MANAGING STAKEHOLDERS:

A CASE STUDY IN ATHENS, GREECE

by

Mr. ANTONIOS BAKOGIANNIS

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Supervisor: Dr. STEPHEN PRYKE

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ABSTRACT

Greek Construction Industry and Market have changed dramatically during the last decades, due to the general development of the country; people need modern, safe and functional houses to cover their new needs.

However, a new construction project may affect people directly or indirectly, positively or negatively; that is why they either support or oppose the implementation of it. They represent the project stakeholders and their attitude is important to its completion. They need to be identified early and managed carefully, because they have a key role to the success or failure of the project. Stakeholder Management becomes a crucial issue to the whole construction process. Stakeholder Analysis represents the main procedure and a variety of different management approaches offers the project manager the opportunity to choose the best one.

The report presents as a case study a live and ongoing project in the area of Athens, Greece, as well. Its external stakeholders, that is, the local residents-neighbours, of that new construction project opposed it and reacted severely. The developing company, 'B&I Constructions Ltd', faced and managed this problem.

The researcher through the edition of a questionnaire, according to relevant theory, and the interview process, gathered the necessary data. Quantitative and Qualitative Data Analyses provided useful and important conclusions and recommendations were made on this important topic.

Key words: Construction Project, Project Stakeholders, Stakeholder Management, Stakeholder Analysis, Quantitative and Qualitative Data Analyses.

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Appendix A: the final questionnaire

1 Introduction

"I want to know God's thoughts; the rest are details."

Albert Einstein (1879-1955)

Managing stakeholders has been a highly important issue for thousands of years, wherever a new construction project had to be made. Projects have a purpose; mainly to make people's lives easier. These are the people who support a new project and try to help as much as possible. However, there are often groups of people who oppose the new project. This is where problems arise and immediate measures have to be taken in order to overcome and solve them. This report investigates the sensitive issue of Managing Stakeholders. Wide bibliography and a case study attempt to provide useful findings in this research.

The second chapter is exploring the Greek Construction Industry and Market, especially in the capital city of Greece Athens. It is separated in three periods, each one providing different but influential characteristics. It is the post-war period, the 1970s and after the 1990s. The 'Managing Stakeholders' problem in modern Greece is presented, so that it will be further analysed in next chapter.

The theoretical background is very important in the whole research because it is the spine of it. It is the framework upon which the questionnaire and the conclusions depend. A large number of authors have dealt with the subject, such as Winch (2002), Cleland (1998), Druker (1996), Hofstede (1997), Johnson and Scholes (2003), Handy (1999), Mintzberg (1995), Morris and Pinto (2004), Porter (1980). Their work is presented in this chapter thoroughly.

The fourth chapter is the one that deals with the research methodology that was followed. Depending directly on the relevant theory, a questionnaire will be used, in a Likert Scale form, which will be answered by the stakeholders themselves, through the process of interviews. The Quantitative and Qualitative Data analyses that follow will provide us with very useful conclusions and helpful recommendations.

As mentioned before, a live and ongoing project in southern Athens, Greece, will be used as a case study for the research. Both the developing company 'B&I Constructions

Ltd' and the project are presented, in order to have a clear view on the actions that were taken and make suggestions for better ones.

Then come the analyses, both quantitative and qualitative, of the data gathered by the process of interviews and answering the questionnaire. This is the most important part where data are transformed into information and they are the main means to give conclusions and recommendations of the final chapter.

The final chapter presents the findings of the research that were revealed from the answers the stakeholders gave to the questionnaire through the interview process. Last, the researcher suggests and recommends ways and procedures to manage stakeholders better, depending on both the findings and the theory. Stakeholder Analysis and Stakeholder Management become an important part of the whole process of construction.

The goal of the report is to try and identify the stakeholders of a construction projects, classify them according to their attitude towards it, support the supporters and try to minimize the affect of the opponents. This means that a project manager must learn to read people's thoughts and predict their actions that can harm the time, cost and quality of a project.

2 Greek Construction Industry-then and now

"The Construction Industry in Greece constitutes the 'steam-engine' of the Greek economy representing 16% of the GDP in year 2000 and it is estimated to reach 20% roughly during the next years".

Association of Civil Engineers of Greece (2001)

2.1 Introduction

The Greek Construction Industry has evolved greatly over time. The present form is still a dynamic one, which means it still changes and tries to adapt to the new standards set by international economy and other forces. However, a short review to the near past in order to present the internal-national forces that formed in a way modern Greek Construction Industry and Market can be very useful.

2.2 Evolution of the Greek Construction Industry and Market

Modern Greek Construction Industry was mainly formed after the civil war that ended in Greece during the 1950s. It was a time when countryside became a hostile place for people with conflicting political beliefs and it started depopulating. It was also the time when people were looking for better work, mainly, and improve their standards of living, as well. Their ambitions could not fit in the Greek villages and their dreams had started to become real. Athens and the harbour of Pireaus represented the whole commercial activity of that time and the demand for work was high. But a big question rises here; was Athens ready to host all these people at the specific time point? Apparently not! However, the city welcomed everybody, and a chain reaction started.

The traditional neo-classical buildings that existed in the area of Athens were the representatives of local architecture. But needs were growing and changes had to be made, as Hadjistergiou[1] (2002) points out. In many areas in Athens such traditional neo-classical buildings were demolished in order to have modern buildings built. The new multi-floor buildings had to offer accommodation to the new arrivals from the countryside. Quantity

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[1] Hadjistergiou, G. (2002), "The post-war reconstruction of Greece", **Newsletter of Technical Chamber of Greece** (TEE in Greek), 29 July, [http://www.tee.gr/online/epikaira/2002/2209/pg147.shtml]

was more important than quality at that time. That is why these structures are characterized as dull and tasteless. This phenomenon reached its peak during the 1970s and it was the time when Greek Construction Industry was mainly formed and preserved most of the characteristics for many years.

Figure 2.1 – Athens in the 1950s
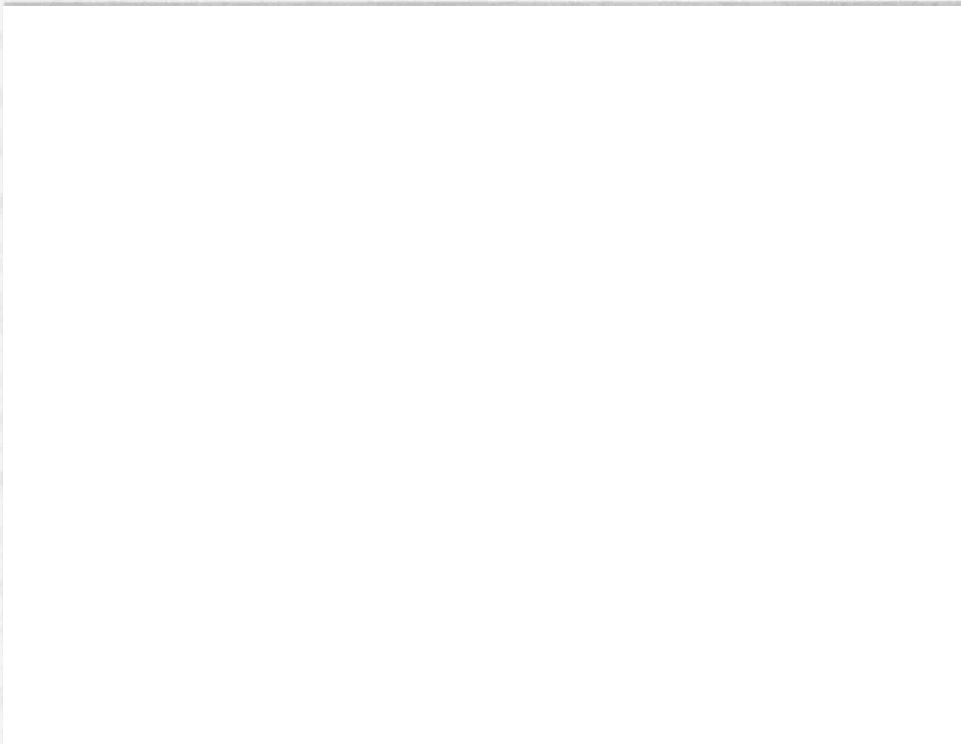
After the severe earthquakes that took place in Greece in Kalamata 1986, Pyrgos 1993, Egio 1995, Grevena and Kozani 1995, Konitsa 1996 and Athens 1999[2] the design had to be more detailed and, of course, offer greater protection against earthquakes. The 'Hellenic Ministry for the Environment, Physical Planning and Public Works' and 'Town Planning Agency' of Athens gave permissions to the construction companies to build high structures and provide Greek Market with modern, safe and functional buildings and dwellings. Modern structures can be 8-9 floor ones, comparing to the maximum of 3 floor traditional neo-classical ones. This is the last period, after the 1990s.

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[2] Data taken from the 'Earthquake Planning and Protection Organisation' of Greece

But as a devil's advocate would say, "Is this new face of the Athenian Construction Industry a consequence of the speculative attitude of the constructors or of the speculative attitude of the people of a whole country who just wanted to get away from the poverty of previous ages and enter the age of consumerism?"[3] The answer is, "probably both!"

2.3 Greek stakeholders

That new face of the Athenian Construction Industry and Market that led to the great 'explosion' created serious problems. The transformation that began during the 1950s reached its peak after the 1970s and is still going on up to now. Construction Industry and Market has attracted a lot of enterprises; as the main body of the industry consists of Small and Medium Enterprises (SMEs) and there are no barriers to enter, the players became numerous.

The environment has always been a very important issue within the Greek Construction Industry. There was a time once when Athens looked like countryside. There were lots of parks everywhere, with fountains and even some kind of wildlife. But constructions started taking away these sites, as they were replaced by tall buildings made of armed concrete. Suddenly, the levels of pollution started increasing dramatically, in the center of Athens, and everyday life started becoming intolerable. This is when people started moving to the suburbs, leading to the expansion of Athens towards every direction[4].

The entrance of modern Greece in the European Union (EU) and European Economic Community (EEC) accelerated the facts that took place. Banks of Greece started to offer loans with extremely low interest rates, approximately 4% comparing to the 25-30% of the 1980s. Many enterprises and individuals were motivated and entered the industry. Entrepreneurs could find the money to start a business and customers could find the money to buy new, modern houses for their families. It is true that the whole economy of Greece at the time depended highly on the banks and the money they gave. The most important stakeholder in a construction project was, and still is, the bank or the financier institution.

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[3] Hadjistergiou, G. (2002), "The post-war reconstruction of Greece", **Newsletter of Technical Chamber of Greece** (TEE in Greek), 29 July, [http://www.tee.gr/online/epikaira/2002/2209/pg147.shtml]
[4] Dimitriou, A. (2001), "Seven bullets in the heart of Athens", **The News** (Ta Nea in Greek), 3 March, 18, [http://ta-nea.dolnet.gr/print_article.php?e=A&f=16983&m=R18&aa=1]

Because of the glorious past from ancient years there are still many monuments hiding under the surface of the ground. The Archeological Service is responsible for investigating the ground at the phase of excavation and their approval is mandatory. There are numerous construction projects, not only private, but public ones, as well, that were stopped because ancient monuments were found during the excavation procedure. The Athenian Underground Network was stopped many times by the Archaeological Service[5]. Health and Safety in the construction site is one of the most important factors that help everybody be productive, efficient and effective. The Town Planning Agency is responsible for checking whether all the necessary measures and precautions are taken. They are very strong and their role is very important through the whole life of a construction project.

Last but not least, are the local community and the great power and influence they can have. It is more difficult when they can have access to local press and start spreading hearsays about the project and the company that is responsible. Small and Medium size construction companies depend a lot on locality; they chose a region or part of a city and they try to get good reputation by repeated projects that are famous for their good quality and reasonable price. This is how the market works. So, getting bad reputation that will lead to organized opposition is the worst thing that can happen, especially when it is supported by the Press. On the other hand, when the local community is aware of the background of the company and approves of the projects they undertake, it is the best advertisement and the best way to get good reputation and make money. They are the stakeholders that exist before the beginning and remain after the end of each construction project. The reasons for their reactions may be reasonable or preposterous, and they are aware of the power they possess to affect a project, but the way they have to be managed must always have the same target; solve the problems in the friendliest way and proceed.

2.4 Summary

It is quite obvious that the present form of the Greek Construction Industry and Market has changed dramatically over the last 50 years. This is an important period that

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[5] Katimertzi, P. (2000), "Excavations in the Athenian Underground Network revealed many...museums", **The News** (Ta Nea in Greek), 10 January, p.4 [http://ta-nea.dolnet.gr/print_article.php?e=A&f=16637&m= P04&aa=1]

finally defined the characteristics of this movement. It is the post-war period, the 1970s and the period after the 1990s up to nowadays. People moved from the countryside to big cities and they were the main reason that transformed Greece, generally, and Athens, more specifically. Needs and demands rose dramatically and people wanted more quantity and better quality. This change affected numerous people, especially the ones that were already living in the big cities. They are the main stakeholders that were affected directly. Some of them were open minded enough to accept newcomers, while some others were not. The former are the ones who supported general development, while the latter are the ones who oppose new construction projects. This fact makes the way they should be managed sensitive enough to be researched and come up to useful conclusions and recommendations in the end.

3 Theoretical Background – Relevant theory

"A typical project will have some stakeholders who will support it and some who oppose it. The question is, who is impacted by what this project is trying to achieve?"

Obeng (1994)

3.1 Introduction

The role of the stakeholders in a construction project has always been extremely important; they have a key role to the success or failure of it. Sometimes they can encourage it and help it getting finished, while some other times they can be the cause for stopping it. So, the first step is to identify them, then estimate their influence and impact they can have on the project, and finally analyse their feelings, control their perception of risk and, of course, respond or take the necessary measures.

