is specifically aimed at providing an interactional linguistic conceptualization of decision-making process. In this study conversation analysis is used to identify those interactions and linguistic features at four Dutch organizations, in order to examine decision-making in the particular context of management meetings. The research highlights the ways in which organizational members collaboratively create the future of their organization.

The results of this study show that the formulation and content of decisions is inextricably connected to the situations in which they are produced and decisions depend on the communicative norms of the group. The study demonstrated that decision-making processes incorporate at least three key elements, first, a decision is a formulated future state of affairs that is positively assessed by relevant participants, second, decision actually is depends on the culture of a team, and finally, the research has demonstrated the importance of considering the subjective, situational and interpretive characteristics of formulations.

3.3.14 (Purdy and Nye, 2000):

This study examined the impact of Media richness on both objective and subjective negotiation outcomes. In this study, 150 undergraduate students enrolled in business administration classes at two campuses of a western V.S. university. Participants average 9.8 years of work experience. The sample was 56% female with a mean age of 30 years. Participants were randomly assigned to one of four media conditions: face-to-face, video conference, telephone or computer talk. Each participant was assigned to the role of retail store manager (buyer) or manufacturer's representative (seller) and charged with negotiating the sale of a man's clothing line. After completing the negotiation, participants responded to a post-negotiation questionnaire.

This research found that rich communication media are more likely to encourage collaborative behavior than poorer media are. Another important finding of this research is that the face-to-face and videoconference conditions generated similar joint profits and satisfaction levels. More over, the research found that media richness directly reduced bargaining time, but did not affect profits. Media richness dose not directly affect subjective bargaining outcomes, but rather affects them indirectly by influencing the bargaining process and objectives outcomes.

3.3.15 (Bhappu, 1999):

This research tried to understand how demographic diversity affects individuals in teams by examining the team decision-making process in depth. The research studied the intervening process variables of conflict and miscommunication, as well as the outcome variables of team identity and decision quality. It also examined how communication media affect individuals in these same teams. A field experiment was conducted. Subjects were assigned to conditions based on their actual roles in an organization. Using a balanced 2*2 design, this research constructed demographically diverse and homogenous work teams along the dimensions of organizational function, racial-ethnic minority status, and sex. Teams communicated face-to-face or using computer-mediated communication technology.

This research found that demographic diversity has both a positive and negative effects on the ability of individuals to identify with their team and to negotiate higher quality decisions. Moreover, the results of this research showed that when teams communication was computer mediated, individuals in these teams had weaker team identity and lower decision quality.

3.3.16 (Citera, 1998):

This study examined the differences in individual influence and decision quality across communication media. Sixty-four participants (35 females and 29 males) were recruited from introductory psychology course. The subjects were placed in 32 groups of two participants each. All groups communicated over all three media: face-to-face telephone, and computer. Participants completed three different tasks. Each task was performed over different type of communication media.

The results showed that influence for dominating participants remained stable across the three media conditions. Less dominating participants, on the other hand, had higher levels of influence in the telephone condition. Influence for less dominating participants, computer-mediated conditions. Furthermore, quality of decision did not differ across communication media. This study suggested a future research in the area of comparing media effects on group processes and output using different tasks.

3.3.17 (King and Xia, 1997):

This paper examined the effect of learning experiences with nine communication media, based on perception changes of media appropriateness. Two hundred ninety-five MBA students participated in longitudinal quasi-experimental study. Students were taught to use new media to communicate with team members in addition to the use of familiar media. The average age of the subjects was 27 years old with an average of four years work experience. Thirty-one percent of the subjects were women and 30% were international students.

Results of this paper indicate that traditionally rich media such as face-to-face, group meetings, and telephone were consistently perceived to be more appropriate than

emerging new media over time. In addition, changes in perception of media appropriateness were directly related to the participants learning experience, and were particularly salient with new media. Furthermore, increased use of some media was found to be associated with decreased use of other media. This paper demonstrates that deliberate technology-use mediation can be an effective management mechanism to facilitate an individual's ability to gain experience in the use of new technology. This paper suggests making future research to see if increased experience with media affects performance.

3.3.18 (Alexander et al, 1991):

This study examined two potential individuals difference measures (communicate apprehension and self-monitoring) and their effect on media choice. Data were gatherer from middle-and upper-level managers of banks in the state of Arizona. Questionnaire was mailed to 743 banking managers in the state. A total of 396 questionnaires were returned for a response rate of 53%. Respondents classified into three levels of management with 11.5% first-level Managers, 74.1% middle-level managers, and 14.4% upper-level managers. There were 125 women (31.6% of respondents) and 271 men (68.0) in the sample. Mean age of respondents was 45; and the median level of education was "some college".

This study found that individuals who experience higher levels of oral communication apprehension are fewer medium sensitive than are their less apprehensive counter parts. Individuals' differences in communication apprehension do have stronger impact on media sensitivity in cases of low message equivocally than in those of high equivocally. Managers dramatically prefer face-to-face interactions for high-equivocally messages, and they prefer the telephone for low-equivocally one. This study suggests that future researchers should attempt to identify the types of personality variables that have more pronounce effects on media choice.

3.4 Conclusion

Some aspects that affect business communication and decision-making were briefed from the previous researches. Those studies used different types of methodologies, some of them applied the analytical descriptive method, and another part of them carried laboratories experiments, while others used proposed modules. Moreover these studies were conducted on different types of organizations including the governmental institutions, public security establishments, and private sector's firms. These studies conducted on different countries with different societies, environments and cultures such as Saudi Arabia, Palestine, Jordan, USA, and China in the period between 1991 and 2008. The applied samples vary in their types, such as MBA students and firm's managers. Part of the results that were found through out this study come on line with the previous researches and other findings were the privilege of this study.

Chapter Four: Research Methodology

CHAPTER OUTLINE

- 4.1 Introduction
- 4.2 Data Collection
- 4.3 Statistical Analysis Tools
- 4.4 Validity and Reliability of the Questionnaire
- 4.5 Research Population and Sample Selection
- 4.6 Characteristics of the Sample

4.1 Introduction

To accomplish the research objectives specified in chapter 1, this study was conducted in two phases. In the first phase, the relevant literature on business communication and decision-making were reviewed. Based on the literature review results, related hypotheses were produced. In the second phase, an initial survey questionnaire that measures the variables and their relations was developed. After revising and refining the initial questionnaire through a pretest and subsequently a pilot study, a final of the questioner was generated and then was administered to a large group of PalTel's employees in the three most important managerial levels (Top management, middle management, and low level management) The data collected from the survey were analyzed to test their related hypotheses.

4.2 Data Collection

As the study follows the analytical descriptive methodology, different tools to collect primary and secondary data were utilized as follows:

4.2.1 Secondary data

To introduce the theoretical literature of the subject, the following data sources were used:

- Books and references in both English and Arabic about business communication and decision-making.
- Periodicals, published papers and articles.
- PalTel's reports and statistics
- Web sites.

4.2.2 Primary data

To collect the primary data of the research, a questionnaire was developed and distributed to the sample of the study. This questionnaire consists of two parts:

Part one: Include the personal and professional information about the subjects.

Part two: Include the three dimensions of the study, which are:

- 1- The effect of using MCTs on decision-making process at PalTel.
- 2- The effect of communication methods on decision-making process at PalTel.
- 3- The effect of employee's communication skills on decision-making process at PalTel.

4.2.3 Data Measurement

In order to be able to select the appropriate method of analysis, the level of measurement must be understood. For each type of measurement, there is/are an appropriate method/s that can be applied and not others. In this research, ordinal scales were used. Ordinal scale is a ranking or a rating data that normally uses integers in ascending or descending order. The numbers assigned to the important (0, 1, 2, 3, 4) do

not indicate that the interval between scales are equal, nor do they indicate absolute quantities. They are merely numerical labels. Based on Likert scale we have the following:

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Scale	0	1	2	3	4

4.3 Statistical Analysis Tools

The researcher used data analysis both qualitative and quantitative data analysis methods. The Data analysis will be made utilizing (SPSS 15). The following statistical tools were utilized:

- 1. Cronbach's Alpha for Reliability Statistics
- 2. Spearman Rank correlation for Validity
- 3. Frequency and Descriptive analysis
- 4. Nonparametric Tests (Mann-Whitney and Kruskal-Wallis)
- 5. Chi-square Test of Independence

4.4 Validity and reliability of the questionnaire

This section presents the pilot study and tests of reliability and validity of questionnaire.

4.4.1. Pilot Study

Several steps were taken to pretest the questionnaire. First of all, the researcher, who is a native Arabic, converted the English version of the questionnaire into Arabic. Then, one researcher, who is fluent in both Arabic and English, translated the Arabic version back into English to check for consistency with the original. Moreover, one doctor, who is Arabic-English bilinguals, in one major university in Gaza Strip examined both the Arabic and the English versions and concluded that the translation was accurate.

The second pretest was conducted using in-depth interviews with five individuals from different management's levels. This helped clarify the questionnaire and highlighted certain aspects of the communication situation, which had to be included in the questionnaire. Then, twelve research experts examined the questionnaire for face validity. The names of questionnaire referees are listed in (Appendix D). After some alterations to the wording of some questions, the questionnaire was administered to 40 employees within PalTel. The result of the pretest indicated that the questionnaire took approximately 15 minutes to complete and that a majority of the respondents appeared to find it interesting to answer (probably due to the relevance of the questionnaire content to the respondents' typical work).

4.4.2 Validity of the Questionnaire

Validity refers to the degree to which an instrument measures what it is supposed to be measuring (Pilot and Hungler, 1985). Validity has a number of different aspects and assessment approaches. Statistical validity is used to evaluate instrument validity, which include criterion-related validity and construct validity.

Statistical Validity of the Questionnaire

To insure the validity of the questionnaire, two statistical tests should be applied. The first test is Criterion-related validity test (Spearman test) which measures the correlation coefficient between each paragraph in one field and the whole field. The second test is structure validity test (Spearman test) that used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one filed and all the fields of the questionnaire that have the same level of similar scale.

4.4.2.1 Criterion Related Validity

Internal consistency of the questionnaire is measured by a scouting sample, which consisted of 40 questionnaires through measuring the correlation coefficients between each paragraph in one field and the whole filed.

Based on the pilot sample statistical analysis, six paragraphs were deleted. Paragraphs 2 and 17 were deleted from the first dimension "The effect of using MCTs on decision-making process at PalTel" because the Sig. (p-values) were equal 0.087 and 0.356, respectively which greater than 0.05. Paragraphs 9 and 14 were deleted from the second dimension "The effect of communication methods on decision-making process at PalTel" because the Sig. (p-values) were equal 0.064 and 0.371, respectively which greater than 0.05. Paragraphs 3 and 14 were deleted from the third dimension "The third dimension: The effect of employee's communication skills on decision-making process at PalTel" because the Sig. (p-values) were equal 0.129 and 0.066, respectively which greater than 0.05.

In addition, four paragraphs were modified, paragraph 13 from the second dimension and paragraphs 6, 11 and 15 from the third dimension.

-Correlation Coefficient of each paragraph of the effect of using MCTs on decision-making process at PalTel dimension and the total of this part.

Table (4) clarifies the correlation coefficient for each paragraph of the effect of using MCTs on decision-making process at PalTel and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to be measure what it was set for.

Table 4 Correlation coefficient of each paragraph of the effect of using MCTs on

decision-making process at PalTel dimension and the total of this part

	ion-making process at Parter dimension and the total of this part					
No.	Paragraphs	Spearman Correlation Coefficient	P-Value (Sig.)			
1.	MCTs (E-mail, V.C., Internet, Intranet etc) enhance the efficiency of communication among employees.	.431	0.003*			
2.	MCTs make attaining information easier.	.397	0.006*			
3.	MCTs assist in assigning clear responsibilities for the employees	.644	0.000*			
4.	MCTs at PalTel assist in providing updated Data Base of understanding works' obstacles and their on line developing stages.	.488	0.001*			
5.	MCTs enhance positive relations among employees.	.502	0.000*			
6.	Modern communication techniques assist in implementing decentralization in decision-making	.577	0.000*			
7.	PalTel does not exaggerate in stressing the confidentiality of information exchanged which leads to employees being effectively benefited from modern communication techniques.	.470	0.001*			
8.	MCTs are effectively used to increase communication opportunities between clients and distributors.	.378	0.008*			
9.	PalTel uses MCTs that motivate employees to participate which consequently lead to numerous alternatives to the problems encountered.	.417	0.004*			
10.	Communication technologies are frequently updated at PalTel to adapt with the rapid acceleration in technologies	.447	0.002*			
11.	MCTs are impersonal (no human feelings and senses)	.381	0.008*			
12.	MCTs help me organize the daily work job	.413	0.004*			
13.	MCTs assist in reducing mistakes committed at work.	.298	0.031*			
14.	E-mail is used for routine communications which do not need sending complicated information	.484	0.001*			
15.	E-mail is not improperly used in unnecessary communication.(not related to work job)	.577	0.000*			
16.	Electronic communications' methods enable me to follow up my tasks remotely (away from the office).	.436	0.002*			
17.	Intranet and internet networks are efficiently and effectively used for they include attainable essential information.	.390	0.006*			
18.	MCTs enhance PalTel staff members' abilities to adopt decisions on the team level.	.488	0.001*			

^{*} Correlation is significant at the 0.05 level

Correlation Coefficient of each paragraph of the effect of communication methods on decision-making process at PalTel dimension and the total of this part.

Table 5 Correlation coefficient of each paragraph of the effect of communication

methods on decision-making process at PalTel and the total of this part

	ods on decision-making process at Pai i ei and the total of this part				
No.	Paragraphs	Spearman Correlation Coefficient	P-Value (Sig.)		
1.	Oral communication methods (personal interviewees, telephone calls, meetings, presentations etc.) encourage employees to pose questions for vague issues that they may face.	.422	0.003*		
2.	Work meetings enhance creative thinking which assists in adopting proper decisions.	.620	0.000*		
3.	Oral communication methods provide employees with simultaneous feed back which enhance the efficiency of communication process.	.563	0.000*		
4.	Written communication methods (reports, memos, letters, etc.) provide employees with the ability to analyze massages.	.565	0.000*		
5.	Periodic reports are properly utilized to easily and quickly identify the problem encountered.	.367	0.010*		
6.	Written communication methods provide employees with the ability to send messages to the different concerned parties.	.559	0.000*		
7.	More than one communication method can be used at once to achieve the related target (example: sending a written massage and then follow it up with telephone call for clarifying the issue).	.680	0.000*		
8.	I prefer handling the complicated problems through oral communication.	.285	0.037*		
9.	Brainstorming sessions can be utilized to explore many alternative for the problem encountered.	.512	0.000*		
10.	Personal interviewees provide employees with the ability to exchange information, signals, sings, and emotions that assist in overcoming complicated obstacles.	.619	0.000*		
11.	I resort to written communication methods to address my direct supervisors at work.	.481	0.001*		
12.	Informal communication channels (social relations among individuals and or groups at the company) are properly used to deliver essential information.	0.461	0.001*		
13.	Horizontal communications contribute to solving problems among the existing departments.	.473	0.001*		

^{*} Correlation is significant at the 0.05 level

Table (5) clarifies the correlation coefficient for each paragraph of the effect of communication methods on decision-making process at PalTel and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha=0.05$, so it can be said that the paragraphs of this field are consistent and valid to be measure what it was set for.

