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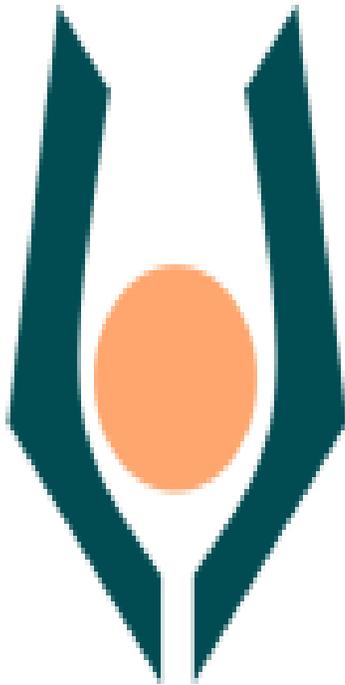
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Subject: "Management and leadership in construction companies"

Student Name: Athanasia Koutroupi

Supervisor : Dimitrios Xefteris

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Open University of Cyprus Faculty of Economics and Management
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Summary

Construction research has not paid much attention to project leadership. This is due to the traditional focus of researchers on technical and managerial features of construction. One of the biggest challenges the construction industry is currently facing is the lack of leaders in the field. Thus, the rapid development of the construction industry in many countries places new demands on leadership. This challenge requires a significant shift in perceptions of the importance of leadership in effective project delivery. The paper argues that authentic leadership and therefore authentic leaders are required by the construction industry.

Table of Contents

3. Management and leadership in construction companies

3.1 Construction companies

3.2 Leadership in construction companies

3.3 Challenges in the construction company

3.4 Leadership style in construction projects

3.5 Leadership for project managers

3.6 Development of authentic leadership in the construction sector

3.7 Characteristics and influences of authentic project leaders

3.8 Impact

3.9 Looks to the future

Chapter 4

4. Management and leadership in construction companies: Case Study

4.1 Case Study: "Babis Vovos - International Technical SA", Construction Company.

4.2 Charalambos Vovos: Civil engineer - Manager of a construction company

Conclusions

Bibliography

Introduction

The science of management, often referred to as business policy, includes a wide range of topics that define the roles and responsibilities of the CEO. In general, topics include the processes by which leaders plan, direct, coordinate, and reward employee activities to achieve the organization's purpose. A description of this process by Peter Drucker decades ago (The Practice of Management, New York: Harper and Row, 1954) is now the cornerstone of management theory. Its process consists of five steps: planning, organization, staffing, leadership and control. Drucker's early work still offers a truly good approach to examining managerial duties.

Among the major challenges managers face there are key strategic and tactical questions about the overall business, including:

- Which companies should the organization compete with?

- How should we set goals for the companies we choose?

- What are the most beneficial actions in order to achieve our goals?

- How should we organize, staff and finance?

- How do we coordinate and control activities across a variety of functions and multiple locations?

- How should we evaluate our progress and performance?

- How should we inform, influence and interact with different areas of the organization?

- How should we make a substantial change when it is needed?

Such issues need to be resolved since they remain a part of an essential decision-making process for any type of business to survive. In order for them to be anwered, a very different mentality, more exactly, a leader mentality is required.

Effective managers have a picture of the whole business in the context of both the present and the possible future environment. They recognize that they must achieve their current goals by surpassing competitors in today's competitive environment while at the same time preparing to shape the future they want for their organization and business. This recognition often initiates the application of all te necessary changes that will steer the organization towards new and different directions. Conclusively, management of any effective changes is a vital attribute of managers.

More specifically, capable general managers can identify when and how to make a move, while choosing the best possible course for the organization as a whole. The search for an optimal position, however, with the aim of continuous improvement, involves a number of judgements often based on competing goals and values. Therefore, in almost all organizations, general management incoroporates facing complex and ambiguous situations.

Recognizing the complexity that general managers have to deal with has led some to believe that management is more of an art than a science. Indeed, there is a logical, analytical side as well as an intuitive, creative side. Both are of critical importance to a manager. The variety of approaches to combining intuition with science results in different people reacting differently in similar conditions. As a result, we see changes in strategy and even culture as managers leave their post, even in highly successful organizations.

The demand for these changes is perhaps one of the most important requirements for the manager: the demand for action. Only actions taken in the present can change the future. In fact, managers need to ask themselves if they are doing what is needed today to secure the future they want for the organization and its stakeholders. This idea was very well substantiated by Peter Drucker, who said: "The purpose of working to create the future is not to decide what needs to be done tomorrow, but what needs to be done today to have tomorrow" (Managing for Results, New York: Perennial Library, Harper & Row, 1986, p. 173). The final strategic question is: Do we adopt the course of actions in order to have the kind of future we want? After an in-depth analysis and the formulation of the correct answers, managers should form the proper plans for the operation of their organization.

Thus, the roles and responsibilities that define the work of the manager are numerous and different.

For a long time the matter of true leadership in construction companies has been the subject of much deliberation. The industry's need to meet the social, economic and environmental challenges of the times energized this argument and deeply qustioned its own ability to create leaders / managers who can inspire and influence real change.

While paying greater emphasis on project management systems, construction companies are looking for professionals with better management and leadership skills than technical skills (Dulaimi, 2005). However, educational institutions and construction companies continue to produce and develop managers who do not have leadership skills. A number of researchers have pinpointed that the construction industry needs significant changes in the way it currently operates (Winch, 1998; Koskela and Vrijhoef, 2001). The main reasos for such apoint are

mainly: a) the promotion of individuals from lower positions without formal education and training, b)the fact that traditional academic curricula that do not examine how proffesionals can evolve into leaders and c) the conventional focus of the industry, which remains unchanged. In addition, the industry has focused on management, excluding leadership (Skipper and Bell, 2006). Thus, construction company managers are rarely considered leaders and are often referred to as managers (Russell and Stouffer, 2003). Their daily work includes managing activities and achieving short-term goals of a project. They need to remind themselves that they need to achieve the traditional triangle of key performance indicators: on time, under budget, of specified quality. This conventional attitude prevents them from behaving like leaders and inspiring teamwork for better performance. Bonasso (2001) suggests that this conventional system produces managers who often do not see broadly or deeply enough in the plans they produce and ignore many serious issues.