The importance of managing stakeholders properly becomes a fundamental issue within the process of the construction project. The relationship between the project and its stakeholders is a dynamic one; it can change at any time, but it must always be in favour of the project. This is mainly the project manager's job!

3.2 Who are the stakeholders in a construction project?

According to Winch (2002), the project stakeholders are those actors which will incur a direct benefit or loss as a result of the project. They are classified into two large groups; the internal, which have a legal contract with the client, and the external, which also have a direct interest in the project, stakeholders. Internal stakeholders are divided into the ones on the demand side, that is, the client, the financiers or the superiors to the client, and the ones on the supply side, that is, the architect, the engineers and the contractors and subcontractors. External stakeholders are divided into private ones, that is, local residents and landowners, environmentalists and archaeologists, and public ones, that is, regulatory agencies, local and national government.

Table 3.1 – Project Stakeholders

Internal Stakeholders		External Stakeholders	
Demand side	**Supply side**	**Private**	**Public**
Client	Architect	Local residents	Regulatory Services
Financiers	Engineers	Local landowners	Local Government
Client's superiors	Contractors & Subcontractors	Environmentalists & Archaeologists	National Government

(Winch, 2002)

The members of the demand side may be an individual or even a whole organization. This means that the complexity and difficulty of managing them can be very low or very high. Project definition accepted by all of them is the primary and fundamental target, even before the start of the implementation of the project. The nature of people representing the supply side, architect or engineers, is directly connected to the reputation of themselves and their projects. Sometimes, they use the projects they undertake to gain good reputation and fame, ignoring the needs of their clients. This means extra costs or dissatisfaction of the client, as far as it concerns the project itself. This fight to gain the income steam from the project by both sides is what Porter (1980) calls margin in the value system. So, this fragile relationship needs a win-win attitude and not a zero-sum one.

Internal stakeholders represent the group that usually supports the project, because they are the group investing their money and/or reputation. External stakeholders are a more diversified group. They may support, be indifferent or oppose a construction project, even from a very early stage, for various reasons.

Private stakeholders, often represented by the local landowners and residents, tend to support new construction projects because they are driven by the feeling that there will be a rise in the value of their holding and a rise in the general level of amenity. However, exactly the same group may have the opposite behaviour; they may fear a fall in amenity and value of holdings. This is a dynamic and unpredictable situation that needs thorough attention and careful management. As far as it concerns the archaeologists and environmentalists group, they have an indifferent attitude when their interests are not

threatened; that is when there are no archaeological findings or the measures to protect the environment are taken. It is a 'black or white' situation without any dispute.

Public stakeholders, at least as far as it concerns private projects, are mainly represented by the local regulatory agencies, such as the Town Planning Agency. Their attitude can be characterized as indifferent when all the procedures to protect the environment are followed, when the rules for urban and rural infrastructure are applied, when all the precautions about the Health and Safety of the site taken and the development is sustainable. Local government tends to encourage development, especially in regeneration areas, as long as it complies with the codes.

3.3 Mapping Stakeholders

The first and fundamental step in "managing stakeholders" is to map their interests in the project, and to identify their importance and influence on it. Stakeholders are the people that may boost the whole project by providing a solution to a big problem or stop it if they feel threatened in any way. The primary goal of "managing stakeholders" is to find ways of changing opponents to supporters by offering appropriate changes to the project mission, and preventing possible supporters defecting to the opponent camp by offering to accommodate more explicitly their proposed problem solutions (Winch, 2002).

Figure 3.1 – Mapping Stakeholders
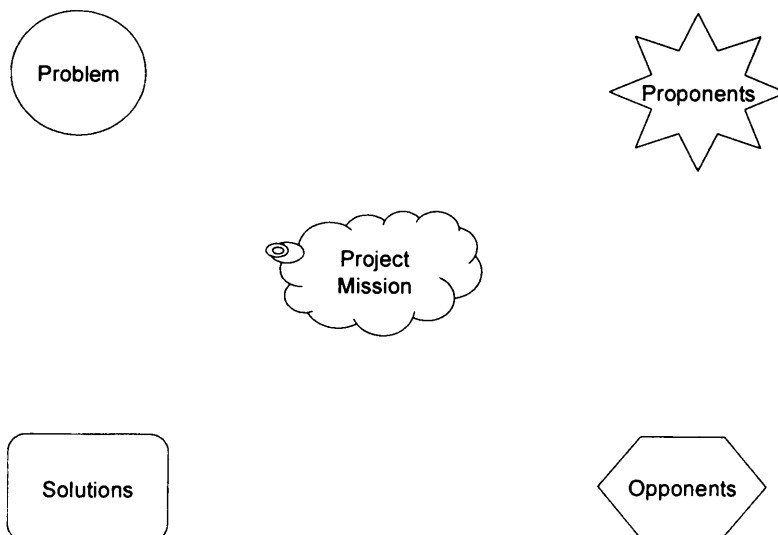
(Winch, 2002)

Once the stakeholder map is ready, the interest/power matrix provided by wide bibliography (Johnson & Scholes, 2003) is one of the most commonly used tools to identify their importance and influence on it and develop a strategy to manage them properly. Its two dimensions represent the **power** of the stakeholders to influence the project and the level of **interest** that the stakeholders have in that project.

Figure 3.2 – Stakeholder Mapping: the power/interest matrix

Level of interest

	low	high
low	A minimal effort	B keep informed
high	C keep satisfied	D key players

Power to influence
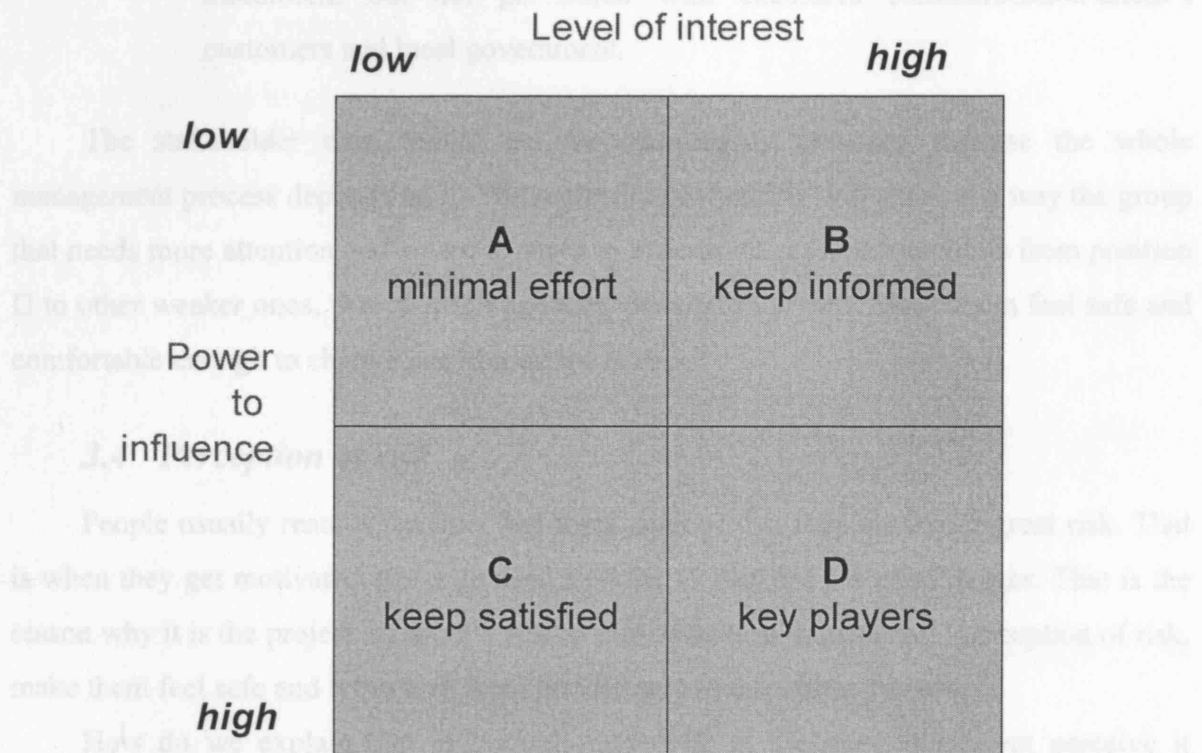
(Johnson and Scholes, 2003)

Someone's position on the grid shows the actions that need to be taken:

- **High power, interested people (D):** these are the key players who must be fully engaged and given the greatest efforts to satisfy-they are usually the client and all the stakeholders of the demand side.

- **High power, less interested people (C):** these people need to be kept satisfied, but not so much informed that they become bored with the

message-they usually are the regulatory bodies and agencies and the stakeholders of the supply side.

- **Low power, interested people (B):** these people must be kept adequately informed, and be sure that no major issues are arising. These people can often be very helpful with the detail of the project-local residents, conservationists and archaeologists.

- **Low power, less interested people (A):** again, these people should be monitored, but not get bored with excessive communication-client's customers and local government.

The stakeholder map should be very thoroughly prepared because the whole management process depends on it. The power/interest matrix will show in a way the group that needs more attention and where to focus in order to transfer stakeholders from position D to other weaker ones, that is, minimize their perception of risk. Make them feel safe and comfortable enough to change position on the matrix.

3.4 Perception of risk

People usually react when they feel threatened or that they are under great risk. That is when they get motivated and organized in order to face the common danger. That is the reason why it is the project manager's task to minimize or eliminate their perception of risk, make them feel safe and try to turn them into helpers in the whole process.

How do we explain that individuals may look at the same thing, yet perceive it differently? A number of factors operate to shape and sometimes distort perception. These factors can reside in the perceiver, in the object or target being perceived, or in the context of the situation in which the perception is made. When an individual looks at a target and attempts to interpret what he or she sees, that interpretation is heavily influenced by the personal characteristics of the individual perceiver. Personal characteristics that affect perception include a person's attitudes, personality, motives, interests, past experiences, and expectations. (Robbins, 2003)

Figure 3.3 – Factors That Influence Perception

Factors in the perceiver
- Attitudes
- Motives
- Interests
- Experience
- Expectations

Factors in the situation
- Time
- Work setting
- Social setting

PERCEPTION

Factors in the target
- Novelty
- Motion
- Sounds
- Size
- Background
- Proximity
- Similarity
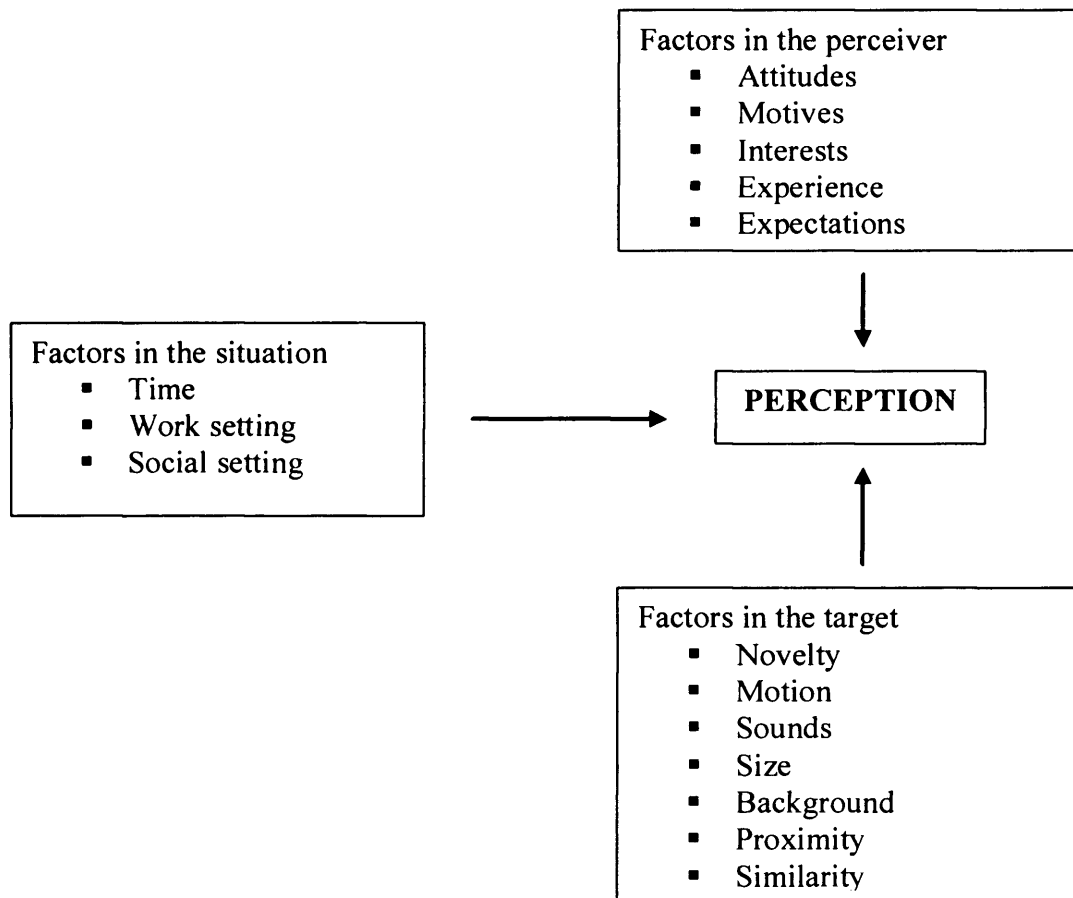
(Robbins, 2003)

The attitude that the stakeholders will adopt is mainly driven by their perception of risk; that is, what are they afraid of and why? Finding the answer to that question will help the project manager, and the client he works for, solve a number of problems even before they appear.

The most important matters that have motivated many stakeholders to oppose construction projects, all of them deriving from their perception of risk, are:

- Environmental impact; not only environmentalists or conservationists may oppose a new project, but even local residents who might fear that there is pollution to the environment more than legal.

- Zoning; there are many violations as far as it concerns the codes and legislation suggested by the Town Planning Agency. Companies tend to bribe people in strategic positions in order to have their own plans implemented, even if they are illegal, but profitable.

