



Communication channels utilized during project bid phase between Project Management Department and Operations Department and the need to be formulated in order to minimize unnecessary scope changes and hidden costs.

By

Printezis I. Petros

A THESIS REPORT

Presented to the Project Management Program in the

School of Management of

City University of Seattle

In Partial Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE in PROJECT MANAGEMENT



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This Master Thesis was elaborated in the frame of the collaboration of the City University of Seattle and the Graduate Technological Education Institute (T.E.I.) of Piraeus to fully implement at TEI of Piraeus Campus the CU's MS in Project Management Program approved by the Hellenic Ministry of National Education and Religion Affairs as by decision E5/58291 published in the Hellenic Government Gazette (FEK) B/924/5-July-2005.

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Dedication

*With gratitude to my parents, Aimilia-Anna and Iakovos and to all my friends,
as a manner of thanking them for the possibility they gave me of realizing my dreams
concerning my thirst for Knowledge and for their understanding for those hours that they missed me as I
was in a continuous run these two years...*

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Biography

Printezis I. Petros

Printezis I. Petros, completed his studies in the Department of Project Management, of the Faculty of Technological Educational Institution of Larissa (T.E.I.), on May 2006, and is a qualified Project Manager of Technological Education. Before his graduation he worked as team member of the Department of mortgage, consuming products and deposit products in National Bank of Greece S.A., as a desk clerk in two Hotels and as a waiter and kitchen staff in two Restaurants – Café, in order to collect money and accomplish his studies. At this period, he is enrolled at City University of Seattle as a graduate student of MSc in Project Management Program. Before completing the follow-up of the program, he began to work at Joint Venture (J/V) “Penspen Ltd – C&M Engineering S.A.” registered in Greece, which implements project management services for a number of Community Support Framework III (CSF III) regarding ongoing natural gas projects of Public Gas Corporation of Greece (DEPA) S.A. and Hellenic Gas Transmission System Operator S.A. (DESFA) S.A., as Planner at the Project Planning and Control Department, exploiting in this way the Project Management knowledge that he acquired by studying all these six years for his personal and professional growth.

Printezis I. Petros, basically creates and manages time schedules. As a member of company’s Project Control Department, he also attends to the advancement of the different types of contracts related to the projects. Every summer since 2000, Petros takes care of his father’s seasonal enterprise of letting apartments concerning financial and human resource management, as a way to contribute to his family and satisfy himself as tourism constitutes his hobby.

Abstract

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Communication channels utilized during project bid phase between Project Management Department and Operations Department and the need to be formulated in order to minimize unnecessary scope changes and hidden costs.

In our days, communication matters are not seriously considered. On several occasions, in lack of effective communication various problems occurred to projects. This thesis marks out the communication channels between Project Management Department and Operations Department in a project environment during project's bid phase. The relationship between stakeholders is in a big percentage problematic. Due to interrelation between these two departments that implement the projects, the situation becomes more difficult. The author examined the existing data and also an extended bibliography and afterwards he drew his conclusions analyzing the issue from the communication management aspect, and came up to create a useful communication tool for every manager or stakeholder dealing with projects. The writer expects to reveal the sources of these problems anticipating that the reader, after understanding this thesis, will use this tool while dealing with some of his next projects, so as this issue will not constitute headache for the managers and the projects. Author's expectation is also to declare to all interested parties the message of understanding lessons learned after the conducted survey, the significance - in the project lifecycle - of having good communication channels within the organization and transmitting information correctly from the beginning, during project's bid phase. This will help to mitigate or better eliminate communication problems.

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Chapter 1 – Introduction

1. Nature of the Study

In the current business environment, communication has become synonymous with management, as big problems can be resolved only when many people get together and synthesize their ideas in a networking situation.

The intention of this research is to look at how effective or deficient communication affects the culture of an organization. In other words, in this study the researcher has to consider the impact of having a bad communication channel and the need to change it in a positive way before it will be able to affect the scope of the project.

2. Needs Assessment

Project stakeholders will review this thesis report during project's strategic planning. These stakeholders include project team members, project manager, operational team members and the operational manager of the company that owns the project.

In some cases, a consultant company may advise these members on specific issues that they may not be familiar with or, if the project is to be delivered to the public, the citizens may provide information regarding their preferred format of the deliverable. In such a conversation, at a round table, the author has to identify the different problems that may arise due to inadequate communication and how this ineffectual communication can cause increased costs to the scope after bid phase. This study also determines how an effective communication channel can be created between project stakeholders in order to serve as a useful tool that can be followed by every organization member.

3. Purpose of the Study

The purpose of this study is to analyze the significance and the importance that communication has on project success and how a manager can and must handle his communication skills to change and sustain the existence of the organization.

Next, the researcher identifies a proper communication tool that will establish and maintain the required communication balance that every project needs.

4. Significance to Workplace

The author wants to determine the best communication channels which are going to be applied in a company as a tool in order to eliminate changes to budget and, in general, to the scope of the projects. When this will be achieved, it will contribute to the different collaborating departments of the organization as to follow the decisions taken during strategic planning phase until the end of the project. When the communication skills of the team members will be improved, the initial plan will be clearer and also, the “S Curves” after the project’s start will be in a better shape than current one, which means that the deliverable is general described or stakeholders are in a conflict situation and they do not provide and receive the information in time.

In the researcher’s country (Greece), the implementation of real project management is established few years before 2004, when the last settings of the Olympic Games of Athens were on their last stage, so she is almost new in the “usage” established field, or even unknown. The research is not be only orientated to the construction projects field, although researcher’s working experience focuses on controlling construction projects.

5. Relation to the Program of Study

When people from different professions and departments in an organization are sharing a common vision, independently if they have different specializations and moral principles, it is important to work together in order to make this project not realistic but reality.

During PM 506 (Managing Projects with people and teams) and PM 503 (Project Communications Management) the researcher was impressed listening the instructor saying that the simple technique of communication, that people use when they need to understand each other for an issue, is not so simple as it seems. To illustrate, project Department's manager calls the operations Department's one, who was company's new employee and asks him what his aspect will be on a crucial problem of the project. This simple example gave writer the idea to handle this issue.

When a project exists as a vision and people start to schedule its implementation, in other words during the planning phase, before the bid's publication, an additional course is also relevant to the - until then - concept topic and this is PM 504 (Project Planning and Control).

Last but not least, communication from its own is an interesting subject for someone to handle with, as surveys indicate that a manager spends more than 70% of his day time engaged in some type of communication.

6. Definition of Terms

No special terms used in this proposal. Final document is expected to include project management terms as may be applicable.

Chapter 2 – Problem Statement

1. Problem Statement

In order to create and sustain a healthy organizational culture, effective communication skills are crucial. It is important that the communication channels used in the separate departments of an organization shall be defined in order to keep a stable balance between the authorized personnel. This must be the mission of the stakeholders of an organization's Project Management Team Department (PMTD), as is the owner of the project, in order to help them synthesize their knowledge during the bid phase and not when the project will be executed, because it will be too late then. When this is not a real event, collaboration is in danger; conflicts occur and as a "domino", some parts or unfortunately the entire project's aim, present a lag.

2. Rationale

Is it possible while taking a bid of a project to avoid making mistakes? The answer results from the conclusions of the whole thesis from the communication aspect.

When the project department's members and those of the operations co-operated in order to resolve issues, the project team should take into consideration that the operation Department's members are much more experienced in project's function. This is the reason to follow this road and not to think their advantage and therefore bypass the experts in operational points. Apart from that, the company can avoid changes in time and also in cost budget. By eliminating barriers between the different departments of the organization the benefit that results will be to ensure a successful deliverable during the operation phase.

The most of the requested changes could have been scheduled from the beginning if these two Departments were collaborating and working as one team, when the project was still in the strategic planning phase, which means one step before the appearance of project's bid.

3. Hypothesis or Objectives

The objective target of this study is to explain how a healthy communication tool between the organization's members could be implemented in order to have a good project opening and prevent any slippages or wrong decisions that may appear in future and have impact during the project or at the end of project.

Chapter 3 – Review of Literature

Before all, author feels the need to express that the importance of communication related with project management has grown and has been recognized after 1990. Although, few people exist that disagree with this connection and on the other hand there are others who believe that communication aspect plays an important role in project's success and as a result project managers must be concerned about it.

Globalization and growing, when entered to organization's environment, make tasks more complex and the need for coordination is required next (Chiocchio F., 2007).

As readers will read below, bibliography shows that '90s was the decade when a movement was presented from a functional organizational structure to a matrix one and then this change was stick to projects. The matter was that these problems occurred from this unknown and new, for the most people, situation. Such problems, from several fields, exist until today though 15 years have passed from then and a lot of experience had to work over projects, in reverse difficulties occurred starting from communication.

The review of literature for this study includes books, journal articles and on Internet based sources and databases concerning how somebody can manage and apply the principle of communication in an organization. Specifically, the research focuses firstly on six communication channels and how they can be effective. These six discussion areas are face-to-face, telephone, voice mail, electronic mail, letter and fax. The relevance between above methods in an efficient intra-organizational communication constitutes part of this research. As it can be understood, every day in our everyday routine and job, we all have to talk and synergise with people. That is exactly what James O'Rourke (2004) calls *talk is the work* in his book. The only thing that must be added to these methods everyone uses, is that with the help of technology two more areas have been added in the last years. These are: video teleconferences and public speaking in front of large audiences and with the help of presentation software or both at the same time.

Bryan R. A. McConachy and Cynthia A. Caine have categorized those communication channels, by which the transmission of information is made and the consignee receives and decodes the transmission, understanding clearly where the consigner intends in three main areas:

1. Text only channel,
2. Voice channel, and
3. Face-to-face channel (PMI Global Congress Proceedings, 2006).

With the use of the following figure, author wants to depict message's route and how messages are transmitted from sender and how receiver decodes and understands this signal (figure 1).

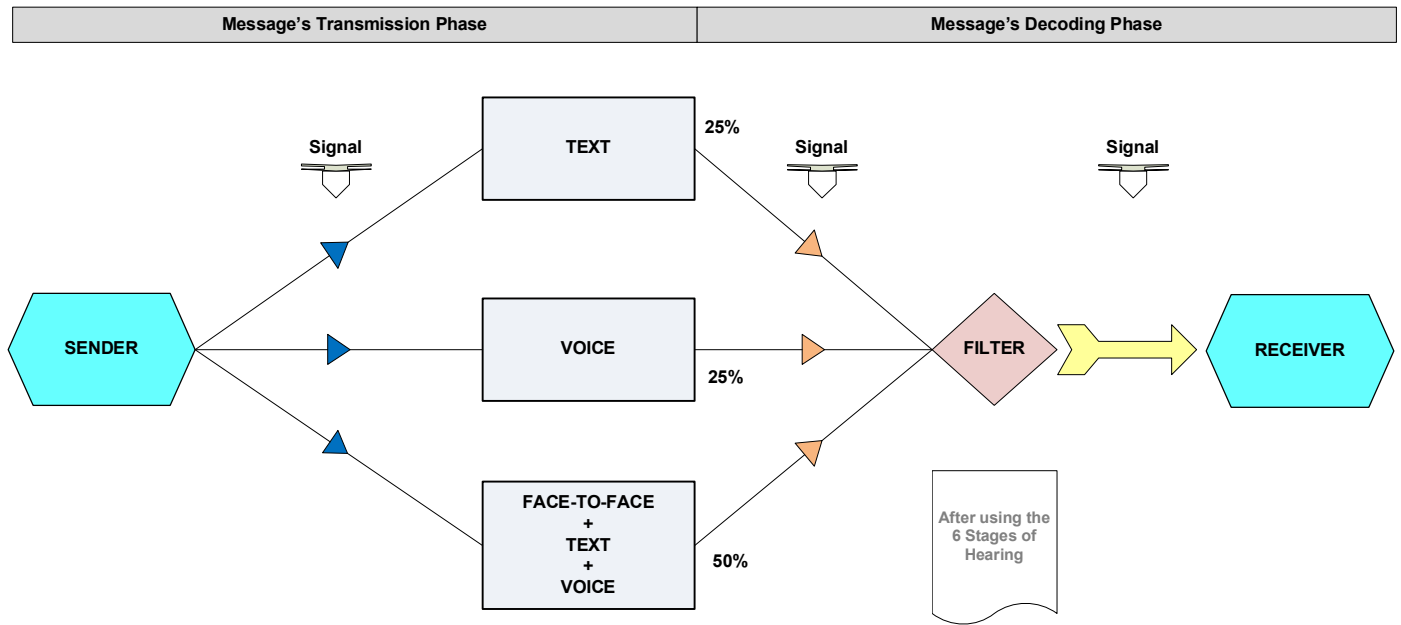


Figure 1. Communication channels used by project-involved people

The first communication channel is based only on words. Such types of means used for communications are: electronic mails, letters and faxes. People that choose a channel based on Text accumulate a percentage of 25% and individuals have to pay attention to their vocabulary, so as the import of document will be clear understood, after receiver's filtering.

Then, individuals, who use voice-based communication channels such as telephone, voice mail and video teleconferences, have to attend issues as diction, accent, speed of their speech and their tone, so as to prevent consignee from possible misunderstanding. In other words, the about 25% of people who prefer to use this communication channel have to avert the contact from selective hearing.

Next, the majority of people (50%) who communicate chose face-to-face communication, which involves the physical presence of the participants, such as meetings or public speaking in front of audiences, by way of presentation. People that choose this last mixed type of communication channel have to take care,

above all, of their gestures (facial) or generally their body language in a percentage of 55%, their tone (in a percentage of 38%) and their words (in a percentage of 7%), with aim the transmitted message will be understood to receiver's ears (McConachy B. & Caine C., 2006).

Virtually, this model befits better in an organizational environment where people with similar culture and language exist. Irrespective of physical presence's existence or not, the success of a model such as the one described above, has direct relation with the listening process. This process helps receiver to filter the message he gets and has to deal with issues as lack of trust, emotional state and perceptions. For this reason, project manager who belongs to the listeners side when communicates, has first to *hear* and afterwards to *interpret, evaluate, understand, respond* and at the end to *remember* (Bjorseth L. D., 2008).