- Correlation Coefficient of each paragraph of the effect of employee's communication skills on decision-making process at PalTel dimension and the total of this part.

Table 6: Correlation coefficient of each paragraph of the effect of employee's communication skills on decision-making process at PalTel and the total of this part

No.	Paragraphs	Spearman Correlation Coefficient	P-Value (Sig.)
1.	I listen carefully during the communication process.	.472	0.001*
2.	I do not hesitate to repeat the points that I understood to confirm my understanding.	.491	0.001*
3.	During listening, my direct supervisor tends to reduce interruption and noise. (Example: close the door, stop receiving calls etc.,) through addressing listening operations.	.663	0.000*
4.	Direct supervisors do not stress on their opinions and always listen to others.	.710	0.000*
5.	I do collect the substantial related information about the work problems before making decisions.	.276	0.045*
6.	Employees tend to select the most proper time for communication process.	.627	0.000*
7.	I tend to use precise statements that express my ideas.	.429	0.003*
8.	I tend to used proper tones and voice pitch during the communication process.	.310	0.026*
9.	I tend to comprehend letters without any personal bias.	.526	0.000*
10.	I specify the precise objective before initiating the communication process.	.290	0.035*
11.	I use the most suitable communication method to ensure the achievement of my predetermined objectives.	.368	0.010*
12.	PalTel employees enjoy the required competencies to prepare the required reports professionally.	.352	0.013*
13.	PalTel employees have the required skills to deal with the English correspondences.	0.480	0.001*
14.	Office designs at the company assist in enhancing the efforts of communication process.	.515	0.000*

Cont.: Table 6 Correlation coefficient of each paragraph of the effect of employee's communication skills on decision-making process at PalTel and the total of this part

	9.1		
15.	Conflict among employees is properly used to increase the quality of decision-making at PalTel.	.483	0.001*
16.		.387	0.007*
17.	I feel that decisions at PalTel are taken on time	.539	0.000*
18.	A detailed plan is sent to the employees who will participate in the meeting prior to holding the meeting	.730	0.000*
19.	All concerned departments are adequately represented in the meeting	.693	0.000*
20.	During the meeting I feel that all participants are motivated and participate in their opinions.	.537	0.000*
21.	During the meeting and in the end period of each section discussions related be summarized and setting the most essential points and recommendations simultaneously before jumping to the next bullet	.721	0.000*
22.	All meetings minutes, recommendations, and duties are documented, determined and specified to their related in charge parties with their time schedule.	.750	0.000*
23.	I ensure that the presentation includes introduction to show the importance of the presentations to the participants.	.416	0.004*
24.	clarification tools (such as, drawing tables, graphics, formats related, etc.) to ease the understanding and comparison of information.	.312	0.025*
25.	I use a concluding statement in my presentation to ensure that participants are motivated to take decisions.	.281	0.040*
26.	Employees skills and competencies are enriched and developed through utilizing different communication methods	.449	0.002*
27.	PalTel uses effective programs to encourage employees to participate in their ideas.	.430	0.003*

^{*} Correlation is significant at the 0.05 level

Table (6) clarifies the correlation coefficient for each paragraph of the effect of employee's communication skills on decision-making process at PalTel and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha=0.05$, so it can be said that the paragraphs of this field are consistent and valid to be measure what it was set for.

4.4.2.2 Structure Validity of the Questionnaire

Structure validity is the second statistical test that used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one filed and all the fields of the questionnaire that have the same level of liker scale.

The researcher assessed the field's structure validity by calculating the correlation coefficients of each field of the questionnaire and the whole of questionnaire.

Table 7 Correlation coefficient of each field and the whole of questionnaire

No.	Dimension	Spearman Correlation Coefficient	P-Value (Sig.)
1.	The effect of using MCTs on decision-making process at PalTel	.879	0.000*
2.	The effect of communication methods on decision-making process at PalTel	.692	0.000*
3.	The third dimension: The effect of employee's communication skills on decision-making process at PalTel	.876	0.000*

^{*} Correlation is significant at the 0.05 level

Table (7) clarifies the correlation coefficient for each filed and the whole questionnaire. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all the fields are significant at $\alpha = 0.05$, so it can be said that the fields are valid to be measured what it was set for to achieve the main aim of the study.

4.4.3 Reliability of the Research

The reliability of an instrument is the degree of consistency which measures the attribute; it is supposed to be measuring (Polit & Hunger, 1985). The less variation an instrument produces in repeated measurements of an attribute, the higher its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient (Polit & Hunger, 1985).

Alpha Cronbach's Coefficient

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and +1.0, and the higher values reflects a higher degree of internal consistency. The Cronbach's coefficient alpha was calculated for each field of the questionnaire.

Table 8 Cronbach's Alpha for each filed of the questionnaire and all the questionnaire

No.	Dimension	Cronbach's Alpha
1.	The effect of using MCTs on decision-making process at PalTel	0.784
2.	The effect of communication methods on decision-making process at PalTel	0.711
3.	The third dimension: The effect of employee's communication skills on decision-making process at PalTel	
All Parag	raphs	0.903

Table (8) shows the values of Cronbach's Alpha for each filed of the questionnaire and the entire questionnaire. For the fields, values of Cronbach's Alpha were in the range from 0.711 and 0.878. This range is considered high; the result ensures the reliability of each field of the questionnaire. Cronbach's Alpha equals 0.903 for the entire questionnaire which indicates an excellent reliability of the entire questionnaire. Thereby, it can be said that the researcher proved that the questionnaire was valid, reliable, and ready for distribution for the population sample.

4.5 Research Population and Sample Selection

4.5.1 Research Population

The research population consists of all employees in the low level management, middle level management, and top level management (446 in number). Table (9) sheds more light on the distribution of study population according to post title:

Table 9 Distribution of population according to post title

Post Title	Number of		
	employees at Gaza	employees at West	
	Strip	Bank	
Top Management	3	36	39
Middle Management	19	81	100
Low level Management	80	227	307
		Total	446

4.5.2 Sample Selection

The research utilized stratified random method according to managerial level in collecting the sample. The percent that each post title represents in the total number of employees was multiplied by the required number of sample, which is 340. Table (10) shows the distribution of stratified random sample among post titles:

Table 10 Sample selection by using stratified random sampling

No.	Post Title	No. of employees	percentage	Sample	Response
1.	Top management	39	8.74%	30	30
2.	Middle management	100	22.42%	76	60
3.	Low management	307	68.84%	234	182
	Total	446	100%	340	272

Three hundred and fourty questionnaires were distributed. The response percentage was 82.1% i.e. 279 out of 340 questionnaires were collected, and seven were not valid.

4.6 Characteristics of the Sample

This section examined the personal and organizational characteristics of the sample.

4.6.1 Gender

Table (11) below, presents that there was 89% of respondents are males and 11% of respondents are female.

Table 11 Distribution of sample according to gender

Gender	Frequency	Percent
Male	242	89.0
Female	30	11.0
Total	272	100.0

4.6.2 Age

Table (12) below, shows that there was 0.7% of respondents are less than 25 years, 5.9% of respondents are from 25 to < 30 years, 25.4% of the respondents are from 30 to < 35 years, 28.7% of the respondents are from 35 to < 40 years, while 24.3% of the respondents are from 40 to < 45 years (), and the last category "> 45" represent 15.1% of the respondents. These results imply that 78.4% of the research sample are from 30 to < 45 years old.

Table 12 Distribution of sample according to Age

Age	Frequency	Percent
Less than 25 years	2	0.7
From 25 to less than 30	16	5.9
From 30 to less than 35	69	25.4
From 35 to less than 40	78	28.7
From 40 to less than 45	66	24.3
45 Years and more	41	15.1
Total	272	100.0

4.6.3 Marital Status

Table (13) below shows that there was 5.1% of the respondents are single, 93.8% of the respondents are married and 1.1% of the respondents are in other status.

Table 13 Distribution of sample according to marital status

Marital Status	Frequency	Percent
Single	14	5.1
Married	255	93.8
Divorced	2	0.7
Widow	1	0.4
Total	272	100.0

4.6.4 Qualification

Table (14) below shows that most of the employees has bachelor or equivalent 70.6% of the respondents, this table also shows that 14% of the respondents has higher education and this is a normal situation since PalTel is High Technology company and provide its customers with most up to date services. Moreover, this table shows that 12% of the respondents has diploma, while 2.9% of the respondents has secondary school certificate and 0.4% of the respondents has a certificate less than secondary school.

Table 14 Distribution of sample according to qualification

Qualification	Frequency	Percent
Less than Secondary	1	0.4
Secondary	8	2.9
Diploma	33	12.1
Bachelor or Equivalent	192	70.6
High Education	38	14.0
Total	272	100.0

4.6.5 Experience

Table (15) below shows that there was 4.4% of the respondents have less than 5 years experience, 18.4% of the respondents have from 5 to < 10 years experience, 60.7% of the respondents have from 10 to < 15 years experience, and 16.5% of the respondents have more than 15 years experience. These results reflect that 95.6% of the sample has 5 years and more experience, which probably reflects capabilities of the sample.

Table 15 Distribution of sample according to experience

Experience	Frequency	Percent
Less than 5 years	12	4.4
From 5 to less than 10	50	18.4
From 10 to less than 15	165	60.7
15 years and more	45	16.5
Total	272	100.0

4.6.6 Managerial Level

Table (16) below shows that there was 11.8% of the respondents are classified from the top management, 22.1% of the respondents are classified from the middle management, while more than 66% of the respondents are from the low management level, and this results from the fact that the number of the employees at the low level management are more than those at the middle and top management levels and that the response rate is more than the required sample in the top management level.

Table 16 Distribution of sample according to managerial lecel

Managerial Level	Frequency	Percent
Top Management (Chief / Director)	32	11.8
Middle Management (District Manager)	60	22.1
Low Management (Senior Engineer – Supervisor – Head of Section – Administrator)	180	66.2
Total	272	100.0

4.6.7 Duty Station

Table (17) below shows that there was 32.7% of the respondents are working at Gaza Strip, while 67.3% of the respondents are working at West Bank and this is consistence with the percentage of the number PalTel's customers at Gaza Strip and the existence of the Head quarter of the company at West Bank which increase the number of the needed employees there.

Table 17 Distribution of sample according to duty station

Duty Station	Frequency	Percent
Gaza Strip	89	32.7
West Bank	183	67.3
Total	272	100.0

4.6.8 Department

Table (18) shows that there was 51.1% of the respondents are working at the technical department which is more than half of the sample, 23.9% of the respondents are working at the commercial department, 11% of the respondents are working at the financial department, and 14% of the respondents are working at the human resource & administrative affairs department. These results reflect that PalTel continued operating according to its strategy that evolves around maximizing the customer satisfaction and providing the latest up-to-date technology through several running projects.

Table 18 Distribution of sample according to department

Department	Frequency	Percent
Technical	139	51.1
Commercial	65	23.9
Financial	30	11.0
Human Resource & Administrative Affairs	38	14.0
Total	272	100.0

4.6.9 Number of training courses in the field of business communication:

Table (19) shows that 70.6% of the respondents got from 0 to 3 training courses in the field of business communication, 23.5% of the respondents got from 4 to 7 training courses in the field of business communication, and 5.9% of the respondents got 8 and more training courses in the field of business communication. Moreover, the average number of training courses in the field of business communication is approximately three training courses (Exactly 2.88). These results reflect that the majority of the sample got training courses in the field of business communication, which probably reflects capabilities, and efficiency of the sample.

Table 19 Distribution of sample according to number of training courses in the field of business comunication

Number of Training Courses	Frequency	Percent
0-3	192	70.6
4-7	64	23.5
8 and more	16	5.9
Total	272	100.0

4.6.10 Percentage of time allocated for communication

Table (20) shows that there was 14.7% of the respondents allocate from 0% to 20% of their working time for communication, 22.8% of the respondents allocate from 21% to 40% of their working time for communication, 17.3% of the respondents allocate from 41% to 60% of their working time for communication, 32.4% of the respondents allocate from 61% to 80% of their working time for communication, and 12.9% of the respondents) allocate from 81% to 100% of their working time for communication. Moreover, the average percentage of time allocated for communication is 54.2%; which is close to the results of some studies that found managers spent 60% to 80% of their time communicating (Dessler, 2004).

Table 20 Distribution of sample according to percentage of time allocated for communication

Percentage of Time Allocated for Communication	Frequency	Percent
0%-20%	40	14.7
21%-40%	62	22.8
41%-60%	47	17.3
61%-80%	88	32.4
81%-100%	35	12.9
Total	272	100.0

Chapter Five: Empirical Framework Hypothesis Testing & Discussion

CHAPTER OUTLINE

- 5.1 Introduction
- 5.2 Analyzing and Discussing the Dimensions of the Questionnaire
- 5.3 Testing the Study Hypotheses

5.1 Introduction

This chapter presents the analysis of the survey data and the results of the tests of the hypotheses proposed in chapter one. This chapter is organized into three major sections as follow. The first section examines the type of data. The second section analyzes and discusses the dimensions of the questionnaire. The final section presents the hypotheses test results.