Due to the reasons mentioned above, the construction industry is facing insufficient supply of "project leaders" although it has produced a large number of "managers". There is a need for leadership development in traditional managers in an industry that has been hit hard by changes in the business environment both nationally and globally. Throughout the industry, the formation of cooperative alliances and cooperative relationships are an intrisic part of any development . The construction industry has entered a new enviroment of socio-economic, cultural, political and business challenges. In addition to that, a number of corporate scandals and cases of mismanagement in the business world also require a different breed of managers. There is also a need for a new understanding of leadership motivation, new ways of measuring leaders' tacit movements, and finally practical and authentic performance standards. In addition, a fresh

positive culture in construction companies is required along with leaders who possess and embrace positive values, ethics, beliefs and ambitions.

Leaders need to be able to change the conventional / classic example of management in the industry, and set role models for other companies to follow. To achieve this goal, it is argued that the construction industry should also focus on developing a new breed of future project leaders through authentic leadership development. These leaders would not only be good project managers, but they would also be people leaders.

Chapter 1

1. Overview of project management

If one word could describe the essence of project management, that is "responsibility". The project manager is responsible for everything that happens in a project. This does not mean that the project manager should or could do anything related to the project. This means that the manager has the ultimate responsibility for the project, regardless of who is on the project team and regardless of the obstacles encountered during successful completion. In other words, the end result is always linked to the project manager. If this sounds like a terrible responsibility, then we certainly understand the meaning of what a project manager means. For many people, it is an exciting challenge since, in addition to the great responsibilities of project management, there can also be many positive reviews for successful project managers.

1.1 Project management rewards

There are many rewards associated with the success of a project manager. Here are just a few of them. First of all, it is necessary to mention the satisfaction of gathering a varied group of individuals from different companies and the creation of a high-performance team that completes the project objectives . Moreover there is an ethical reward stemming from the help of these people being able to fulfill their responsibilities and achieve success for themselves and the project. Increased profits and improved cash flow to the organization for which the project manager operates is another important point. The rewarding image of a satisfied customer is also essential. Repeated collaborations with the aforementioned client is another reward. Working

with a new company based on positive suggestions from a satisfied previous customer is obviously a rewarding experience. Finally, improved career opportunities for the project managers and their respective teams is the ultimate form of reward. Good project managers are one of the few job functions that are still in demand by companies in almost every business sector.

1.2 Responsibility of the project manager

The technical knowledge and skills required to be a successful construction manager are wide-ranging, but the good news is that you do not need to be an expert in all of these. In fact, one does not need to be an expert in any of them, he must, however, having experience in engineering or construction is a significant factor. Moreover as important as this technical experience may be, the will and commitment to take overall responsibility for the projects is even more essential. A typical construction project will have many of the following related disciplines (financial, accounting, engineering, law, insurance, risk management, market, policy, environment, technology).

1.3 Skills of a successful project manager

While experience in engineering and construction is important, the critical skills needed to be a successful project manager are not technical. They are leadership and management skills - skills that help the manager guide and manage the project in such a way that the project objectives are achieved.

The exercise of leadership and management often overlaps, but the general meaning and intent are usually clear, so there is no need for excessive academic analysis of these terms. As a general

statement, leadership implies a set of activities based on people, such as communication, guidance, setting a personal example, recognition, feedback, support, etc. while management tends to involve a more systematic set of activities such as planning, organizing, managing and controlling.

1.4 Project design

Perhaps the best way to get an overview of the project management process is to look in detail at how a project is planned.

Engineering and construction managers tend to enjoy undertaking responsibilities such as design, coordination, negotiation, installation, problem solving, etc. Planning, on the other hand, requires a more thoughtful, long-term view of the project and may include planning for activities that are "beyond the horizon" as to when they will occur. It requires more thought and often receives insufficient attention. However, good planning is the cornerstone of a good project. Careful planning, combinedwith good execution, is bound to lead to a successful project outcome most of the times. On the other hand, ineffective planning, even with good execution, can lead to a successful project, but also one which is often fraught with crises, stress and loss of opportunities, because the manager and his team saved the project instead of looking for those aforementioned opportunities. So what are the components of a successful project plan? Details vary from project to project, but the following elements are part of almost any good project plan.

Deliverables

What are the deliverables and when are they due? A deliverable is anything that is stipulated in the contract that the engineer, the construction company, the seller or the supplier has agreed to deliver to the customer. Examples of deliverables include specifications, plans, cost estimates, project schedule, equipment, buildings, systems, training, etc. During the design phase of a project, it is important to identify these deliverables, when they are due and who has the primary responsibility for each deliverable (the manager has overall responsibility for each deliverable). Often tables stipulated in a contract list all the specific deliverables and they are a good way to know what needs to be delivered and when.

Resources

A variety of resources are required to guide and manage successful projects properly. One will need human resources, technology - computers (for programming, budgeting, word processing, calculations, writing, project monitoring, progress review, e-mail, etc.), communication equipment, budgeting, in total, a clear picture of the financial resources available for project completion, equipment, accounting support.

Resource Conflicts

The project design should anticipate potential resource conflicts and, as far as possible, indicate how to manage these conflicts. Typical resource conflicts include those listed below.

Excellent human resources are always in demand and it is extremely rare that the ideal project team would expect the project manager to congratulate them on the work they are doing,

but also to manage potential conflicts within the team. Creating a plan for managing these HR conflicts that meets the needs of the manager and the needs of the organization will be crucial to the success of the project.

Technology - With technology prices falling steadily (computers, printers, telephones, etc.), technological conflicts are becoming less common. However, in a cash flow environment, this can be a challenge for a project manager. Alternatively they may include renting, borrowing from other projects or borrowing equipment from a technology team at your company, etc.

Seasonal effects on the project must be reflected in the project design. Seasons can affect the project in different ways. People in winter can be absent due to illness. In summer, they take vacations. In both cases they are not available for work on the project. Sometimes the weather is prohibitive. Similarly, in some areas, they are expected to stop or slow down productivity in a project. A prudent project manager will plan an appropriate number of vacation days, sick days, days of difficult weather, etc. and will include them in the project program. It is not difficult to calculate the number of working days that will take place due to these factors and it must be done.

Adverse weather can affect work on site. Still, the number of business days that could be lost because of site conditions can be predicted beforehand and estimated .

Whether it is a for-profit, non-profit or government agency, there will always be a budget for the project. The manager is responsible for preparing the budget at the start of the project and for managing it during project execution. The level of budget complexity should be commensurate with the overall complexity of the project. In order to prepare an effective and realistic budget, it

is important to analyze the project in phases, tasks or any other classification resulting from the construction of the project

Once the project planning steps are completed, it is important that the various members of the project team "affirm" their commitments so as to agree on what they are going to do and when they will do it. This may take the form of a contract, stating the commitment by the project team members that they will honor their commitments to carry out the project.