This process either belongs to the Project Management Department or in the Operations Department, when followed hierarchically by all members of a team and especially by project manager, can enhance their communication skills and help them focus on mutual interests they should have, as they act for the common project's vision and mission, which is the success. After using these six (6) stages of hearing as called, additional tools as repeating and summarizing can be used in order to improve listening and at the same time to diminish possibilities of false interpretations to happen. As these last two methods are methods of affirmation of all said previously, they help communicators escape from "idea killer" phrases such as: "that will never work" or "your idea sounds great, but...". From the above, the crucial result which can be drawn is that everyone spends a lot of his time communicating to ensure that "*the intended message is the received message*" (McConachy B. & Caine C., 2006).

All these means of communication are the tools that every manager uses and manages in order to make everyday routine of the project clear to the other team members. Consider rather when it concerns collaboration during project's bid phase, where every stakeholder has to be proactive and to work for the common vision (O'Rourke J., 2004).

In order to organize his writing, the author has divided the research in two (2) basic concepts of communications that apply to project management. These two (2) concepts are:

1. Lack of communication leads to scope changes
2. The Need is Proved and it is Now Necessary for a Channel/Template to be Formulated

1. Lack of Communication Leads to Scope Changes

At this point it is important to examine the relevance between the four (4) core processes of project's communication management, according to PMBOK (2004), which ensure timely and appropriate management of information in every phase of project's execution. These four (4) processes are:

1. communications planning,
2. information distribution,
3. performance reporting, and
4. manage stakeholders.

Communications planning is a part of project plan and contains the status of communication of all involved stakeholders. With the use of this plan everybody can ensure that effective communication will be applied during project's execution. Consequently, project plan's initial aim must be to answer the following five questions:

- a. Who? (needs the information),
- b. What? (information he needs),
- c. When? (did he need the information),
- d. Who? (delivers the information),
- e. How? (the information should be delivered).

The second process of Project Communications Management is *Information distribution* and helps everyone involved with the project by providing them with the appropriate available information. After identifying the distribution groups, the information have to be collected, shared and stored also in an archive that will be always available.

Performance reporting is defined as the process of the continuous reviewing of the project's communication plan. To be more specific, after taking feedback from all the involved team members, adequacy or not of the current information is examined. At this point, the desirable method of communication is the target. This explains why this process evaluates whether the existing communication method is adequate or not and whether it can be accomplished when criteria like the type of information, the

frequency, the depth of the format and the method will be used for information's transmittal, will be taken into consideration.

The relation between *performance reporting* process and *communications planning* process concerning stakeholder's changes and their corrective actions can be shown, among others, in next figure (Figure 2).

The fourth and last process is how to *manage stakeholders*. It is a recurrent process performed during the whole phase of project's execution. This last chapter of communications management indicates appropriate ways of stakeholder's guidance, in all phases of the project, in order to have a project without contingencies (PMBOK, 2004).

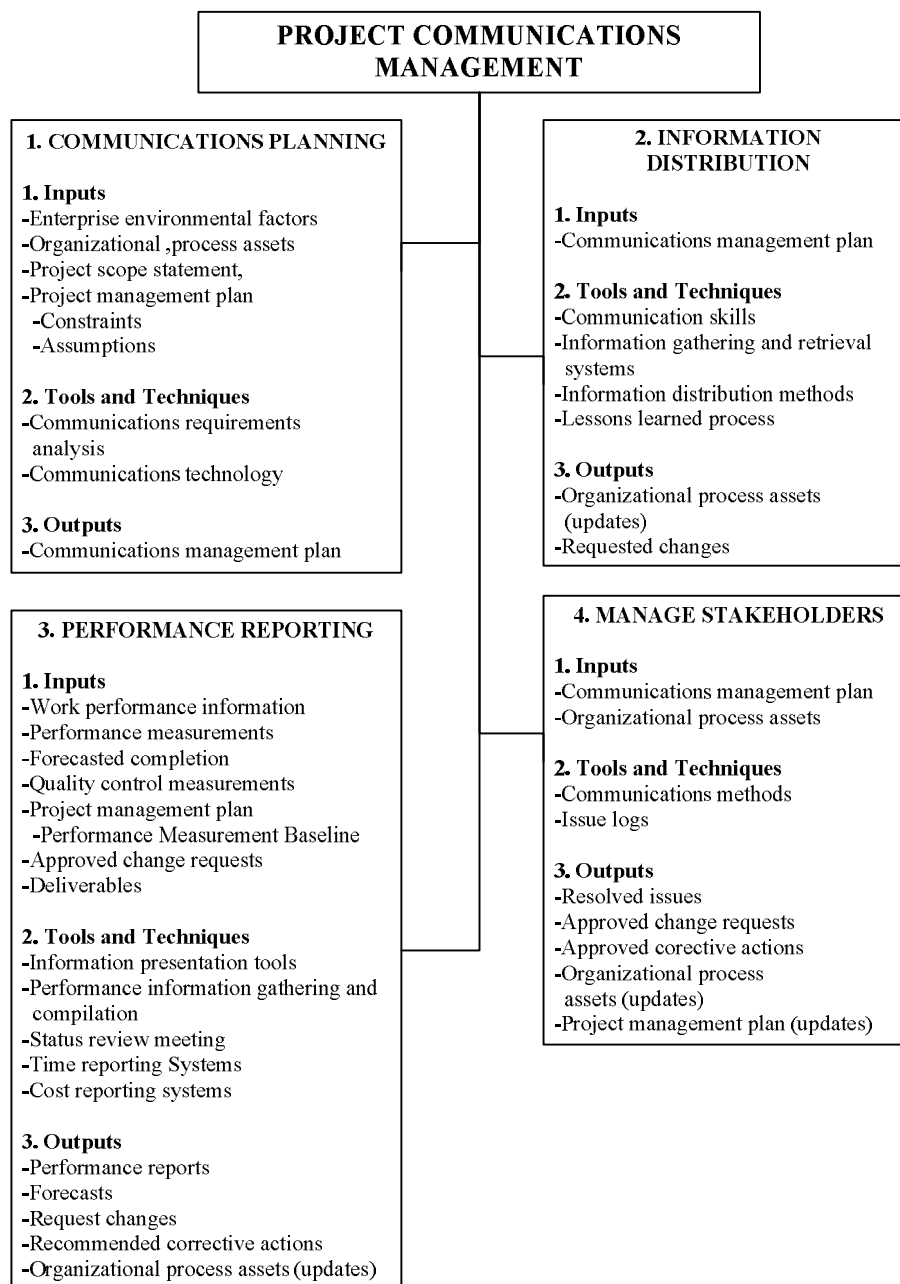


Figure 2. Project Communications Management Overview (PMBOK, 2004)

Next, the most important element that everyone who arranges such issues must take into account is that from the available methods, organizations could choose these or those ones suit their teams. Informal direct conversation is more usual than the formal one and it recommends a method that is preferred from

formal procedures as it is a faster and more casual method. However, whichever communication system is used, is supplementary to despite substitute, for face-to-face meetings (Heller R., 1998).

When members from different departments of the organization are trying to schedule which will be the project's deliverable that they work on, then some disputes between them may occur. One possible reason of this happening is due to overlap of the authority.

In order to avoid conflicts, all members or the departments in total must be convinced to collaborate so that the company's vision and mission will be both successful. When managing conflicts, we have to confront them. This will be achieved when the conflicting parties meet face-to-face and try to overtake their disagreements. This approach indicates that stakeholders have to think win-win and solve problems and focus less on being combative (Kerzner H., 2006).

"Projects are made up of people getting things done. Getting the right things done in the right way requires communication among all the stakeholders". As a result, in strategic planning phase, in detailed planning phase and in the bid phase, each technique of project management involves communication, if it is not a method of communicating (Verzuh E., 2005).

Effective communication comprises listening, presenting, persuading and is at the heart of effective teamwork. Project managers have to listen critically, sympathetically and creatively if they wish to fulfil their challenge of completing the project successfully, after effectiveness of oral communication. This behaviour of focusing on listening skills could increase, except the three traditional constraints of a successful project (time, cost and performance) to client's acceptance, a new fourth discussion area (Smith K., 2007).

When referring to communication inside a team, is useful to see the customer of the project as a stakeholder and more especially as a team member, not simply as a sponsor. In that manner, project management team can collaborate better across the organization, define and communicate the scope of work clearly and ensure that work will be quality and schedule-driven, after this customer-driven approach during the whole process of managing the project (Barkley B. & Saylor J., 2001).

Communication, whether electronic, written or verbal, is always purposeful and intentional. Actual communication can be grouped into different categories. When people aware of them they can be more

effective, they can eliminate the disputes and barriers between them and determine where the real problem is (Flannes S. & Levin G., 2005).

Project manager when working on projects, as has been indicated by a conducted survey, needs some skills to handle project and lead it to a successful end. These skills, with the proportional percentage of their requirement, are the following:

1. Communications (84%),
2. Organizational skills (75%),
3. Team-building skills (72%),
4. Leadership skills (68%),
5. Coping skills (59%),
6. Technological skills (46%) (Kouzes J. & Posner B., 1987-1995).

These percentages show the importance of communication aspect while dealing with people and projects simultaneously. No matter how effective organizational and team-building skills a manager may have, if he is not so good as communicator, then he can not avoid having impact on project's progress. To start with, project leader needs to be a good facilitator from the communication aspect and after that comes everything else of the skills that he could have.

Generally speaking, after concentrating information and studying a lot of books intending to gain a better understanding of the term "communication", one statement stands out: "Communication is the transfer of meaning" (Fabun, 1968). With this research, the reader shall be informed regarding specific communication points as about which are the elements of communication, its principles and levels, how we do not succeed as often as we should and how we could eliminate physical and psychological barriers in order to communicate successfully.

In that direction fluctuates also another author who defends the Keep It Simple Stupid (KISS) principle, which means that when managing projects, people "*do not have to do more or less than they must do to get the job done*". In other words, there is no need to spend more or less time than the required, to accomplish the task. Such activities could delay or accelerate a job could be the records after a specific task.

Independently if he is analytical or not, manager will spend more of his time, than the one he had anticipated (Lewis J., 2005).

A Harvard Business School survey studied a number of successful general managers over a five-year period. The results showed that they spent most of their time with everybody, either was inside or outside of their company. More specifically, the average manager spends just 25% of his time working alone. Few of them spend less than 70% of their time working with others and some spend up to 90% of their working time in this way. The most important point is the wide discussion topics and the time that managers lose in such petty conversations (Kotter J., 1999, p.145-159).

Older scientific studies have presented similar results, as for instance a survey conducted from University of Minnesota, which claims that the average person spends about 70% of each day engaged in some type of communication. From this time, 45% is spent on listening, 30% on speaking, 16% on reading and only 9% on writing (Nichols & Stevens, 1957). These two surveys that researcher described above, contribute to understanding that when the head of the organization's departments spends a lot of his time at issues with no worth, the rest members of these departments will imitate and finally follow this tactic too. This will cause only one result: issues pending and lack of collaboration between the members of the departments.

In 2001, James O'Rourke after analyzing the results from several scientific studies ⁽¹⁾ concluded that the most of the key personnel, including project managers, spend more than 78% of their daily time communicating, which means on talking, listening and cooperating with others.

From the aforementioned, everyone can understand that communication is a critical issue for a project manager. Because of this importance, raised from researches that occasionally see the light of publicity, project manager's first aim and responsibility must be the plan of communication during all phases of the project.

⁽¹⁾ Most important of the studies O'Rourke based his statement:

Rankin P. T. "The measurement of the ability to understand spoken language" (unpublished Ph.D. dissertation, University of Michigan, 1926). *Dissertation abstracts* 12, No. 6 (1952), pp. 847-848.

Borden, D. *The Business of talk: Organizations in Action*. New York, NY: Blackwell, 1995.

Werner, E. K. "A study of Communication Time" (M.S. thesis University of Maryland, College Park, 1975).

Wolvin, A. D and Coakley C.G. *Listening*. Dubuque, IA: Wm. C. Brown and Co., 1982.

In continuity, Valdis E. Krebs (2007) helps to improve organization's information flow by seeing the different project teams of an organization as a network. From this point of view, someone can claim that the best in networks is to exist more connections (i.e.: "*the more connections, the better*"), but as Krebs states it is not working always, vice-versa "*the better connections, the better*". This means that when referring to human beings, the fewer stakeholders involved inside a project team, the quicker information arrives to those interested. As a result, project manager has to establish better connections/channels between people involved, in order to make information accessible to those people that really need it and also, independently to whom the transmission of information goes, so that the recipient understands exactly what sender intends without misunderstandings (<http://www.orgnet.com/MCO.html>).

Vancho Cirovski (1998), a former Vice President of Human Resources at Cardinal Health and trained by Krebs in the past, shows the importance of managing communications inside organization in absolute relation with Einstein's famous formula $E=MC^2$. More analytically, "M" is the "*Mastery of each individual*", "C" is the "*Communication that flows through Connections that join individuals into organizations*" and "E" is "*the resulting Effectiveness of the team or organization*". Cirovski argues that teams can change when communicating effectively. As he was football player and coach, he remarked that teams are communicating more on the field, usually beat their opponents who are constituted by individual superior players. Everyone who attends football, including the researcher, remembers the Greek National football team, which won the UEFA Euro on 2004 without showing such a good performance never in the past. Individuals sharing common vision and being guided by a competent project manager are functioning better than individuals of recognized value. In the previous example, Otto Rehhagel took over Greek National team from its obscurity and led it after one year of great coaching to the top, over against all Greek and European expectations. This means that when a team is managed by a communicator who has the appropriate tools and skills to reach all the members of his team – like Mr. Rehhagel did – and independently what type of individuals they are, the result of this total strategy will be nothing else but success. This can be explained if you imagine "*communication*" and "*connections*" (the two C's from Vancho's formula) combined in another dimension Cirovski named "*Chemistry*". Just like football team

members when collaborating and communicating well can win even superior teams, thereby chemistry inside project teams can lead to organizational effectiveness (<http://www.orgnet.com/MCO.html>).