5.2 Analyzing and Discussing the Dimensions of the Questionnaire

5. 2.1 Analyzing the First dimension

First dimension: The effect of using MCTs on decision-making process at PalTel

Table 21 Mean and Sign test for each paragraph of the first dimension and the total of this dimension

No.	Dorographs	Mean	Proportional	Sign	P-Value	Rank
140.	Paragraphs	Mean	Mean	Test	(Sig.)	Kank
1.	MCTs (E-mail, V.C., Internet,		Wican	Test		
	Intranet etc) enhance the efficiency of	3.6	91.2	16.2	0.000*	
	communication among employees.					2
2.	MCTs make attaining information	3.7	93.1	16.3	0.000*	
	easier.	5.,	75.1	10.5	0.000	1
3.	MCTs assist in assigning clear	3.1	78.0	14.6	0.000*	
	responsibilities for the employees	3.1	76.0	14.0	0.000	9
4.	MCTs at PalTel assist in providing					
	updated Data Base of understanding	3.2	78.8	14.6	0.000*	
	works' obstacles and their on line	3.2	76.6	14.0	0.000	
	developing stages.					8
5.	MCTs enhance positive relations	2.8	70.2	12.0	0.000*	
	among employees.	2.0	70.2	12.0	0.000	13
6.	Modern communication techniques					
	assist in implementing	2.5	61.6	7.4	0.000*	
	decentralization in decision-making					16
7.	PalTel does not exaggerate in					
	stressing the confidentiality of					
	information exchanged which leads to	2.6	65.0	9.7	0.000*	
	employees being effectively benefited	2.0	03.0	7.1	0.000	
	from modern communication					
	techniques.					15

Cont.: Table 21 Mean and Sign test for each paragraph of the first dimension and the total of this dimension

1						
8.	MCTs are effectively used to increase communication opportunities between	3.0	76.0	13.8	0.000*	
	clients and distributors.					10
9.	PalTel uses MCTs that motivate					
	employees to participate which					
	consequently lead to numerous	3.2	79.6	14.9	0.000*	
	alternatives to the problems					_
1.0	encountered.					7
10.	Communication technologies are					
	frequently updated at PalTel to adapt with the rapid acceleration in	3.2	80.4	15.1	0.000*	
	technologies					5
11.	MCTs are impersonal (no human					3
11.	feelings and senses)	2.2	53.8	1.7	0.095	17
12.	MCTs help me organize the daily	2.2	01.2	15.5	0.000*	
	work job	3.2	81.2	15.5	0.000*	4
13.	MCTs assist in reducing mistakes	2.9	73.7	13.6	0.000*	
	committed at work.	2.9	75.7	13.0	0.000	12
14.	E-mail is used for routine					
	communications which do not need	2.7	67.7	9.2	0.000*	
	sending complicated information					14
15.	E-mail is not improperly used in					
	unnecessary communication.(not	1.8	46.0	-3.1	0.002**	4.0
	related to work job)					18
16.	Electronic communications' methods	2.2	70.0	12.0	0.000*	
	enable me to follow up my tasks	3.2	79.8	12.9	0.000*	
1.7	remotely (away from the office).					6
17.	Intranet and internet networks are					
	efficiently and effectively used for they include attainable essential	3.4	84.6	14.9	0.000*	
	information.					3
18.	MCTs enhance PalTel staff members'					3
10.	abilities to adopt decisions on the	3.0	74.9	13.8	0.000*	
	team level.					11
	All Paragraphs	3.0	74.2	16.1	0.000*	

^{*} Mean is significantly greater than 50% (Middle percentage)

Following are the analysis of the paragraphs of table (21) according to the ranking of each paragraph:

- The mean of paragraph #2 "MCTs make attaining information easier" equals 3.7 (The maximum value = 4) and the proportional mean equals 93.1%. The value of sign test equals 16.3 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that indeed MCTs is essential fast reliable factor tool in collecting and gathering the required information, it allows input from the many instead of just the few and

^{**} Mean is significantly smaller than 50% (Middle percentage)

allows information to be easily shared electronically among a large number of team members. This result is logic since most PalTel's employees have computers, e-mail accounts, and Internet access, which facilitate their ability to get the required information, thus enhancing organizational communication, team collaboration, and decision-making process.

- The mean of paragraph #1 "MCTs (E-mail, V.C., Internet, Intranet etc) enhance the efficiency of communication among employees." Equals 3.6 (The maximum value = 4) and the proportional mean equals 91.2%. The value of sign test equals 16.2 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. The result of this paragraph indicates that MCTs, which used by PalTel enable the company to increase team member participation, offer flexibility over time and distance, and archive a permanent record of all discussion. In this regard, PalTel encourages its employees to use e-mail, video conferencing, and Internet communication, because it is a cheaper alternative than having a team meeting at a common location. Moreover, this helps PalTel to overcome some of it's constrains such as time pressure and the geographic distribution of team members.
- The mean of paragraph #17 "Intranet and internet networks are efficiently and effectively used for they include attainable essential information." Equals 3.4 (The maximum value = 4) and the proportional mean equals 84.6%. The value of sign test equals 14.9 with sig. (pvalue) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This answer confirms that PalTel's Internet and Intranet serve PalTel's employees and promote a sense of community among them regardless of their location in Palestine. They have the required policies, work procedures, employees' insurance details, and news. Other recently launched pages include the market studies page and the Saving Fund page, both allowing employees easy access to useful information and forms. Moreover, the intranet includes other useful links that provide access to important telecom-related sites. This event-driven publishing enables the company to respond more rapidly to changing conditions than traditional paper-based publishing while eliminating paper, printing, and distribution costs. Moreover, an Internet-based inter-organizational system NGS has been adapted by PalTel for meeting its inter-firm communication needs and enhancing cooperation with its trading partners.
- The mean of paragraph #12 "MCTs help me organize the daily work job." Equals 3.2 (The maximum value = 4) and the proportional mean equals 81.2%. The value of sign test equals 15.5 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. From this result, we can say that there was a consensus from most of the respondents about the

benefit of modern communications technologies in organizing their daily work job duties. This answer is logic since these technologies make the creation of memo, letter and proposal writing easier by providing reliable tools to correct misspelled words, and Grammars errors. Moreover, it provides the ability to set up calendar and schedule for meetings, visiting surveys and interviews, which make work-achieving tasks easier more organized successfully.

- The mean of paragraph #10 "Communication technologies are frequently updated at PalTel to adapt with the rapid acceleration in technologies." Equals 3.2 (The maximum value = 4) and the proportional mean equals 80.4%. The value of sign test equals 15.1 with sig. (pvalue) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result is as expected since PalTel continues to use the most up-to- date technologies in order to increase the performance of the employees and to maximize the customer's satisfaction. For example, PalTel added last year a communication application to its internet system to link its employees electronically since almost all the employees have internet access. This communication program is called MenaMe and it is an employee self service program. Managers through this program can monitor their subordinates, analyze their needs, and submit some requests from the Human Resource department for improving their employee's abilities. Nowadays, PalTel is implementing a new Internet base application which called Siebel, this application is designed to make all the service orders to be done electronically without using any hard copy. Moreover, this application will link all PalTel's departments electronically.
- The mean of paragraph #16 "Electronic communications' methods enable me to follow up my tasks remotely (away from the office)." Equals 3.2 (The maximum value = 4) and the proportional mean equals 79.8%. The value of sign test equals 12.9 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This answer indicates that PalTel today increasingly relies on electronic communication to link employees electronically and to, therefore, provide instantaneous communication organization wide. PalTel used the internet technology such as VPN and dial up to give its managers and supervisors the access to its archives, libraries, e-mail, and software applications. This enables the employees to follow up their work while they are at home which accordingly, increase the productivity, reduce the costs and make them use the time effectively.
- The mean of paragraph #9 "PalTel uses MCTs that motivate employees to participate which consequently lead to numerous alternatives to the problems encountered." Equals 3.2 (The maximum value = 4) and the proportional mean equals 79.6%. The value of sign test equals 14.9 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there

is an agreement from the respondents' point of view about this paragraph. This result shows a positive effect of the MCTs that used by PalTel (electronic brainstorming and electronic meeting) in the ideas generation process, because these technological tools are less disruptive, more efficient, and more focused than traditional methods such as face- to –face meetings. Although these technological tools motivated the employees to participate and increased the number of ideas generated, a special care should be taken to over come the disadvantages of these tools such as the difficulty to respond to facial expression and difficulty to detect the emotional reactions.

- The mean of paragraph #4 "MCTs at PalTel assist in providing updated Data Base of understanding works' obstacles and their on line developing stages." Equals 3.2 (The maximum value = 4) and the proportional mean equals 78.8%. The value of sign test equals 14.6 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha=0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This answer shows that MCTs used by PalTel ensure that information is available where the work is being done through some used tools such as on line reports, management presentations, and data mining systems. These information enable both the control where decisions are taken and ensure that top management can update the strategy with new insights. As such diagnostics simultaneously serve the learning about future opportunities and the managements of current performance.
- The mean of paragraph #3 "MCTs assist in assigning clear responsibilities for the employees" equals 3.1 (The maximum value = 4) and the proportional mean equals 78.0%. The value of sign test equals 14.6 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This indicates that there is a clear responsibility at PalTel. It is already defined who has responsibility to make decisions, who has input and who is charged with putting the decisions into action. MCTs helped in setting that through the formal communications and the used systems. For example, the oracle financial system has clear responsibilities for cash management level starting from the approvals on projects and ending by closing these projects after the implementation.
- The mean of paragraph #8 "MCTs are effectively used to increase communication opportunities between clients and distributors." Equals 3.0 (The maximum value = 4) and the proportional mean equals 76.0%. The value of sign test equals 13.8 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicts that PalTel has recognized the importance of inter- organizational communication to an effective management of broad supply chains. As mentioned in chapter 4, this internet technology has been implemented by PalTel to communicate with the internet service providers ISP's for

ADSL and Data lines application. Although this step is very important, many steps should be taken by PalTel to implement these MCTs in other fields such as the purchasing process.

- The mean of paragraph #18 "MCTs enhance PalTel staff members' abilities to adopt decisions on the team level." Equals 3.0 (The maximum value = 4) and the proportional mean equals 74.9%. The value of sign test equals 13.8 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. The positive answer to this paragraph supports the previous answers, which were obtained from respondents in this dimension. These technologies allow the possibility of creating a greater quantity and quality of information in the decisionmaking process through the creation of many ideas and the simultaneous evaluation of many alternatives by a large number of people. As well, these technologies increase the possibility for rapid decisions because of the simultaneous consideration of multiple alternatives. Moreover, MCTs allow rapid strategy or process change as new information becomes available, and this rapidity can result in a more effective communication because all team members are immediately informed of these shifts instead of continuing to work toward old objectives or under old understandings instead of waiting weeks for the next face-to-face meeting only to discover such a shift in direction or strategy is a classic consequence of ineffective teamwork and communication in synchronous teams.
- The mean of paragraph #13 "MCTs assist in reducing mistakes committed at work." Equals 2.9 (The maximum value = 4) and the proportional mean equals 73.7%. The value of sign test equals 13.6 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. As expected, this positive result supports the respondent's answer of paragraph #12 in this dimension. The MCTs have advanced tools that eliminate the employee's mistakes and facilitate their work.
- The mean of paragraph #5 "MCTs enhance positive relations among employees." Equals 2.8 (The maximum value = 4) and the proportional mean equals 70.2%. The value of sign test equals 12.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha=0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows one of the advantages of MCTs especially in our country where employees are facing mobility and traveling difficulties created by the Israeli occupation. For example, video conferencing allows PalTel's employees from different areas to see, talk, and hear each other and make business meeting at the same time through this tool.

- The mean of paragraph #14 "E-mail is used for routine communications which do not need sending complicated information" equals 2.7 (The maximum value = 4) and the proportional mean equals 67.7%. The value of sign test equals 9.2 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result clarifies that respondents when dealing with difficult situations which need complicated information prefer to use face-to-face communication because sending someone an e-mail is a far less personal way of communicating than simply speaking him face-to-face, and it often results in misunderstanding on the part of the person who receives the message.
- The mean of paragraph #7 "PalTel does not exaggerate in stressing the confidentiality of information exchanged which leads to employees being effectively benefited from modern communication techniques." equals 2.6 (The maximum value = 4) and the proportional mean equals 65.0%. The value of sign test equals 9.7 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This indicates that the respondents are satisfied with their authorities to access the company's resources to get the required information that needed to perform their tasks by using the modern communication tools that used at PalTel.
- The mean of paragraph #6 "Modern communication techniques assist in implementing decentralization in decision-making." equals 2.5 (The maximum value = 4) and the proportional mean equals 61.6%. The value of sign test equals 7.4 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This indicates that respondents can make their own decisions without conferring with other parties. This type of decision is very essential for PalTel since it is a service company and customer satisfaction is a very important issue for it. MCTs that in use at PalTel help in providing decision makers with needed vast amount of information from people both, inside and outside the company.
- The mean of paragraph #11 "MCTs are impersonal (no human feelings and senses)." equals 2.2 (The maximum value = 4) and the proportional mean equals 53.8%. The value of sign test equals 1.7 with sig. (p-value) equals 0.095 which is larger than the level of significance $\alpha = 0.05$, so the mean of this paragraph dose not differ from the middle point 50% (Neutral). So we conclude there is an average agreement from the respondents' point of view about this paragraph. This result shows that the used MCTs generally filters out nonverbal and related status cues, and this filtering from the respondent's point of view is likely both an advantage and a constraint on effective communication, depending on the situation. Using MCTs can benefit those who may feel shy speaking in public or those who are discounted in face-to-face discussion

because of status effects. The lack of visual cues in MCTs may allow more focus on the task and less focus on the social and personal aspects of interaction.

- The mean of paragraph #15 "E-mail is not used in sending unnecessary communication.(not related to work job)" equals 1.8 (The maximum value = 4) and the proportional mean equals 46.0%. The value of sign test equals -3.1 with sig. (p-value) equals 0.002 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is **negative**, then the mean of this paragraph is significantly **smaller** than the middle point 50%, so we conclude there is disagreement from **the respondents' point of view about this paragraph**. This result indicates that the company is facing a problem with the most commonly used communication tool, which is the e-mail. Many unrelated to job messages are transmitted through this system. These messages consumed too much time and waste employee's efforts. Moreover, this could cause an information overload where employees may have difficulty sorting the useful from the trivial messages and may become impatient while doing so.