- Quality of specification; quality has always been a serious matter for both the client and the end-users of a project. They are always very demanding and sometimes more than necessary.

- Sustainability; this is a very serious matter and people are always concerned about it. They think themselves as being a part of the project at present and their families in the future. Sustainable development has always been a serious source of anxiety among stakeholders.

Wright (1997) agrees that sometimes concerns are valid and it is as well to know these problems at the outset. Usually, suspicion of a project will arise from a lack of understanding of the true purpose, or then again it might be just a reluctance to change. As Machiavelli (1513) wrote, "it must be considered that there is nothing more difficult to carry out, nor more doubtful to success, nor more dangerous to handle, than to initiate a new order of things."

3.5 Understanding the power of Project Stakeholders

Power is the ability of individuals or groups to persuade, induce or coerce others into following certain courses of action (Johnson & Scholes, 2003). Power relationships in project management have been a very important issue during the last years [Pinto, (1996), Handy (1999)]. Three facets of power have been identified by Lukes (1974).

- Facet 1, overt power. The ability of A to persuade B to chose the option A prefers,

- Facet 2, agenda-setting power. The ability of A to set the agenda so that B's preferred option is "off the agenda",

- Facet 3, hegemonic power. The ability of A to define the issues in such way that B sees no alternative but to make choices favourable to A.

Figure 3.4 – The three facets of power
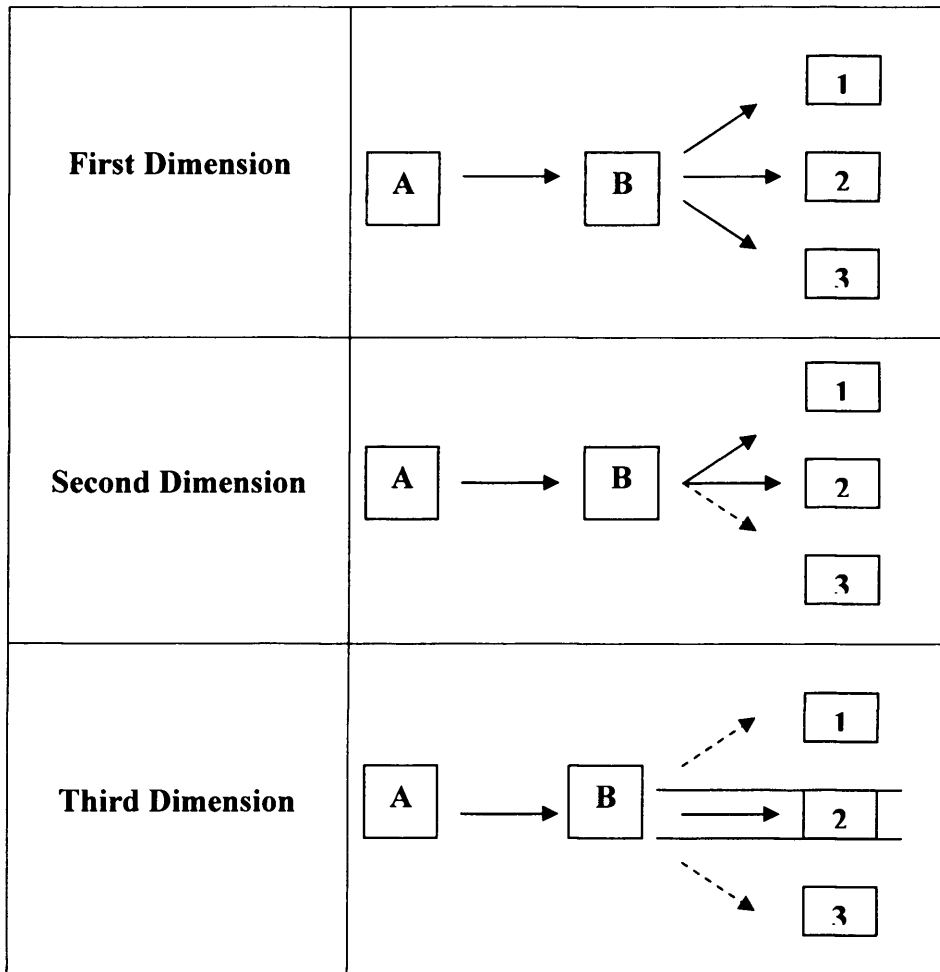
(Morris and Pinto, 2004)

In order to manage stakeholders properly, a manager must search and identify the indicators of power they possess, that is, the visible signs that stakeholders have been able to exploit one or more of the sources of power. Johnson and Scholes (2003) suggest the following indicators of power:

- The status of an external stakeholder can often be inferred by the speed with which the company responds,

- Resource dependence in terms of relative size of shareholdings or loans, or the proportion of a company's business tied up with any one customer, or a similar dependence on suppliers. A key indicator could be the ease with which

a supplier, financier or customer could switch or be switched at short notice, and

- Symbols are also valuable clues about power. For example, whether the management team wines and dines a customer or supplier, or the level of person in the company who deals with a particular supplier.

Every project team should bear in mind that projects have a habit of becoming the target of negative information. The negative information may be circulated by those with conflicting interests. Special-interest groups may seek to have the project delayed or cancelled to preserve the status quo, or otherwise "held to ransom" to serve their own ends. (Cleland, 1998)

Stakeholders interact with the project in two primary arenas (Newcombe, 2002):

- The cultural arena – this is represented by the ideology or shared values of the project participants and may be used to shape or constrain changes. Culture is a force for co-operation between project stakeholders.

- The political arena – this is the arena where powerful individuals and interest groups (stakeholders) exercise power to achieve their objectives; these often conflict with the objectives and expectations of other stakeholders involved in the project.

Thus stakeholders interact with the project through two opposing forces, the centripetal force of co-operation through the culture and the centrifugal force of conflict and competition in the political arena (Mintzberg, 1995). However, unlike other forces which operate in organizations, for example, differentiation and integration which may create different organization structures for different projects in a diffused way (Morris, 1972), cultural and political forces are infused into the whole project organization. Balancing these opposing forces and stakeholder interests is a major role of the project manager for any project.

3.6 Managing stakeholders

Stakeholder Analysis is the identification of a project's key stakeholders, an assessment of their interests, and the ways in which these interests affect project riskiness and viability. It is linked both to institutional appraisal and social analysis: drawing on the

information deriving from these approaches, but also contributing to the combining of such data in a single framework. Stakeholder analysis contributes to project design through the logical framework, and by helping to identify appropriate forms of stakeholder participation (Department for International Development, 1995).

More information about the key stakeholders is imperative; the way they feel about the new construction project will somehow determine their behaviour upon it, and furthermore, the best way that will engage them to the whole process is more than helpful. There are some key questions that can help a project manager understand the stakeholders:

- What financial or emotional interest do they have in the outcome of the project? Is it positive or negative?
- What motivates them most of all?
- What information do they expect?
- How do they want to receive information? What is the best way of communicating messages to them?
- What is their current opinion of the work so far? Is it based on good information?
- Who influences their opinions generally, and who influences their opinion of the client? Do some of these influencers therefore become important stakeholders in their own right?
- If they are not likely to be positive, what will win them around to support the project?
- If they are not finally won around, how will their opposition be managed?
- Who else might be influenced by their opinions? Do these people become stakeholders in their own right?

A very good way of answering these questions is to talk to the stakeholders directly; people are often quite open about their views, and asking people's opinions is often the first step in building a successful relationship with them. Only then will the project manager be able to identify blockers or critics, advocates and supporters or the project and adopt the appropriate approach.

3.6.1 Approaches to Managing Stakeholders

Winch and Bonke (2002) have provided through their research work suggestions on how to improve the management of stakeholders.

The Alignment of Incentives. This is considered to be the best way to manage the internal stakeholders of a project. On the demand side this can be achieved by offering them an equity stake in an SPV, like the Second Severn Crossing in the UK that Campagnac (1996) has suggested. Incentive contracts that will replace the lump-sum or fee-based ones between the demand and supply side are helpful towards the suggested direction.

Early Development of a Mitigation Strategy. After having mapped the stakeholders of a construction project it will be easier to identify the claims that are likely to be made by external ones and their power to press them. If the integrity of the project is not threatened by claims coming from the key stakeholders, then the project should continue.

Friends in the Right Places. Usually this is a responsibility of the client or the sponsoring team. During some difficult moments, people at the right place at the right time can offer valuable help and solutions that nobody else may be able to do.

An Ethical Approach. Johnson and Scholes (2002) define Corporate Social Responsibility as the 'extent to which an organization exceeds its minimum required obligations to stakeholders', while Winch (2002) defines Project Social Responsibility as 'the extent to which the project definition exceeds the minima established in the NPV calculation and those required obtaining regulatory consents'. In other words, companies must act responsibly and deliver value to stakeholders, because their good reputation based on business ethics is their strongest weapon against damaged brand that can occur when companies fail to act responsibly.

Effective Consent Management. Stringer (1995) introduced the management of consent within the regulatory framework as a strategic matter within project definition. Winch (2002) identified the three basic approaches:

- Define and Enquire; used when the regulations are unambiguous and prescriptive, the codes are published and simply require to be interpreted.

- Consult and Refine; used where codes are not prescriptive or where there are significant uncertainties.

- Bribe and Ignore; is widespread-zoning codes are routinely ignored in many countries as recent tragedies, where shanty towns have been engulfed by mudslides, show.

A Strong Client. A client with a clear target who knows what he expects from a project and what he is willing to invest is the most effective stakeholders manager.

Getting the Concrete on the Table. Stakeholders are very likely to change their minds about supporting a project and oppose it. That is why making large spends early in the project life cycle on non-fungible assets can be used by project managers to keep their projects rolling.

Visualization. Digital techniques or mock-ups can help stakeholders have a clear view of the project, so that they will not meet something unexpected.

Public Relations. Keeping the external stakeholders informed using PR techniques can be very helpful, especially by avoiding harmful rumors growing and circulating. People are usually stimulated when something goes wrong, so, releasing good news is a means of keeping the stakeholders on-side.

3.6.2 Information and Communication

Communication is perceived as a vital ingredient for project success; it has been calculated as being second only to technical performance in importance. The project manager and team need to draw on the full range of communication methods and media to communicate successfully especially with the external members of the project environment, as suggested by Calvert (cited in Turner, 1995).

Communication with external parties can be planned and unplanned, but must always be controlled by the project team to ensure suitable information is given at the most advantageous time for the project and to reduce rumour and hearsay. To achieve this, a communication plan may be formalized, which will make the best use of planned communications to reduce unwanted or unplanned communication. The project's external communication plan can be formulated by considering the stakeholders and environmental influences. In all cases it is likely to be beneficial to contact supporters and opinion formers to advise them of the project's aims and benefits. The plan should include contingencies for dealing with possible detractors so that communication is managed as proactively as possible. Proactive communication of information is cheap compared with reactive responses to misinformation.

Table 3.1 – Planned and unplanned communication

Planned	Unplanned

Letters
Mail shot
Presentations
Personal calls
Public meetings
Meeting decision makers
Meeting opinion formers
Advertising through:
  – Site hoardings
  – Newspapers
  – Television (if possible)
  – Posters
  – Radio
	Public meetings
	'looking over the fence'
	Government Select Committee
	Government Agencies
	  – Environmental protection
	  – Health and Safety
	Media coverage
	  – Newspapers
	  – Radio
	  – Television

(Turner, 1995)

3.7 Summary

There are three fundamental questions in a construction project and its relation to the project manager and the stakeholders of it.

1) Who are the project stakeholders?

   - Identify them,

   - Map them, and

   - Allocate their position in the power-interest matrix.

2) What do these stakeholders expect from a construction project?

   - What is their perception of risk, and

   - Understand their power over it

3) How do project managers manage these stakeholder clients?

   - Different approaches and which one is the most suitable.

The identification of the stakeholders, how they are grouped according to a number of researchers has been thoroughly presented in this chapter. Also, what is their perception of risk and the level of their power concerning the construction project has been addressed. The right choice of the best approach when managing stakeholders is a serious responsibility that a project manager must undertake.

4 Research Methodology

The purpose of interviewing is to find out what is in and on someone else's mind.
We interview people to find out from them those things we cannot directly observe.

Patton (1980, p.196)

4.1 Introduction

The research for the report will be made through a questionnaire that will be edited according to the theoretical background of the "Managing Stakeholders" issue. Wide bibliography explains very thoroughly the main reasons that drive stakeholders act and react under certain circumstances. After the questionnaire is ready and answered by the stakeholders themselves, through the interview process, data provided will be further analyzed, mainly quantitatively, but qualitatively, as well. There are valuable explanations behind the answers given that make the research highly important.

4.2 Quantitative and Qualitative Data Analysis

Bryman and Cramer (1994) suggest the main steps of the quantitative research. Although there are grounds for doubting whether research always conforms to a neat linear sequence (Bryman, 1988a, 1988b), the components depicted in the figure provide a useful model.

Theory is the starting point for every research. In this kind of research, theories that are most likely to receive direct empirical attention are those which are at a fairly low level of generality.

Hypothesis comes after the theory has been formulated. It is more likely to come up with a hypothesis, which relates to a part of the relevant theory, which will be used in the analysis. Hypotheses have the advantage that they force researchers to think systematically about what they want to study and to structure their research plans accordingly.

Operationalisation of concepts means developing measures of the constituent concepts in order to assess the validity of a hypothesis. During this stage, concepts are translated into variables, that is, attributes on which relevant objects-people differ.

Selection of respondents or subjects. When a survey investigation is undertaken, the researcher must find or distinguish the appropriate group of people that is best to be

researched. They are the people who will answer the questionnaire, be interviewed and they are the people whom the results and possible outcomes concern. The objectives of the survey must be well defined. People and especially stakeholders who have been in conflict with the company will be rather suspicious and their attitude towards the questionnaire may be reluctant. It should be clearly understood that the only objective is to understand what went wrong and what should be done in the future, in order to avoid similar problems.