Despite the planning and faithful adherence to a schedule, deviations can be observed. In these cases the project design should be revised to reflect the actual conditions and changes that have occurred. This does not mean, however, that a program should be revised just because of a problem or a difficulty in the project. Good project managers solve the vast majority of problems without changing deadlines, budgets or quality standards. On the other hand, a change in the scope of the project or a natural disaster could change deliverables, dates, costs, etc. that could justify a revised project plan.

1.5 Staffing of the project team

There are several important factors that contribute to a successful project, but if the most important factor had to stand out, it would be people. Effective professionals always find a way to make things happen - to overcome the many challenges inherent in any engineering or construction project. The ability of the project manager to influence and determine to whom his project has been assigned, can have a significant impact on the success of the project itself. And in many projects, this influence can range from very small (e.g. the managers inherit the members of the project team and have to forge a successful team with the people given to them), up to the point they are asked to choose the best people for the job themselves.

Usually, however, the actual influence of the project manager on the choice of his project team falls somewhere between these two extremes. As a result, the project manager has to use a number of different strategies to get the best people for the project, according to the overall goals of the organization. When attracting people to the project team, the project manager must be flexible, persuasive and dynamic. Determining which of these characteristics should be required at all times in the staffing process requires a sense of judgment.

The right type of expertise

The individuals selected for the project team depend on the nature of the project. It is essential to select the right branches of engineering, construction and support staff that will help the manager steer a successful project. Each project, with its own unique requirements, will determine how many and what types of these or other skills will be required to perform successfully.

The right type of people

Once the type of expertise required for the project has been determined, the appropriate human resources with the appropriate type of expertise required for the project must be sought.In this stage, it is extremely important to do as much work as possible to find the potential members of the project team.

1.6 Technical, schedule, financial management

The essence of effective project management is the management of the techniques, schedules and financial data of a project, with a successful and profitable result for the organization, as well as a satisfied customer who wants to work with the organization again in the future.

The role of communication

The first step in the effective management of a project is to constantly emphasize the importance of meeting the expectations of the techniques used, the planning and the financial management of the client and the organization. The project manager wants and must emphasize the importance of achieving schedules and financial goals at every reasonable opportunity. The expression of these requirements can take place during the first meeting of the project team and will of course be repeated at each subsequent meeting.

Effective management of the technical performance of the project

While the manager has overall responsibility for the project, in managing the technical performance of the project, it is important to place responsible members of the project team to control the technical performance. This will be based on the leadership skills of the project manager. The issue of accountability is crucial. Whether it is a design analysis or a construction schedule, the manager must ensure that project team members understand their responsibility and liability for fulfilling their commitments in the technical part of the project. It should be noted that there are acceptable commitment dates and that quality standards should be met. This does not mean that a member of the project team who makes a mistake will be fired or replaced. Instead, the manager must support and train these members tso that they are able to fulfill their commitments in the future.

Effective planning management

    The first step in effectively managing the schedule is for the project manager to constantly

emphasize the importance of adhering to the schedule of both the client and the company. The

manager must reinforce the importance of meeting milestones at every reasonable opportunity.

One way to avoid late deliveries is to have periodic review meetings. In these meetings the

administrator will check the delivery dates and identify potential problems.

When running a project, it is a fact that while most people are committed to delivering on what

they promised, when they promised it, occasionally specific date commitments will not be met.

The manager should handle each situation and ensure that time commitments lapses are avoided

in the future. A proper manager should also be sensitive to serious personal problems that the

team may face and work with them as much as possible to help them fulfill their commitments.

Effective financial management

    Even the most technically sound project, which was well completed on schedule does not

meet all the requirements of effective project management if it does not meet its financial

objectives. The manager is responsible for managing the project on a specific budget by allowing

and accepting the uncertainties inherent in it, even when it is difficult to accurately predict costs.

    In order to effectively manage the financial part of the project, it is important for the manager

to become familiar with the project control system used by the organization. The reports and

information collected by these systems usually provide a wealth of data on the financial health of

the project. Sometimes these reports can be a challenge to decipher, but the manager needs to understand them so that he can determine if the project is on track based on its budget.

Labor cost management

Labor costs can be the most important element of a project. As with other project management responsibilities, it is important for the project manager to constantly reiterate to the project team the importance of controlling internal labor costs. If project team members know that internal cost control is important to the manager, it is more likely to become a priority for them as well.

If managers have prepared a budget and know what to expect in the way the project progresses in relation to the working hours required to achieve this progress, they are in a position to determine if labor costs are reasonable compared to the value received. If a manager finds that the cost is excessive compared to a previous commitment to deliver a product at a fixed cost (or working hours), then negotiations should be made. This may include removing some or all of the extra-budgetary hours charged to the project.

Subcontractor cost management

Many projects use subcontractors, consultants and salespeople. Project managers are required to control the cost of subcontractors as strictly as they control other project costs. A few ways to achieve this initially involve informing the team that controlling subcontractor costs is as important as controlling other costs. Also, looking for multiple offers from other subcontractors or using subcontractors that have been reused by the organization is an option. Experience has

shown that one of the best indicators of future performance is past performance. Negotiating

services and costs is a regular practice.

Chapter 2

2. Basic principles of leadership

So far, we have talked about many important functions of project management. We have mentioned how to staff the project team, the basic principles of project planning, the use of tools and procedures to help manage the project and how to successfully manage the technical and financial elements of a project.

All these functions are performed by individuals. Good people, with good guidance, always find a way to make things happen - to overcome the many challenges inherent in any engineering or construction project. The ability of the project manager to effectively guide his people can have a significant impact on the success of a project.

For many professional technicians, this is the most difficult aspect of project management. Most technicians are involved in engineering or construction because they like to design things, build things, and solve problems. However, as these same people evolve into the organization they work for and seek (or have) project management responsibilities, an increasing amount of their work will involve guiding others to complete the many functions of the project. Leadership can be a daunting task for some people, especially technicians - project managers who may have extensive construction experience, but little in being the person who will be responsible for leading others to do the job.