Previous results indicate that there was consensus from most of the respondents that the MCTs are positively related to decision-making process. In other words, PalTel uses the advantages of these technologies effectively and efficiently to enhance the decision-making process. As shown in table (21) the mean of the total dimension equals 3.0 (The maximum value = 4) and the proportional mean equals 74.2%. The value of sign test equals 16.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this dimension differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this dimension is significantly greater than the middle point 50%, so we could conclude there is an agreement from the respondents' point of view about this dimension. This result is supported by the finding of the following previous studies:

- 1- Al- Manye (2006); this research found that the implication of communication technology has a great impact on the efficiency of the employees in public security establishment.
- 2- Berry (2006); this article found that Computer-Mediated Communication has brought about radical change in understanding communication teamwork and decision-making. Computer-Mediated Communication allows time for research and discussion and information are easily shared electronically. Moreover, it creates permanent and evolving record of discussion, creates a data-base to document the expedition and responsibilities of team members.
- 3- Caballer et al. (2005); this paper found that groups mediated by video-conference improve their affective responses under time pressure.
- 4- Al- Shehri (2004); this researcher found that communication technologies play an important role in improving staff member's occupational performance level.

- 5- Cai (2003); this study found that the frequency and diversity of internet communication played an important role in determining the level of purchasing performance.
- 6- Al- Hawamda (2002); this study found that there is statically significant relationship between the characteristics of information and the ability of companies to adapt to task environment.
- 7- Colqitt et al. (2002); this study found that access to Computer-Assisted Communication improved the decision-making performance of teams.

On the other hand, this result is inconsistent with other previous studies:

- 1- Al- Buheisy (2005); this article found that only a small part of the Palestinian firms us (partially) this technology. The author of this article related this result to two main dependable factors, which are the following:
 - a- Manager's lack of knowledge in using the Internet technology.
 - b- Manager's weakness of manipulating English language.

One reason for this inconsistency is that; this study had been conducted on year 2005, which the period of Internet limited in its availability for all business categories. But, recently and during through the last three years since 2005 to 2008 there is tremendous expansion, enhancement, development, and availability of the Internet technology for all types of users. Another reason is that the population of this study consisted from different types of firms.

2- Pissarra and Jesuino (2005); this study found that electronic brainstorming didn't generate greater diversity of ideas.

This result was due to using of students (volunteer college undergraduates) as subjects, and running of the experimental work in a scholarly context.

3- Cortesi (2001); this study found that groups were least efficient using video conferencing.

It is clear that this study had been accomplished on year 2001 at a subjects located in USA, which the period of starting the use of video conferencing technology.

4- Bhappu (1999); the result of this research showed that when teams communication was computer mediated, individuals in these teams had lower decision quality.

The author of this research refer this result to the poor communication and the conflict that existed between the individuals in diverse work team because of that, those individuals are so different from each other. From my point of view, the year of conducting this research and the type of computer applications that used in this research are also key factors of this result.

5.2.2 Analyzing the second dimension

Second dimension: The effect of communication methods on decision-making process at PalTel

Table 22 Mean and Sign test for each paragraph of the second dimension and the total of this dimension

No.	Paragraphs	Mean	Proportional Mean	Sign Test	P- Value (Sig.)	Rank
1.	Oral communication methods (personal interviewees, telephone calls, meetings, presentations etc.) encourage employees to pose questions for vague issues that they	3.3	81.5	1 F G	0.000*	1
2.	may face. Work meetings enhance creative thinking, which assist in adopting proper decisions.	3.3	81.4	15.6 15.5	0.000*	2
3.	Oral communication methods provide employees with simultaneous feed back which enhance the effectiveness of communication process.	3.1	78.0	15.0	0.000*	4
4.	Written communication methods (reports, memos, letters, etc.) provide employees with the ability to analyze massages.	3.1	77.2	14.7	0.000*	5
5.	Periodic reports are properly utilized to easily and quickly identify the problem encountered.	3.1	76.6	14.4	0.000*	6
6.	Written communication methods provide employees with the ability to send messages to the different concerned parties.	2.8	70.6	9.5	0.000*	10
7.	More than one communication method can be used at once to achieve the related target (example: sending a written massage and then follow it up with telephone call for clarifying the issue).	3.0	75.6	12.1	0.000*	7
8.	I prefer handling the complicated problems through oral communication.	2.6	64.6	7.1	0.000*	12
9.	Brainstorming sessions can be utilized to explore many alternative for the problem encountered.	2.9	72.5	12.9	0.000*	9
10.	Personal interviewees provide employees with the ability to exchange information, signals, sings, and emotions that assist in overcoming complicated obstacles.	3.2	79.0	15.2	0.000*	3

Cont. Table 22 Mean and Sign test for each paragraph of the second dimension and the total of this dimension

11.	I resort to written communication methods to address my direct supervisors at work.	2.7	66.4	8.7	0.000*	11
12.	Informal communication channels (social relations among individuals and or groups at the company) are properly used to deliver essential information.	2.4	59.4	6.4	0.000*	13
13.	Horizontal communications contribute to solving problems among the existing departments.	3.0	74.1	14.1	0.000*	8
	All Paragraphs	2.9	73.6	16.1	0.000*	

^{*} Mean is significantly greater than 50% (Middle percentage)

Following are the analysis of the paragraphs of table (22) according to the ranking of each paragraph:

- The mean of paragraph #1 "Oral communication methods (personal interviewees, telephone calls, meetings, presentations etc.) encourage employees to pose questions for vague issues that they may face." equals 3.3 (The maximum value = 4) and the proportional mean equals 81.5%. The value of sign test equals 15.6 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. It is clear from this result; most of the respondents rely more on oral communication method for addressing ambiguous and fast-changing situations. This method is the richest medium, it is more accurate, more extensive use of direct person-to-person interaction of decisions, fewer mistakes occurs, and fewer problems arise.
- The mean of paragraph #2 "Work meetings enhance creative thinking which assists in adopting proper decisions." equals 3.3 (The maximum value = 4) and the proportional mean equals 81.4%. The value of sign test equals 15.5 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result confirms the result of paragraph #1 in this dimension since, business meetings is useful in facilitating an exchange of information and in contextually grounding decisions. Meetings are very important tool that used by PalTel for generating ideas, expanding thought, and enhancing creative thinking, which can dramatically impact the ultimate success of decisions. This result is expected since meetings are characterized by a use of personal narratives, examples, and experiences.
- The mean of paragraph #10 "Personal interviewees provide employees with the ability to exchange information, signals, sings, and emotions that assist in overcoming

complicated obstacles." equals 3.2 (The maximum value = 4) and the proportional mean equals 79.0%. The value of sign test equals 15.2 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. It is not surprising that there is a consensus from most of the respondents about the important of nonverbal messages since nonverbal messages can support or undermine the stated message. Research has been estimated that in conversation involving two people, verbal aspects of a message account for less than 5% of the meaning, whereas nonverbal aspects of a message account for 95% of the meaning (Dessler, 2004). Nonverbal communication takes place through facial expression, body position, eye contact, and other physical gestures.

- The mean of paragraph #3 "Oral communication methods provide employees with simultaneous feed back which enhance the effectiveness of communication process" equals 3.1 (The maximum value = 4) and the proportional mean equals 78.0%. The value of sign test equals 15.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This answer confirms the previous results of paragraphs #1 and #2 in this dimension that most of the respondents prefer to use the oral communication method. PalTel's employees are very familiar with oral communications (face-to-face discussion, telephone conversation, and formal presentations and speeches) where communication is immediate and any response or feedback is immediate. In addition they are able to use body language and voice tone in the communication to help add extra emphasis to particular points or to convey doubts and feeling. Because it is more accurate and effective than other methods, PalTel sets oral communication apart as being special.
- The mean of paragraph #4 "Written communication methods (reports, memos, letters, etc.) provide employees with the ability to analyze massages." equals 3.1 (The maximum value = 4) and the proportional mean equals 77.2%. The value of sign test equals 14.7 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that written communication plays an important role in decision-making process at PalTel. Employees are familiar with written communication (memos, letters, reports, e-mail, computer files, and other written documents). Benefits of using written messages are that the messages can be revised several times, it can be saved, the receiver has more time to analyze the messages, and employees separated by both time and space can participate in decision-making process.
- The mean of paragraph #5 "Periodic reports are properly utilized to easily and quickly identify the problem encountered." equals 3.1 (The maximum value = 4) and the proportional mean equals 76.6%. The value of sign test equals 14.4 with sig. (p-value)

equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result is logic because as listed in chapter 4, PalTel increasingly depends on communication applications (ex. MenaMe, oracle financial system, faulty lines system...) that provide managers and supervisors accurate and timely reports to help them identify and analyze problems. An example of using reports in decision-making process at PalTel is the service of fixing the faulty lines. This service is very important for PalTel since customer's satisfaction is one of its top priorities. This process begins with reporting 166 for any fault, and then the fault will be registered on the faults system. After that this fault will appear to the exchange in charge of fixing the faults on the program. Then, the process of fixing and checking the line starts. When everything is right and the line is fixed they register the time of fixing. The system generates a fault report including the following important details: number of faulty lines, type of faults, faults carried over for more than 24 hours, historical data of faulty lines, and number of faults repaired. These reports are analyzed by the technical mangers in a daily basis in order to take identify the problems and make the required decisions to improve the quality of this service.

- The mean of paragraph #7 "More than one communication method can be used at once to achieve the related target (example: sending a written massage and then follow it up with telephone call for clarifying the issue)." equals 3.0 (The maximum value = 4) and the proportional mean equals 75.6%. The value of sign test equals 12.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This answer indicates that the respondents wisely use the advantages of more than one communication method for sending the important messages in order to achieve the target of sending these messages and to be sure that the messages are received clearly and timely. By using this way, they stimulate a number of the receiver's senses. An e-mail and a phone call, for example, provide sight and sound. Moreover, repeating a message by using a different channel act to reinforce it and decrease the likelihood of distortions.
- The mean of paragraph #13 "Horizontal communications contribute to solving problems among the existing departments." equals 3.0 (The maximum value = 4) and the proportional mean equals 74.1%. The value of sign test equals 14.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This results shows that there is a tone in PalTel that encourages employees to participate the communication between departments or between employees in the same department. Moreover, I think PalTel's structure is open to free communications and this help the employees communicate easily with colleagues through the chain of command. In spite of the positive result of this paragraph, we can say that managers need to take more steps to improve organizational

communication. This means improving upward, downward, and horizontal communications flow. Doing so helps management know whether employees understand essential types of information regarding, for instance, job instructions, policies, and rational for jobs (how jobs are related to other jobs and positions).

- The mean of paragraph #9 "Brainstorming sessions can be utilized to explore many alternative for the problem encountered." equals 2.9 (The maximum value = 4) and the proportional mean equals 72.5%. The value of sign test equals 12.9 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that PalTel encourage employees to use brainstorming which is one of the creativity techniques to improve the quality of their decisions. One important point here is that management should make sure that the corporate environment allows employees to execute what they've achieved.
- The mean of paragraph #6 "Written communication methods provide employees with the ability to send messages to the different concerned parties." equals 2.8 (The maximum value = 4) and the proportional mean equals 70.6%. The value of sign test equals 9.5 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows clearly that even so most of the respondents rank oral communication as it is more important than written method, but written communication is also an important method since so much communications such as memos, e-mail messages and reports used as evidence of previous discussions and agreements. It provides the history of project or collaboration. It justifies an activity and provides back-up and proof. This help employees share information and take action. A decision process is not limited to those individuals who happen to be in the room. An e-mail for example can sent to every member of the company in order to make successful interaction, effective articulation of ideas and creation of shared meaning that allow decisions to be made.
- The mean of paragraph #11 "I resort to written communication methods to address my direct supervisors at work" equals 2.7 (The maximum value = 4) and the proportional mean equals 66.4%. The value of sign test equals 8.7 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that there is a problem in the upward communication, respondents of this paragraph preferred to use the written communication method in messaging their managers. This caused by the status differences, which creates communication barriers between managers and their subordinates. One expert says, "By far the most effective way of tapping the ideas of subordinates is sympathetic listing in the many day-to-day informal contacts within department and out side the work place." (Dessler, 2004). To avoid such problem, managers and group leaders must develop trust

in their working relationships with subordinates and team members, and take advantage of all opportunities for face-to-face communication and start using management by wandering around.

- The mean of paragraph #8 "I prefer handling the complicated problems through oral communication." equals 2.6 (The maximum value = 4) and the proportional mean equals 64.6%. The value of sign test equals 7.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result supports the result from dimension 1 paragraph #14 on that in complicated situations oral communication method is preferred to other methods because of its media richness. It provides instantaneous audio and visual feedback, not just through the person's words, but through his or her body language and tone as well. At the other extreme, unaddressed documents (like companywide memos impersonally distributed to all employees) are low in media richness.
- The mean of paragraph #12 "Informal communication channels (social relations among individuals and or groups at the company) are properly used to deliver essential information." equals 2.4 (The maximum value = 4) and the proportional mean equals 59.4%. The value of sign test equals 6.4 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. In one study to discover what excellent, highly innovative companies were doing that caused them to be excellent, one of the notable finding was that these firms put enormous effort into fostering informal communication (Dessler, 2004). In spite of this agreement, PalTel should pay more attention to manage the informal communication; this will in order enable it to be quicker on its feet, and also more innovative.

Results of the paragraphs in the second dimension show that most of the respondents agree on that the type of used communication methods positively related to decision-making process. Most of them prefer to use the oral communication method for solving complicated problems since oral communication provides ability to exchange information, signals, signs, emotions, and fast feedback. As shown in table (22) the mean of the total dimension equals 2.9 (The maximum value = 4) and the proportional mean equals 73.6%. The value of sign test equals 16.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this dimension differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this dimension is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this dimension. This result is supported by the finding of the following previous studies:

1- Byrne and May (2006); the result of this study showed that employees derived of their satisfaction with the information they received about their job from rich

communication channels such as face-to-face meeting, phone conversations, and departmental meetings with their managers. Lean communication such as news letters, or written memos and notices contributed small addition to their satisfaction level in information about their jobs.

- 2- Caballer et al. (2005); result of this study show a direct effect of communication media on satisfaction with the effectives responses of team members while they were performing intellective tasks.
- 3- Al- Shehri (2004); this research found that administrative communication plays an important role in solving staff member's problems through the accuracy in providing employees with suitable instructions to face problems and saving time effort.
- 4- Al- Ghnam (2002); this study found that there is a statistical significance between nonverbal messages and the efficiency of the administrative communication.
- 5- Cortesi (2001); this study found that participation and performance (achievement, efficiency, and satisfaction) were highly dependent on communication channel. Group members participated more often in face-to-face meeting. Group produces more ideas face-to-face. Finally, Group satisfaction was perceived to be highest for face-to-face.
- 6- Citrin (2001); this study found that feedback quality is an important predictor of all the different dimension of information quality (clarity, relevance, accuracy, and timeliness). Feedback speed was found to affect significantly perceptions of information accuracy and timeliness.
- 7- Purdy and Nye (2000); this research found that rich communication media are more likely to encourage collaborative behavior than poorer media are. Moreover, the research found that media richness directly reduced bargaining time.