Setting up a research design. There are two kinds of research designs; the experimental, in which the researcher actively manipulates aspects of a setting and the survey/correlational design, in which the researcher cannot manipulate any of the variables of interest and the answers are spontaneous. The term correlation refers to the technique for analyzing relationships between variables.

This is the stage where the researcher **collects data**, by interview or questionnaire, or a combination of both.

Data analysis has to do with the interpretation of the variables derived from the study. Quantitative analysis means that the researcher focuses on the percentage of common answers and tries to group these answers according to certain criteria.

The last stage is where the researcher is trying to connect the different answers and come up to useful and certain conclusions that depend directly on specific criteria. These are the **findings** of the research and this is the ultimate goal of the whole process. Qualitative data analysis will reveal hidden answers, depending on "perceptions, assumptions, prejudgments, presuppositions" (Van Manen, 1977, as cited in Miles and Huberman, 1994) and for connecting these meanings to the social world around them.

Figure 4.1 – The research process

```
                                    Theory
                                      │
                                      ▼
                                  Hypothesis
                                      │
                                      ▼
                        Operationalisation of concepts
                                      │
                                      ▼
                                 Selection of
                           respondents or participants
                          ↙                        ↘
        Survey/correlational design          Experimental design
```

┌─────────────────────────────┐
│ Create experimental
│ and control groups
│
│ Carry out observations
│ and/or administer tests
│ or questionnaires
└─────────────────────────────┘

┌─────────────────────────┐
│ Conduct interviews or
│ administer
│ questionnaires
└─────────────────────────┘

```
                              Collect data
                                   │
                                   ▼
                              Analyse data
                                   │
                                   ▼
                               Findings
```
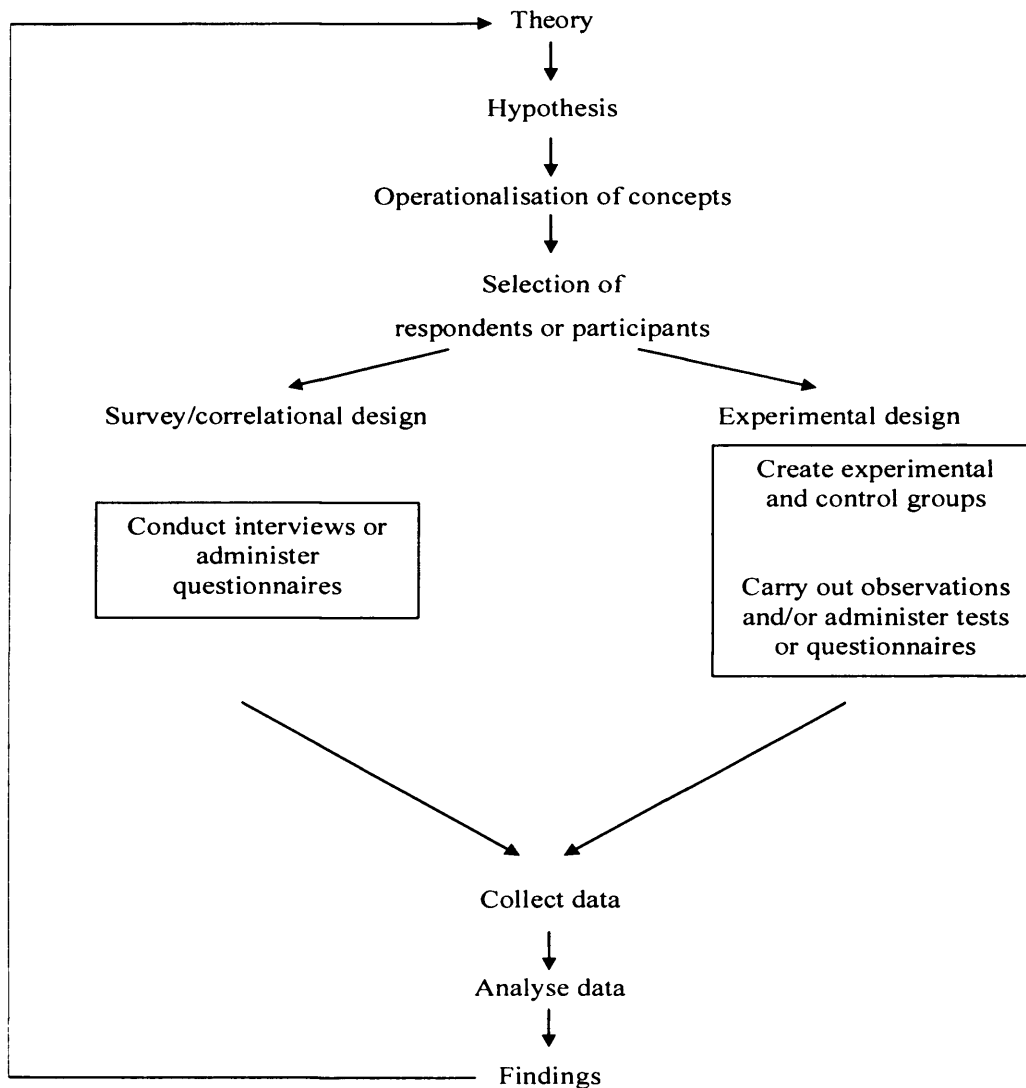
(Bryman & Cramer, 1994)

4.3   Groups of questions

There are 36 questions to which the stakeholders of a specific construction project are invited and challenged to answer. The word 'challenged' implies that they have not presented a friendly attitude towards the project. That is the reason why the questionnaire does not ask for personal data, a fact that will motivate them to give sincere answers. The

questions are grouped in a way that will lead to reasonable conclusions. They will provide the path from the quantitative to the qualitative data analysis.

The first group of questions has to do with the attitude of the stakeholders-local residents towards the specific project and the construction company; if they like the specific project for which they reacted severely, if they are aware of the company and other projects they have undertaken, both in the close and general area, as well, and how they feel about the general infrastructure of the area; were they angry because of the dramatic change of southern Athens or did the developing construction company do something wrong?

The second group of questions deals with the construction site of the project. Did they act under the impression that there were legal violations, were they aware of all the precautions for the health and safety of the workers and neighbours that had been taken, were they disturbed by the demolition and excavation stage, were they worried by the ground conditions they saw and the measures taken by the company? The final question asking the personal nature of experience in construction is a key one. The answer to it will determine in a way whether their concern was driven by knowledge, experience and/or influence by others. This group of questions is a very important one, because some of the stakeholders reacted during the demolition of the old building, some others during the excavation stage and some others during the construction stage. The answers to this group will determine where their anxiety and perception of risk came from, and ways to prevent such reactions in the future will be investigated.

Communication and information is the topic of the following group; what was the way they were kept informed about the project, was it by their access to the construction site, was it by the answers provided by the workers and the directors of the developing company, what were the actual quality and means of it and what were the desired ones? Do they prefer completely impersonal through letters or completely personal through meetings and conversation communication and information? The answers will offer the company the opportunity to reexamine their communication and information means they have used so far and improve them, if necessary.

One of the most important groups is the one that has to do with relationships; what are the relationships among the stakeholders, that is, residents of the same building, same neighbourhood, between stakeholders and the company and other developers in the area?

Were they united under the same threat, the new tall building, or there is something else? A profile of their interrelationships is very important to compare with their relationship with the company.

The next group of questions is trying to identify the attitude of the same stakeholders in other similar construction projects in the close area. Did they face the same problems with the ground conditions like the project of the case study, were they adequately informed and what were the means? So, the conclusions of this group will reveal whether the opposition was personally driven or there were actual mistakes, comparing to other developing companies. They can be a useful comparison in an attempt to find out what went wrong or what could have been avoided.

The last group consists of some personal questions of the stakeholders that will answer the questionnaire; they are asked general questions about their gender, their age range, their kind of job. Usually, women are influenced by their husbands, especially in technical issues. Also, in Greece, children stay at the same house with their parents up to the age of 25, at least; this means that they are directly influenced by their parents and they represent their parents' opinion and not their own. Their educational and social background is connected with their attitude and especially with their perception of risk. Education and wealth are directly linked. The vast majority that presents the former presents the latter, as well; so, their reaction is expected to be softer because of their anxiety coming from the possession of knowledge. In the end, they are prompted to make recommendations to the company about whatever they think that may be important or necessary. This part is very important, because they will provide the research with valuable information on how things should be done and why.

The final form of the questionnaire can be found in Appendix A at the end of this report.

4.4 Summary

This chapter presented the methodology and structure of the research instrument chosen for this report. The research methodology used is through the edition of a questionnaire, made of 36 different, but grouped questions, which will lead to quantitative

data analysis, at first, and qualitative data analysis, next. Interviews will take place so that the stakeholders are motivated to give sincere and truthful answers.

The edition of a questionnaire that will provide useful conclusions is mostly important, because this is the main target of the whole research. The questions are directly linked to the theoretical background of the 'Managing Stakeholders' issue and the quantitative and qualitative data analyses that will follow are crucial.

5 Case study

"The most successful enterprises do not fragment their operations - they work back from the customer's needs and focus on the product and the value it delivers to the customer."

Egan Report (1998)

5.1 Introduction

The report will focus on a live and ongoing construction project, in Athens, Greece, undertaken by a local developing company. The structure of the company is very important, because it is linked to the way decisions are made. The project has not finished yet and the stakeholders have directly affected the overall time, cost and quality of the project; there were severe reactions by the local residents, but they were managed in a way that will be analyzed and criticized about the right and wrong actions that took place, what really happened, what should have happened and what should have been avoided.

5.2 Description of the company developer for the case study project

The company that will provide the research will all the necessary data is 'B&I Constructions Ltd'. They act as developers, that is, they buy land, they make contracts with contractors and subcontractors, and they sell the houses they build to customers, in order to make profit. The company has been involved in the Greek Construction Industry for over 30 years, and overtaken small and big scale projects, mainly dwellings, but office buildings, as well.

The company, at the moment, consists of three directors, who are the founders of the company and the ones who have been investing their capital, through all these years. The present structure of 'B&I Constructions Ltd' can be characterized as *functional structure*, and is based on the primary activities that have to be undertaken. The three directors have separate authorities and each one deals with different tasks within the company. The whole supervision of the organisation is characterized as *direct supervision*, which is often found in family businesses and that is why there is no *span of management control*.

The *Site Director* is responsible for the effective and efficient operation of the whole construction site. He has to be there all the time and supervise the jobs, order necessary materials on time so that workers do not stop working at any time, give directions and propose methods for implementing procedures, handle all the workers and the conflicts that may arise between them. He is responsible for the good performance of the employees and the quality control of the project, as well. The whole procedure of constructing a building in Athens is a very demanding process that needs constant and direct supervision, especially because of the large number and heterogeneity of build workers.

The other director is responsible for *Law and Financial* issues. That means that he has to contact with the law and financial department of the company, which are external cooperators, and provide them with the necessary transcripts when needed. Also he is responsible for the computerization of documents and files.

The last director is responsible for *Public Relations*, he is the one who deals with the public services, Town Planning Agency, does the talking with the banks and is also responsible for managing stakeholders, especially the external, public and private, ones.

It is obvious that the structure is not very complicated, but it is the typical structure of a Greek Medium Enterprise that is involved in the Construction Industry (fig.2). The *chain of command* is rather short and the *over-centralisation* in the face of the site director is very obvious.

Figure 5.1 – Structure of 'B&I Constructions Ltd'
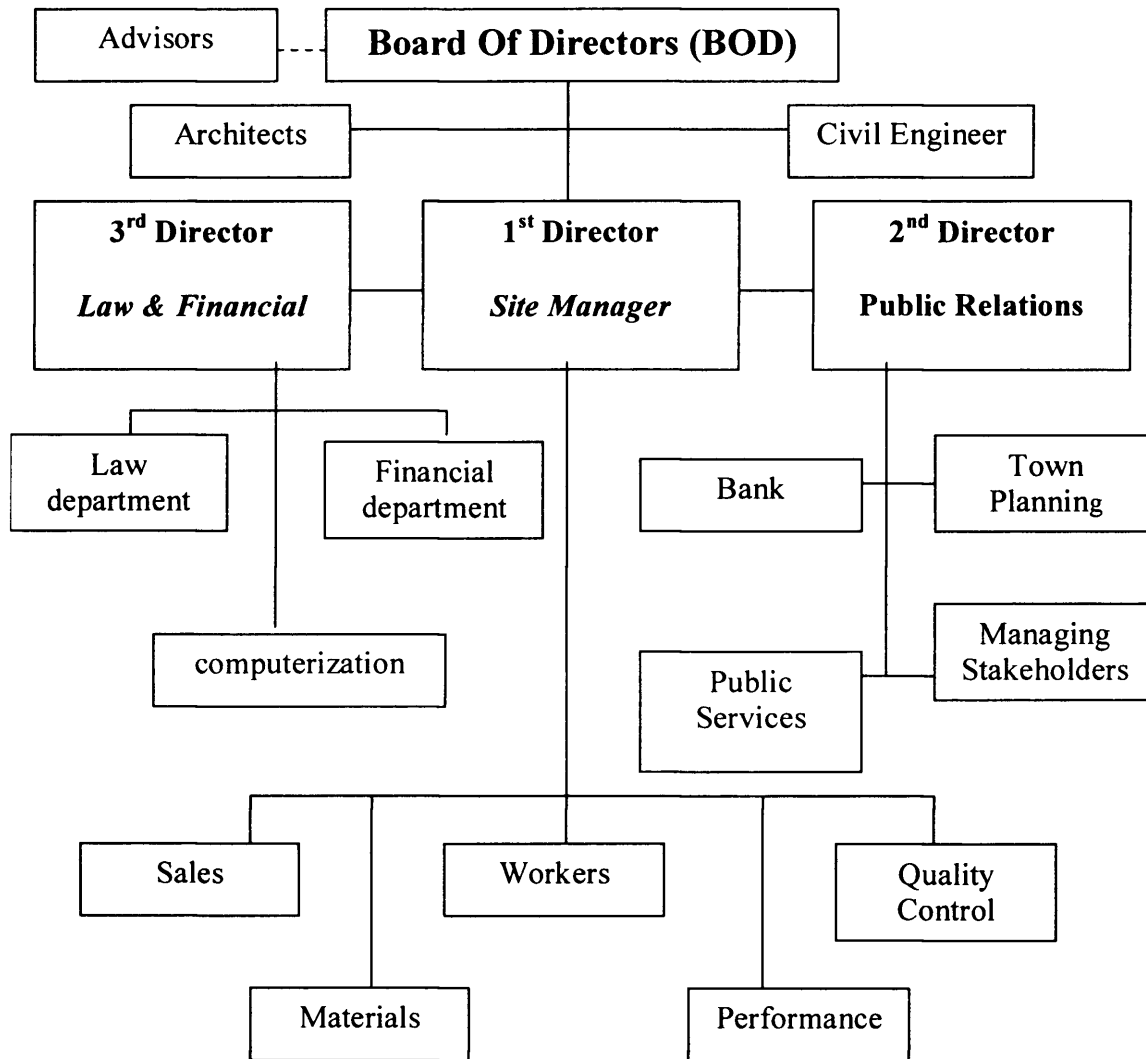
('B&I Constructions Ltd', 2005)

5.3 Description of the construction project

The area of construction site is 1,200 m^2, which can be considered as a large scale project comparing to the usual size of others, 500-700 m^2, in the same area. The Town Planning Agency suggests that the housing area can be 3,000 m^2 in an 8 floor building with maximum height of 27 metres (8 floors × 3,00 m + ground floor 3,00 m) above ground level. Because of the complexity of the site and the different levels it presented, the total depths of excavating were -3,-8 and -15 m for foundation level.