All these years, communication issues remain unknown for people involved with projects as resulted after one more, but more recent survey, conducted by PCI Global on 2004 and which claims that many project managers and team members do not even comprehend the course of their own projects concerning the budget, specifications and deadline. Analytically, difficulties concerning communication appeared and those can be translated as the 64% of the sample do not know if projects are on or off budget and also if projects met specifications required. Another dispiriting conclusion that was made is that 44% of the respondents said that they were not aware of whether their projects met deadline! Unfortunately, these are the results when people are not giving the appropriate importance on feedback inside organizations. Communications gaps between senior management, project sponsors and project teams occurred (PM Network, 2005, p. 16).

Michel Thiry states in his article that since 1990, many organizations moved from a functional organizational structure to a matrix one, as a way of better implementing project management methodology to their projects. To that manner, organizations have evolved into project-based organizations (PBO) but some managers spend still a considerable time focusing on bureaucratic aspects instead of creating synergy and integration inside the whole organization (PM Network, 2006, p. 22).

Gale Sarah Fister maintain arguable that poor communication decimates planning. She provides outcomes from a study conducted by a French computer manufacturer, which displayed that 57% of projects owed their failures to bad communication between relevant parties. A dimension given by Sarah's paper is that project managers have to be communicators and like those they should share their experiences, knowledge, expectations and generally all information, which objectively can help the project succeed. Otherwise, she shares Chris Butler's (president of the Performance Engineering Group) opinion, who claims that if project managers do not take the responsibility to assure the aforementioned "*they have to assume responsibility of the entire team's failing as unspoken expectations lead to crisis*".

In order to ensure how project managers will be better communicators and successful leaders of their team, Sarah makes reference to Chris Butler's three (3) steps.

These three (3) steps that Chris Butler has proposed are:

1. “Give team members clear unambiguous performance expectations”,
2. “Give regular performance feedback”, and
3. “Make sure your people have the tools to do their jobs and remove any barriers that block their ability to perform”.

Elucidating, the most important issue must be perceived from these steps is that in any case, goals set from project manager must be clear understood from each team member in order to be able to deliver on time, on cost and on performance needed. Furthermore, project managers have to provide with feedback their team members in order to strengthen their position. Another subject is that team members need to take appropriate instructions after a possible fail, so as to change their attitude in the future and prevent from having recurrent mistakes. Also, a successful project manager has to offer his team all those preconditions and resources they need to meet their leader’s satisfaction, regarding security of the project deliverable, which means that manager shall ensure that no one inside the team will run into difficulties during their performing.

Another issue that emerges from Sarah’s paper is that team members run into difficulties working effectively as one unit. Possible cause for this situation is that team members are not used to adopt formal communication opportunities, when even the project is in the beginning. Ancient Greeks had as virtue that “*unity is strength*” and they meant exactly that many people united and well collaborated could overtake a crisis that could not alone and without feedback. This characteristic combined with clear and detailed arrangements given to team members can ensure project’s success. Moreover, project manager as a leader has to give motives to his members, such as to just reward them by keeping their morale high and also defend his members and team when unreasonable issues occur. When project manager acts with this way, team will feel secure in the future. It is important for team members to be supported by their leaders, sum rather when they deserve it.

Besides, project team has to communicate via communication means set in project plan. This increases communication’s effectiveness and gives value to project’s tracking. Considering researches results regarding communication aspect, it seems that almost all project managers’ time is spent on

interacting with his team members instead of handling clearly the whole project. Notwithstanding, facts are not like it seems, according to the paper that states it is “*better to overcommunicate than undercommunicate*”, as half of project manager’s daily activities were spent on communication with people in general, including team members, with an only aim: to serve better the project (Gale S., 2005).

Gee Mike (2007) has added that often project managers focus only on how they will manage people. He states the real challenge is to fulfill the need to manage not only people who are close to the project but also the wide community of project’s stakeholders. Project leader has to find out which leadership style to implement, to inspire his team members and try to motivate his team and furthermore to manage other people involved in project who may be individuals or organizations that can be affected by project’s success. It is distinct that during most times project manager manipulates projects has to deal with many people or groups and this is a hard task. In order to handle such situations, which require managing of time, managers have to pay attention in two elements. In particular managers have to examine: i) the power and the effect which stakeholders have on project and ii) their interest concerning the project, in order to categorize them and spend equal time to each of these stakeholders or the seasonable time at each one of them. Project managers have to manage high power stakeholders in a way that will help the project succeed with their influence. As they are interested, managers have to detect which stakeholder wants to be an active participant of the project, to make an effort and maximize his role by trying also to increase his involvement. Stakeholders can be categorized in four (4) groups regarding their communication needs:

- A. High Power-High Interest,
- B. High Power-Low Interest,
- C. Low Power-High Interest, and
- D. Low power-Low interest.

Here is the real challenge for project manager: to handle, manage and guide people belonging to the above categories, as they can be met inside an organization. Stakeholders of the first category (High power-High interest) need close management by project manager as they have the right to consume to the project and try to make their interests happen. *High power* people but with *low interest* are not active enough. Moreover, they are interested on progress issues, as they want to seem productive though their participation

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is limited. By contrast, people with *low power* but *high interest* are kept in touch concerning project's progress, because of the little power they reflect. That kind of stakeholders are interested on the deliverable and due to the sharpness that possesses them, they keep their interest undiminished. The last type of stakeholders is those who have *low power* and *low interest*. These stakeholders are the last in project manager's priority list independently that they may become more interested as the project continues (Finweek, 2007, p. 46).

This breakoff is not easy to be made as each stakeholder has his own personality and strategy in all phases of a project. Some are introvert, others extravert, sensing or intuitive, thinking, feeling, judging perceiving and that makes difficult the job of the average project manager. What managers have to do is to make efforts to evolve to better communicators and this will ensure that their leadership will be more effective in the future. Do not forget that *lessons learned* is the most important issue that managers have to deal with, before starting manipulating with new projects (Flannes S. & Levin G., 2005).

Another issue, concerning especially projects from construction field is the revision of the *detailed project scope* document. Even brief or detailed can be, it can not attribute the sense of time regarding the actual progress, the sense of credibility of Mechanical Completion date, the sense of possible requests of resources can be made even if those will be in human resources, on equipment or on cost oriented ones. This is not an effective communication channel as a detailed bar chart is better than a detailed project scope. A detailed Critical Path Method (CPM) network is preferable to describe such kind of project's activities. Even if bar chart as CPM network is preferable, it can not show priorities, changes between linked work packages and some times the completion date (Datz M. & Wilby L., 1977, p. 13-17).

Besides, it is necessary for stakeholders to receive the right information and make the right decisions. In order to persuade with this important issue, project stakeholders should adopt the following techniques:

- ◆ Communicating with the team,
- ◆ Communicating with management and customers,
- ◆ Change management, and
- ◆ Closeout reporting (Verzuh E., 2005).

People must increase their understanding ability during all project phases. In particular, it can be understood that the present thesis report concerns the first method only and strongly to the point of the bid phase.

To illustrate, three project management functions exist:

1. Project definition,
2. Project planning, and
3. Project control.

In the first function, project manager has to specify all project stakeholders and what their roles will be. It is also manager's work, to implement the communication strategy and all processes of documentation including decision's change and acceptance document. The outcome of this process demonstrates the project's general picture and the frames in which they will be moved.

In the planning phase function, manager shall describe in details the goals and all seven (7) best project manager's friends which means: how will they be succeeded, *who* will do the work, *when* it will be done, *how* much it will cost, etc. Estimating techniques of cost and time schedule are in full operation in this phase as developed in project's definition phase.

Project control contains all these activities that lead project to achieve its goal. These are measurement of the progress, of communication, and corrective actions of possible obstacles that a project may face up (Verzuh E., 2005).

These three functions represent project manager's responsibilities and they are recurrent as planning causes changes on definition phase and control with its turn can cause changes to the plan or / and to the definition of the project. In order to be clear understood that this repeated process is important during all project's phases, author deems advisable to concretize (figure 3) the above described functions, in which project leader spends a lot of his daily time. The course of blue arrows shows the sequence of the process and the red arrows show the feedback of the functions inside initiation and execution phase.

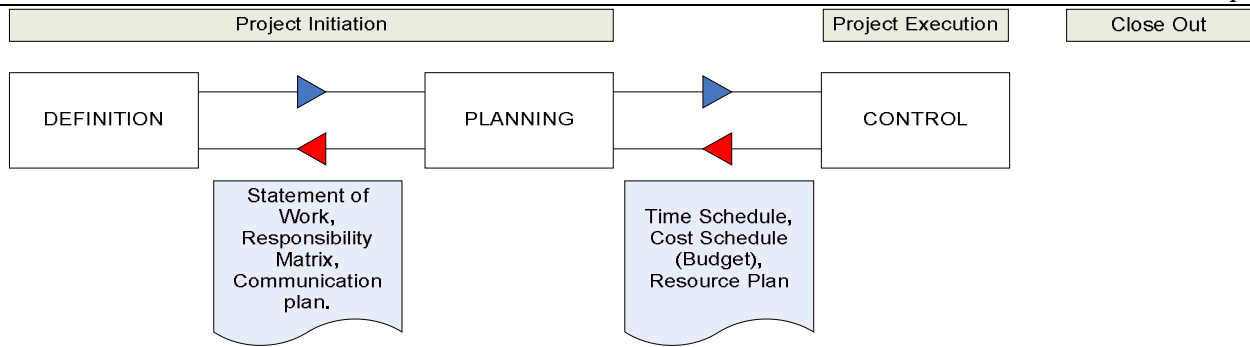


Figure 3. Project Management Functions during its life cycle (Verzuh E., 2005)

After it is considered that project manager various abilities from definition. Some of the most important are that he is head of his team members and project he leads and also he has to ensure the project's success on scope's triangle, which means on time, within budget and at acceptable levels of performance. In addition, a project leader is a good facilitator and communicator, as he dialogues with project stakeholders, team members, organization's Board members and he helps project office members to get their work done (Flannes S. & Levin G., 2005).

From all the above, it can be easily understood that project managers must be able to refer the possible absence of resource needed and also the status of project's progress in order to prevent any lag could occur during execution's phase. A good communicator has also to secure the support of the executives in order to keep communication's smoothness and clearness inside teams' walls. Another issue for a leader is to care not to keep secret the success of a project. Consider that failures accompany all involved stakeholders and especially the company's name and its creator, namely project manager, why while a project succeeds not to share that as a united team and collaborated with other stakeholders, including executives, you finally achieved to deliver project goals on scope? Bibliography leads to the conclusion that project managers have to increase their initiatives and support them by involving their executives to make them real. After all, leaders have to share "good news" with their superiors, as an indicant reference mentions: *"if we did not share these successes, we would fail to deliver on the communication aspect of our strategic plan"* (PM Network, 2005, p. 60-66).

Ancient Greeks also alleged that *"the beginning is the half of all"* and they meant that people have to initially set everything correct. If people originally set their objectives clearly and accepted by everyone demanded, there is no reason not to pay a compliment (even if with regular memos) to everyone involved to Printezis I. Petros

this success, including executives who firstly accepted project manager's initiative to implement the specific strategy.

An accessional issue concerning communication aspect is the team's propensity to exist in different places of the world. These geographically dispersed teams, as called, have the "advantage" to require discrete processes, aiming with this way to manage people from distance and with different culture. International teams never meet face-to-face, or its members meet rarely. National teams, notwithstanding the big distance which separates them, are participating more often in face-to-face meetings and less via teleconference meetings, contrariwise with international team's members. The need for expedited communication between team's members is imperative in all situations and not only in case of people existence in the same area. Project manager should be able to confront also types of people involved in projects, even if their presence is regular (physical presence) or occasional.

Project manager in order to mitigate possible effects, which emerged from the above described events, has to select first of all the appropriate communication channel for each case. Afterwards, by developing a team communication commitment, he will give to the project the advantage to carry eliminated barriers among project team's members. It is important not to forget that avoiding building or conceivable barriers gives project manager the chance to develop processes that can facilitate communications for dispersed people (McConachy B. & Caine C., 2006).

2. The Need is Proved and it is Now Necessary for a Channel/Template to be Formulated

When author launches his inquiry and starts to think about how to formulate a communication channel template, he dwells in the following statement: “*The best method to control something is to understand how it works*” (J. Doyme Farmer, Santa Fe Institute). This depicts exactly the current situation that project managers are called to face, that they cannot find the solution to control better the projects because they are not able to understand their nature from the beginning, or they do not want to do so. This represents an outcome of undefined leadership roles, of unclear organizational design status of the working environment that project managers work under, of lack of effective communication which resulted to project cost overruns, delayed schedules, safety and operational problems, rework and conflicts between involved people. Consequently, authority and project responsibilities are waned and projects fail.

For this reason project manager as a communicator, has to inculcate in his members fresh and new ideas so as to eliminate undesirable problems such as the aforementioned. Communication deficiency leads to scope changes and it is now essential for a communication channel to be formulated in order to satisfy this need.

An advisable way to be successful when starting dealing with such an issue, is to have a clear mission statement or ask from all team members to answer the question: *What are we here to do?* Every one of them is expected to give project manager the same answer. That is important because it shows the opinion that an agreement exist concerning project’s mission. Furthermore, it can help project team’s members to avoid likely posterior disputes and masses of problems. Mission statement should answer in the same questions that communication plan does (who, what, when) vis-à-vis the customer. With a view to create schedules, project goals and a team building process which will help them handle projects, team members have to meet some of the fundamental elements of mission criteria, which are:

- ◆ Purpose (reason of project’s existence),
- ◆ Team’s skills and tasks Uniqueness,
- ◆ Clearness of the meaning,
- ◆ Abstractive (brief and easy to be reminded),
- ◆ Defined the limit of team’s activities,

- ◆ Constancy of mission's following (abate common changes),
 - ◆ Supports higher level mission (project mission to hang together organization's mission)
- (Todryk L., 1990).

After all, leaders dealing with projects in early phases know in advance that project outcome reaches often failure instead of success. As a result, they are starting to look over *lessons learned* aspect, in order to understand why projects finally failed. That will make them enrich their *know-how* and prevent their new projects from having the same destiny.