On the other hand, this result is inconsistent with the following previous study:

1- Johnson (2003); this research found that increasing or decreasing richness of media dose not uniformly alter decision-making constructs, such as message significance, message reorientation, and subjective judgment.

5.2.3 Analyzing the Third dimension

Third dimension: The effect of employee's communication skills on decision-making process at PalTel

Table 23 Mean and Sign test for each paragraph of the third dimension and the total of this dimension ${\bf r}$

No.	Paragraphs	Mean	Proportional Mean	Sign Test	P- Value	Rank
					(Sig.)	
1.	I listen carefully during the communication process.	3.5	87.3	16.2	0.000*	1
2.	I do not hesitate to repeat the points that I understood to confirm my understanding.	3.0	75.9	13.8	0.000*	11
3.	During listening, my direct supervisor tends to reduce interruption and noise. (Example: close the door, stop receiving calls etc.,) through addressing listening operations.	2.5	62.1	8.0	0.000*	22
4.	Direct supervisors do not stress on their opinions and always listen to others.	2.4	60.3	7.0	0.000*	23
5.	I do collect the substantial related information about the work problems before making decisions.	3.3	83.4	16.0	0.000*	4
6.	Employees tend to select the most proper time for communication process.	2.5	63.7	9.1	0.000*	19
7.	I tend to use precise statements that express my ideas.	3.2	79.9	15.4	0.000*	6
8.	I tend to used proper tones and voice pitch during the communication process.	3.1	76.8	14.1	0.000*	10
9.	I tend to comprehend letters without any personal bias.	3.3	83.0	15.5	0.000*	5
10.	I specify the precise objective before initiating the communication process.	3.4	86.1	16.3	0.000*	2
11.	I use the most suitable communication method to ensure the achievement of my predetermined objectives.	3.4	85.0	16.1	0.000*	3
12.	PalTel employees enjoy the required competencies to prepare the required reports professionally.	2.6	65.2	9.2	0.000*	18
13.	PalTel employees have the required skills to deal with the English correspondences.	2.1	51.7	0.8	0.399	27

Cont.: Table 23 Mean and Sign test for each paragraph of the third dimension and the total of this dimension

	inis dimension					
14.	Office designs at the company assist in enhancing the efforts of communication process.	2.4	59.2	6.0	0.000*	24
15.	Conflict among employees is properly used to increase the quality of decision-making at PalTel.	2.1	52.3	1.9	0.052	26
16.	I take the nonverbal expressions and behaviors into consideration.	2.7	67.2	10.4	0.000*	16
17.	I feel that decisions at PalTel are taken on time	2.1	53.2	2.8	0.005*	25
18.	A detailed plan is sent to the employees who will participate in the meeting prior to holding the meeting	2.5	62.6	8.1	0.000*	21
19.	All concerned departments are adequately represented in the meeting	2.8	70.1	12.3	0.000*	15
20.	During the meeting, I feel that all participants are motivated and participate in their opinions.	2.5	63.3	8.4	0.000*	20
21.	During the meeting and in the end period of each section discussions related be summarized and setting the most essential points and recommendations simultaneously before jumping to the next bullet	2.7	66.9	10.5	0.000*	47
22.	All meetings minutes, recommendations, and duties are documented, determined and specified to their related in charge parties with their time schedule.	2.9	72.1	10.5	0.000*	17
23.	I ensure that the presentation includes introduction to show the importance of the presentations to the participants.	3.1	77.3	14.9	0.000*	9
24.	During the presentation I use convenient clarification tools (such as, drawing tables, graphics, formats related, etc.) to ease the understanding and comparison of information.	3.1	78.2	15.0	0.000*	7

Cont.: Table 23 Mean and Sign test for each paragraph of the third dimension and the total of this dimension

25.	I use a concluding statement in my presentation to ensure that participants are motivated to take decisions.	3.1	78.1	15.0	0.000*	8
26.	Employees skills and competencies are enriched and developed through utilizing different communication methods	2.9	71.3	12.8	0.000*	14
27.	PalTel uses effective programs to encourage employees to participate in their ideas.	3.0	75.0	13.5	0.000*	12
	All Paragraphs	2.8	70.6	16.0	0.000*	

^{*} Mean is significantly greater than 50% (Middle percentage)

Following are the analysis of the paragraphs of table (23) according to the ranking of each paragraph:

- The mean of paragraph #1 "I listen carefully during the communication process." equals 3.5 (The maximum value = 4) and the proportional mean equals 87.3%. The value of sign test equals 16.2 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that listening is ranked the highest communication format. This result was expected since listening is at least as important as delivering messages. One research found that 40 percent of manager's salary is earned by listening. This percentage increased as he climbs the professional ladder. Eighty percent of a CEO's salary is earned through listening (Mckenna, 1998). Another research found that good listening skills account for 40 percent of the variances in effective leadership (Whetten and Cameron, 2005). Despite this result, and despite its important in managerial success, I think most of us have undeveloped listening skills and being a good listener is neither easy nor automatic. It requires developing the ability to hear and understand the received message.
- The mean of paragraph #10 "I specify the precise objective before initiating the communication process." equals 3.4 (The maximum value = 4) and the proportional mean equals 86.1%. The value of sign test equals 16.3 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that most respondents are well aware of the importance of specifying the concerned objective before initiating the communication

process. Since communication in not only the what, but also the how, this improves the effectiveness and efficient of the communication process as whole through:

- Deciding what they want the employees to do/know after the communication.
- Defining the target audiences.
- Determining the content of the message.
- Identifying the most effective and efficient media to use.
- Choosing the best time for sending the message.

This result is supported by the results of paragraphs #6, #7, #11, and #19 of this dimension.

- The mean of paragraph #11 "I use the most suitable communication method to ensure the achievement of my predetermined objectives." equals 3.4 (The maximum value = 4) and the proportional mean equals 85.0%. The value of sign test equals 16.1 with sig. (pvalue) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that respondents do care to select the convenient communication channels to achieve the concerned target. As we noticed from the results of most the paragraphs in the second dimension, choosing the suitable communication channel have an important role on the communication process. Some communication channels convey more information, while other is more personal, provide quick feedback, and send different types of cues. Therefore, they use the appropriate channel according to the type of the messages. For example, they send difficult messages through richer media like face-to-face, and transmit routine messages through less rich media like e-mail.
- The mean of paragraph #5 "I do collect the substantial related information about the work problems before making decisions." equals 3.3 (The maximum value = 4) and the proportional mean equals 83.4%. The value of sign test equals 16.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that respondents benefit from the available resources to collect the required information in order to recognize the problem, explore its effect, and minimize the degree of uncertainty. Several decision-making tools such as statistical analysis of data, market research and forecasting are employed in assessing comparative probability. Moreover, the used MCTs help in collecting information quickly and in generating greater number of ideas. In addition, they benefit from using the group decision-making to get information that is more complete.
- The mean of paragraph #9 "I tend to comprehend letters without any personal bias." equals 3.3 (The maximum value = 4) and the proportional mean equals 83.0%. The value of sign test equals 15.5 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there

is an agreement from the respondents' point of view about this paragraph. This result indicates that the employees do care in comprehensive reading messages and trying to understand the concept through the lines without personal discrimination. This helps to see other's viewpoints as reasonable, and incorporate other's perspectives into their interpretation of issues.

- The mean of paragraph #7 "I tend to use precise statements that express my ideas." equals 3.2 (The maximum value = 4) and the proportional mean equals 79.9%. The value of sign test equals 15.4 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that the respondents count business writing as one of the most important and significant part of their job duties. In order to address their ideas, they make their entire letter, memo, or report specific, short, and clear.
- The mean of paragraph #24 "During the presentation I use convenient clarification tools (such as, drawing tables, graphics, formats related, etc.) to ease the understanding and comparison of information." equals 3.1 (The maximum value = 4) and the proportional mean equals 78.2%. The value of sign test equals 15.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result reveals that respondents gave high rating to this statement due to that PalTel's team leaders are frequently called to present their information and perhaps an opinion or proposal on a variety of issues. Therefore, they have the required presentation skills to achieve that. Here, visual communication is used as a decision-making tool. Several tools such as tables, charts, diagrams, and graphics are used to explain and simplify the relationships between facts, things or ideas
- The mean of paragraph #25 "I use a concluding statement in my presentation to ensure that participants are motivated to take decisions." equals 3.1 (The maximum value = 4) and the proportional mean equals 78.1%. The value of sign test equals 15.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result supports the agreement obtained from the result of paragraph #24. In addition to using the visual communication, team leaders use a conclusion at the end of each presentation to summarize the key points and motivate the audience to action.
- The mean of paragraph #23 "I ensure that the presentation includes introduction to show the importance of the presentations to the participants." equals 3.1 (The maximum value = 4) and the proportional mean equals 77.3%. The value of sign test equals 14.9 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$,

so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates an introduction is used at the beginning of the presentation to explain to the audiences the purpose and the importance of the presentation.

- The mean of paragraph #8 "I tend to used proper tones and voice pitch during the communication process." equals 3.1 (The maximum value = 4) and the proportional mean equals 76.8%. The value of sign test equals 14.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that non-verbal messages, such as tone of voice and facial expression, are used to support the stated messages that increase the effectiveness of the communication process.
- The mean of paragraph #2 "I do not hesitate to repeat the points that I understood to confirm my understanding." equals 3.0 (The maximum value = 4) and the proportional mean equals 75.9%. The value of sign test equals 13.8 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result confirms the result of paragraph #1 since seldom can effective listening be separated from reflecting response. Reflecting response is to mirror back to the communicator the message that heard, this allows the speaker to feel listened to, understood, and free to explore the topic in more depth.
- The mean of paragraph #27 "PalTel uses effective programs to encourage employees to participate in their ideas." equals 3.0 (The maximum value = 4) and the proportional mean equals 75.0%. The value of sign test equals 13.5 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows clearly that PalTel continuously makes great efforts to keep its employees motivated to participate by in their ideas. PalTel Star and Spark are two examples of the currently used programs for Idea Generation. The employees can access a website designed specially for this purpose and inter their ideas that helping the business grow profitability and reducing the costs. A committee evaluates these ideas in order to reward the owners of the applicable ones. Recently, these programs are connected to the result of the performance appraisal system to encourage the employees to participate in these programs.
- The mean of paragraph #22 "All meetings minutes, recommendations, and duties are documented, determined and specified to their related in charge parties with their time

schedule." equals 2.9 (The maximum value = 4) and the proportional mean equals 72.1%. The value of sign test equals 13.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. Meetings leaders issue minutes of meeting which record the decisions of the meeting and the actions agreed. They provide a record of the meeting and, importantly, they provide a review document for use at the next meeting so that progress can be measured, this makes them a useful disciplining technique as individuals' performance and non-performance of agreed actions is given high visibility.

- The mean of paragraph #26 "Employees skills and competencies are enriched and developed through utilizing different communication methods" equals 2.9 (The maximum value = 4) and the proportional mean equals 71.3%. The value of sign test equals 12.8 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result is supported by the positive results of most the paragraphs in this dimension and the result of item number nine of the first part of the questionnaire where table (20) shows that the average number of training course that respondents got in the field of business communication is approximately three training courses. These results reflects that PalTel provide good training and development to its employees in order to enjoy higher productivity, faster problem solving, and higher quality outputs.
- The mean of paragraph #19 "All concerned departments are adequately represented in the meeting" equals 2.8 (The maximum value = 4) and the proportional mean equals 70.1%. The value of sign test equals 12.3 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that meetings leaders invite the people with the necessary information for the items listed in the meeting agenda. Those participants can contribute and make good decisions.
- The mean of paragraph #16 "I take the nonverbal expressions and behaviors into consideration" equals 2.7 (The maximum value = 4) and the proportional mean equals 67.2%. The value of sign test equals 10.4 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result supports the previous agreement result that was obtained from paragraph #8 in this dimension. Using the non-verbal messages is an important aspect of communication between the employees since reading people's facial expression will give clues to their responses to the received verbal messages.

- The mean of paragraph #21 "During the meeting and in the end period of each section discussions related be summarized and setting the most essential points and recommendations simultaneously before jumping to the next bullet" equals 2.7 (The maximum value = 4) and the proportional mean equals 66.9%. The value of sign test equals 10.5 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result supports the result of paragraph #19 in that the meetings leaders at PalTel have the required skills for managing the meetings. As time dwindles for each item on the distributed agenda, leaders stop the discussion, then summarize the debate on that agenda item and move on the next item on the agenda.
- The mean of paragraph #12 "PalTel employees enjoy the required competencies to prepare the required reports professionally." equals 2.6 (The maximum value = 4) and the proportional mean equals 65.2%. The value of sign test equals 9.2 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shoes that the employees have the claverneeded skills those required in making professional reports. This accordingly improves the chance that the decisions will be made successfully. In one example, a quality report is prepared periodically to assist the quality of service that provided to the customers in the field of repairing the faulty lines. Several tools are used in this report such as tables, charts, numerical relationships, graphs, and percentages. This report represents the data in a way that help the decision maker increase decision quality.
- The mean of paragraph #6 "Employees tend to select the most proper time for communication process." equals 2.5 (The maximum value = 4) and the proportional mean equals 63.7%. The value of sign test equals 9.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that employees use time appropriately and recognize the timing of the communication, whatever its format, can be crucial to the decision-making process. Timing is thought of in several senses. For example, the entire range of competing demands on person's time, personality, attention, and moods are taken into account when choosing the best time for particular audience to receive a particular message. Moreover, Timeliness of the response is also considered to meet any deadlines since timely reports, presentations, and e-mails are always taken as a sign of good communication.
- The mean of paragraph #20 "During the meeting, I feel that all participants are motivated and participate in their opinions." equals 2.5 (The maximum value = 4) and the proportional mean equals 63.3%. The value of sign test equals 8.4 with sig. (p-

value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that meetings leaders, work diligently to ensure everyone's thoughts and ideas are heard by guiding the meeting so that there is a free flow of debate with no individual dominating and no extensive discussions between two people.