Figure 5.2 – Drawing of the project


```
                                     8th floor
7th floor

                                              max height=27.00 m

ground floor level
parking level -1
parking level -2                              max depth=8 m

foundation level
```
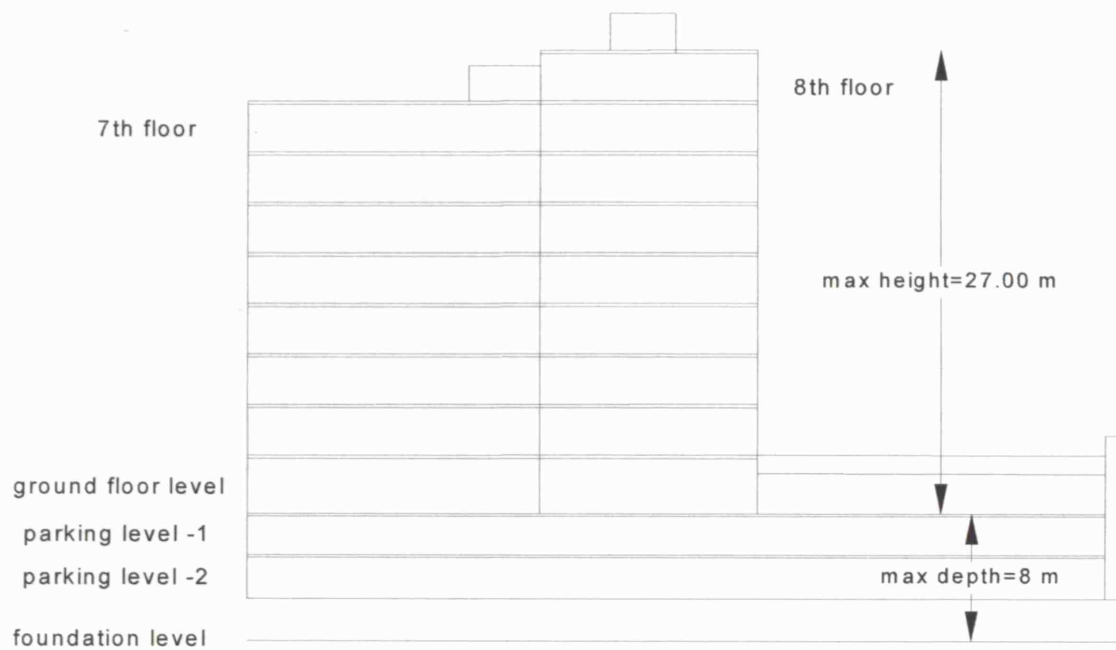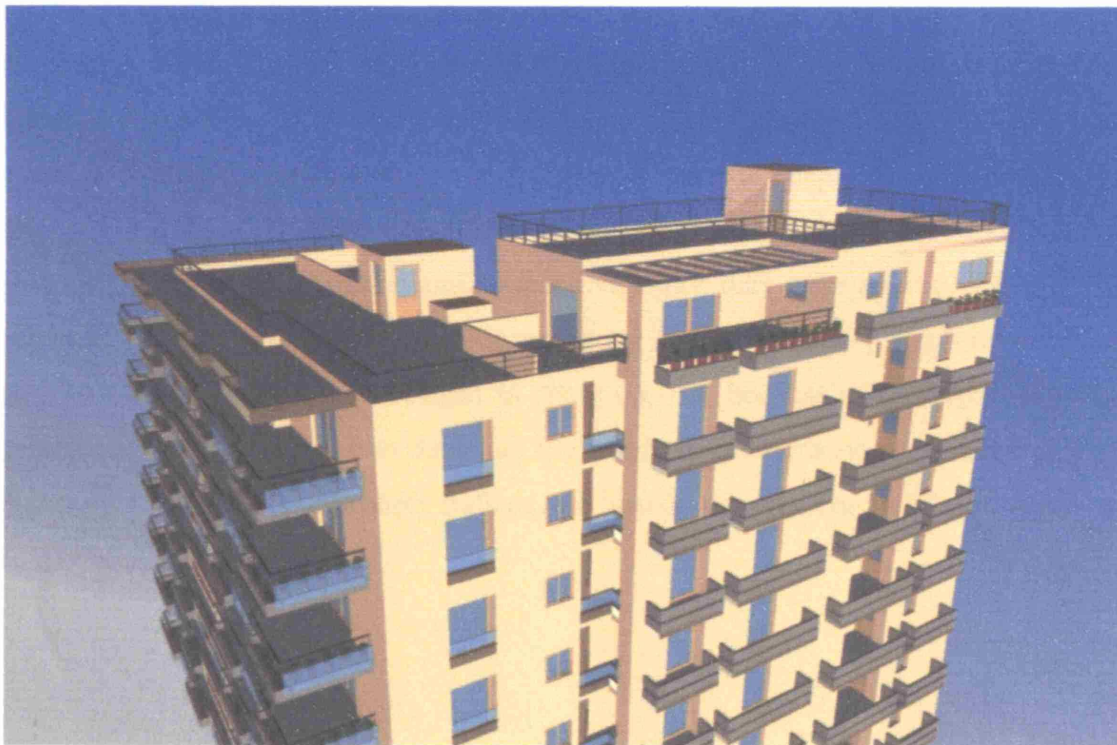
Figure 5.3 – How the new building will look

5.4 Presentation of the stakeholders

The stakeholders of this construction project who were directly affected by it, both positively and negatively are:

- 'B&I Constructions Ltd' that acts as the developer/client of the project,
- The architect and civil engineer who were responsible for the design of the project,
- The contractors and subcontractors,
- The bank that represented the partial financier of the project, and
- Local residents and neighbours.

This report will deal only with the group of local residents and neighbours, who were the ones who reacted severely and created problems to 'B&I Constructions Ltd'. They represent the *external-private stakeholders* of a construction project and they are the most unpredictable. It needs much more time and effort to cover all the aforementioned stakeholders, so they may become the research topic for future reports.

5.5 Presentation of problems that arose

The main problem that occurred in the specific construction project came from the local community, that is, the neighbours of the area close to it. Even from a very early stage they reacted, due to the noise and dust that was created during the demolition of the old low building. The police, to whom the calls were made, appeared many times, even in the same day. They always asked the workers to sprinkle the ruins to keep the dust down. They could also see that this procedure was followed and there was nothing more to be done. The police were very understanding and cooperative, since they were able to verify that all the precautions were taken as far as it concerned the health and safety regulations of the site. But, as they said, they were obliged to show up, just because of the repeated calls. The demolition lasted for only two days and the whole neighbourhood was aware of the tasks that would take place, through notices on boards of adjacent buildings, signs in the construction site and leaflets.

Figure 5.4 – The first old low building

Figure 5.5 – The second old low building
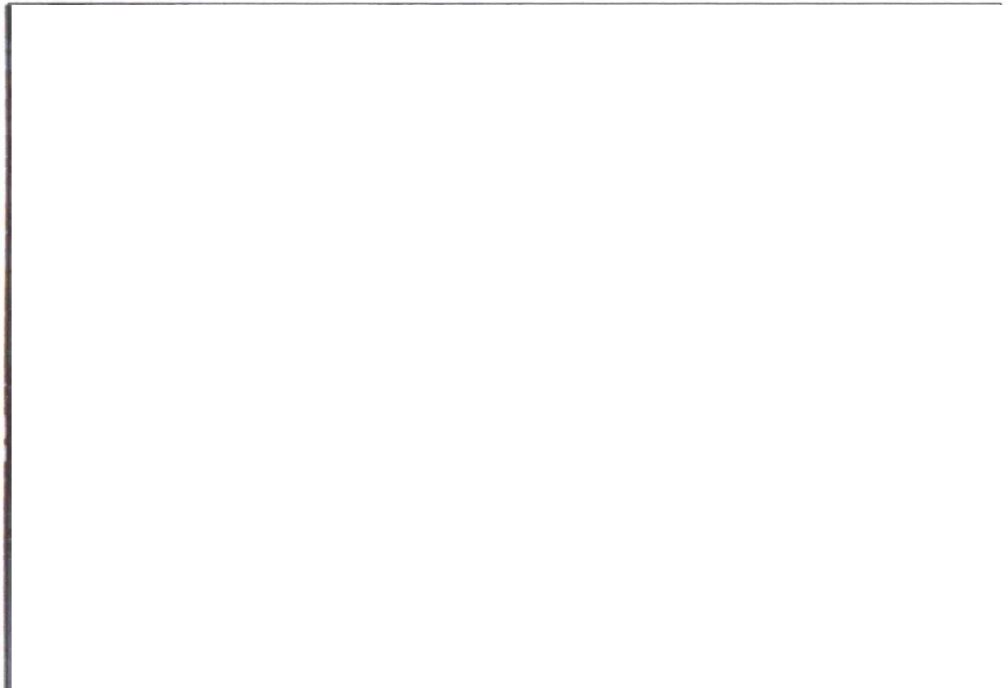
Figure 5.6 – The demolition of the old buildings

(Photos provided by 'B&I Constructions Ltd')

Then there was the excavation period that caused even more reactions. Because of the strange form of the ground, which was inclining, the level for foundations was -3,-8 and -15 m from the level of the road. This created extra anxiety, and although they were informed by members of the staff about what was going on, they called the Town Planning Agency to verify that. The showed up, they investigated the area and they informed them that there was nothing to worry about, because all the necessary precautions were taken by everybody and they should not stop working at all before supporting the ground completely.

Figure 5.7 – Aerial view site from SW

(photo taken by Bakogiannis, 2005)

Their final demand was to move the whole building because they would lose the old view they had from the old low building. This was a serious matter for the company. They could go against their will, just because there was nothing illegal to be afraid of, but this might cause further and more severe reactions. Some of them had access to local newspapers and a bad article for the company, that would present them as non-negotiable and cruel would destroy the good image and friendly relationships within the area they had been working for 30 years. This scenario was out of the question, so the company compromised and changes were made. The changes were approved by the architect and the civil engineer and after that everything has been going on normally up to now.

The situation described above put the architect and civil engineer into a dilemma. What should be done in order to satisfy them both; the former wanted to have his ideas implemented and the latter had to provide a safe building, sometimes making it hard to find

a solution that would satisfy them both. Through partnering, understanding and cooperation, all problems were overcome.

During these reactions the people on site had to stop working. Every time an agency or the police were coming to check the situation, they had to stop, before taking the approval to continue. This is the standard procedure. During the negotiations about moving the building, the steel and concrete workers had stopped working for about two months. This meant loss of money for the company and loss of image, as well. Customers would wonder what is going wrong and they have stopped working for so long. This was a cost that could not be avoided after it had occurred.

The financier of this project, that is, the bank that had provided the company with a big loan started wondering what was going on, because a surveyor of the bank appeared in certain dates to verify the works that were going on. Due to the good, long-term and in complete trust relationship between the 'B&I Constructions' and the Bank, there was no problem.

5.6 Summary

The structure of 'B&I Constructions Ltd', the developing company for the case study project, was presented in this chapter and the responsibilities of each of the three directors, in order to understand how some decisions were taken. A full view of the active construction project and some technical information are also available, through drawings and pictures. There are numerous stakeholders, but the report will deal only with the external-private ones, that is, local residents and neighbours. Last, there is a presentation of their reactions, oppositions and problems, that affected the overall time and cost of the project.

6 Analysis

"It is important that the project's objectives mesh with its stakeholders, and that they continue to fit stakeholders' interests as the project evolves, conditions change and the interdependencies of key systems, stakeholders and their objectives change."

Peter Morris (1997)

6.1 Introduction

This chapter presents the quantitative analysis of data, mainly. Based on the way the questions were grouped, answers are analysed and useful conclusions are provided. There is also an attempt for a qualitative analysis. Besides numbers and bars, there are other meanings hidden and presented.

6.2 Quantitative Data Analysis

Answers were given by 53.68 % (51 out of 95 houses) of the residents that were identified in the four adjacent buildings. It was a summer period and maybe a significant number of them were on vacation, but the percentage is adequate enough to result in important and useful findings.