2.1 Are leaders born or created?

There are many times when referring to a person we characterize him or her as a natural leader. This is true for some people - as we hear about naturally born athletes, there are also some people who simply possess the ability to encourage others to follow them. Leadership skills, like athletic skills, seem to follow a normal distribution pattern within the general population. There are relatively few natural leaders, as well as a few born athletes. Nevertheless, the good news is that like many good athletes who, while not born with athletic skills, work hard and become great, the same goes for leaders. Almost anyone can become a good leader with hard work, guidance and practice. Like any other job function, leadership ability can be acquired. And just as almost everyone can improve a skill with practice, so can leadership skills be understood and improved with practice.

2.2 Leadership Theories

One of the challenges that leaders face today is that there are many so-called "correct" leadership theories. Some of the best known theories include:

- Situational Leadership
- Participatory Leadership
- Imperial (authoritarian) leadership
- Theory X
- Theory Y.
- One minute manager theory

And many more. These are just some of the different theories existing today. In light of the large number of such leadership theories, it is no mystery why many leaders are confused as they try to understand these often contradictory leadership concepts and apply them to the "arena" of the workplace. A leadership theory or model is useless if it cannot be applied in the real world

The model presented in this chapter is based on a scientifically valid blind research study (McBer and Company, 1983) that identifies the characteristics and abilities of top leaders. The term "scientifically valid" means that the survey, which was based on interviews with more than 100 leaders, applies to the majority of the leader population. This validity is important because it distinguishes this model from many leadership theories which seemingly sound good, yet they are proven not to be functional.

2.3 Definition of Leadership and Key points of leadership

Leadership: The process of influencing individuals or groups to achieve an organizational goal or mission.

Leadership is a dynamic process, not a static one. To be effective leaders, managers must constantly practice their leadership skills and abilities. They do not have to be perfect, but they must always strive to apply sound leadership principles in their leadership endeavors.

Leadership involves influencing individuals or groups. Good leaders effectively influence others because they know that they can not do everything themselves. Good leadership is designed to achieve an organizational goal or mission. This means guiding the project team and managing

the project with high quality, on time and within the allocated budget , while winning over a client who is satisfied with the end result.

Competence is any knowledge, skill, behavior, attitude, or trait that can be proven to reliably distinguish between effective and less efficient job performance. In other words, a skill is what senior performers do more often, in more situations, and with better results than mediocre performers.

Research on a leader's skills identified a set of skills, behaviors, or indicators that great leaders displayed or performed excellently.

Sense of responsibility

The research identified 11 skills. The researchers noted that no skill was considered more important than another. However, recording the sense of responsibility first, truly reveals the goal of leadership - if the leader is not responsible, nothing else matters, because little else will happen, except perhaps by chance.

Leaders take responsibility for their performance and that of their team, including failures or problems. Great leaders have an almost tangible sense of responsibility towards the public and their work. Such leaders keep asking, "How can we make things better?" When things go wrong, they ask, "What could I do to prevent this?" A great leader holds other people responsible for their roles in the project, but he or she does not automatically blame others when problems arise.

A true leader takes responsibility for the reputation or image of the team and seeks to build team morale and spirit by striving for a strong positive team image. For example, if one person in the team or the whole team receives a compliment from a customer or another person in the company, a great leader would publicly congratulate the person / team and emphasize his or her appreciation for their good performance. If it is a big enough success, the leader can inform a senior leader and ask that person to congratulate and praise the people / team who were responsible for the good performance. This results in showing others what good performance looks like and instilling in everyone a sense of pride and an increased motivation for good performance. If something goes wrong, the leader focuses on solving any immediate problems first. Then, by taking measures to avoid bothering anyone, he or she implements procedures that will help prevent similar incidents in the future. This monitoring could include additional training, ensuring that the leader's guidelines and standards are understood and establish procedures or other actions that will help minimize the likelihood that the same mistake will happen again.

A true leader takes responsibility for the safety and well-being of team members in work-related activities. The great leader cares about the health and safety of team members. This may include providing safety equipment for work, sometimes above and beyond requirements, as well as other appropriate means of protecting team members. As a result of the leader 's sincere concern for the safety of his / her members' work, he / she achieves a higher level of support and loyalty from his / her team members than would otherwise be the case. Who would not feel a stronger sense of loyalty and commitment to a leader or company that took care of overall security beyond the minimum standards?

Furthermore, true leaders support their teams' members' responsibilities towards their families. A great leader recognizes that team members have a life outside of work. While leaders keep people responsible for the performance of their work, they also support a team member when family needs arise. Examples include: - Time for personal crises - Phone calls to check on a sick family member - Relocation of workload temporarily to deal with a temporary crisis. An alternative form of this appreciation may be a special effort in a corporate meeting, such as a meal to praise the partner's work to the partner's spouse, child, or other family member.

Positive expectations for people

A great leader starts with a positive attitude towards the people he or she is working with. Positive expectations are based on respect for people's dignity and self-esteem. The expectation is that when people are treated well they will do well. It is not an unrealistic optimistic view of people, but a positive prejudice a manager feels about the team members that tends to instill a sense that they want to live up to the leader's expectations. The following are ways in which great leaders display positive expectations of their people.

A good leader has a strong belief that his subordinates are valuable resources

Good leaders listen to their people. They provide feedback to individuals about their contribution. Great leaders understand that they do not know everything. They do not have all the answers. They certainly make all the important decisions, but they also take full advantage of the experience and ingenuity that exists in their team. And when people are treated as intelligent adults with something to contribute, it builds their confidence, their morale and their commitment to the team.

Good leaders also recognize a person's strengths and weaknesses. No one is good or bad. When a person has poor performance, it is easy to be condemned altogether. Similarly, a good performance can produce a "halo" - the idea that the person can not be wrong. The great leader follows a balanced approach to evaluating people.

A good leader directly expresses to people the belief that they can and will succeed. When leaders are positive about their people this behavior has the effect of increasing the performance of the individual to meet the expectations of the leader. The person tends not to disappoint the leader.

Aware judgement

Even the best managed projects run into problems on the road to success. Sometimes, it can be very stressful for everyone, especially for the leader. Some leaders react inappropriately to failures by avoiding burdens and underestimating the people they believe caused the problem. Worse still, leaders can vent their frustrations on anyone close by. The great leader on the other hand tends to stay calm, focus on the facts, strive for objectivity and seek to reach sound conclusions.

Leaders form opinions and make decisions regarding information and identification of available facts. Great leaders are in no hurry to judge. They remain calm when others are not. This ability to remain calm in stressful situations, when chaos and confusion swirl everywhere, promotes

confidence in leaders by their people and others around them. As a result, everyone is able to focus their efforts on finding the best solutions instead of responding to the leader's statements.