- The mean of paragraph #18 "A detailed plan is sent to the employees who will participate in the meeting prior to holding the meeting" equals 2.5 (The maximum value = 4) and the proportional mean equals 62.6%. The value of sign test equals 8.1 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that meetings participants at PalTel are prepared for the meetings in advance, this multiply the meetings effectiveness many times over, and create opportunities for managers and employees to work together to achieve common goals and here the clarity will help the group discuss issues and make decisions in a deliberate and confident manner.
- The mean of paragraph #3 "During listening, my direct supervisor tends to reduce interruption and noise (Example: close the door, stop receiving calls etc.,) through addressing listening operations." equals 2.5 (The maximum value = 4) and the proportional mean equals 62.1%. The value of sign test equals 8.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that physical distractions are eliminated by setting priorities and preventing interruptions such as telephone calls, drop-in visitors and the like.
- The mean of paragraph #4 "Direct supervisors do not stress on their opinions and always listen to others." equals 2.4 (The maximum value = 4) and the proportional mean equals 60.3%. The value of sign test equals 7.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result indicates that mangers motivate their subordinates to provide valid ideas, which in order will enhance the upward communication and decision-making process.
- The mean of paragraph #14 "Office designs at the company assist in enhancing the efforts of communication process." equals 2.4 (The maximum value = 4) and the proportional mean equals 59.2%. The value of sign test equals 6.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this

paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. Office arrangement, which is a nonverbal communication format, can especially facilitate or complicate the task of communicating messages. For one thing, office arrangements have different meaning regarding the way they organized. Despite the positive agreement about this paragraph, I think this issue should be restudied taking into consideration the characteristics of the Palestinian society.

- The mean of paragraph #17 "I feel that decisions at PalTel are taken on time" equals 2.1 (The maximum value = 4) and the proportional mean equals 53.1%. The value of sign test equals 2.8 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this paragraph differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this paragraph is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this paragraph. This result shows that PalTel's leaders achieved the fast acting. To do so, they use two tactics. First, they focus on real-time information: current information obtained with little or no time delay (supported by the result of paragraph #2 of the first dimension). For example, they constantly monitor daily operating measures like work in process rather than checking periodically the traditional accounting-based indicators such as profitability (supported by the result of paragraph #5 of the second dimension). Second, they involve people more efficiently in the decision-making process (supported by the results of paragraph #9 of the first dimension and paragraph #19 of the third dimension). They rely heavily on trusted experts, and this yields both good advice and the confidence to act quickly despite uncertainty. They also take a realistic view of conflict: They value differing opinions (supported by the result of paragraph #15 of the third dimension).
- The mean of paragraph #15 "Conflict among employees is properly used to increase the quality of decision-making at PalTel." equals 2.1 (The maximum value = 4) and the proportional mean equals 52.3%. The value of sign test equals 1.9 with sig. (p-value) equals 0.052 which is larger than the level of significance $\alpha = 0.05$, so the mean of this paragraph dose not differ from the middle point 50% (Neutral). So we conclude there is an average agreement from the respondents' point of view about this paragraph. This result indicates that the employees know their individual roles and responsibilities and the line of reporting and accountability, which in order prevent tensions. On the other hand, they should believe that each conflict brings with it opportunities to learn and strengthen the group and its decision-making
- The mean of paragraph #13 "PalTel employees have the required skills to deal with the English correspondences." equals 2.1 (The maximum value = 4) and the proportional mean equals 51.7%. The value of sign test equals 0.8 with sig. (p-value) equals 0.399 which is larger than the level of significance $\alpha = 0.05$, so the mean of this paragraph dose not differ from the middle point 50% (Neutral). So we conclude there is an average agreement from the respondents' point of view about this paragraph. In English language, in particular, we face the danger of miscommunication with one another. This problem generally leads to restricted communication flow, inaccurate messages and misinterpretation of meanings. Fortunately, PalTel had made much progress recently in improving employees English languages skills, primarily through

an agreement with the AMIDEAST institute in West Bank and Gaza Strip especially for this purpose. Major strides have been taken to enhance oral, written, and listening English language skills. However, comparable progress has not occurred in the interpersonal aspects of communication. Employees still afraid in using the language, make insulating statements, and communicate clumsily.

Results of the paragraphs in the third dimension show that most of the respondents agree on that employee's communication skills positively related to decision-making process. Listening skills and identifying the most appropriate communication method were the most important skills from the respondents point view. As shown in table (23) the mean of the total dimension equals 2.8 (The maximum value = 4) and the proportional mean equals 70.6%. The value of sign test equals 16.0 with sig. (p-value) equals 0.000 which is smaller than the level of significance $\alpha = 0.05$, so the mean of this dimension differs significantly from the middle point 50% (Neutral). Since the value of sign test is positive, then the mean of this dimension is significantly greater than the middle point 50%, so we conclude there is an agreement from the respondents' point of view about this dimension. This result is supported by the finding of the following previous studies:

- 1- Smythe (2008); this research concluded that the primary driver resulting in engaged leaders and employees is the appetite and ability of leaders to engage their subordinates in every decision-making and bigger-ticker change.
- 2- Al Manye (2006), this research found that the lack receiving adequate training is one of the major obstacles that hinder the use of communication technologies in public security establishment in kingdom of Saudi Arabia.
- 3- Al Buheisy (2005), this study showed that the English level of the employees at the Palestinian firms is a key word in using new technologies such as internet, intranet, and extranet.
- 4- Dearing (2005); this article suggested eight simple practices to increase the quality and quantity of output from leadership team meeting and to help them make and communicate clear decisions about their organizations: (1) Know the agenda in advance; (2) Have a process; (3) Identify decisions; (4) Set a decision-making threshold; (5) Put staff expert to work; (6) Summarize decisions; (7) Create a record; and (8) Assign communication.
- 5- Al Zoghby (2004); this result found that there is statistical significant correlation between administrative communication skills and administrative communication efficiency.
- 6- Abu Al-Ghnam (2002), this study showed that there is a statistical significant correlation between the responses perception of nonverbal messages and the modified variables.
- 7- Alexander et al. (1991); this study found that individuals who experience higher levels of oral communication apprehension are fewer medium sensitive than are their less apprehensive counter parts.

5.3 Testing the Study Hypotheses

The study hypotheses are as following:

- **Hypothesis 1:** There is a significant correlation between the modern communications technologies and decision-making process in PalTel?
- **Hypothesis 2:** There is a significant correlation between the business communications methods and decision-making process in PalTel?
- **Hypothesis 3:** There is a significant correlation between the personnel communications skills and decision-making process in PalTel?
- **Hypothesis 4:** There is a significant statistical difference of sample's personnel opinions of various respondents' pivots according to their individual and professional differences.

5.3.1 Testing Hypothesis 1

Hypothesis 1: There is a significant correlation between the modern business communications technologies and decision-making process in PalTel

Table 24 Correlation coefficient between the modern business communications technologies and decision-making process in PalTel

Dimension	Spearman Correlation Coefficient	P-Value (Sig.)
The effect of using MCTs on decision-making process at PalTel	.879	0.000*

^{*} Correlation is significant at the 0.05 level

Table (24) shows that the spearman correlation coefficient between the modern business communications technologies and decision-making process in PalTel equals 0.879 and The p-values (Sig.) equals 0.000 which is less than 0.05, so there is a significant correlation between the modern business communications technologies and decision-making process in PalTel . This result agrees with the following prior studies:

- 1- Berry (2006); this article found that Computer-Mediated Asynchronous Communication CMAC has brought about radical changes in understanding communication teamwork and decision-making.
- 2- Al- Manye (2006); this research found that the implication of communication technologies has a great impact on the efficiency of the employees in the field of decision-making process.
- 3- Pissarra and Jesuino (2005); this study found that there was an impact of communication technology on the flow of ideas and of group's performance.

- 4- Al- Shehri (2004); this research found that administrative communication plays an important role in solving criminal security staff members problems. Moreover, this research found that communication technologies play an important role in improving staff member's occupational performance level.
- 5- Cai (2003); this study found that using the inter-organizational internet communication play an important role on decision-making process in the field of purchasing performance.
- 6- Colquitt et al (2002); the results of this study indicated that access to computer-assisted communication improved the decision-making performance of teams.

On the other hand, this result disagrees with the following studies:

- 1- Al- Buheisy (2005); this article found that there was no considerable effect of modern technologies in decision-making process in the Palestinian firms. The author of this article refer this result to two reasons, the first is the qualifications of these firm's managers that not related to neither commercial science nor information technology. The second reason is that those managers did not receive any training courses in the field of MCTs. Moreover, this study had been conducted on a previous time and had been applied on a different population as listed before in this chapter.
- 2- Bhappu (1999); the result of this research showed that individuals in teams had weaker team identity and lower decision quality when teams communication was computer mediated. From my opinion, this negative result was because this research was conducted on 1999 at the beginning of the internet revolution.

5.3.2 Testing Hypothesis 2

Hypothesis 2: There is a significant correlation between the business communications methods and decision-making process in PalTel

Table 25 Correlation coefficient between the business communications methods decision-making process in PalTel

Dimension	Spearman Correlation Coefficient	P-Value (Sig.)
The effect of business communication methods on decision-making process at PalTel	.692	0.000*

^{*} Correlation is significant at the 0.05 level

Table (25) shows that the spearman correlation coefficient between the business communications methods and decision-making process in PalTel equals 0.692 and The p-values (Sig.) equals 0.000 which is less than 0.05, so there is a significant correlation

between the business communications methods and decision-making process in PalTel. This result agrees with the following prior studies:

- 1- Caballer et al (2005); this paper showed a direct effect of communication media on satisfaction with group results and commitment to those results.
- 2- Cortesi (2001); this study found that communication channel had a significant effect on group composition. Participation and performance were also highly dependent on communication channel.
- 3- Huisman (2001); the result of this study showed that the formulation and content of decisions is inextricably connected to the situation in which they are produced.
- 4- Purdy and Nye (2000); this research found that rich communication media are more likely to encourage collaborative behavior than poorer media are. More over, the research found that media richness directly reduce bargaining time and indirectly affect subjective bargaining outcomes.

On the other hand, this result disagrees with the following studies:

- 1- Johnson (2003); this research found that increasing or decreasing richness of media dose not uniformly alter decision-making constructs, such as message significance, message reorientation, and subjective judgment.
- 2- Citrin (2001); this study found that communication media characteristics such as feedback quality is an important predictor of all the different dimensions of information quality (clarity, relevance, accuracy, and timeliness) for the three communication media examined (salesperson, technical literature, and web information sources).
- 3- Citera (1998); this research found that quality of decision did not differ across communication media.

5.3.3 Testing Hypothesis 3

Hypothesis 3: There is a significant correlation between the personnel communications skills and decision-making process in PalTel

Table 26 Correlation coefficient between the personnel communications skills and

decision-making process in PalTel

Dimension	Spearman Correlation Coefficient	P-Value (Sig.)
The third dimension: The effect of employee's communication skills on decision-making process at PalTel	.876	0.000*

^{*} Correlation is significant at the 0.05 level

Table (26) shows that the spearman correlation coefficient between the personnel communications skills and decision-making process in PalTel equals 0.876 and The p-values (Sig.) equals 0.000 which is less than 0.05, so there is a significant correlation between the personnel communications skills and decision-making process in PalTel. This result agrees with the following prior studies:

- 1- Smyth (2008); this research concluded that the primary driver resulting in engaged leaders and employees is the appetite and ability of leaders at every level to engage their subordinates in every decision-making. Moreover, the author of this research found that leaders who engage the right groups in every day decisions and in designing and executive change will benefit both in terms of the quality of decisions and the speed of execution that derives from people who feel ownership of the outcome.
- 2- Al- Manye (2006); this research found that improving the employees skills through adequate training will enhance their ability to use modern technologies in decision-making process.
- 3- Al- Buheisy (2005); this research indicated that managers English level is a key word in using modern technologies in decision-making process.
- 4- Dearing (2005); this article suggested eight simple practices to help leaders make and communicate clear decisions about their organizations. These eight tactics will increase the quality and quantity of output from leadership team meetings by increasing the leader's skills in effectively managing meetings.
- 5- Al- Zoghby (2004); this study found that there is a statistical significant correlation between administrative communication skills and administrative communication efficiency, as well as, between the nonverbal messages elements and administrative communication.
- 6- Huisman (2001); the result of this study showed that the formulation and content of decisions is connected to the situations in which they are produced and decisions depend on the communicative norms of the group.

5.3.4 Testing Hypothesis 4

Hypothesis 4: There is a significant statistical difference of sample's personnel opinions of various study's pivots according to their individual and professional differences

Mann-Whitney test was used to determine whether there is a significant statistical difference of sample's personnel opinions of various study's pivots according to Gender and Duty Station.

The result for every dimension is shown in the following Tables:

5.3.4.1 Gender

Table 27 Mann-Whitney test of the dimensions and their p-values (Sig.) for Gender

Dimension	Test value	P-value(Sig.)
MCTs	2.992	0.003*
Communication methods	0.580	0.562
Employee's communication skills	2.681	0.007*
All dimensions	2.636	0.008*

^{*} The mean difference is significant at 0.05 level of significant

Table (27) shows that the p-value (Sig.) is less than $\alpha = 0.05$ (α is the level of significance) for MCTs, Employee's communication skills, and all dimensions together. We conclude that there is a significant difference in rank means between males and females for these dimensions. On the other hand, the p-value (Sig.) is greater than $\alpha = 0.05$ for Communication methods. We conclude that there is no significant difference in rank means between males and females for this dimension.

Table 28 Mean Ranks for the dimensions for Gender

Dimension	Mean Ranks		
Dimension	Males	Females	
MCTs	141.52	96.03	
Communication methods	135.53	144.33	
Employee's communication skills	141.00	100.20	
All dimensions	140.93	100.80	

Table (28) shows that the rank means for males are higher than the females for MCTs, Employee's communication skills, and all dimensions together. We conclude that the respondents' gender has an effect on the respondents' agreement for these dimensions. This means that males responses are more agree than females for these dimensions. A possible explanation is that women's absenteeism rates tend to be higher than those of men. This allows men to play a more active role in problem solving, communication styles, and analytical skills. Another explanation is that men and women use communication for different reasons. Men use it to emphasize status, where as

women use it to create connection (Robbins, 2003). What is happening is that when men hear a problem, they want to assert their desire for independence and control by providing solutions. Women, on the other hand, view relating as a way to promote closeness. Women present the problem to gain support and connection, not to get the men's advice. This result agrees with the following prior study:

- Al- Lozi (1999); this research found that the conceptions of male employees towards communication competency were higher than those of female employees in all fields of study except for choosing the appropriate method for communication behavior

5.3.4.2 Duty Station

Table 29: Mann-Whitney test of the dimensions and their p-values (Sig.) for Gender

Dimension	Test value	P-value(Sig.)
MCTs	1.047	0.295
Communication methods	0.748	0.454
Employee's communication skills	0.210	0.834
All dimensions	0.285	0.776

Table (29) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension. We conclude that there is no significant difference in rank means between Gaza strip and West bank for all dimensions.