After becoming more experienced, project manager's next step is to search identification methods of risks which may occur and avert them of happening, so as project's success to be guaranteed. A related analysis took place brought out twelve (12) basic reasons that lead a program to failure. As programs include projects, it can be easily understood that some of those reasons, which lead a program to failure, can be transferred to projects in which projects pertain. Those reasons are:

4. Underestimating Project's complexity,
5. Lack of access and internal Communication,
6. Not integrating the key elements,
7. No measurable controls,
8. Requirement creep,
9. Ineffective implementation strategy,
10. A software tool is not the only answer,
11. Contractor and Customer have different expectations,
12. No shared "Win-Win" attitude,
13. No formal Education,
14. Lack of leadership commitment and sponsorship, and
15. Not viewed as a start-up business (Gioia J., 1996).

The above reasons seemed unexceptional to project manager's ears but those are some of the most important explaining why project stakeholders have not to belittle and take into serious account when identifying risks in general and hereupon, when identifying methods regarding communication risks. When

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organizational structure suffers from lack of effectiveness, stakeholders of several departments have not access to information needed for project. That affects project and beget critical impact to its progress. Project manager has to be able to manage such situations by having in his mind how he can reverse the situation and keep the project in the path of success. As only one of them, or more than one in combination, can disarrange project's situation, project managers should assess the burden of those twelve reasons for failure, before deciding how they will confront them (Gioia J., 1996).

Due to the change from vertical to horizontal hierarchy observed in our days it is understood that a blend of skills is required from manager's side. There exist the need of skills of what called Participative Style and what called Flexible Management Style skills, which with the help of a *system thinking*⁽²⁾ ability can lead project managers to change the style according to the situation. Having in mind that good leaders use all styles with one of them normally dominated, but also that bad leaders tend to stick to one style, bibliography finally prefers to adopt the combined situation as preferable profile. Apparently, depending on miscellaneous circumstances, project manager has to select the suitable and appropriate style for the specific case, starting from Participative and changing to Flexible Management Style, when necessary.

The above described combination of the styles will help project managers concerning their challenges: decision-making and organizational structure. With aim to be successful communicator, leader and facilitator, project manager should be characterized by *credibility*, *tolerance for ambiguity* and *creativity in problem-solving* which in collaboration with *effective communication skills* and application of a *flexible management style* could be able to find people who will become members of his team (Pinto J. & Trailer J., 1998).

Without doubt, those characteristics are important for a manager who seeks effectiveness in leadership but in order to become an integrated manager, it is meaningful for him to adopt the seven habits of highly effective people. This is essential for project manager and creates a notable effect, which can

⁽²⁾ Managers have to see the Organization as a System. Project Managers especially know how complex systems are developed, managed, and improved, as well as how they affect people and other systems (Senge P., 1994).

"Systems thinking refer to the general reflex or habit of conceiving of reality in terms of interdependencies, interactions and sequences" (Scholtes P., 1998).

increase communication status and also have impact on the client. According to Steven R. Covey, in order to

be effective a manager must:

- ✓ Be proactive,
- ✓ Begin with the end in mind,
- ✓ First things first,
- ✓ Think win/win,
- ✓ Seek first to understand then to be understood,
- ✓ Synergize, and
- ✓ Sharpen the saw (Covey S., 1989).

These habits will grow, after their adopting from team members, communication status of project management's team members and several organizations' Departments' members level of verbal communication effectiveness. Project manager has also to improve his rate of competency, after believing in his team member's capabilities. After a leader, project manager has also to be a mentor and persuade his members that their work is for project's good. Everyone dealing with projects has not to forget that to succeed in his life he has to help others to succeed. Being proactive means helping your boss or team members to succeed (Covey S., 1989).

Everyone has to find his moment of truth after using the integrated and principle-centered approach of Stephen R. Covey (2004), who helps people dealing with projects with aim to solve their personal and professional problems. After developing win-win thinking on contract, it is wanted for all members to be successful. It is also wanted to manage customer's expectations, administer internal conflicts, without customer knowing that and to manage possible disputes with customer.

After including the aforementioned inside the communication plan, project manager must reach beyond effectiveness, towards fulfillment, contribution and greatness. People feel neither fulfilled nor excited until the existing situation and there is the need for some motives to be established and to make team members more excited from day to day. That is exactly what author of this book calls new (8th) habit; he presents the current need to find a way and "*go from the effectiveness to greatness*" which means that the challenge nowadays is "*to find the voice and inspire others to find theirs*" (Covey S., 2004).

By inference, people of the same culture can use the communication channel template, as analyzed on the first part of the current chapter. People who have different culture and language skills can also use the aforementioned channel after understanding and agreeing to a common code of communication that will be accepted from all individuals, by way of policy. This will help organization's departments and several team members that constitute them to achieve effective and accurate communications.

As team building is an ongoing process and at the same time is ignored from organizations, people have not to forget that when they want to improve team's functioning, they have first to improve processes, by which the work is done. James P. Lewis named this process "team-building cycle" and outlined this recurrent cyclical process, as follows:

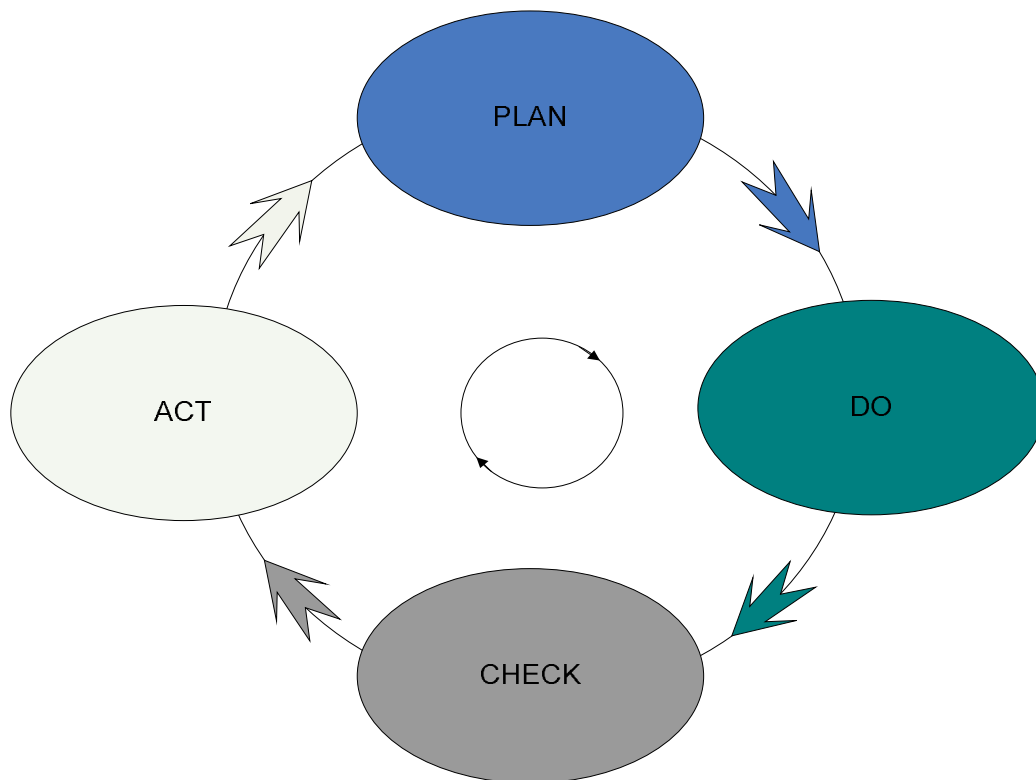


Figure 4. The Plan-Do-Check-Act Cycle (Lewis J., 2005)

It helps team members understand what they have done well so far and what they want to do better in the future. After reviewing lessons learned at *check* point, people will be ready to improve the processes concerning communication problems and decrease their weaknesses.

Thus, an important issue is how project managers assess their profile in order to make decisions, which can show a room for improvement of personal development in leadership and management competencies, in working with people on both highly complex and more routine projects. A lesson learned Printezis I. Petros

resulted from this analysis is that if all these staff is checked frequently, *know-how* can be created for projects and by extension for organizations, so as everybody from now on can recognize gaps before it is too late and make the appropriate changes in order to ensure project's common good.

Chapter 4 – Methodologies and Procedures used in the Study

This Thesis examines the relationship between the members of two different departments of an organization, who have to synergize as a team.

Author's first goal is to exhibit and analyze the obstacles that can be caused due to ineffective communication. In other words, due to lack of communication difficulties emerge and impede project execution. In order to establish communication, he set some principles that all stakeholders of the organization's departments who were involved during the bid phase must adopt, so as to enable them to build better collaboration.

With a view to implement a communication strategy that will establish healthy communication and will prevent projects from slipping, the researcher has to know firstly if the existing one is effective. More precisely, he uses quantitative design as a manner of getting proofs about communication status. The method the author utilises is survey.

At this point, researcher commends to share with readers the activities he undertook to conduct the study. Especially he used written questionnaires, which have been distributed in two phases. The first distribution was made to the leaders, heads and key personnel of the different departments personally (printed hard-copy questionnaire) and the second was made via e-mail to people with the same educational and occupational level as in the first distribution, but who were in a distance either they were living abroad or author believed that it is more functional for those specific people to fill in electronically the questionnaires.

An extremely important issue for each person who conducts a survey is to get back at least thirty (30) answered questionnaires with aim the survey can be scientifically accepted. Indeed, if someone accounts the possibility of a remarkable number of questionnaires, which are not earnestly answered by respondents and hence by definition cannot be estimated in research's results, then it is clear understood that almost fifty (50) questionnaires is needed to be gathered.

Particularly, researcher has dispensed about hundred (100) questionnaires from both hard-copy and electronic versions on one's tod and additionally thirty (30) questionnaires were distributed through colleagues either printed or forwarded via e-mail.

From these one hundred and thirty (130) questionnaires, only forty two (42) returned to researcher's hands and most of them out of time. More concretely, eight (8) of these were returned through electronic distribution (version 2) and the rest thirty four (34) questionnaires that reached author's hands were through printed distribution (version 1).

When reading these sentences please keep in mind that you have to give an adequate interval of time to respondents in order to complete questionnaires. The problem is that time is not as you consider it but you have to get inside respondents mind when counting the time! A smart action in order to save time and avoid any confusion is suggested from author to anyone who will perform the same study and seeks to help respondents not to have enough time to complete by their own the questionnaires, but to complete them by way of interview.

Last but not least, questionnaires were dispensed to organizations and individuals manipulating projects of the following backgrounds:

- Construction field (in collaboration with the Government),
- Energy projects (in collaboration with the Government),
- Forestry Program (in collaboration with the Government),
- Research and Development (R&D) Program on Medical machinery,
- Airline Industry's projects,
- Education Training Program (in collaboration with Greek and foreign Universities), and
- Corporate Program (EP) carried out by Hellenic Ministry of Tourism.

People who are involved in such projects with these objectives and have complemented the author's questionnaires were stakeholders on all project parties: contractor, owner, supervisors, third party inspectors, public organizations and authorities team members who validate activities with progress. Their experience was admittedly helpful for the results of the present research.

Each questionnaire consists of twenty nine (29) questions separated in four (4) sections:

1. Personal Information (7 questions),
2. Communication Status (6 questions),
3. Short Essay questions (3 questions),
4. Rate some Statements (13 questions).

In first section's questions respondents had to select from multiple choices. The same applied also to some of the second section, except some questions in which respondent had to choose between "YES" or "NO". In questions of third part, people consisting survey's population had to answer open questions in a few sentences and in the last section they had to indicate the extent to which they agree or not with the arrayed statements. They had to choose among "Strongly Disagree", "Disagree", "Neutral", "Agree" and "Strongly Disagree".

An optional section also exists at the end where respondents may report some issues related to the topic, which this questionnaire may has not covered, or/and some of their experiences/comments that could help researcher to come easier to conclusions.

Questions like: "How were the projects scheduled in the bid phase?" and "How they finally functioned?" were included in questionnaires (see the template in [Appendix A](#) for more details). Author's aim is the answers and the comments of these key position persons to lead to variations requests and amendments non-recurring.

A last important issue concerning questionnaires used for this research and must be known is that all responses were kept confidential and were taken into account only from author to conduct his conclusions. This means that people who replied electronically on author's e-mail must not be concerned about nothing, as the questionnaires they sent were printed before evaluation.

In addition, any information related to this issue, will be collected (e.g.: books, articles and relevant surveys) to help the researcher make his conclusions stronger. In this way, the results of this study will constitute a powerful communication tool that will enable the team members to enhance the effectiveness of their intra-organizational communication and build better relation with other stakeholders.

Finally, please note that some of the forms that were used inside research questionnaire's template are result of author's synthesis, which came out from additional samples that author has seen posted on the Printezis I. Petros

web. Such sources for instance were retrieved on April 20, 2008, from

http://www.cs.ubc.ca/~cs444/resources/ethics/CS444_2004-05_SampleQuestionnaire.doc and

<http://www.niace.org.uk/online/Documents/Questionnaire.doc>.

Chapter 5 – Results

In the third chapter, titled “Review of Literature”, the author organized his writing toward the already discovered in the literature findings. This segmentation comprised two (2) concepts:

1. Lack of Communication Leads to Scope Changes, and
2. The Need is Proved and it is Now Necessary for a Channel/Template to be Formulated

In the present chapter, writer presents the outcomes of the survey he conducted and he will connect them with the two preceding basic concepts in a manner to make clear that communication has become synonymous with management, as big problems can be resolved only when many people get together and synthesize their ideas in a networking situation.

After providing readers with a summary of the survey exhibited in the previous chapter, researcher wants to provide them also some more analytical elements, concerning the survey he conducts. With the use of tables and figures he will try to communicate effectively survey’s results.

First of all, author demonstrates some further results, referring to those forty-two (42) people who actively took part to the research and especially their age, gender, educational level, current occupation (job title) etc. In other words, it is time to itemize respondents’ personal and status information as they supplemented their answers to the questionnaires. From now and on, they will be called in terms of statistic: “*population*”.

1. Lack of Communication Leads to Scope Changes

To way that “introduces” population and begins with, author has distributed questionnaires to individuals aged as shown in the following table (Table 1):

Table 1

Age group of respondents.