The bar charts are grouped in the same way that are grouped in the questionnaire and are presented:

- The first group of questions **(Questions 1-6)** has to do with general questions about the specific project and the developing company 'B&I Constructions Ltd'. It is quite obvious from the diagram that most people like the architecture of the building and they consider it as sustainable development (Q.1 and 2). There is a significant percentage of people, approximately 40%, that are not fully aware of 'B&I Constructions Ltd' projects **only** in the close area (Q.3 and 4). However, people who are aware seem to like and have a good opinion about them (Q.5). This group of questions implies that the company should put more emphasis on the advertisement, marketing and public relations issue in the close area of Paleo Faliro. They seem to have a significant audience that appreciates their previous projects in the area, but they must work harder on the group that is not informed.

They should always bear in mind, though, that new infrastructure in the area is not very welcome (Q.6).

Figure 6.1 – Distribution of stakeholders' answers according to Likert Scale about

General about the Project and 'B&I Constructions Ltd'
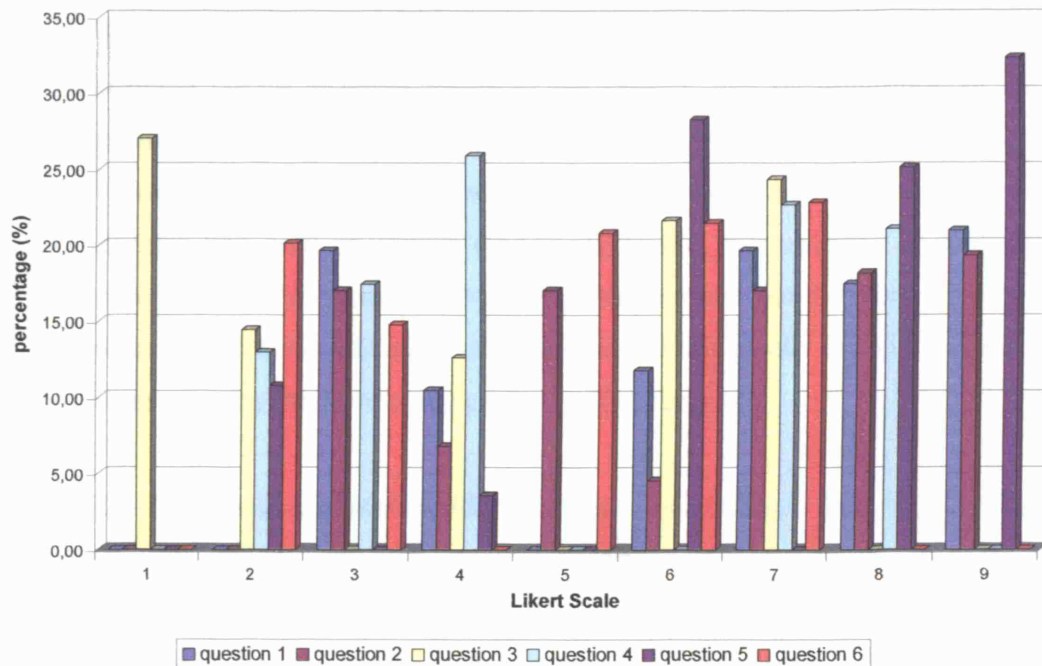
Table 6.1 – Questions 1-6

Question	General about the project and 'B&I Constructions'
1	Do you like the architectural design of the building?
	(1: no,I do not like it at all, 9: yes,I like it a lot)
2	Do you think that the building is sustainable?
	(1: no,it is not, 9: yes,it definitely is)
3	Are you aware of any previous projects of 'B&I Constructions' in the close area of Paleo Faliro?
	(1: I do not know anyone, 9: I know them all)
4	Are you aware of any previous projects of 'B&I Constructions' in the general area of Southern Athens?
	(1: I do not know anyone, 9: I know them all)
5	If you are aware,do you like them?
	(1: no,I do not, 9: yes,I like them a lot)
6	Do you like the idea of new infrastructure in the area?
	(1: no,I do not, 9: yes,I like it a lot)

- The next group of questions **(Questions 7-15)** deals with the specific construction site and the impression the stakeholders had of it. More than half of the people asked believe that there were legal violations, concerning zoning and health and safety issues, in the project (Q.7 and 8). That is why they called the Town Planning Agency so many times. Others, who had some relevant knowledge, approximately 40%, had the opposite opinion. All of them were driven by the same factor; the high level of annoyance and pollution they suffered during different stages of the project, that is, demolition of the old existing building, excavation and construction of the new one (Q.9 and 10). However, more than 60% admits that all the necessary precautions were taken to prevent that kind of disturb (Q.11), while the vast majority of stakeholders consider that their access to the neighbourhood was not disturbed (Q.12). They seem to feel quite safe due to the condition of the ground and the measures that were taken by the developing company (Q.13 and 14).

Figure 6.2 – Distribution of stakeholders' answers according to Likert Scale about Construction Site
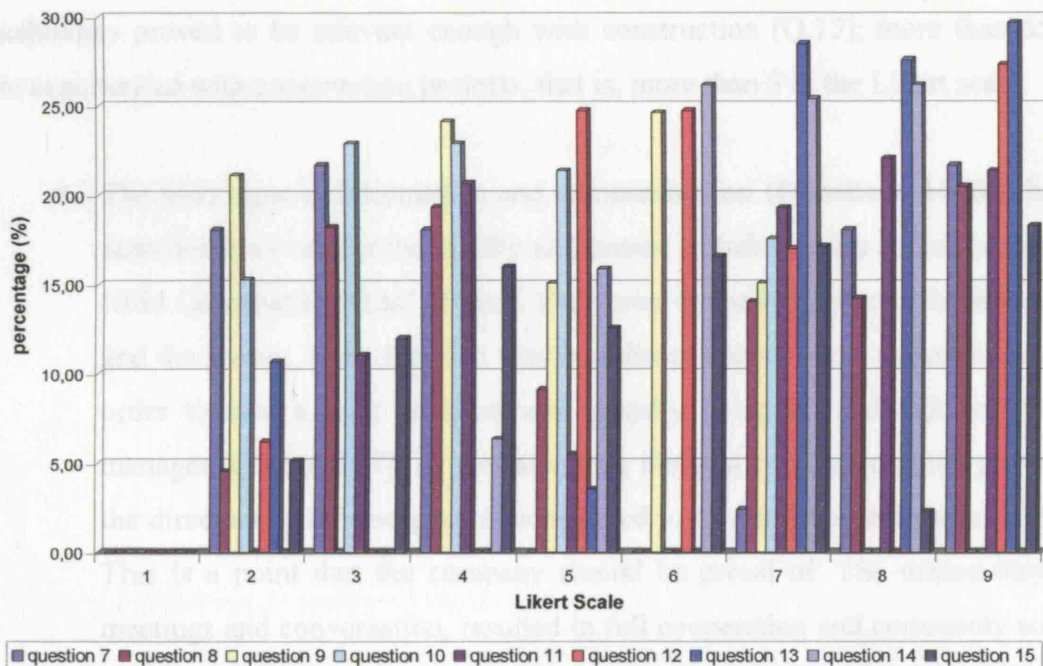
Table 6.2 – Questions 7-15

Question	Construction Site
7	Do you feel the project presents legal violations?
	(1: yes,there are too many, 9: no,there is none)
8	Do you feel that all the health & safety regulations were followed?
	(1: no,more attention is needed, 9: yes,everything was right)
9	What was the level of annoyance(sound) from demolition & excavation?
	(1: high level-unbearable, 9:low level-no irritation)
10	What was the level of pollution to the area (dust,rubble,etc)?
	(1: high level-unbearable, 9:low level-no irritation)
11	Did the company take any measures to prevent pollution (dust,rubble)?
	(1: no,they did nothing, 9: yes,they did everything they could)
12	Was your access to the neighbourhood affected by the construction site?
	(1: there was a serious problem, 9: no problem at all)
13	Did the ground conditions create any form of anxiety?
	(1: yes,I could not sleep, 9: no,everything was ok)
14	How worried did you feel due to the actions taken to support the ground etc?
	(1: extremely worried, 9: almost completely safe)
15	What is the nature of your experience in construction?
	(1: no experience at all, 5: I have been involved indirectly,as a neighbour, 9: my job and/or education has to do with construction,architect,engineer,builder)

This is very important finding considering the high level of risk during the excavation stage, due to a new method that was used to support the ground. Of course, this new method was supported by the perfect rocky condition of the ground below. Stakeholders proved to be relevant enough with construction (Q.15); more than 65% are quite experienced with construction projects, that is, more than 5 in the Likert scale.

- The next topic is information and communication **(Questions 16-20)**; how the stakeholders evaluate the quality and means of information and communication 'B&I Constructions Ltd' offered. They seem to really appreciate both the quality and the means. They feel that they had direct access to the construction site, in order to take a look on what was actually going on and talk with the site manager (Q.16 and 17). At the same time the quality of information provided by the directors of the company is considered to be adequate and complete (Q.18). This is a point that the company should be proud of. The means they used, meetings and conversation, resulted in full cooperation and commonly accepted

solutions, in the end (Q.19 and 20). Stakeholders felt that they were an important part of the whole process and responsible for the decisions that were made.

Figure 6.3 – Distribution of stakeholders' answers according to Likert Scale about

Information & Communication

question 16   question 17   question 18   question 19   question 20
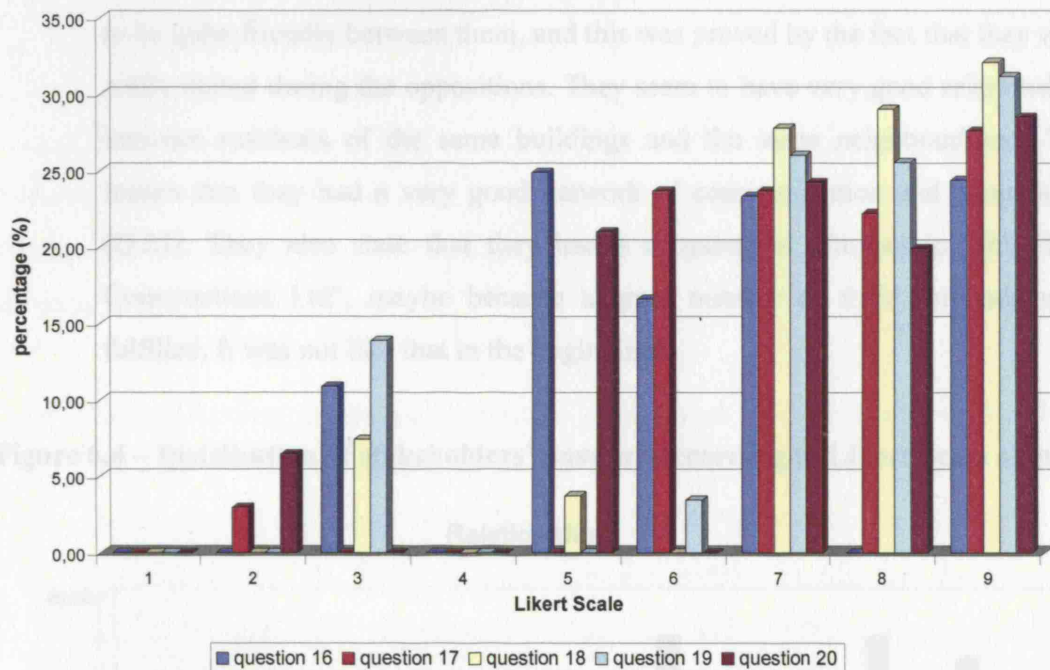
Table 6.3 – Questions 16-20

Question	Information & Communication
16	Were you informed by what you were watching only?
	(1: no,I could not see anything, 9: yes,I could see everything)
17	How was your access to the construction site to talk to people?
	(1: hard, 9: easy-direct)
18	What was the level of information provided by the directors of 'B&I Constructions'?
	(1: irrelevant-disorientated or ignored, 9: adequate-complete)
19	What was the quality of information provided by 'B&I Constructions'?
	(1: impersonal-letters , 5: semi-personal-telephone, 9: personal & direct-meetings & conversations)
20	What was the quality of information you would prefer by 'B&I Constructions'?
	(1: impersonal-letters , 5: semi-personal-telephone, 9: personal & direct-meetings & conversations)

This group of questions is actually the prize of 'B&I Constructions Ltd' that they achieved the goal; stop the oppositions and move on with no further delays and over-costs.

- The diagram that refers to the relationships **(Questions 21-25)** of the stakeholders among them (Q.21 and 22), between them and 'B&I Constructions Ltd' (Q.24) and other developers in the same area (Q.25) can be seen mainly quantitatively, but needs further qualitative analysis, as well. Stakeholders seem to be quite friendly between them, and this was proved by the fact that they were really united during the oppositions. They seem to have very good relationships between residents of the same buildings and the same neighbourhood. This means that they had a very good network of communication and cooperation (Q.23). They also state that they had a cooperative relationship with 'B&I Constructions Ltd', maybe because a great number of their demands were fulfilled. It was not like that in the beginning!