Table 30: Mean Ranks for the dimensions for Duty Station

Dimension	Mean Ranks Gaza Strip West Bank		
Difficusion			
MCTs	129.35	139.98	
Communication methods	141.61	134.02	
Employee's communication skills	135.07	137.20	
All dimensions	134.55	137.45	

Table (30) shows that the rank means for Gaza strip and West bank respondents are approximately equal for all dimensions together. We conclude that the respondents' Duty Station has no effect on the respondents' agree for these dimensions. This means that there is agreement between Gaza strip and West bank respondents for all dimensions. This is due to the fact that the employees at both Gaza strip and West bank are working at the same environments, using the same communication technologies and methods, and getting the same training course.

- The Kruskal-Wallis test is a statistical test that is used to compare the ranks means between three or more samples. We examine and if there is any significant difference in point of view of the respondents regarding the dimensions and affected by Age, Marital

Status, Qualification, Experience, Managerial Level, Department, Number of training courses, Percentage of time allocated for communication

The result for every dimension is shown in the following Tables:

5.3.4.3 Age

Table 31: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Age

Dimension	Test Value	df*	Sig.
MCTs	9.001	5	0.109
Communication methods	3.182	5	0.672
Employee's communication skills	6.625	5	0.250
All dimensions	7.937	5	0.160

^{*} df: Degrees of Freedom

Table (31) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the respondents age categories regarding their respondent agree to all dimensions. So, we conclude that the respondents' age has no effect on the respondents' agree. This could be due to the fact that 54.1% of the research sample is from 30 to <40 years old and 78.4% of the research sample is from 30 to < 45 years old as shown in table (12). This result agrees with the following prior study:

- Al- Shehri (2004); this research found that criminal security staff members have a similar point of view towards the role of administrative communications in occupational performance regardless their age.

On the other hand, this result is inconsistence with the following prior study:

- Al- Manye (2006); this research found that there are significance differences between the respondents age regarding to their agreement to the role of modern technologies in performance on public security establishment.

5.3.4.4 Marital Status

Table 32: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Marital Status

Dimension	Test Value	df*	Sig.
MCTs	1.857	2	0.395
Communication methods	0.217	2	0.897
Employee's communication skills	3.930	2	0.140
All dimensions	3.334	2	0.189

^{*} df: Degrees of Freedom

Table (32) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the

respondents Marital Status categories regarding their respondent agree to all dimensions. So, we conclude that the respondents' Marital Status has no effect on the respondents' agree. This result indicates that the individual's personality is developed across time toward increased maturity, which reflects the way they go about gathering and evaluating information in solving problems and making decisions.

5.3.4.5 Qualification

Table 33: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Qualification

Dimension	Test Value	df*	Sig.
MCTs	8.087	4	0.088
Communication methods	2.542	4	0.637
Employee's communication skills	2.090	4	0.719
All dimensions	3.575	4	0.467

^{*} df : Degrees of Freedom

Table (33) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the respondents Qualification categories regarding their respondent agree to all dimensions. So, we conclude that the respondents' Qualification has no effect on the respondents' agree. This could be due to the fact that 84.6% of the research sample has bachelor and higher education certificate as shown in table (14). Moreover, the places of employment for a considerable number of them are not consistence with their qualifications. This result agrees with the following prior studies:

- 1- Al- Shehri (2004); this research found that there are no significance differences between the respondents qualification regarding to their agreement to the effect of administrative communication in occupational performance on public security officers.
- 2- Al-Lozi (1999); this result showed that there is no considerable effect of academic rank in relation with competency of administrative communication.

On the other hand, this result is inconsistence with the following prior study:

- Al- Manye (2006); this research found that there are significance differences between the respondents qualifications regarding to their agreement to the role of modern technologies in improving performance on public security establishment.

5.3.4.6 Experience

Table 34: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Experience

Dimension	Test Value	df*	Sig.
MCTs	1.376	3	0.711
Communication methods	2.280	3	0.516
Employee's communication skills	2.706	3	0.439
All dimensions	1.510	3	0.680

^{*} df: Degrees of Freedom

Table (34) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the respondents Experience categories regarding their respondent agree to all dimensions. So, we conclude that the respondents' Experience has no effect on the respondents' agree. This result is logic and was expected since 95.6% of the sample has 5 years and more experience (as shown in table (15). Most of them enter the organization together or at approximately the same time and have tremendous experience with the different types of communication media. This experience with media increased the employee's skill, comfort, and use of media. For example, communication media choice is determined by the fit of the perceived media richness and perceived information richness. These perceptions are built upon previous experience with media. This result agrees with the following prior studies:

- 1- Al- Manye (2006); this research found that there are no significance differences between the respondents experience regarding to their agreement to the effect of communication methods, employees communication skills, and MCTs in developing performance on public security Establishment.
- 2- Al- Shehri (2004); this research found that criminal security staff members have a similar point of view towards the role of administrative communications in occupational performance regardless their experience.
- 3- Al-Lozi (1999); this result showed that there is no considerable effect of experience in relation with competency of administrative communication.

On the other hand, this result is inconsistence with the following prior study:

1. King and Xia (1997); this paper indicated that traditionally rich media such as face-to-face, group meetings, and telephone were consistently perceived to be more appropriate than emerging new media over time. In addition, changes in perception of media appropriateness were directly related to the participants learning experience, and were particularly salient with new media. This inconsistency came from the fact that individuals in this paper have high level of expertise and familiarity with face-to-face and telephone communication. As a

result, they would naturally prefer these media over other unfamiliar ones as argued by the author of this paper, which is not the case in PalTel since its employees, are familiar with all types of communication media.

5.3.4.7 Managerial Level

Table 35: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Managerial Level

Dimension	Test Value	df*	Sig.
MCTs	3.339	2	0.188
Communication methods	6.599	2	0.037**
Employee's communication skills	8.351	2	0.015**
All dimensions	9.296	2	0.010**

^{*} df : Degrees of Freedom

Table (35) shows that the p-value (Sig.) is smaller than $\alpha=0.05$ (α is the level of significance) for Communication methods, Employee's communication skills , and all dimensions together, so there are significant differences between the respondents Managerial Level categories regarding their respondent agree to theses dimensions. So, we conclude that the respondents' Managerial Level has an effect on the respondents' agree. On the other hand, the p-value (Sig.) is greater than $\alpha=0.05$ for MCTs, so there is no significant differences between the respondents Managerial Level categories regarding their respondent agree for this dimension. So, we conclude that the respondents' Managerial Level has no effect on the respondents' agree. This result is logic since the same used MCTs are available for almost all the employees without any distinction according to their managerial level. This result agrees with the following prior study:

- Al- Manye (2006); this research found that there are no significance differences between the respondents experience regarding to their agreement to the effect of communication technologies in developing performance on public security Establishment.

On the other hand, this result is inconsistence with the following prior study:

- Al- Lozi (1999); this study found that job level had no considerable effect with its relation to choosing the appropriate method for communication behavior.

One possible explanation of this inconsistency is that PalTel belongs to the private sector where the speed and accuracy in decision-making is much more important than the public sector. In addition, the private sector pays more attention to the development and training of its employees as it fits with their managerial levels.

^{**} The mean difference is significant at 0.05 level of significant

Table 36: Mean Ranks for the dimensions for Managerial Level

	Mean Ranks				
			Low Management		
Dimension	Тор	Middle	(Senior Engineer –		
Dimension	Management	Management	Supervisor – Head		
	(Chief/	(District	of Section –		
	Director)	Manager)	Administrator)		
MCTs	155.64	143.51	130.76		
Communication methods	153.89	153.44	127.76		
Employee's communication skills	139.42	161.43	127.67		
All dimensions	146.03	161.26	126.55		

The rank mean for Top Management (Chief / Director) is higher than the other Managerial Level for Communication methods. The rank means for Middle Management (District Manager) is higher than the other Managerial Level for Employee's communication skills, and all dimensions together. We conclude that the respondents' Managerial Level has an effect on the respondents' agree for these dimensions.

5.3.4.8 Department

Table 37: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Department

Dimension	Test Value	df*	Sig.
MCTs	2.466	3	0.482
Communication methods	3.517	3	0.319
Employee's communication skills	3.398	3	0.334
All dimensions	2.710	3	0.439

^{*} df : Degrees of Freedom

Table (37) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the respondents Department categories regarding their respondent agree to all dimensions. So, we conclude that the respondents' Department has no effect on the respondents' agree. This result was expected since all employees of the company regardless of their related departments use the same communication technologies and methods, and gain training courses in this field. In addition, certainly most and even all common shared applications among the departments use the same communication technologies to achieve task's work duties. For example, PalTel uses Telco program, which is startup its procedures with commercial department by receiving the customer's applications those transferred to the technical department to manage the availability then approved, and end up by financial department. This result agrees with the following prior study:

- Al- Manye (2006); this research found that there are no significance differences between the respondents department regarding to their agreement to the effect of

communication technologies in developing performance on public security Establishment.

5.3.4.9 Number of training courses

Table 38: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Number of training courses

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Dimension	Test Value	df*	Sig.
MCTs	3.836	2	0.147
Communication methods	4.088	2	0.130
Employee's communication skills	4.806	2	0.090
All dimensions	5.464	2	0.065

^{*} df : Degrees of Freedom

Table (38) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the respondents "Number of training courses" categories regarding their respondent agree to all dimensions. So, we conclude that the respondents "Number of training courses" has no effect on the respondents' agree. This could be due to the fact that the respondents are familiar with the concepts of business communication since most of them have gained training courses in the field of business communication. The average number of training courses is approximately three training courses.

5.3.4.10 Percentage of time allocated for communication

Table 39: Kruskal-Wallis test of the dimensions and their p-values (Sig.) for Percentage of time allocated for communication

Dimension	Test Value	df*	Sig.
MCTs	3.126	4	0.537
Communication methods	4.543	4	0.337
Employee's communication skills	7.117	4	0.130
All dimensions	6.035	4	0.197

^{*} df : Degrees of Freedom

Table (39) shows that the p-value (Sig.) is greater than $\alpha = 0.05$ (α is the level of significance) for each dimension, so there are no significant differences between the respondents "Percentage of time allocated for communication" categories regarding their respondent agree to all dimensions. So, we conclude that the respondents' "Percentage of time allocated for communication" has no effect on the respondents' agree. This result could be due to the fact that the average percentage of time allocated for communication is 54.2%; which is close to the results of some studies that found managers spent 60% to 80% of their time communicating (Dessler, 2004).

5.3.4.11 Percentage of Time Allocated for Communication and Managerial Level

Table 40: Pearson Chi-Square test of the relation between managerial level and

percentage of time allocated for communication

Ferrenge			Percentage of time allocated for communication					
			0%-	21%-	41%-	61%-	81%-	
			20%	40%	60%	80%	100%	
Managerial Level	Top Management (Chief /	Count	2	4	2	15	9	
	Director)	%	6.3%	12.5%	6.3%	46.9%	28.1%	
	Middle Management	Count	2	9	12	29	8	
	(District Manager)	%	3.3%	15.0%	20.0%	48.3%	13.3%	
	Low Management (Senior	Count	36	49	33	44	18	
	Engineer – Supervisor – Head of Section – Administrator)	%	20.0%	27.2%	18.3%	24.4%	10.0%	

Pearson Chi-Square = 34.775, degrees of freedom = 8, Sig. (P-value) = 0.000

Table (40) shows that Sig. (P-value) =0.000 which is smaller than the level of significance 0.05, so there is significant relationship between Managerial Level and Percentage of time allocated for communication.

Chapter Six: Results and Recommendations

CHAPTER OUTLINE

- 6.1 Introduction
- 6.2 Results
- 6.3 Recommendations
- 6.4 Proposed Future Studies

6.1 Introduction

The aim of this research was to examine the impact of business communication on decision-making process in PalTel. Four hypotheses were tested for this purpose. In the first hypothesis, we assumed that there is a significant correlation between the modern business communications technologies and decision-making process in PalTel. The results revealed that the relationship exists and further revealed that there is a significant positive correlation between modern business communications technologies and decision-making process in PalTel and evidently indicates that the hypothesis is statistically valid. In the second hypothesis, we assumed that there is a significant correlation between business communications methods and decision-making process in PalTel. The results revealed that the relationship exists, further revealed that there is a significant positive correlation between business communications methods and decision-making process in PalTel, and evidently indicates that the hypothesis is statistically valid.

In the third hypothesis, we assumed that there is a significant correlation between the personnel communication skills and decision-making process in PalTel. The results revealed that the relationship exists and further revealed that there is a significant positive correlation between the personnel communication skills and decision-making process in PalTel and evidently indicates that the hypothesis is statistically valid. In the last hypothesis, we assume that there is a significant statistical difference of sample's personnel opinions of various respondents' pivots according to their individual and professional differences. Analysis of this hypothesis revealed that there is a significant difference in rank means between males and females for MCTs, Employee's communication skills, and all dimensions together. In managerial level, we found that there are significant differences between the respondents Managerial Level categories regarding their respondent agree to Communication methods, Employee's communication skills, and all dimensions together.

This chapter discusses the major findings of this study. Results and recommendations, as well as, future research direction, are also provided.

6.2 Results

The study revealed that there is a positive impact of business communication on decision-making process. Hereinafter, we highlight the findings that the study reached:

- 1. Modern Communication Technologies (MCTs) make attaining information easier.
- 2. MCTs increase the efficiency and productivity through effective teamwork and effective decision-making.
- 3. MCTs as revealed by respondents create permanent and evolving records of discussion, which leads to creating database to document team members' expectations and responsibilities.
- 4. MCTs motivate employees to participate with their ideas consequently leading to generating ideas that are more creative.