Leaders make decisions or draw conclusions using data and information from their own experiences and those of others. While taking responsibility for their actions, great leaders know that they do not know everything and do not hesitate to ask for information from others. The leader encourages team members to make the best decision possible. In seeking this contribution, great leaders may need to work hard to build trust, as some team members may have worked for a disproportionately capable leader in the past, and may be reluctant to give the new leader their contribution for fear of ridicule.

A great leader has the ability of what is called "connecting the dots". This ability allows the leader to take different elements and organize them into whole concepts. It allows the leader to see patterns and sort relevant information from irrelevant information.

A true leader identifies many causes for an event, situation, or behavior (e.g., delayed delivery). This indicator or behavior says that if something happens in the project, a great leader will look for something more than simple or seemingly obvious reasons. An example might be that of a person on your project team who seems to miss deadlines longer than you think is acceptable. Instead of assuming that this person does not appreciate the importance of deadlines or does not care if he achieves them, the great leader will discover the "whys" of unacceptable behavior. Reasons may include a combination of the following:

- The person is overworked
- The Leader has not explained the importance of meeting deadlines
- The person is not properly trained

- The person is incompetent

- The individual may receive delayed input from others

Whatever the reasons, the great leader will use this behavior or indicator to get to the bottom of the situation.

A capable leader interprets the meaning of non-verbal cues - (a facial expression, a dead end) , looking for words, for true meanings and perceptions. Such a person dentifies trends in events or patterns of behavior. This ability requires the skill to recognize trends and patterns, that is, when things get better or when things go the other way. The great leader asks why, and begins to reinforce good behaviors, and identifies changes to correct the bad ones. An example of this capability may be the results of efforts to reduce the cost of a project.

Good leaders identify similarities or patterns between old and new situations. Excellent leaders are good students. They are able to learn from the past and apply lessons from previous events to new but similar situations. In other words, any great leader avoids rediscovering the wheel.

They are also able to identify key differences between situations or between opposing views. At the same time, good leaders recognize key differences between situations that may, on the surface, seem the same. They gather and convey ideas or situations through the use of metaphors and proportions, when needed.

Use of multiple influence strategies

In the definition of leadership, influence was the key word.Great leaders use a range of strategies to influence those ontheir project team as well as others inside and outside the organization.

Leaders usually establish credibility by demonstrating their own expertise and professionalism - (ability). However a great leader does not have to be the best in a certain set of skills (eg best engineer, best electrician, best engineer), but one who should be perceived as a competent professional by the staff. This allows the leader to be accepted as a teacher or judge by the members of his work team. It is important to understand that the more one works as a project manager, the less technical expertise that person is expected to have.

Great leaders lead by example. They understand that if others are to live up to the standards, the leader must set those standards and expectations. In other words, the great leader must lead the discussion. Everything leaders do is observed by their people. Even when a leader thinks that no one is watching, people seek him or her for guidance on how to act. Leaders exert influence with an appeal for a higher purpose and provide extra incentives for their theam to perform well.

Leaders appropriately structure the situation or the environment to influence the attitude or behavior of people - (more or less formally, as the case may be). They build and maintain relationships - (client, boss, other leaders, etc.) in order to achieve organizational goals. They can not succeed alone. Great leaders build supportive relationships of trust above, below and beyond the chain of command and help others achieve their goals and as a result, when they need help, others are willing to help.

Leader influence

Similar to the previous skill, this includes the leader who invokes his or her position as a project manager to influence others in a very personal way.

Leaders visit shops or workplaces or otherwise make themselves available or visible with the express purpose of showing interest, concern or appreciation. Great leaders do not stay locked in their office. Quite the contrary, they come out to say hello to those who belong to the team, thank them for their work, ask about their family, etc. The bottom line is that great leaders care about their people beyond the workplace and show interest in using this behavioral skill.

They usually use symbols to increase morale, faith or a sense of staying in the project or the team. These tactics will vary depending on the team. The leader publicly recognizes superior individuals or group performance. One of the most powerful ways a leader can influence people is to recognize and praise the good work of the team. Even the improvement over previous unacceptable performance can be commendable. Praise is a powerful motivator and a great leader is generous with it when it is earned. Praise which is not earned , on the other side, ceases to be motivation. The point is not to let good performance go unnoticed, even if it is just a sincere thank you.

The great leader outlines standards and expectations through the consistent reinforcement of project and company standards. These patterns are reinforced by words, gatherings, promotions, meetings, etc. The idea behind this behavior is to use the right opportunities to come back and reinforce the values and standards of the company and the project.

Conscious use of discipline

One of the most difficult things a leader can do is to hold others accountable for their results. Almost no one wants to be the "bad guy". We would all rather pat someone on the back for a good job instead of disciplining someone. But it is an inescapable truth that one aspect of a leader's job is to hold people accountable for results and enforce corporate standards.

This ability has to do with the fact that the great leader will use discipline where needed. However, as the title of ability suggests, it is a discipline governed by consciousness. There are no psychological tortures or attacks on an individual's dignity, but the leader's intention to inform others on the project team that continued poor performance will not be tolerated. Afterall, it does not take long for resentment to develop against the leader if project team members often see an employee fall short of standard performance and suffer no consequences.

The power of a project manager to exercise disciplinary authority varies from organization to organization. In many organizations, the project manager does not have direct control over the members of his project team. In this case, any discipline involved should most likely involve the person in charge. Nevertheless regardless of the organizational relationship between the leader and the employee, the leader can not shy away from the responsibility of ensuring that people perform their jobs to the standards.

A leader imposes the standards of companies and projects. A great leader does not allow standards to be violated with impunity. These standards could be related to the way the client is treated, the quality of the computer techniques, the ability to execute project schedules, and so on. If standards are lacking, however, the great leader does not treat the employee harshly the

first time or possibly several times. Instead, he or she will guide and advise the employee to help this person succeed in his job. Often, an employee's failure to meet the standards is not the employee's fault. It is rather the result of leadership failure to ensure that the employee is properly trained and driven to success. Despite concerns about the individual's future, the great leader will exercise disciplinary authority when the project or team may be harmed. While worrying about the individual, the great leader will not let one individual hurt the whole team or negatively affect the customer or the company. If necessary, the great leader will remove the individual from the team or project. Many organizations have a so-called progressive discipline policy that governs discipline issues. This usually includes verbal warnings, written warnings, a final warning (in which the employee is specifically informed that if his performance does not meet the standards within a certain period of time, he will be fired by the organization) and finally, dismissal from the company.