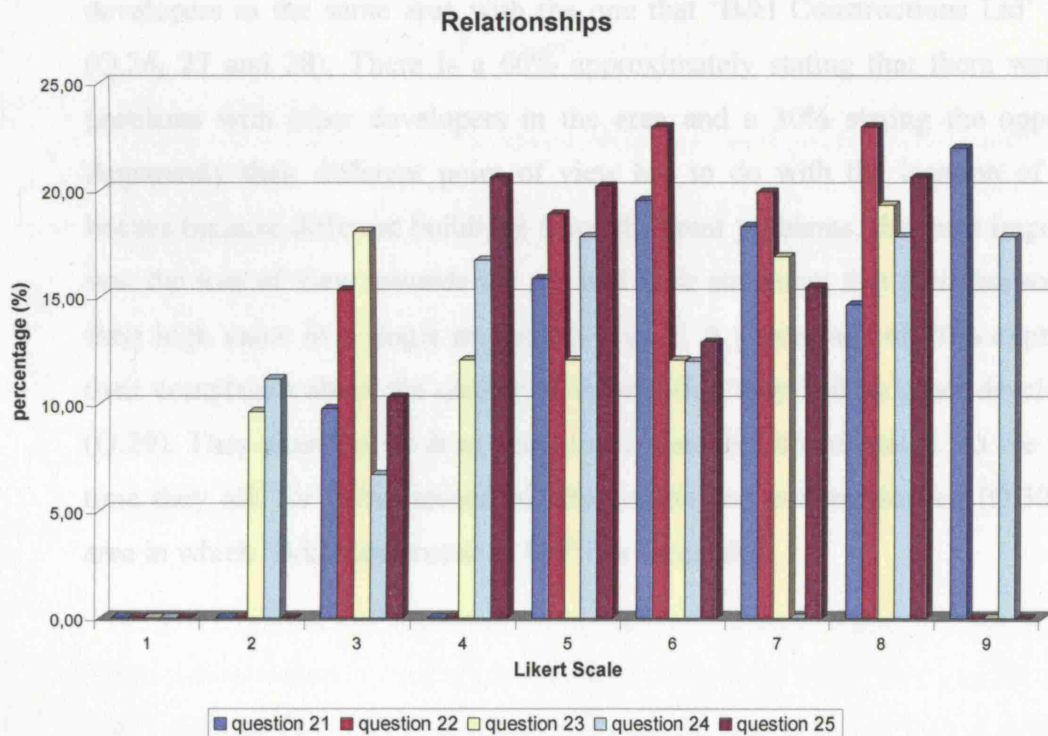**Figure 6.4 – Distribution of stakeholders' answers according to Likert Scale about**

Relationships

Table 6.4 – Questions 21-25

Question	Relationships
21	What is your relationship with the rest of the neighbours in your building?
	(1: we are enemies, 9: we are very good friends)
22	What is your relationship with the rest of the neighbours in the area?
	(1: we are enemies, 9: we are very good friends)
23	What was the level of information provided by the neighbours?
	(1: high level, 9: low level)
24	What is your relationship with 'B&I Constructions'?
	(1: we are enemies, 9: we are very good friends)
25	What is your relationship with other developers in the area?
	(1: we are enemies, 9: we are very good friends)

Last, but not least, more than 50% admit that their relationships with other developers in the area were below 5 in the Likert Scale. It is well known that they had the same reactions with them as well. The author believes that their answers to question 25, referring to this issue, is not truthful enough.

- The following group of questions **(Questions 26-30)** deals with relevant projects in the area, and the purpose is to compare what happened with other developers in the same area with the one that 'B&I Constructions Ltd' acted (Q.26, 27 and 28). There is a 60% approximately stating that there were no problems with other developers in the area and a 30% stating the opposite. Apparently their different point of view has to do with the location of their houses because different buildings faced different problems; the most important was the loss of view towards the sea and their statement that their houses lost their high value in a single moment proves it. A percentage of 70% expresses their complaints about the quality of information they had by other developers (Q.29). They characterize it as poor, inadequate and disorientated. At the same time they ask for better means of information and communication (Q.30), an area in which 'B&I Constructions Ltd' has succeeded.

Figure 6.5 – Distribution of stakeholders' answers according to Likert Scale about

Relevant Projects
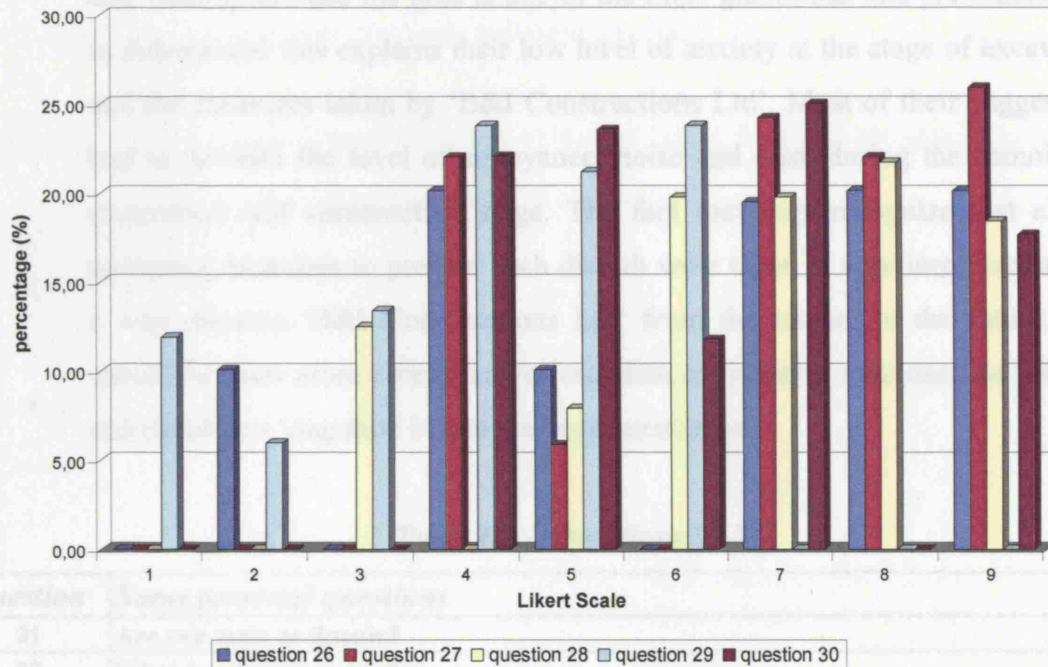
Table 6.5 – Questions 26-30

Question	Relevant Projects
26	Did you have any problems with other developers at the stage of demolition and/or excavation?
	(1: there were numerous problems, 9: no problems at all)
27	Did you have any problems with them at the stage of construction?
	(1: there were numerous problems, 9: no problems at all)
28	Did they have any ground condition problems?
	(1: there were numerous problems, 9: no problems at all)
29	Were you adequately informed by other developers in the area?
	(1: not informed-ignored, 9: adequately informed)
30	How was the way of information/communication?
	(1: impersonal-letters , 5: semi-personal-telephone, 9: personal & direct-meetings & conversations)

- The last 6 questions **(Questions 31-36)** deal with general personal information; there are no names or further personal data. People are asked their gender, their age range, how long they have been living in the area and are prompted to make

suggestions. The vast majority of the stakeholders are 25-60 years old, have been living in the area for 10-30 years and have managing positions in their jobs. This can explain their perception of risk and its relation with their educational and socio-economical background. They seem to be quite educated and wealthy-besides the area is one of the most glamorous and preferable ones in Athens-and this explains their low level of anxiety at the stage of excavation and the measures taken by 'B&I Constructions Ltd'. Most of their suggestions had to do with the level of annoyance, noise and dust, during the demolition, excavation and construction stage. The fact that they recognize that all the necessary measures to prevent such disturb were taken is very important and in a way releases 'B&I Constructions Ltd' from the blame. In the future, they should be even more careful and/or establish cooperative relationships with the stakeholders a long time before the implementation.

Table 6.6 – Questions 31-36

Question	Some personal questions
31	Are you male or female?
32	What is your age range?
33	Are you working?
34	If yes,what kind of work do you do for a living?
35	How many years have you been living in the area?
36	Any other suggestions/recommendations?

The last diagram of the quantitative data analysis represents the average value of the answers that the stakeholders gave for the 30 questions. The x-axis represents the number of questions and the y-axis the average value for each question given in the Likert Scale. The questions are grouped in the same way as in the questionnaire. So, taking a more thorough look, it is obvious that the average values support what has already been said; 'B&I Constructions Ltd' need to work more upon their reputation, especially in the close area. At the same time they need to be more careful with the construction site, especially during the demolition and excavation stage. It is noticeable that they have made it as far as it concerns the information and communication part; stakeholders seem to feel adequately or completely informed about the project and satisfied by the methods and means that were

used. The relationship among neighbours and between local residents and developing companies is friendly, especially after some of their demands were satisfied. Last, there is the attitude of the same stakeholders towards other developers of the same area. This is where 'B&I Constructions Ltd' has won, comparing to them.

Figure 6.6 – Scattered diagram of average values of Likert Scale for all questions (1-30)

Average Values of Likert Scale Vs Number of Questions
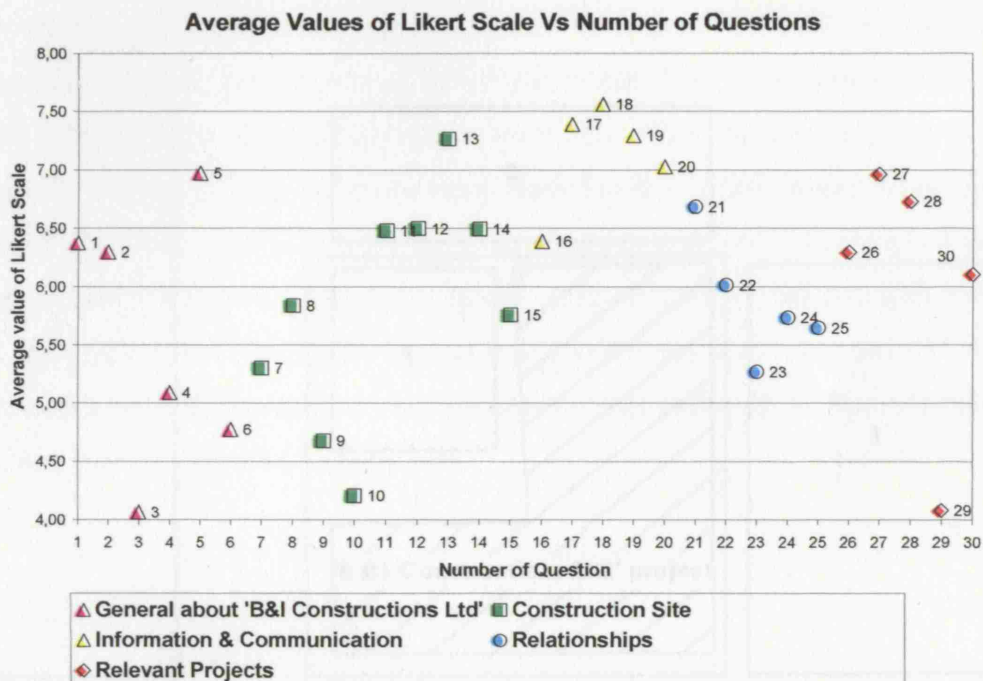
6.3 Qualitative Data Analysis

Besides the quantitative analysis of the previous paragraph there should be qualitative analysis, as well, in order to justify and support some of the answers given by the stakeholders.

A map of the neighbour buildings to which the stakeholders who were interviewed is quite helpful. It is very obvious that the residents of buildings 1 and 2 lost their view at the sea. The stakeholders that were activated at the stage of construction were the residents of these two buildings. As the time was passing and the building of 'B&I Constructions Ltd' was becoming taller and taller, their reactions became stronger. Building 3 reacted negatively only concerning the dust and noise issues, while building 4 is also a new one.

The developing company of that building faced exactly the same problems with 'B&I Constructions Ltd'. This is not a coincidence at all. Local residents felt that their houses started losing value, which is probably true, but since the development of the area permits such development, they should be ready to face such events. This explains the same way that other developers were treated in the same area and the hostility against the general infrastructure in the area.

Figure 6.7 – Map of adjacent and existing buildings
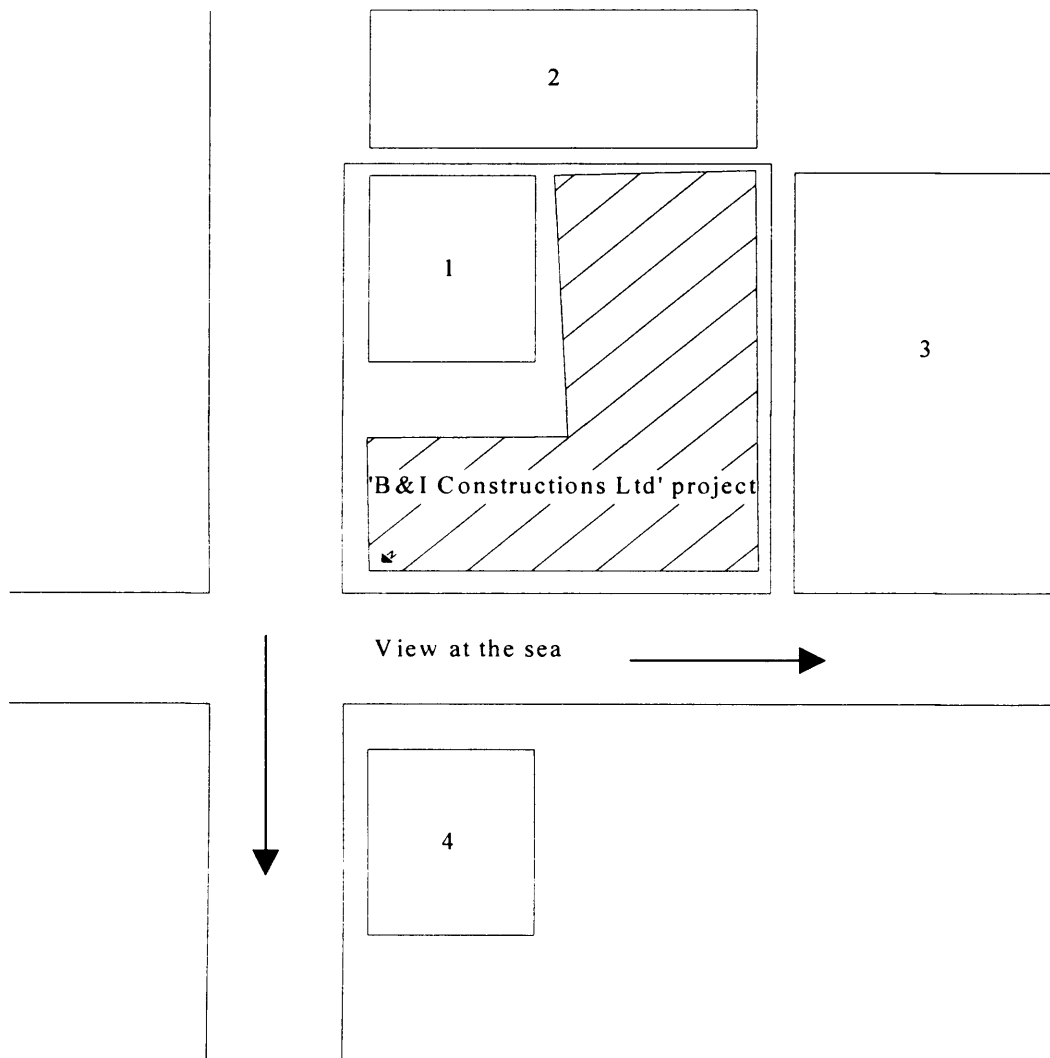
A great number of local residents were disturbed by the noise, dust and pollution during the excavation stage especially. Again, residents of building 4 were the most reluctant because they had experienced the same problems. It is a fact that residents from building 4 did not cause any problems at any time. The main reactions were initiated by the other 3.