- 5. Internet based communication increases communication opportunities with stakeholders.
- 6. MCTs are frequently updated, and that they enable PalTel's employees to follow up day-to-day tasks remotely.
- 7. E-mail is improperly used as it is sometimes used in sending unrelated to work messages.
- 8. MCTs are impersonal and do not involve feelings.
- 9. The result revealed that the employees use oral communication methods for complex tasks.
- 10. Feedback speed in oral communication methods was found to affect positively the effectiveness of communication process.
- 11. Multiple cues in oral communication methods were found to assist in overcoming complicated obstacles.
- 12. Oral communication methods found to encourage collaborative behavior and creative thinking.
- 13. Written communication methods are utilized to easily and quickly identify the problems encountered.
- 14. Written communication methods provide employees with the ability to analyze messages.
- 15. Employees, wisely use the advantages of using more than one communication method for sending the important messages in order to achieve the target of sending these messages and to be sure that the messages are received clearly and timely.
- 16. Informal communication channels are found to be properly used to deliver essential information.
- 17. Employees, resort to written communication methods to address their direct supervisors, which mean that some of them suffer from communication apprehension.
- 18. Good listing skills are ranked the highest important communication format.
- 19. Specifying the concerned objective before initiating the communication process improves the effectiveness and efficient of the communication process as whole through; Deciding the required action after the communication, Defining the target audiences, Determining the content of the message, Identifying the most effective and efficient media to use, and Choosing the best time for sending the message.
- 20. Engaging the employees in decision-making process positively affect this process.
- 21. Running effective meetings were found to increase the quality and quantity of the decisions.
- 22. Successful presentations were found to motivate participants to make good decisions.
- 23. Nonverbal messages enhanced the effectiveness of the communication process.
- 24. There is a significant difference in rank means between males and females for MCTs, Employee's communication skills, and all dimensions together.
- 25. There are significant differences between the respondents Managerial Level categories regarding their respondent agree to Communication methods, Employee's communication skills, and all dimensions together.

6.3 Recommendations

- 1- Achieving the maximum benefit out of Internet communication with trading partners through increasing the investments on advanced Internet communication tools such as Internet-based communication and Extranets. These tools can significantly increase information transaction speed, reduce information costs, accelerate order fulfillment cycle time, and enhance customer service quality, for example this tool could be implemented in the field of purchasing process.
- 2- Increasing the commitment of managers to the importance of communication. Managers should spend significant amount of their time talking with employees, responding to questions, listening to their concerns, and conveying the company's vision to them.
- 3- Promoting upward communication through which management knows whether subordinates understand legislations and instructions or not. It encourages subordinates to contribute by their creative ideas. Communication also provides management with valuable input upon which decisions can be based. In addition, it cultivates acceptance and commitment by giving employees an opportunity to express ideas and suggestions. The following points could help foster upward communication:
 - a- Social gathering (including departmental parties, picnic, and recreational events) provides opportunities for informal and casual communication.
 - b- Regular meetings with subordinates can be a good source of information.
 - c- A suggestion system, even a suggestion box, can encourage upward communication.
 - d- An open door policy enables employees express concerns through a channel outside the normal chain of command.
 - e- E-mail: Top management should encourage all employees to e-mail concerns and questions directly to them.
 - f- Improving manager's skills on feedback techniques and rewarding them for using it.
- 4- Improving downward communication. Downward communication includes a variety of essential types of information regarding for instance, company's mission, organizational policies and practices, job instructions, and employee's appraisal results. Following are some simple effective methods for fostering upward communication:
 - a- Fostering trust and commitment among employees by treating them, more like partners than employees.
 - b- Motivating all employees to focus on helping, the businesses grow profitably by sharing the financial data, explaining its numbers for them, and rewarding them for improvements in performance.
 - c- Using the body language effectively when communicating with subordinates such as maintaining eye contact, smiling, and using open-handed gestures.

- 5- Improving horizontal communication. Each employee is depending on his colleagues for help to get his job done, and his day-to-day peace of mind usually depends, to some extent, on how he gets along with his peers. Following are some ways to improve horizontal communication;
 - a- Organizing committees and task forces.
 - b- Using independent integrators to improve communication among departments.
- 6- Increasing the benefits of informal communications. Rich informal communication leads to more action, more experiments, more learning, and simultaneously leads to stay in touch and on top of things. Here are some simple ways to accomplish this:
 - a- Maintaining communication intensity at extraordinary level. Encouraging an open exchange of ideas, in which people are blunt and straightforward in going after the issues.
 - b- Providing physical support for informal communication. Encouraging managers to get out of their offices, walk around, and strike up conversation with employees in and outside their own department.
 - c- Emphasizing informality.
- 7- Resuming the special English language training courses and programs that were initiated for all PalTel employees as these courses will enhance the employee's ability and skills to use the Modern communication technologies MCTs.
- 8- Giving free access opportunity for all Field workers to use e-mail, Intranet, and Internet special work programs.
- 9- Management should make sure that the corporate environment allows executing the creative ideas generated by the employees.
- 10-Carrying on the process of updating MCTs in order to maximize the benefits of using these technologies.
- 11-Controlling the use of e-mail system specially in reducing the unrelated to job messages that consumed employee's time and efforts.
- 12-Promoting the use of face-to-face communication media in addressing complicated situations. This method allows employees exchange information, get immediate feedback, and use nonverbal messages, which add extra emphasis to complicated points.
- 13-Developing employee's skills in preparing, reading and analyzing the work reports.

- 14-Management has to exert more effort to enhance trust between managers and subordinates in work relationships.
- 15-Improving the employee's listening skills by developing their abilities to hear and understand the received messages.
- 16-Management has to pay more attention to the elements of nonverbal messages, specially the shape, office arrangements, and time that affect the message's elements.

6.4 Proposed Future Studies

Future studies may need to consider:

- The effect of Internet-based communication technologies on participation and performance, since communication technology is evolving rapidly.
- The impact of communication technologies on competitiveness of PalTel.
- The effect of information overload on decision-making and ways to manage it.

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Appendix (A) Final Questionnaire In Arabic

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تقبلوا فائق التقدير والاحترام،

الباحث زياد رفيق الشيخ ديب يوليو 2008

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الجزء الثاني: البيانات التخصصية:

المحور الأول: أثر استخدام تقنيات الاتصال الحديثة في عملية اتخاذ القرارات في شركة الاتصالات الفلسطينية: X

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Appendix (B) Final Questionnaire In English

Islamic University Graduates Studies Deanery Business Administration dept. College of Commerce



Questionnaire	e No.
Date	

Dear Colleagues

The attached questionnaire is a tool of collecting data reference in order to conduct a thesis about "The Effect of Business Communication on Decision-making Process: Case Study - Palestine Telecommunication Company (PalTel)" to be submitted in partial fulfillment of the requirement for MS Degree in Business Administration.

In accordance with achieving the aimed goal of this study; this questionnaire is designed in two parts:

Part one: Include the personal information.

<u>Part two</u>: Include the three dimensions of the study, which are:

The first dimension: The effect of using MCTs on decision-making process at PalTel.

The second dimension: The effect of communication methods on decision-making process at PalTel.

The third dimension: The effect of employee's communication skills on decision-making process at PalTel.

Therefore, achieving this objective requires your participation to answer all questions thoroughly, honestly and subjectively. You are kindly reminded that all submitted information will be treated as confidential and will be of major concern to us.

Thank you for your cooperation

Researcher

Eng. Ziad Rafiq Elshikhdeeb

Part one: Personal Information

1-	Gender Male		Female				
2-	Age						
	Less than 25 years		From 25 to less than 30				
	From 30 to less than 35		From 35 to less than 40				
	From 40 to less than 45		45 Years and more				
3-	Marital Status						
	Single		Married				
	Divorced		Widow				
4-	Qualification						
	Less than Secondary		Secondary				
	Diploma		Bachelor or Equivalent				
	High Education (Please Spe	ecify):					
5-	Experience						
	Less than 5 years		From 5 to less than 10				
	From 10 to less than 15		15 years and more				
6-	Managerial Level Top Management (Chief / I	Director)					
	Middle Management (District Manager)						
	Low Management (Senior I Section – Administrator	_	- Supervisor – Head of				
7-	Duty Station Gaza Strip		West Bank				
8-	Department Technical		Commercial				
	Financial		Human Resource & Administrative Affairs				
9-	9- Number of training courses in the field of business communication: training courses						
10.	- Percentage of time allocat	ted for co	ommunication				

Part Two: Questionnaire dimension

The first dimension: the effect of using MCTs on decision-making process at PalTel

Please indicate your agreement/disagreement with the following statements by putting the sign X in the appropriate location on a scale of 4-0 (4 = agree strongly and 0 = disagree strongly).

Item	Strongly Agree 4	Agree 3	Neutral 2	Disagree 1	Strongly Disagree 0
1. MCTs (E-mail, V.C., Internet, Intranet etc) enhance the					
efficiency of communication among employees.					
2. MCTs make attaining information easier.					
3. MCTs assist in assigning clear responsibilities for the employees					
4. MCTs at PalTel assist in providing updated Data Base of					
understanding works' obstacles and their on line developing					
stages.					
5. MCTs enhance positive relations among employees.					
6. Modern communication techniques assist in implementing decentralization in decision-making					
7. PalTel does not exaggerate in stressing the confidentiality of					
information exchanged which leads to employees being					
effectively benefited from modern communication					
techniques.					
8. MCTs are effectively used to increase communication					
opportunities between clients and distributors.					
9. PalTel uses MCTs that motivate employees to participate					
which consequently lead to numerous alternatives to the					
problems encountered.					
10. Communication technologies are frequently updated at					
PalTel to adapt with the rapid acceleration in technologies					
11. MCTs are impersonal (no human feelings and senses)					
12. MCTs help me organize the daily work job					
13. MCTs assist in reducing mistakes committed at work.					
14. E-mail is used for routine communications which do not					
need sending complicated information					
15. E-mail is not improperly used in unnecessary					
communication.(not related to work job)					
16. Electronic communications' methods enable me to follow					
up my tasks remotely (away from the office).					
17. Intranet and internet networks are efficiently and					
effectively used for they include attainable essential					
information.					
18. MCTs enhance PalTel staff members' abilities to adopt					
decisions on the team level.					

The second dimension: The effect of communication methods on decision-making process at PalTel.

Item	Strongly Agree 4	Agree 3	Neutral 2	Disagree 1	Strongly Disagre e 0
1. Oral communication methods (personal interviewees, telephone calls, meetings, presentations etc.) encourage employees to pose questions for vague issues that they may face.					
2. Work meetings enhance creative thinking which assist in adopting proper decisions.					
3. Oral communication methods provide employees with simultaneous feed back which enhance the effectiveness of communication process.					
4. Written communication methods (reports, memos, letters, etc.) provide employees with the ability to analyze massages.					
5. Periodic reports are properly utilized to easily and quickly identify the problem encountered.					
6. Written communication methods provide employees with the ability to send messages to the different concerned parties.					
7. More than one communication method can be used at once to achieve the related target (example: sending a written massage and then follow it up with telephone call for clarifying the issue).					
8. I prefer handling the complicated problems through oral communication.					
9. Brainstorming sessions can be utilized to explore many alternative for the problem encountered.					
10. Personal interviewees provide employees with the ability to exchange information, signals, sings, and emotions that assist in overcoming complicated obstacles.					
11. I resort to written communication methods to address my direct supervisors at work.					
12. Informal communication channels (social relations among individuals and or groups at the company) are properly used to deliver essential information.					
13. Horizontal communications contribute to solving problems among the existing departments.					

The third dimension: The effect of employee's communication skills on decision-making process at PalTel.

Item	Strongly Agree 4	Agree 3	Neutral 2	Disagree 1	Strongly Disagree 0
1. I listen carefully during the communication process.					
2. I do not hesitate to repeat the points that I understood to					
confirm my understanding.					
3. During listening, my direct supervisor tends to reduce					
interruption and noise. (Example: close the door, stop					
receiving calls etc.,) through addressing listening					

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operations.			
4. Direct supervisors do not stress on their opinions and			
always listen to others.			
5. I do collect the substantial related information about the			
work problems before making decisions.			
6. Employees tend to select the most proper time for			
communication process.			
7. I tend to use precise statements that express my ideas.			
8. I tend to used proper tones and voice pitch during the			
communication process.			
9. I tend to comprehend letters without any personal bias.			
10. I specify the precise objective before initiating the			
communication process.			
11. I use the most suitable communication method to ensure			
the achievement of my predetermined objectives.			
12. PalTel employees enjoy the required competencies to			
prepare the required reports professionally.			
13. PalTel employees have the required skills to deal with the			
English correspondences.			
14. Office designs at the company assist in enhancing the			
efforts of communication process.			
15. Conflict among employees is properly used to increase			
the quality of decision-making at PalTel.			
16. I take the nonverbal expressions and behaviors into			
consideration.			
17. I feel that decisions at PalTel are taken on time			
18. A detailed plan is sent to the employees who will			
participate in the meeting prior to holding the meeting			
19. All concerned departments are adequately represented in			
the meeting			
20. During the meeting I feel that all participants are			
motivated and participate in their opinions.			
21. During the meeting and in the end period of each section			
discussions related be summarized and setting the most			
essential points and recommendations simultaneously			
before jumping to the next bullet			
22. All meetings minutes, recommendations, and duties are			
documented, determined and specified to their related in			
charge parties with their time schedule.			
23. I ensure that the presentation includes introduction to			
show the importance of the presentations to the			
participants.			
24. During the presentation I use convenient clarification		+	
tools (such as, drawing tables, graphics, formats related,			
etc.) to ease the understanding and comparison of			
information.			
25. I use a concluding statement in my presentation to ensure		+ +	
that participants are motivated to take decisions.			
		+	
26. Employees skills and competencies are enriched and			
developed through utilizing different communication methods			
27. PalTel uses effective programs to encourage employees to			
participate in their ideas.			

Appendix (C)

Referees Who Judge the Reability of the questionnaire

1. Professor Yousif Ashor	The Islamic University of Gaza
2. Dr. Majed AL- Farra	The Islamic University of Gaza
3. Dr. Sami Abu El Rooss	The Islamic University of Gaza
4. Dr. Yousif Bahar	The Islamic University of Gaza
5. Dr. Samir Safi	The Islamic University of Gaza
6. Dr. Nafez Barakat	The Islamic University of Gaza
7. Dr. Mohammad Megdad	The Islamic University of Gaza
8. Dr. Mohammad El-Aydi	(UNRWA)- Gaza Field Office
9. Dr. Said Ghabayen	University of Palestine
10.Dr. Wael Thabet	Al-Azhar University – Gaza
11.Dr. Marwan Ismail	Palestine Communication Company