Efficient communication

It is impossible to lead people if they do not understand you. Poor communication between the leader and his team can lead to a lack of understanding of the mission and values, standards and expectations of the leader and the organization. This is why this ability appears in the list of top leaders.

The leader explains why, shares information, conveys the purpose of decisions. Research shows that people will put more effort and commitment when they understand the "why" of a decision. When possible, the great leader will explain the reasons to his or her subordinates to gain more commitment and support. At the same time, a leader takes steps to ensure that people absorb what is communicated to them— (non-verbal information, repetitive messages,

observation). The great leader will use more to test understanding. The leader will seek

understanding in the eyes of the individual, asking for repeated returns, monitoring

performances, etc. to ensure that communication was effective.

A good leader has to adjust communications to the level of understanding of people. Great

leaders will adapt the words, vocabulary and phrases to the level of education and training of the

people they communicate with. They know how their people learn best and communicate in a

way that works best for each of them.

Chapter 3

3.1 Construction companies

The thing to note is that the construction industry, unlike most other industries, is not a single industry but relates to different market areas. For classification purposes it can be divided into four areas:

- Building
- Civil engineering
- Repair and maintenance
- Manufacture of materials

These can be subdivided into separate market segments, such as construction, consisting of housing, industrial and commercial markets.

A study by Yousif et al. (2015) found that the construction industry has been hit by a leadership crisis in recent years, although there is growth in construction companies. This crisis in leadership has slowed the development of the industry, as leaders were insufficient to lead and achieve the desired goals.

The construction industry has a bad reputation for high rates of accidents and hazardous activities. This is reflected in statistics on high accident rates in recent years in many countries.

This problem causes loss of many lives, health, skilled personnel, compensation and cessation of production. It is a consequence of the failure of workplace safety management.

Inbaekemen and Odivwri (2015) in their study recognized that leadership significantly affects employee performance and participatory leadership styles help improve employee performance. In addition, the study by Dahal et al. (2016) found that different leadership styles are required in different situations.

A study by Pretorius et al. (2017) found that there are four stages in the overall life cycle of a project, ie

- Beginning of the project,

- Organization and preparation,

- Execution of the project and

- Project completion

Therefore, it would be perfectly appropriate for a project manager to use different project leadership styles at different stages of the project life cycle.

3.2 Leadership in construction companies

Research has shown that the manager of a construction project is one of the most important factors in the overall project success (Odusami, 2002; Toor and Ogunlana, 2005; Long et al., 2004). Hynes and Love (2004) cite examples from previous researches and note that managers have an impact on the overall quality, project cost, and that manager quality can affect project costs by up to 10% (Herbert et al., 1970) .

Leadership is one of the most important issues in management studies (Toor and Ogunlana, 2006). However, many authors have not been able to formulate the idea of leadership despite the large volume of research and literature in the field (Giritli and Oraz, 2004; Ket De Vries, 2003). Especially in the construction industry, not much work has been done on leadership (Odusami et al., 2003; Keegan and Hartog, 2004; Chan and Chan, 2005).

Cleland (1995) reports limited leadership coverage in the Project Management Body of Knowledge (PMBOK) and notes that it is an unknown area (terra incognita). Even the latest version of PMBOK includes very little discussion about leadership.

Dulaimi and Langford (1999) argue that studies of leadership in the construction industry focus on exploring the motivations and personal characteristics of project managers. In fact, only a handful of studies have focused on leadership development by construction managers.

Lack of focus on leadership is not limited to construction research. Construction managers are hardly considered project team leaders (Bresnen et al., 1986). A recent survey by the American Council of Engineering Companies (Russell and Stouffer, 2003) found that very few people see engineers as leaders, with a large percentage of respondents perceiving them as technical advisers.

Several reasons have been suggested to explain why the construction industry has not conducted significant research on leadership and its practical uses. For example, Langford et al. (1995) argue that the low volume of construction leadership studies is due to the lack of understanding of the social sciences by those in the field of construction.

3.3 Challenges of construction companies

The uniqueness of the construction field is perhaps the most frequently mentioned feature in publications on construction project management. This uniqueness comes from the distinct characteristics of construction products (Drewer, 2001). It also makes the management of construction projects a separate category as it has significant challenges in various contexts, such as: industry-specific and general challenges, environmental challenges (socio-cultural, economic, technological, legal, regulatory, environmental and ethical).

Challenges for the construction industry in particular, include poor social image of construction, fluctuating construction activity (Ofori, 1993), increased private sector involvement in infrastructure, globalization of construction leading to increased foreign participation in domestic industries (Raftery et al., 1998), the ever-increasing size of projects, the need to integrate an increasing number of construction processes (Ofori, 2003), the rapid nature of projects (Kwakye, 1997), multi-project environments (Toor and Ogunlana, 2006), the expansion of franchising application in industry, the growing trend of strategic alliances (Ofori, 2003) such as joint ventures, mergers, acquisitions and partnerships. Some other researchers note and report challenges such as the gap between research and practical application (Ofori, 1993; Chemillier, 1988) and the need to achieve the highest value (Huovinen, 2006).

Songer et al. (2006) note that the construction industry faces significant leadership challenges such as a lack of quality personnel due to the difficulty of attracting talent, an aging workforce and other workforce issues such as changes or transitions, lack of teamwork and communication, training (Songer et al., 2006).

These challenges and the need for rapid change in business culture have led to the widespread leveling of organizational structures and empowerment strategies. To improve the operational flexibility of organizations, several new structures have emerged such as: networks, partnerships, federalist structures, shamrock structure and virtual organizations (Bolman and Deal, 1997).

Sociocultural challenges include the spread of terrorism, wars, political unrest, other security problems, increased private participation in infrastructure projects and intercultural issues. Economic challenges include financing difficulties, precarious economic conditions, threats of high inflation due to rising energy prices, fluctuating stock values and exchange rates and cash flow problems.

Technological challenges concern and include the increased use of information and communication technologies, such as e-procurement, the technological gap between developed and developing countries, leading to technology transfer issues, and technological innovation and progress.

There are also multiple legal and regulatory challenges. These challenges include different legal systems, appeal procedures and arbitration methods within and between countries.

On the other hand, sustainability and environmental challenges are also a common if not permanent phenomenon. Increasingly stringent environmental regulations, increasing awareness

of the need for structures that support and promote sustainable development, are some of the major challenges in the field of sustainability and the environment.