Age Group	People
20 - 29	18
30 - 39	9
40 - 49	10
50 - 59	4
60 +	1
Total:	42

In order to incuse these numbers in percentages, the author arrays the following diagram (Figure 5), from which it can be easily resulted that 45% of the population are aged from 20 to 39 years old and 55% from 40 to 60 plus years old.

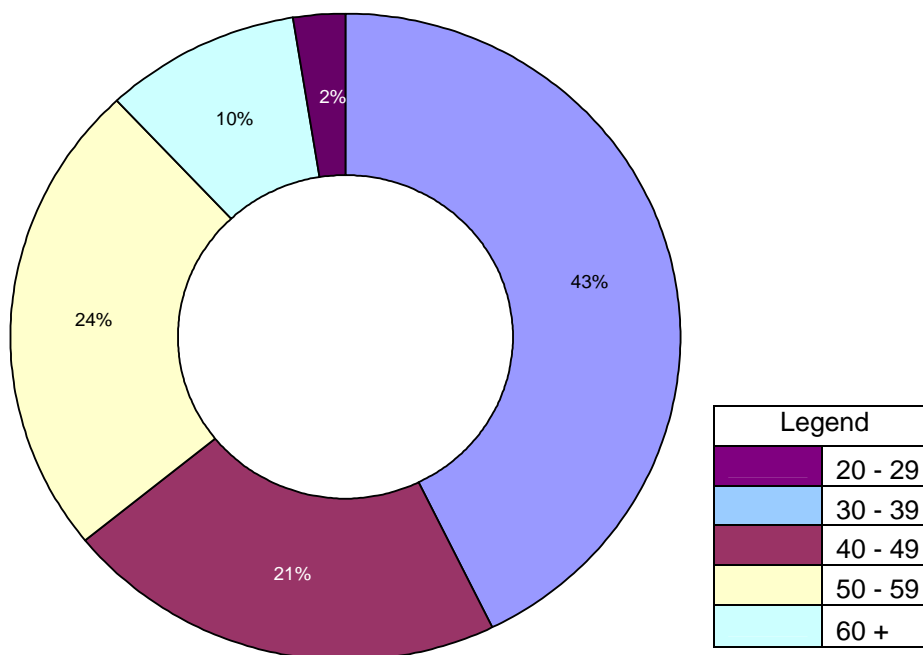


Figure 5. Respondents' age in percentages

From survey's participants, 69% are male and 13% are female (29 men and 13 woman). From those, 26 people hold a Master Degree (62%), 11 people hold a Bachelor Degree (26% - Higher Education level), 4 people hold a Doctorate Degree (10%) and lastly there is 1 who holds other type of educational certificate (2%).

The next pie diagram (Figure 6) depicts the position that population holds in their job. Most important results which came obviously from that figure are that 33% of the respondents are Heads and Managers in their Departments and 37% are Administrative assistants and Technical Experts or better, simple but essential team members needed in every project.

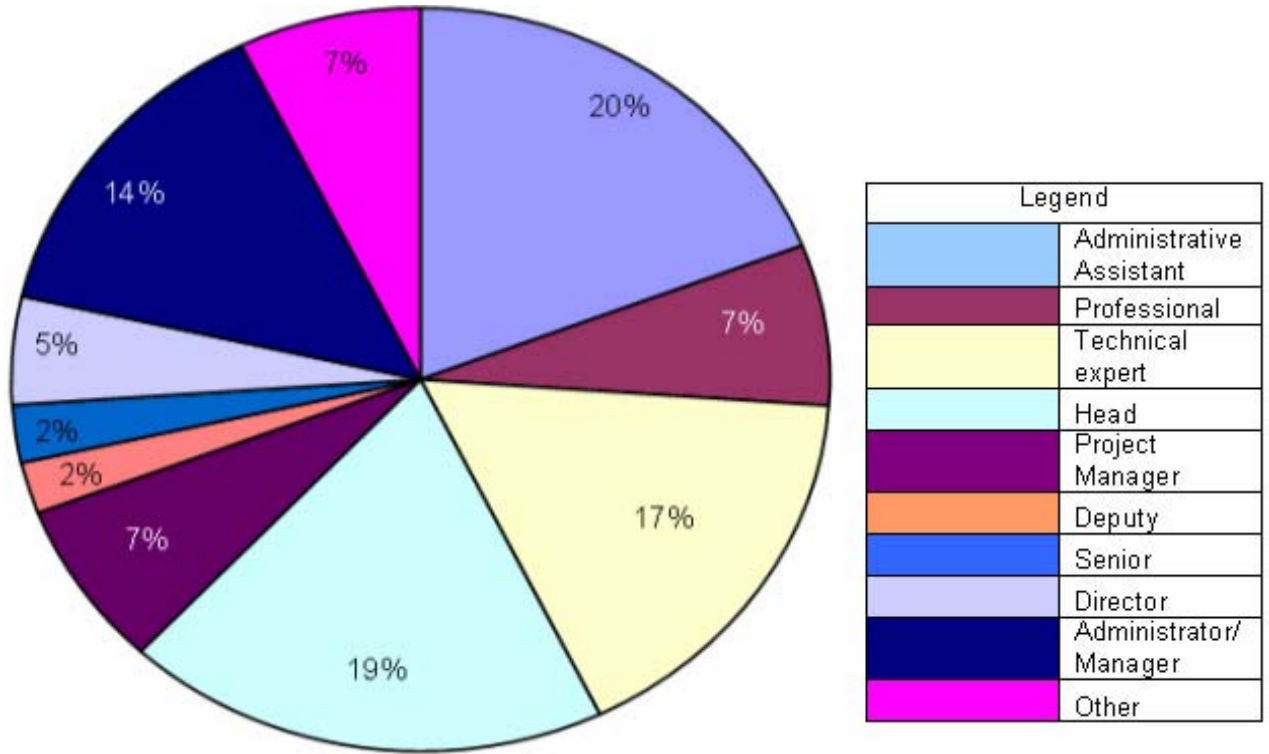


Figure 6. Respondents' current occupation in percentages

In the chart below (Figure 7), the fluctuation of the years, during which individuals are dealing with projects, is presented. For instance, 6 people are working on projects 3 years, other 6 people 10 years and only 3 respondents are dealing with projects for 1 year, etc. This shows that 50% of the population deals with projects from 1 to 7 years and the rest 50% from 8 to 37 years. The average of years, of those who participate on this survey, is 5.

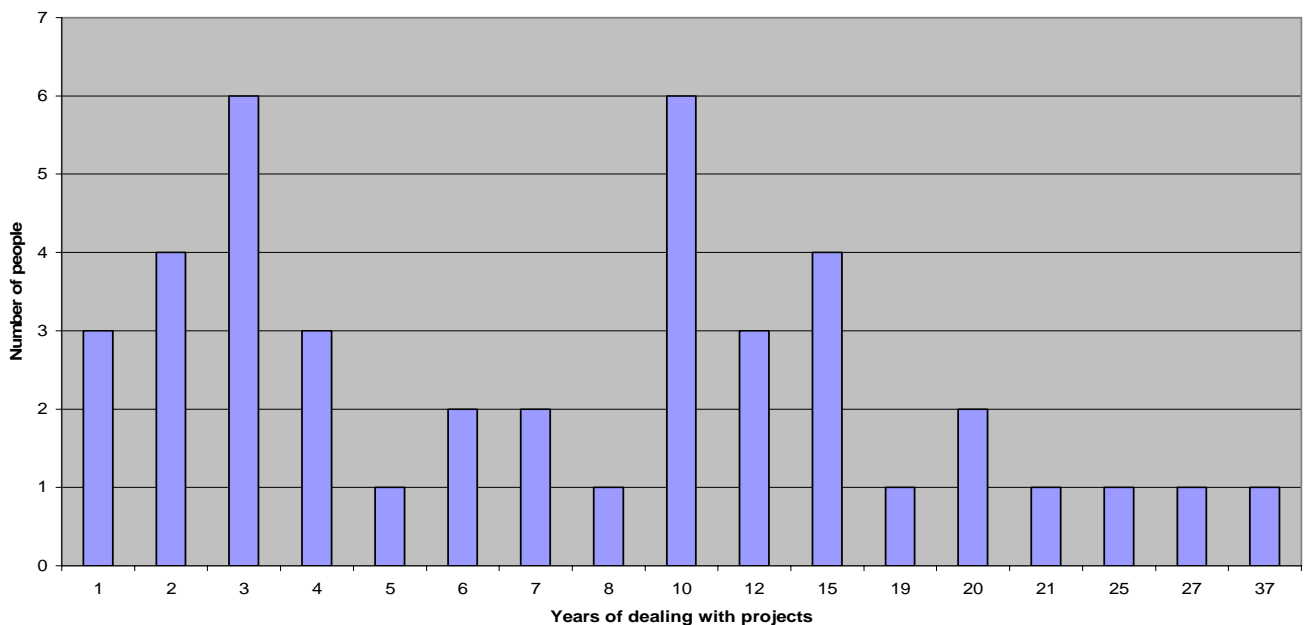


Figure 7. Respondents' project activity

Another important element resulted from the survey is that 68% of the population occupies its job position from 0 to 3 years and only the 32% occupies its position from 4 to 17 years. In average, the years of respondents' occupation in current position are only 2. Figure 8 demonstrates the whole population's picture regarding this aspect.

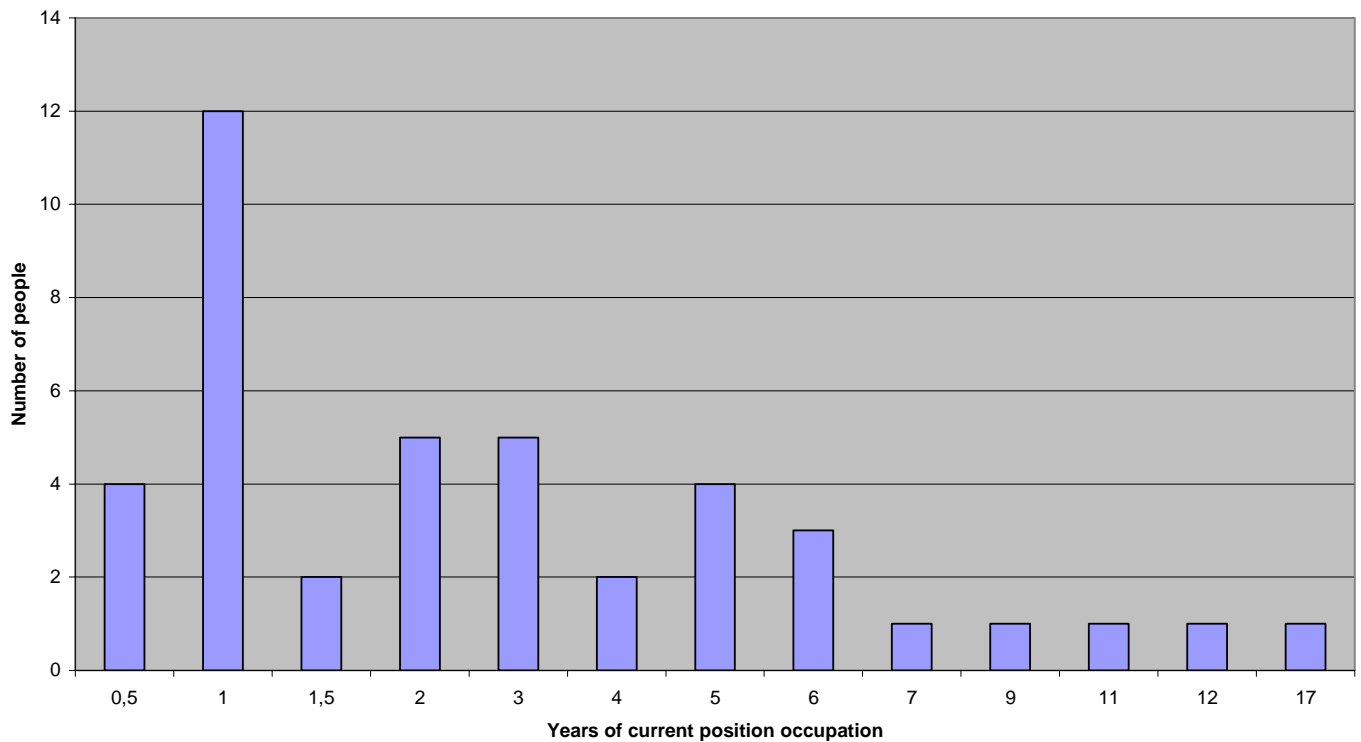


Figure 8. Respondents' current position occupation

Then, it is essential to show respondents' working experience level. On Figure 9, the allocation of the respondents' experience years is displayed. The outcome of this chart is that 71% of the population has from 5 to 37 years of experience concerning project management. In average, people's experience counts 7 years. Only 29% has from 2 to 4 years of experience.