6.4 Summary

This chapter presents the results; at first, there is quantitative data analysis, supported by necessary diagrams and graphs. There are many valuable answers and helpful conclusions; there were aspects of the project where 'B&I Constructions Ltd' proved to be very effective and efficient and there were also other aspects where more attention is needed. The developing company must work harder on their advertising, marketing and public relations policy in order to get a bigger share in the local market, at least as far as it concerns their reputation. However, stakeholders seem to be very satisfied with the quality of information provided by the directors, characterizing it as complete and adequate, and the means used; the personal communication through meetings and conversations proved to be very fruitful, effective and efficient.

7 Conclusions and Recommendations

'The criteria for measuring the success of projects is shifting from timescale, budgets and deliverables to the more uncertain requirements and expectations of stakeholders'

Sue Mann reports (11.2004)

7.1 Introduction

Stakeholders can many times be powerful enough to disrupt projects; that is the reason why they should be identified at an early stage and managed carefully. The project environment makes them form their own perception of reality. A number of methods and propositions are suggested by wide bibliography but only a few of them are applicable enough to be adopted in real world. Project Stakeholder Analysis and Management is what stakeholders force modern construction/developing companies adopt. This is a relatively young, at least in Greek Construction Industry, but very helpful procedure in order to enhance the progress of a project.

7.2 Important findings from the research

The case study that was presented in previous chapter has offered very useful findings. The developing company, 'B&I Constructions Ltd', faced severe opposition by the group of external-private stakeholders, that is, local residents. They formed groups that reacted for different reasons. It depended on the position of their buildings, the view at the sea they lost and their perception of risk concerning the construction site. No matter what each case might have been, they all had to be managed carefully, so that the project could move on without any further delays and cost overruns.

One of the most important weapons in a competitive market like Construction Industry and Market is good reputation. It mainly derives from projects of good quality and business ethics. A construction company should always bear in mind that when they produce modern buildings of good quality, both clients and customers-end users appreciate it and it can be the best advertisement for the project, the developing company and the area, in general. The next step is to establish an active Public Relations mechanism that will be of serious benefit. The answers the stakeholders gave by themselves prove that they are not

fully aware of construction projects of the developing company in the close area, but they seem to like the architectural design of the building and consider it sustainable development.

Another issue that caused anxiety and annoyance to the neighbourhood was the noise and dust that were created during the demolition of the old existing building and the excavation stage to build the new one. All the measures and precautions were taken, as far as it concerned the Health and Safety of the construction site and workers. Next time local residents should be informed earlier and more adequately by the developing company about the works that will take place. As far as it concerns the zoning violations, they felt that they were many, although they were not. The only way to put pressure on the developing company was through the Town Planning Agency that is responsible for such matters. Neighbours could predict that their houses would lose their value because they lost their view at the sea. It was more like a last attempt to change something. But the situation is 'black or white'; that is, the Town Planning Agency sets the parameters for the buildings and when there are no violations, nothing can happen.

Information and Communication represents probably the most important part of the research. Stakeholders expressed the view that they want to be kept constantly informed about what is going on. They prefer being informed through meetings and conversations, but they also like to have the chance to visit the construction site, talk with someone responsible, the project manager, and get answers that they will be able to verify on their own just by watching. They also want to feel that they take part in the decision making process or at least that their voice is heard by the directors.

It seems that the local residents have good relationships among them, especially when they unite to face the common threat, and they have showed the same attitude towards every other developer in the area. Their leader or representative must be identified at an early stage, be approached carefully and managed properly.

7.3 Recommendations – Applications

There is not one way to manage stakeholders in a construction project that fits all. It is a dynamic situation and the project manager must judge wisely which action to take.

Stakeholder Analysis offers a standard procedure that can be followed and Stakeholder Management Approaches offer a variety to choose the best one.

The fundamental step is to identify the stakeholders of a construction project and map them; predict which ones will support and which ones will oppose the project. Some of them will remain indifferent. Internal stakeholders are the ones who invest their money and reputation, so they tend to be supporters. External ones are the ones facing the changes a new project may cause and they are most likely to oppose it. The main goal must be to minimize or eliminate the power of opposing stakeholders, while maximize and encourage the participation of the supporting ones, at the same time.

The next step is to place them in the interest/power matrix. There should be an attempt to identify their interest and where it comes from; why do they have an interest on the project, and how serious is their interest? At the same time, their power to achieve their personal possible goals must be estimated; do they have access to local press, to local government? Usually there is a leader among them, who unites them under the same threat. This leader who acts as their representative must be identified and become the connecting link between the developing company and the stakeholders.

Once the number of stakeholders and their interest and power on the project has become known, through the Stakeholder Analysis, the management of these stakeholders begins.

It is a moral obligation of the company and the project manager, as well, to deliver value to stakeholders and at the same time promote and advertise the company and the projects. Good reputation based on business ethics is the best weapon against damaged brand that can occur when companies fail to act responsibly.

Business ethics is achieved through:

- Refusing to fund or be a part of any project that does not follow the rules and codes suggested by the Ministry of Environment or Town Planning Agency to protect the Environment.
- Providing clean and useful facilities in the construction site for the workers, that is, strictly follow the health and safety regulations, set by the relevant agency
- Preserving the local architecture and culture; providing modern buildings that are suitable for the neighbourhood and the direct environment

■ Experimenting with new or more sustainable designs and materials; new methods that have proved to be better than older ones, in terms of quality, and improve the standard of living.

Participatory communication means listening as well as speaking. There are always differences in experience, language and culture among people, that is why communication must be clear and fruitful. Of course, there are important tools to enhance communication, such as Information and Communication Systems (ICT), newsletters, annual reports and meetings. People tend to like being informed personally and directly through conversations and meetings. This procedure can be difficult but efficient. They should be encouraged to select a representative or a leader who will be the intermediary between them and the developing company. Access to the construction site should never be prevented, so that stakeholders can verify by themselves that what has been promised and agreed is done.

7.4 Summary

Stakeholders have the potential to disrupt projects. In the extreme, they can make projects uneconomic and no longer practicable. This can cause a loss of credibility for those involved in the project and a loss of market for those who depend on the project's outcome. Failure to manage a project's stakeholders and to predict and prepare for their behaviour will increase the risk of these problems occurring.

Stakeholders should be identified at an early stage, have their importance, interest and power they have on the project evaluated and be mapped.

The most applicable management approaches are business ethics and good communication to ensure project success. External stakeholders should be aware of the ethical attitude of the company and be provided with clear, adequate and complete information. The project team should communicate with supporters and opinion formers and must be proactive in promulgating the information it considers to be important as and when it needs to.

Stakeholder Analysis offers the methodology to identify the external stakeholders of a project, understand the environment forces that may influence them and map them, while various Stakeholder Management Approaches offer different choices. The best one depends on the situation and the judgment of the project manager or the client.

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9 Appendices

Appendix A: the final questionnaire

QUESTIONNAIRE

#		Negative ◄———► Positive								
		1	2	3	4	5	6	7	8	9
	General about the project and 'B&I Constructions'									
1	Do you like the architectural design of the building?	1	2	3	4	5	6	7	8	9
	(1: no,I do not like it at all, 9: yes,I like it a lot)									
2	Do you think that the building is sustainable?	1	2	3	4	5	6	7	8	9
	(1: no,it is not, 9: yes,it definitely is)									
3	Are you aware of any previous projects of 'B&I Constructions' in the close area of Paleo Faliro?	1	2	3	4	5	6	7	8	9
	(1: I do not know anyone, 9: I know them all)									
4	Are you aware of any previous projects of 'B&I Constructions' in the general area of Southern Athens?	1	2	3	4	5	6	7	8	9
	(1: I do not know anyone, 9: I know them all)									
5	If you are aware,do you like them?	1	2	3	4	5	6	7	8	9
	(1: no,I do not, 9: yes,I like them a lot)									
6	Do you like the idea of new infrastructure in the area?	1	2	3	4	5	6	7	8	9
	(1: no,I do not, 9: yes,I like it a lot)									
	Construction Site									
7	Do you feel the project presents legal violations?	1	2	3	4	5	6	7	8	9
	(1: yes,there are too many, 9: no,there is none)									
8	Do you feel that all the health & safety regulations were followed?	1	2	3	4	5	6	7	8	9
	(1: no,more attention is needed, 9: yes,everything was right)									
9	What was the level of annoyance(sound) from demolition & excavation?	1	2	3	4	5	6	7	8	9
	(1: high level-unbearable, 9:low level-no irritation)									
10	What was the level of pollution to the area (dust,rubble,etc)?	1	2	3	4	5	6	7	8	9
	(1: high level-unbearable, 9:low level-no irritation)									

#	Question	1	2	3	4	5	6	7	8	9
11	Did the company take any measures to prevent pollution (dust,rubble)?	1	2	3	4	5	6	7	8	9
	(1: no,they did nothing, 9: yes,they did everything they could)									
12	Was your access to the neighbourhood affected by the construction site?	1	2	3	4	5	6	7	8	9
	(1: there was a serious problem, 9: no problem at all)									
13	Did the ground conditions create any form of anxiety?	1	2	3	4	5	6	7	8	9
	(1: yes,I could not sleep, 9: no,everything was ok)									
14	How worried did you feel due to the actions taken to support the ground etc?	1	2	3	4	5	6	7	8	9
	(1: extremely worried, 9: almost completely safe)									
15	What is the nature of your experience in construction?	1	2	3	4	5	6	7	8	9
	(1: no experience at all, 5: I have been involved indirectly,as a neighbour, 9: my job and/or education has to do with construction,architect,engineer,builder)									

Information & Communication

#	Question	1	2	3	4	5	6	7	8	9
16	Were you informed by what you were watching only?	1	2	3	4	5	6	7	8	9
	(1: no,I could not see anything, 9: yes,I could see everything)									
17	How was your access to the construction site to talk to people?	1	2	3	4	5	6	7	8	9
	(1: hard, 9: easy-direct)									
18	What was the level of information provided by the directors of 'B&I Constructions'?	1	2	3	4	5	6	7	8	9
	(1: irrelevant-disorientated or ignored, 9: adequate-complete)									
19	What was the quality of information provided by 'B&I Constructions'?	1	2	3	4	5	6	7	8	9
	(1: impersonal-letters , 5: semi-personal-telephone, 9: personal & direct-meetings & conversations)									
20	What was the quality of information you would prefer by 'B&I Constructions'?	1	2	3	4	5	6	7	8	9

Relationships

	1	2	3	4	5	6	7	8	9
(1: impersonal-letters , 5: semi-personal-telephone, 9: personal & direct-meetings & conversations)	1							8	9
21 What is your relationship with the rest of the neighbours in your building?	1	2	3	4	5	6	7	8	9
(1: we are enemies, 9: we are very good friends)									
22 What is your relationship with the rest of the neighbours in the area?	1	2	3	4	5	6	7	8	9
(1: we are enemies, 9: we are very good friends)									
23 What was the level of information provided by the neighbours?	1	2	3	4	5	6	7	8	9
(1: high level, 9: low level)									
24 What is your relationship with 'B&I Constructions'?	1	2	3	4	5	6	7	8	9
(1: we are enemies, 9: we are very good friends)									
25 What is your relationship with other developers in the area?	1	2	3	4	5	6	7	8	9
(1: we are enemies, 9: we are very good friends)									

Relevant Projects

	1	2	3	4	5	6	7	8	9
26 Did you have any problems with other developers at the stage of demolition and/or excavation?	1	2	3	4	5	6	7	8	9
(1: there were numerous problems, 9: no problems at all)									
27 Did you have any problems with them at the stage of construction?	1	2	3	4	5	6	7	8	9
(1: there were numerous problems, 9: no problems at all)									
28 Did they have any ground condition problems?	1	2	3	4	5	6	7	8	9
(1: there were numerous problems, 9: no problems at all)									
29 Were you adequately informed by other developers in the area?	1	2	3	4	5	6	7	8	9
(1: not informed-ignored, 9: adequately informed)									
30 How was the way of information/communication?	1	2	3	4	5	6	7	8	9

(1: impersonal-letters , 5: semi-personal-telephone, 9: personal & direct-meetings & conversations)

Some personal questions

31 Are you male or female?	male	female	
32 What is your age range?	up to 25	25-60	over 60
33 Are you working?	no	yes	
34 If yes, what kind of work do you do for a living?	pensioner	manager	handcraftsmen
35 How many years have you been living in the area?	up to 10	10 to 30	more than 30
36 Any other suggestions/recommendations?			