Ethical challenges include corruption in both developing and industrialized countries, fraudulent, immoral and unprofessional practices (Toor and Ofori, 2006).

The aforementioned examples prove beyond a shadow of a doubt that the construction industry should focus on developing project managers who possess good leadership qualities. Such project managers have a leadership style that best suits themselves and the teams they lead, but also the projects they manage.

3.4 Leadership style in construction projects

The leadership discussion should include the appropriate leadership style for business and project leaders. Leadership style is a common result of information about the leader, his personality traits and underlying motivations (Toor and Ofori, 2006a). In recent decades of leadership research, a number of leadership styles have been proposed for organizational leaders such as the transactional style, the transformation style, that of the charismatic leader, the democratic, the authoritarian, the consulting, participatory, the servant leader, tyrant, the project-oriented leader, the relationship-oriented leader, the production-oriented leader, the employee-oriented leader and so on.

Researchers have explored leadership styles suitable for construction professionals. The widely used leadership model is Fiedler's (1967) least preferred co-worker (LPC) conjunctural

model. In one of the first studies, Monaghan (1981) observed that project managers, who had a high level of work and were low in people consideration, produced an acceptable level of commercial performance.

Another study described project managers as "socially independent" (Bresnen et al., 1986) although LPC scores indicate work-oriented behavior of subjects (Dulaimi and Langford, 1999). Seymour and Elhaleem (1991) noted that the effectiveness of project managers is quite synonymous with leadership in the direction of work.

Rowlinson et al. (1993) examined the variants of leadership styles used by the same construction managers on different occasions. They found that project leaders tend to use a supportive style in the feasibility study and pre-contract stages of the work and an instructional style as construction progresses. Dulaimi and Langford (1999) in their study also considered project managers as socially independent. They noted that the personal orientation of the project manager and the situation variables were independent of each other. Their results show that the personal orientation of the project manager does not affect their behavior.

In another study of construction site managers, Fraser (2000) found that those who scored high on the efficiency scale used the team leadership style. These managers followed a production leadership style with the lowest scores and those using a compromising leadership style had mediocre efficiency scores.

In contrast to previous studies, in a study of project managers in Bangkok, Thailand, Ogunlana et al. (2002) found that relationship-oriented leadership style was considered more important than work-oriented style for project managers. Fellows (2003), in a quantity study -

construction professionals with specialized knowledge of construction costs and labor contracts - in Hong Kong, observed a tendency to adopt a supportive leadership style. They observed that the preference for leadership-oriented relationships was stronger among contractors than consultants.

In their research on the leadership style of construction professionals in Turkey, Giritli and Oraz (2004) observed that women and men managers were similar in terms of business leadership but in the transformational leadership style, the practice was significantly different. . Also, managers in higher positions had and used a leadership style of leadership than in lower management positions, which shows that senior managers - managers are guided by example, but exercise strict control over the poor performance of their subordinates.

Chan and Chan (2005) found that all transformational factors (characteristics and behaviors, motivation through inspiration, spiritual stimulation and personalized vision) and the potential reward of transactional factors were significantly correlated with scoring outcomes (such as leaders, the extra effort of employees, the satisfaction of employees by leaders). The study revealed that the well-understood leadership styles of construction professionals were mobilization through inspiration, idealized characteristics, mental stimulation, idealized behaviors, potential reward, and personalized vision. Chan and Chan (2005) suggest that construction professionals promote the use of transformational leadership in their interactions with employees in the workplace for greater productivity and employee satisfaction.

Toor and Ogunlana (2006) observed that the characteristics of transformational leadership scored higher than those of transactional leadership. They also observed that the use of power

and punishment were rated the lowest among leadership behaviors. The above researchers summarized the leadership behaviors in what they call "Four Rs":

- Resolving,

- Reverent (respect),

- Rewarding, and

- Revolutionary

and argued that the "Four Rs" were critical to the success of construction leaders in major projects.

The debate so far reveals that there is no general agreement on what leadership style best suits builders and project managers. The reasons are clear: no leadership style can be considered the best in all circumstances and at all times (Fiedler, 1967; Vroom and Jago, 1988). The context studied is important when it comes to measuring management knowledge (Chanlat, 1996), and leadership style effectiveness (Fellows et al., 2003). In addition, most of the recognized leadership styles are egocentric, work-focused, relationship-focused, or change-oriented. These styles do not indicate whether the effort behind the leadership is genuine, authentic and credible. Leaders can utilize such styles for certain personal purposes. Therefore, there is a need for a leadership that is selfless, altruistic, future-oriented, self-regulating and to put it simply, authentic.

Another important question is whether characteristics such as duty, clarity of vision, mental stimulation, active or passive management, and so on, are sufficient for an effective leader.

In addition, most leadership styles do not take into account questions such as how the leader develops a particular style, why the leader chooses to adopt a particular style, why some styles work within some groups but fail at others under similar circumstances, if there is an ideal set of quality characteristics for the best leadership style, how one leader changes from one style to another, if it is possible to maintain credibility by changing styles often, how a leader can have many styles at once, if he or she works on different projects etc.

To answer these questions, one must look for the fundamental and key characteristics that create and structure the current leadership style, so that there is a broader basis for understanding leaders and developing leadership. George (2003) and Luthans and Avolio (2003) presented the structure of "authentic leadership" as a solution to the current challenges of leadership as well as its future requirements. In the next section, the concept of authentic leadership is discussed in detail, along with its possible application in the construction industry.

3.5 Leadership for project managers

The need for effective leadership in construction projects is undeniable in an increasingly complex global environment. Large and international construction companies require people who have integrity, understanding of the situation, passion for guidance, zeal to bring about change and understanding of the demands of both work and society.

Although various forms of leadership are suggested in the literature, many researchers in the field of leadership now believe that "authentic leaders" are the solution to the leadership crisis in the modern business world. Characteristics of authentic leaders include positive energy, high

sense of integrity, moral character and self-discipline, clear purpose, concern for others, confidence, hope, optimism, resilience and personal values (George, 2003 ; Luthans and Avolio, 2003; Avolio and Gardner, 2005; Luthans and Avolio, 2003).

Some recent research also suggests that the construction industry should develop individuals who are not only good managers but also have a genuine passion for leading projects. These leaders are not self-centered project stereotypes, rather they are motivated by the well-being of their subordinates, other colleagues, their organization and society in general. They have the highest sense of responsibility and while achieving their goals, they do not forget their moral obligations to their organization, society and future generations. They have a balanced lifestyle and futuristic leadership style. They are strict in their moral values and do not compromise. They build an environment of mutual trust, optimism, altruism and transparency within the working groups.