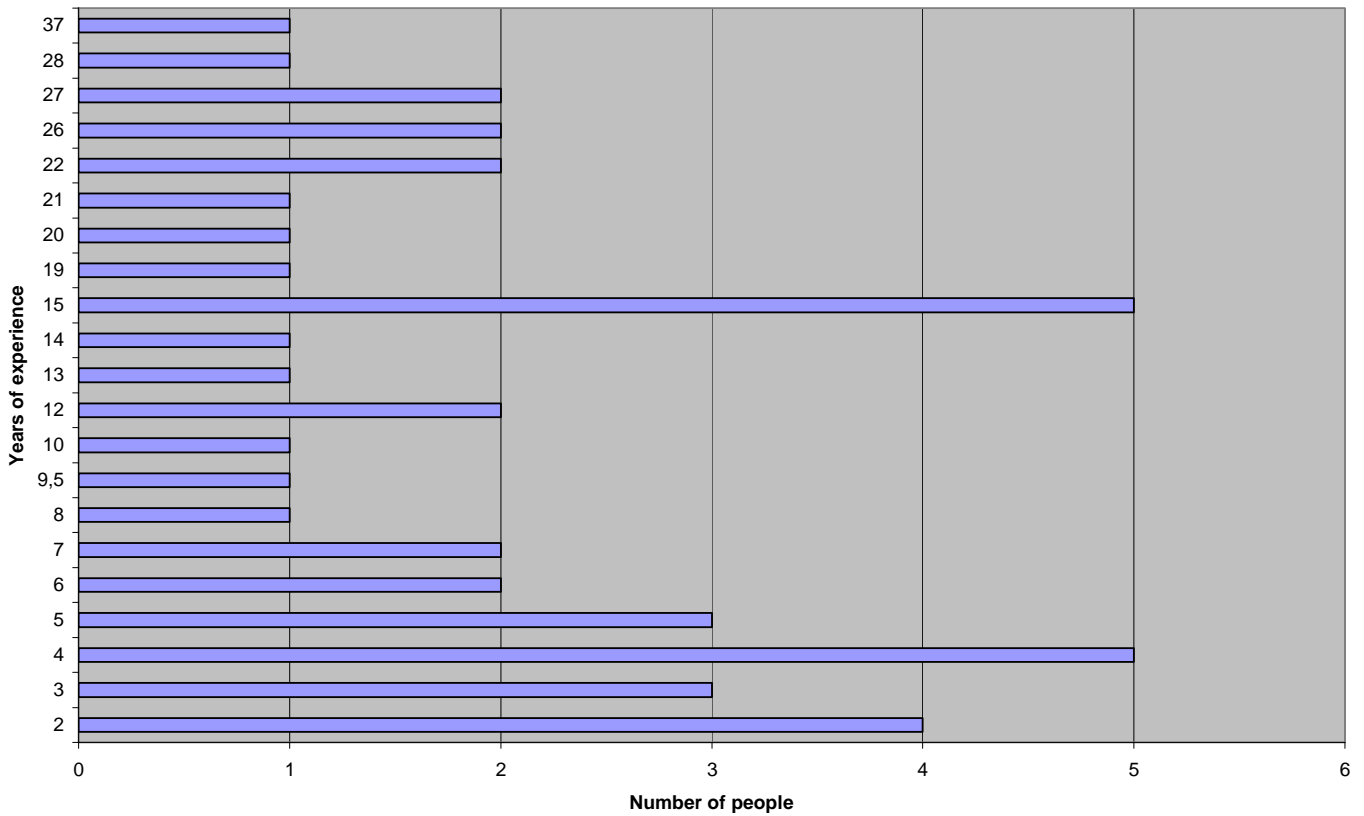


Figure 9. Respondents' current position occupation

Next, author presents several tables in order to pass along to the vital results of his research.

Agreements and disagreements in statements like “You run into difficulties, concerning communication aspect” and “Some problems, regarding communication, are recurrent” are catalytic to the conducted survey to come to its results. In this way we encounter the following elements:

Table 2

Difficulties, concerning communication aspect.

Difficulties	People
YES	41
NO	1
Total:	42

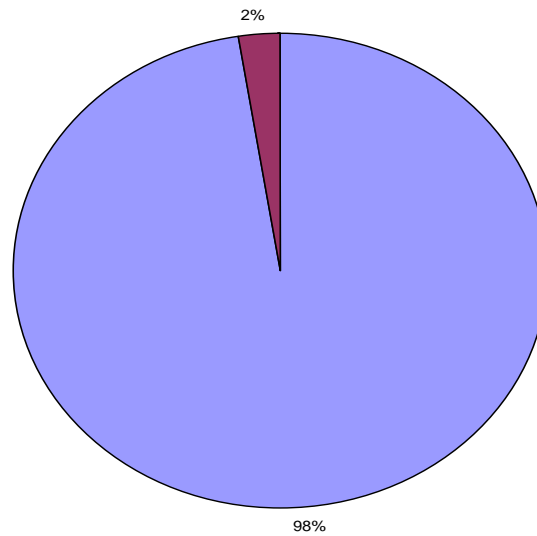


Figure 10. Respondents are running into difficulties

Almost 100% of the population runs into difficulties concerning communication aspect. Especially, 98% of the population, which corresponds to 41 respondents, runs into difficulties and only 2% (1 correspondent) answered that he is not running into (Figure 10). From those, 37 individuals answered that the difficulties they are running into are recurrent (88%) and only 4 respondents in total of 41 (12%) answered that the difficulties they met are not repeated. The pie chart below shows exactly this outcome (Figure 11).

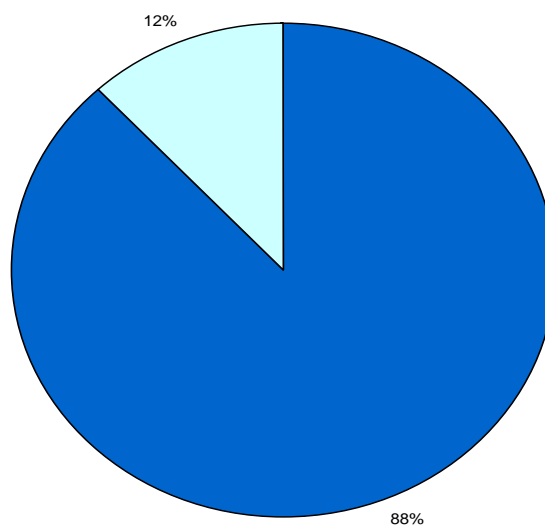


Figure 11. Iteration of difficulties

Another interesting result is that 74% (Yes) of respondents believe that there are deviations between scheduled and actual progress of the projects due to ineffective communication, over against 26% (No) which does not agree with this. Figure 12 displays the detailed number of those people.

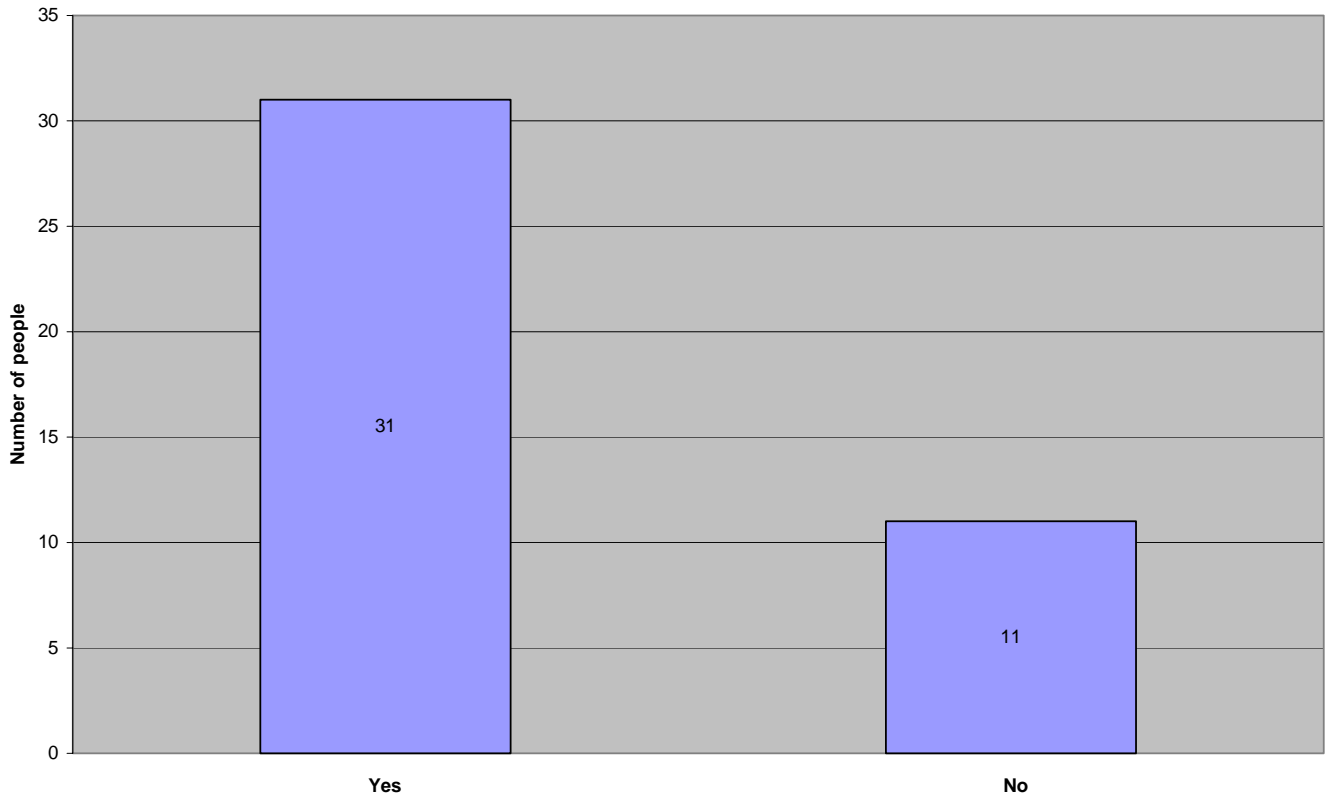


Figure 12. Distance between scheduled and actual progress shows big divergences

Moreover, it is noteworthy that the results came out from the choices in the statement “There are people in your Department that you can not collaborate with them adequately”, are not as clear as the previous (Figure 13). In particular, there exists a percentage of 45% (Yes) which states that it runs into difficulties, caused from its colleagues inside the same Department and another 55% (No) which claimed that the above problems occurred by people of the other Department, namely Project Management or Operations Department, proportionately in which Department they belong.

After a second approach and on the occasion of another question, which was answered by the same people, we can say that about the same percentages came out. Those are that 43% agreed and strongly agreed with researcher’s statement “Existing communication skills are not effective inside my Department”. There exist also a 29% that keep neutral position and another 28% that disagree or strongly disagree.

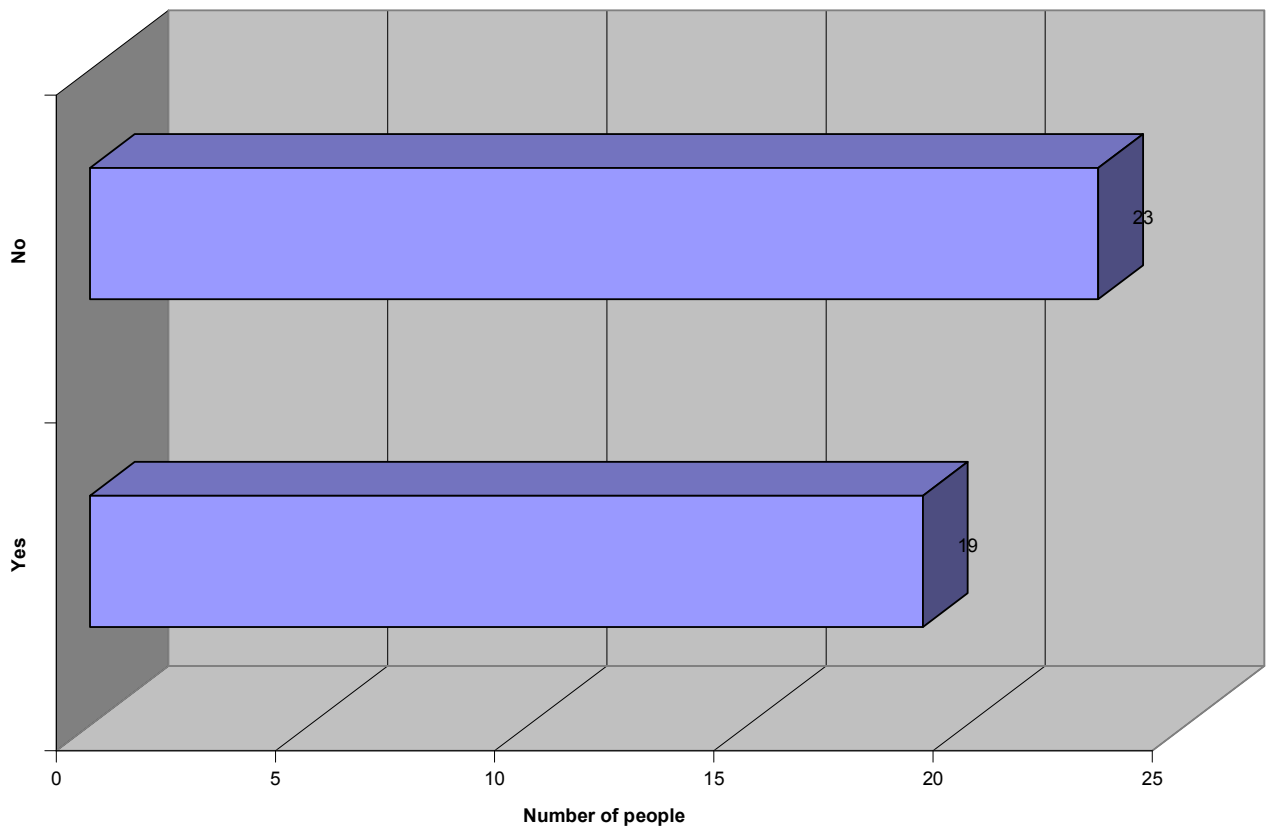


Figure 13. Cooperativeness between colleagues of the same department

It is now indispensable for the researcher to provide readers with results concerning the effects of deficient communication. In the next table (Table 3) all “stakeholder’s” responses of this survey is portrayed. In the language of numbers, 58% (24 people) of the population believed that bad communication brings disarrangement on project’s time, on cost and performance together, 21% (9 people) alleged that only time and cost are induced, 10% (4 people) claimed that time and performance are only affected and there exists another 11% (it is translated to 5 respondents) which feels that only one of the three areas can counter problems due to deficient communication at project’s bid phase. The Table below and the Figure 14 show all possible combinations of participants’ answers in the survey.

Table 3

Ineffective communication aspect has impact on three areas.

Areas	People
Time	2
Cost	1
Performance	1
Time & Cost	9
Time & Performance	4
Cost & Performance	1
Time, Cost & Performance	24
Total:	42

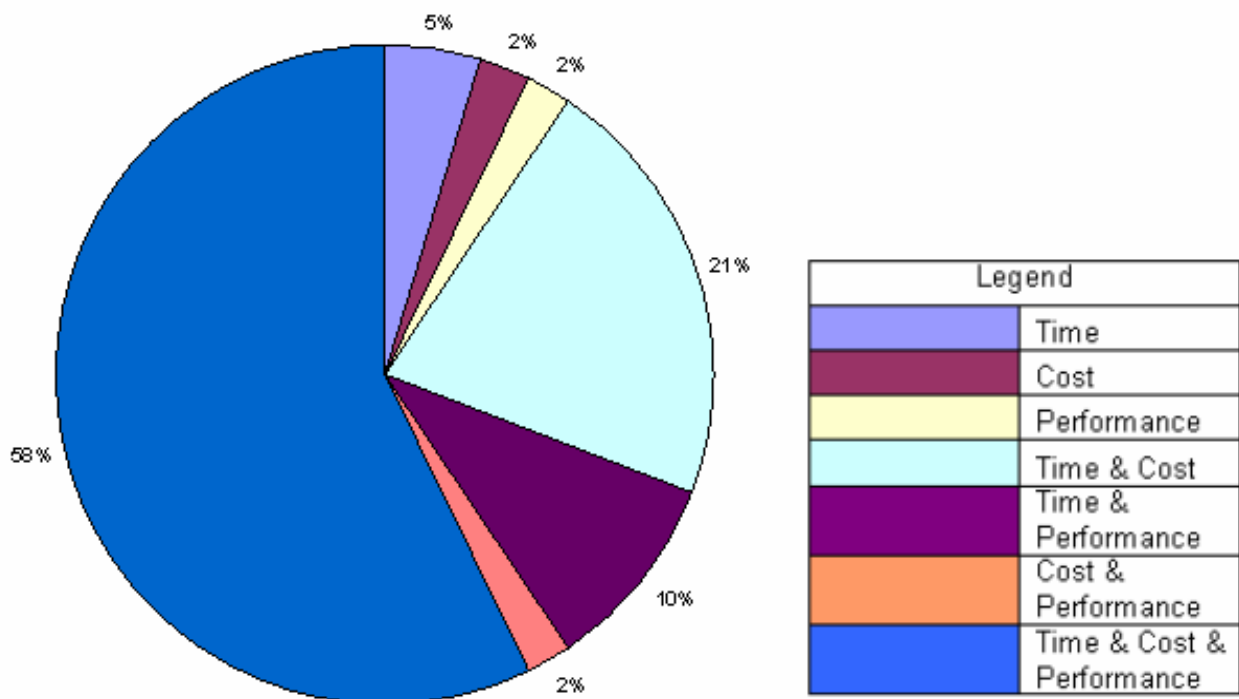


Figure 14. The conjunct impact of ineffective communication on Time, Cost, Performance

2. The Need is Proved and it is Now Necessary for a Channel/Template to be Formulated

From this point, some of the results which will be presented in the current thesis report, do not show exactly the one hundred percent of the real picture of projects concerning their final success or failure, as the survey's result is not affected positively or negative, but there are only some diminished percentages. There will be an explanation by the writer about this issue in the following and last chapter.

Returning to the outcomes of the research, 50% of respondents believes (simple or strongly) that projects are not scheduled adequately on bid phase and 24% of them is neutral. Only 26% believes that the planning phase is adequate. In addition, it is believed from 79% of those who answered, that projects did not

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function as were initially scheduled by Project Management Department and 14% keeps neutral position. In an effort to combine this outcome with the previous one, presented that 72% claimed that projects were not functioning as described on bid phase and only 24% was neutral, then a reason emerges to start being anxious for what is really happening on projects, even before their start.

In order to ensure that there is no chance for any ambiguity to exist, author provides readers with additional elements of his survey. Regarding bid changes after its announcement, 62% of people answered that it is true and a 31% does not state clearly its point of view. Moreover, 67% of people stated that project's scope has changed during project's execution phase, 19% are neutral and another 14% simply disagree with this statement. Even though bad communication exists in project environment, 23 people (54%) tend towards the opinion that projects finally functioned satisfyingly, only 12 of them state that projects finally did not function satisfyingly (29%) and 7 are neutral concerning that aspect (17%). Having in mind that the same people who gave the above answers, they all claimed at the same survey that problems regarding communication are crucial for project success, a question can easily come out and this is: How can projects finally functioned adequately, after the existence of communication problems that are crucial for project's advancement? Next chapter of present thesis report is going to answer on this question.

Last but not least, 69% of respondents (29 people) believe that communication skills need changes in order to be effective, other 24% (10 people) expressed their neutral position and only 7% does not agree with this statement, which corresponds to 3 people. Whereas only 69% of the population tends to the opinion that the need for changes exists, the 90% of those (38 people in total of 42) gave the answer that they need to find a solution in order to minimize if not eliminate, hidden costs, delays and all those difficulties which can occur due to the deficient communication.

Finally, in proof of the aforementioned another indisputable percentage comes (95% which corresponds to 40 people, see Figure 15) in a manner to show that the project stakeholders, independently in which Department they belong (Project Management or Operations one), believe that they have to implement and use some kind of communication channels, so as to eliminate scope changes and especially those which have impact on the included in original contract (variations or amendments concerning deadline/milestone changes or/and budget/specifications changes).

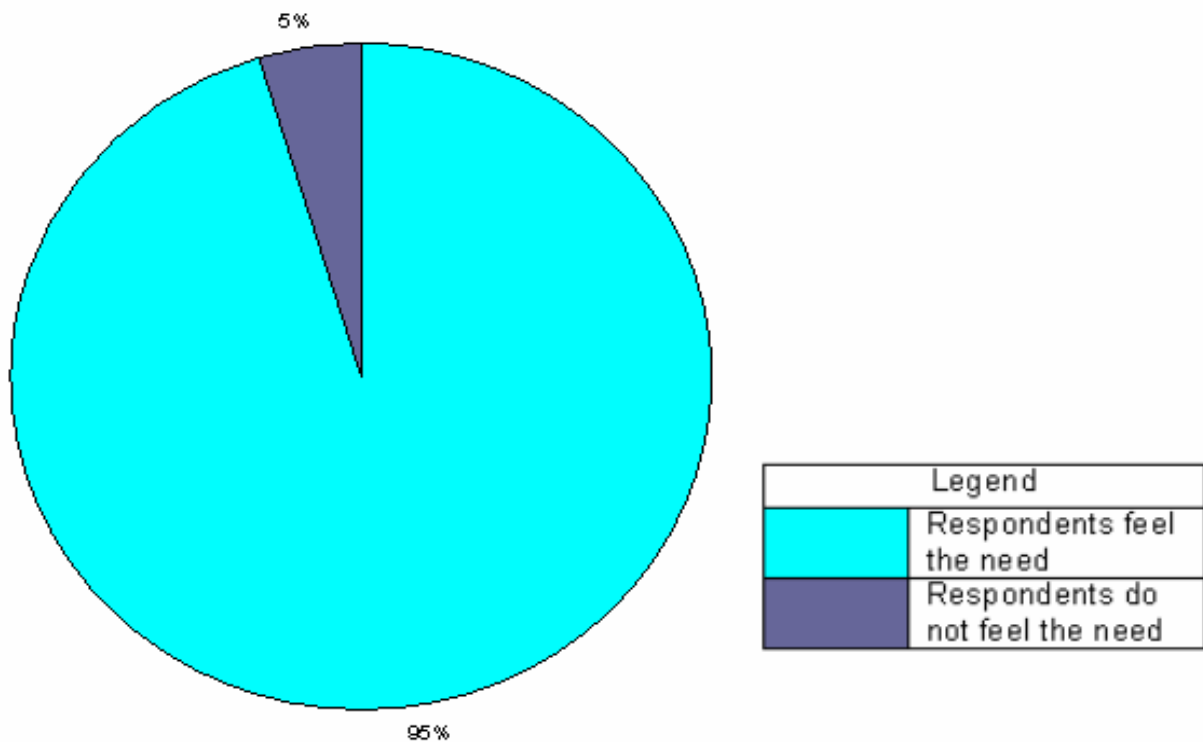


Figure 15. Respondents feel that communication channel implementation is needed

It is now clear that author's intention for this research, which was addressed in the introductory section of the document, has been resolved and can now be said that communication status of an organization impacts on its culture. It is imperative that project manager has to act without delay and assure that changes will be applied in a way to turn over this situation, before affecting project's scope.

Chapter 6 – Discussion, Conclusions, Recommendations

Communication Channel Suggestion

To the author's knowledge and as regards Greek managerial environment, no other study has examined effectiveness or not of communication channels between two of the basic Departments that collaborated on project's inception phases: Project Management Department and Operations Department.

After the elements exposed in the previous Chapter, concerning utilization of channels during project bid phase and the bibliography that both proved the need to formulate a communication channel by way of template, in order to minimize unnecessary scope changes and hidden costs, there is no time like the present for each of the team members to understand that the importance of high communication level is essential for project's success.

After the addressed procedure on the methodology section of this thesis report (Chapter 4), with the help of which author found out his results and before giving meaning to these results listed in Chapter 5, he wants to say few words concerning the survey he conducted. First of all, quantitative design as a manner of getting proofs about communication status and especially survey with questionnaires, as the method the writer utilises, contains risks.

Readers must firstly remember some of the presented results depicted in the current thesis report, which do not show the total picture of projects concerning their final success or failure and afterwards must have in mind some parameter that can be understood only after author's explanation regarding this issue. Once, the non seriously supplementation of the questionnaires from those people who participated in the survey is one of the reasons that leads to increased results, more than those that had to exist.

Then, an extremely big number of people who work on big projects showed unwillingness to answer and return questionnaires. Probably they do not understand that if they supplement the substantial answers, after it is possible to resolve the existing problem.

Since the bigger part of the questionnaires was sent to individuals who work on projects put in Greece, another issue that can be set for discussion at this point is that the Greeks were not acquainted much

from research aspect, as they answered the questionnaires without paying the appropriate attention. This event appeared mainly on respondents' age group from 20 to 29 and less from 30 to 39 and upper. Although all respondents possess at least a Bachelor Degree and 70% of the respondents are Heads, Managers in their Departments or Administrative assistants and Technical Experts, however this critical incident occurred to author's survey. Researcher momentarily made the thought: *"What am I asking about communication during project's bid phase, since people who hold key positions on their projects, independently the authority they have, are not in position to fill in with the appropriate gravity a simple questionnaire dedicating 5-7 minutes! How they are going to manage and control projects if they cannot understand how important the communication is and how it works?"* As a result, this impelled the writer to make a preselection before concluding how many questionnaires he will use as his survey's population, in order not to affect survey's results. At the end he decides to utilize 42 questionnaires, as he described on Chapter 4, without having other worry.

This can work as lesson learned for people who want to start conducting a survey in the future. Maybe one of the results of this study could be another research that will examine the status of the statistical surveys in Greece, related to the rest Europe ones. This is at least one of the author's recommendations for additional research and study, to an issue that touches enough fields and not only those directly related with mathematics. In other words, he hopes that the not at all satisfying comments exhibited above about that topic will pave the way for other researcher's future investigation.

Nevertheless, it is time to give meaning on study's results regarding organizations or business and readers. Concerning the age of the respondents, it can be easily understood that the majority of the respondents are aged from 40 to 60 plus, which means that responsibilities and confidence are still synonymous with grey temples. In other words, old people give the impression of experienced people. Regarding the gender now, it is obvious that women did not take the opportunity to climb on key positions, as they occupy the 13% of the sample.

Thus, in our days, a positive result is that people involved with projects, hold at least one educational certificate, as reported and before. This culture can help them resolve potential problems generally and considering that their current occupation is in key positions in their organizations, independently if they are

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new employees or not, that designates the fact that rotation is a fact and that Board members give

opportunities to individuals who have not enough experience than others, especially in key positions of less importance. This can be verified if we take into consideration that the average of the years of last position's occupation is only 2 years. It emerged that whereas, they are new in their current position and they deal with projects in an average of 5 years, however they have a related experience in an average of 7 years. This may happen by counting in the working experience years and the years of educational experience.

Besides, results presented in the previous chapter concerning the base of the conducted survey, which is the intra-organizational difficulties in terms of communication, are disheartening. To illustrate, 41 in total of 42 people who encounter problems regarding communication have excited author. The resumption of those problems that 37 of the respondents face in their projects is another truth during the bid phase. Only 4 individuals from the sample do not believe that they meet recurrent problems in regard of communication and they leave to be meant that this situation of ineffective communication is truth for their working environment and they have been already familiar with! This means that they feel this commonplace is a fact that happened correctly to projects. It can be said that they perceive such situation as a natural one. Author finds this explanation as immunity to such problems that project management team and especially its leader, namely project manager, have never confronted and this is a negative aspect as communication is frequent, is everywhere and as previous studies have shown is the main project manager's occupation in daily basis.

Most of the participants in the survey declared that responsible for these problems are members of the other Department. Researcher can give three meanings to this result:

- a) They shift the burden to their colleagues from the other Department, or
- b) They are not able to recognize their inefficacy, or
- c) Both the above.

Therefore it could not be otherwise that most of the respondents believe that divergences between scheduled and actual progress of the projects exist due to ineffective communication. The real challenge for writer is to explain how projects can finally function satisfyingly after these communication problems, which are crucial for project's advancement. The only explanation that can be given, except of the non serious answers given by respondents, is that they sacrifice one of the three factors of a successful project: time,

cost, or performance, so as to save caused from the bad initial planning troubles and not reveal impact to project's final deliverable.

It is quite clear that successful communication affects projects positively and reversely deficient communication have negative reflect. This conclusion was made by researcher after the fact that 39 people chose that time section is affected from team's members communicative status, others 35 believed that this aspect can affect cost sector, also 30 claimed that performance can be affected and moreover that all of the respondents who answered that all these three parameters can be affected. It is impossible to deny that our decisions determine our route, so managers have to reduce presence of bad communications between our team members.

Another major result emerged from this survey is that 50% of respondents stated that projects were not scheduled adequately on bid phase, in contrast with only 26% that incline in adequacy of the schedule and 24% that hold neutral position on that issue. There is a declination to the almost 100% of the population who runs into difficulties concerning communication aspect but this is attributed to the not serious completion of the questionnaires, as mentioned above. Also, 79% of those asserted that projects did not function as were initially scheduled by Project Management Department and the bid changed after its announcement in a percentage of 62%.

As well, participants in researcher's survey have predicated the changes that appeared concerning time, cost and quality issues in a percentage of 67% (14% claimed that project scope does not change and the last 19% are neutral). The 54% of the respondents generally feel that projects finally functioned without further consequences, other 17% stated neutral and only 29% of the sample believe projects did not function as was expected. More specifically, respondents answered that ineffective communication caused unwanted changes on:

- a. Time (deadlines and milestones) in a percentage of 95%,
- b. Cost (budget, variations, etc.) in a percentage of 88%, and
- c. Performance (specifications and quality issues) in a percentage of 74%.

None of the participants in the survey stated that unwanted changes caused from above problems on time and on cost. There exists only one person (2%) who claimed that the same for performance issue only,

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while the other people keep neutral position on this matter, in all three parameters (5%, 12%, 24%

respectively). After all, the need to formulate communication channels is reinforced by the fact that 72% of the population confirmed that projects are not functioning as described on bid phase.

Thus, communication skills are not effective inside several PMTDs (survey maintained it on 44%, after calculating the average of two questions). Percentages do not show the individuals' clear prospect because of the known reasons which author previously explained. At this point, researcher wants to add one more important cause that over and above those mentioned earlier may explain why these variations appeared. Some of the “stakeholders” of the conducted survey told the researcher that they were afraid in case the results of this survey will become known to their superiors or to Board members and CEO’s and is a fact that in any occasion they do not want this. Although he explained for one more time that the survey is conducted anonymously, all responses will be kept confidential and there is no instance to reveal to a company’s Board member that people in organization’s Departments “X” and “Z” are unable to collaborate together effectively, those people tried to “cook” their answers or they did not returned the questionnaires at all.

Finally, he asked whether stakeholders belonging to Project Management Department and Operations Department have to implement and use some kind of communication channels in order to eliminate scope changes, like amendments and variations orders on original contracts, concerning time, cost, or /and performance issues, 95% of them responded that this need really exists. Moreover, they agree in a percentage of 69% that communication skills need to be renewed so as to turn from deficient to successful. In a more personal approach now, based on their personal need to find a solution to minimize those defects concerning hidden costs, delays, etc, the 90% of the population reported that they have to take initiative and act proportionately.

In order to find out what is missing from projects and what must continue to exist and at the same time to encourage people working on them to understand their needs and act as it is advisable, writer examines and analyzes what particular aspects of communication channel exist between several PMTD that team members do like and dislike as a manner to abut in the appropriate channel/template which will also be suggested to other people for action.

The majority of the respondents accepted that the absence of communication is a really big problem.

Concerning all those issues which bring out negative side effects to communication most, customary remarks of the respondents are that communication via e-mails is a common communication channel between various Departments. Although they recognize it is a direct and effective channel of communication, they find many times it is also an “iceberg”, due to bad manipulation of people. Furthermore, it seems that this type of communication reaches to a point to replace face-to-face communication as people in neighbor offices prefer to “speak” electronically than loudly. Another outstanding element is that people in every Department are so busy and sometimes forget to share meaningful information. This can cause duplication in efforts, it can lead to a situation where Departments are waiting for each other, in other words can lead project team members to rework. As has been already evolved in Chapter 3, the different styles of communication can also cause problems. As a result, when there is no stability and people are at times, either very direct to their communication styles or are gentler, then problems cannot be avoided. The need to follow up the execution of the already agreed actions is also a frequent remark of unwanted situations during bid phase, as it shows that these two Departments do not pay enough attention and do not weight the objectives and priorities that each one has. This means that people consume their efforts to compromise the disagreements and to find solutions, instead of having already organized such issues from the beginning. Values of shared mission and vision are unknown for people dealing with projects and their position takes now the personal vision of each individual who constitutes a team and the shifting of the burden.

Apart from that, other annotations have been divided into two sections. The first is that people are afraid to speak, as some kind of suspiciousness and the fear of openness exist, due to personal ambitions of a part of individuals inside Departments. The other part concerns people who have not set a specific communication channel in their Departments or further in their organizations. As they claimed, the main concept is to do only the assigned work faster and easier. Team members, who collaborated with public corporations, have faced except from these issues, bureaucratic procedures and delays owed exclusively to bureaucracy. Some of the respondents called it as their new “communication method” and some others characterized this situation as the monster of their projects that engulfs time and money.

Additional aspects regarding what brings such problems, is that too many people are responsible for one simple task, that too many correspondence exists (letters, faxes, etc.), meetings that were conducted with many participators, including people with no intention to take part to the decisions and the short cut of the agreed communications methods which occurred after people alleged the accommodation of the procedure. Participants in survey have referred also more confused cases, during which the procedures of the existing plan are not followed and also cases of teams which have specific communication channels but they feel that they need technical experts to use them due to their various scientific fields. Moreover, a remarkable number of respondents exist, which expressed that due to the different educational background of the team members and due to the lack of problems archive inside organizations which raised in the past during a contract, lead the same problems to be repeated in the next contracts.

In a nutshell, face-to-face communication exists only during the meetings and the rest day team members utilize e-mails to interact among each other. If there are underlying problems on communication, there will be problems when advancing from the bid phase to implementation. So, project manager's target must be the existence of clear specifications and information, so as the implementation will not suffer and therefore they can control the project adequately. Also there is the need to keep the records in a way to work as lessons learned for people dealing with projects and holding key positions in next projects.

On the other hand, respondents shared with the researcher their good experiences regarding communication. Tactics and situations which were finally successful, as a manner to accrete communication status inside organizations, are going to be revealed by the writer in order to help readers adopt some of the proven good ideas.

Regular review meetings with predefined agenda, among persons of different Departments may be the key for the successful complication of a project, as persons from different departments can discuss a lot of critical subjects and help to achieve the better understanding of customer value, needs and expectations. This regular tête-à-tête situation with clear conclusions helps team members to minimize communication problems. An additional positive step on that way is the use of new technology, which facilitates our transactions. Good relationship and in personal level can also serve project scope's achievement. It is

remarked that organizations in general tried to handle projects better by sending site representatives to all sites where project and sub-projects are executed, as a way to handle better its actual progress.

It is strongly recommended that companies have to give motives to their employees or stakeholders. It is fact that they always try to deal with any problems or difficulties that projects may face and keep in contact for new instructions. Project manager, for example, could be able to reward a member's hard work with some kind of "special treatment" or bonus.

After agreeing to be flexible when a change will occur, a team has to take time to plan communication. Also, each one of the members have to talk about the best way to share information and to assure that these will be available and open whenever wanted from one or other Department. An effective way to achieve this is to open each meeting with talking about what participants did at the last meeting and close each meeting by preparing written minutes of meeting that can be shared to all participants. Those minutes of meetings constitute good opportunities for the members to be certain that everything that were said and heard inside the meeting room are accurate even after exit of the room.

All in all, author pays regard to possible existence of reaction or reporting from respondents' point of view concerning the increase of unnecessary scope changes, raised from the lack of communication. Even though most of respondents have reacted or/and reported formally or unofficially to their superiors by supporting the need for existence of more effective communication inside their Department, most times the phenomenon of no reaction was observed. On the other hand there are enough people, who adduced that the issue of reporting is not in their authority and if they would try to report the above problems to a supervisor this would diminish individuals' morale. Researcher believes that neither employee will be degraded, nor communication status has to remain in low standards due to the fear of the unknown. Collaboration and effectiveness inside team will never be inserted inside team's borders with such people's attitudes.

The maturity of a team can be shown only if competent individual behaves as one and united team, which is characterized from:

- ❖ Appropriate Leadership,
- ❖ Suitable membership,
- ❖ Commitment to the team,

- ❖ Constructive climate,
- ❖ Concern to achieve,
- ❖ Clear Department role,
- ❖ Effective work methods,
- ❖ Well-organized team procedures,
- ❖ Critique without rancor,
- ❖ Well-developed individuals,
- ❖ Creative strength, and
- ❖ Positive intergroup relations (Todryk L., 1990).

When team members understand these aspects and be supported so as to be approached like that, then they can try to stop the scope's creep by stopping those parts that might not be necessary for projects. This process will help manager to understand from where did the changes come from and next, he could be able to determine if these new data could be included on scope or not. After an agreement on that issue, project manager has to start to communicate and get involved with the whole team. In case of disagreement, project manager simply does not include changes to the project scope and project team will see the possible perspectives of a postponement until the next version of the project, which means after the completion of the first version of the project.

To sum up, author suggests the development of Responsibility Assignment Matrices (RAM) or Linear Responsibility Charts (LRC) during project bid phase as a way to avoid overlaps in authority and team relations. This offers project manager a number of advantages as is the existence of a clear picture of team members' responsibilities. In particular, information as who must approve, who must be notified and who must be consulted regarding each activity of the project, appeared from these two tables.

From all the above, as a next step of a process which can lead project team members not to live again the appearance of variation requests and amendments on original contracts, researcher supports the opinion that a flexible communication plan is one strong "weapon" to project manager's hands. This process can increase "management skills" of team members and decrease those of "doing", also reinforce time

management and tend to eliminate bottlenecks concerning management aspect. A sample of such useful plan that can be utilized by project team is presented below (Table 4).

Table 4*Sample of communication plan.*

Accession Number (A.N.)	Communicator's Name	Communicator's Position	Communicates with...	Communication's reason	Medium will be used	Frequency	Gives report to...	Extra information	Reporting/documentation Method
1									
2									
3									
4									
5									
6									
7									
...									

As a result of this study, it is recommended that everyone who deals with projects must have in mind that all thoughts that individuals will make, have to solve not only the symptoms of a problem but the problem's root. So, the solution which author wants to recommend is that we have to solve the real problem. In such a way project manager in collaboration with his team's members have to review all these parameters before allowing execution phase to continue. This is so not to get any surprises in the future and make healthy communication stick in projects so in the bid phase as much as during execution's phase.

Communication issues are not effective when dealing with projects in our country as far as personal interests and political ambitions cause problems in the integration of the project's execution and this impact both on project owner and users. As described previously, communication with public corporations is a real trouble. First of all, Government has to maximize their communication status in each service and after all, either directly or indirectly collaborated with them, will be also refreshed. It is also important that information received from stakeholders should be used to improve future project performance by using the lessons learned process.

Collaboration is everything. If no one inside a team can synergize with the others, projects cannot end satisfyingly and then overruns on cost, time and performance will occur. If projects are not functioning well, every person that deals with it will have problem, either deserve it or not. That means team: in success and in failure all members are responsible on the same rate, except project manager who as a leader, must take the responsibility and put in front his breast. Instead of conservative perceptions and bureaucracy that lead to old fashioned reactions, the need for proper and accurate dissemination of the information item in a timely manner, largely enables the scheduled work and facilitates the efforts to achieve performance excellence.

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Appendices

1. Appendix A: Questionnaire Template used for the Research

Thank you for taking the time to help author with this survey.

Your answers and experience are important. All responses will be kept confidential.

Section I: Personal Information - Communication Status

1. In what age group are you?

- 19 and under 40 - 49
 20 - 29 50 - 59
 30 - 39 60 +

2. Gender:

- Male
 Female

3. Educational level:

- Compulsory Education Doctorate Studies
 Higher Education Other
 Master Degree Studies

4. In terms of your current occupation, how would you characterize yourself?

- | | |
|---|---|
| <input type="checkbox"/> Administrative Assistant | <input type="checkbox"/> Senior |
| <input type="checkbox"/> Professional | <input type="checkbox"/> Designer |
| <input type="checkbox"/> Technical expert | <input type="checkbox"/> Director |
| <input type="checkbox"/> Head | <input type="checkbox"/> Administrator/Manager |
| <input type="checkbox"/> Project Manager | <input type="checkbox"/> Other, please specify: |
| <input type="checkbox"/> Deputy | |

Please supplement your answers.

5.	How many years are you dealing with projects?	
6.	How many years do you occupy this position?	
7.	How many years of experience do you have?	

Section II: To be completed

Please circle your answers.

8.	You run into difficulties, concerning communication aspect.	YES	NO
9.	Some problems, regarding communication, are recurrent.	YES	NO
10.	There are people in your Department that you can not collaborate with them adequately.	YES	NO
11.	The distance between scheduled and actual progress shows big divergences.	YES	NO
12.	Do you believe that stakeholders of PM and Operations Departments have to implement and use some kind of communication channels in order to eliminate scope changes (amendments) and hidden costs (variations) on original contracts?	YES	NO

13. From your experience, problems regarding communication aspect have impact on:

- Time (deadline/milestones)
- Cost (variations/budget)
- Performance (specifications/quality)

[You can tick more than one answer in this question]

Section III: Please answer the following questions in a few sentences:

These questions intend to reveal what you think and feel about certain areas – there are no wrong answers.

14. What particular aspect(s) of communication channel exist between your and other Department that you dislike?**15. What particular aspect(s) of communication channel exist between your and other Department that you like?**

16. Until to date have you reported or reacted, concerning the increase of unnecessary scope changes arise from lack of communication?

Section IV: Please indicate the extent to which you agree or disagree with the following statements by giving a rate to the scales below.

**SD = Strongly Disagree, D = Disagree,
N = Neutral, A = Agree,
SA = Strongly Agree.**

- 17. Problems, regarding communication, were crucial for project's success. SD D N A SA
- 18. Above problems caused unwanted changes on time. SD D N A SA
- 19. Above problems caused unwanted changes on budget. SD D N A SA
- 20. Above problems caused unwanted changes on specifications. SD D N A SA
- 21. Projects were scheduled adequately on bid phase. SD D N A SA
- 22. Projects were not functioned as initially scheduled by PM Department. SD D N A SA
- 23. Bid changed after it was announced. SD D N A SA
- 24. Project scope changed during its execution. SD D N A SA
- 25. Projects finally functioned satisfyingly. SD D N A SA
- 26. Projects were not functioning as described on bid phase. SD D N A SA
- 27. Existing communication skills are not effective inside my Department. SD D N A SA
- 28. Communication skills need changes in order to be effective. SD D N A SA
- 29. I need to find a solution in order to minimize if not eliminate, hidden costs, delays, etc. SD D N A SA