3.6 Development of authentic leadership in the construction sector

There are passive and active forces, modern leadership challenges, and leadership requirements for future construction projects. Passive forces include traditional education, training, passive organizational and industrial culture, and traditional performance expectations. These forces push the project manager to remain conventional and classic, to comply with the requirements of the situation and to accept the existing circumstances. Modern leadership challenges include those that are industry specific. These challenges were discussed above. Active forces consist of demands and expectations for the future of business and project leaders.

To meet these requirements, project leaders must be optimistic, future-oriented, resilient, ethical, creative, innovative and transparent.

Future leaders must also be able to demonstrate real performance and create a positive environment in their organizations. Modern leadership challenges and active forces simultaneously inspire the traditional project manager to evolve into an authentic project leader through the development of authentic project leadership. The model shows that the development of authentic project leadership depends on the positive mediation of previous leaders, the highly developed organizational framework and a positive external environment. A highly developed and positive organizational framework will support the type of self-knowledge and self-regulation required of leaders to develop higher levels of authentic leadership potential (Luthans and Avolio, 2003).

It is argued that the positive self-development of the project leader is influenced by the external environment which may include: other organizations, project stakeholders, socio-cultural and economic factors, the political situation and other external influences (Toor & Ofori, 2006). The positive mediation of previous leaders refers to the positive effect of activation events that activate leadership traits on individuals.

Toor and Ofori (2006b) describe these factors as biological, physiological, psychological, sociocultural, spiritual, economic, educational, professional, and other related. The combined positive mediation of previous leaderships with a positive organizational and environmental context is central to the development of positive leadership traits.

3.7 Characteristics and influences of authentic project leaders

The developmental model of authentic project leadership proposes the positive influence of various social dictations with positive psychological characteristics to create positive organizational behaviors in individuals who eventually develop as authentic project leaders. These leaders are confident, optimistic, resilient, resilient, ethical and futuristic (Avolio et al., 2005; Gardner et al., 2005; May et al., 2004) and with all these characteristics turn their partners into leaders (Luthans and Avolio, 2003). At the same time, they have a strong understanding of cultural sensitivities and have high motivation and self-awareness. They understand the requirements of the project from the client as well as from the perspective of the user and give the best possible contribution to make the project successful for all interested parties. They have the highest level of integrity, deep sense of purpose, courage to move forward, passion and leadership skills (George, 2003).

Authentic project leaders realize that the engineering profession requires people with honor, integrity, technical ability, entrepreneurship and pleasant personalities (Schaub and Pavlovic, 1983). They show professionalism and have characteristic professional ideals, which Lawson (2004) considers to be knowledge, organization and ethics of duty. They also have high standards of ethics and ethics. They monitor the growth of their followers and act with the aim of turning them into future leaders (Avolio and Gardner, 2005). They are involved in monitoring the performance and correcting the mistakes of their followers, teaching and guiding them (Bass and Steidlmeier, 1999).

Authentic project leaders are not only good at utilizing human and social assets (Avolio and Luthans, 2006), they are also competent and highly knowledgeable in their field. Gardner and

Schermerhorn (2004) believe that the knowledge of authentic leaders is committed to building a higher level of organizational capacity. Their behaviors become examples for others to follow and have the maximum level of performance. Authentic leaders have a strong influence on enhancing the ability of others to perform better by providing support and creating conditions that stimulate and motivate individuals to work hard, even extremely hard (Gardner and Schermerhorn, 2004). They challenge their followers by setting high performance standards through their own examples. Demonstrating dedication, they become the standard for real performance. Although, as humans, they make mistakes, take responsibility, and learn from their mistakes (George, 2003). Through the wisdom they gain from their experiences, they can reflect on a situation by evaluating and making choices (Kupers, 2005). They are guided by a set of higher values (Schwartz, 1994) that mediate their decisions about what is right and fair for all concerned (Bass and Steidlmeier, 1999; Luthans and Avolio, 2003; May et al., 2003). Michie and Gooty (2005) believe that authentic leaders are concerned with the interests of all stakeholders as they have important values such as kindness (honesty, responsibility and faith) and ecumenism (equality, social justice and tolerance).

These characteristics show some of the characteristics of transformational, charismatic, spiritual and moral leadership. Proponents of authentic leadership call it a "radical construct" and believe that it is based on all forms of positive leadership, although it differs from other leaderships in many ways (Avolio and Gardner, 2005; George, 2003). Therefore, authentic leaders can be transactional, transformational, leadership, or participatory, and yet continue to be defined as authentic leaders (Hughes, 2005).

3.8 Impact

The model presented here underlines the need for a change in the overall philosophy with which modern construction managers operate. A more humane and authentic approach to project leadership is favored. It is argued that assessing the authenticity of leadership will help develop effective leadership for future projects, and also leads to a professional culture based on positive organizational behavior, positive culture, high values, mutual respect and understanding, mutual prosperity and real performance.

Another advantage of authentic leadership is its viability compared to other forms of leadership. Since authentic leadership is a radical construct and is achieved through a deep sense of self-awareness and self-regulation, there is a high probability that it will be maintained in individuals and organizations. Authentic leadership development will also develop a positive organizational culture that will ultimately enhance employee satisfaction and productivity. It will also build trustworthy and lasting relationships between leaders and their subordinates.

The authentic leadership structure also emphasizes the authentic development of the followers. Authentic leaders are not selfish. They act as role models for their followers and focus on developing themselves as leaders. Studies have shown that when people are treated fairly, they are more committed and are more likely to display positive attitudes and behaviors (Rhoades, et al., 2001; Gardner et al., 2005). This positive attitude of leaders as well as the trust of followers in leadership leads to positive organizational results (e.g. Dirks and Ferrin, 2002) such as developing positive organizational behavior (Luthans, 2002; Cameron et al., 2003).

Developing authentic leadership of project leaders will also benefit the leaders themselves by improving their performance and efficiency. It will have a profound and long-lasting positive effect on the overall organizational culture and performance. Developing authentic leadership will create an environment of trust and positive relationships that are the keys to the success of teams working on construction projects.

3.9 Looks to the future

It is necessary to study the level of authentic leadership in the leaders in the construction industry at different levels of organizations and in different countries. Studies in different fields of authenticity can help improve leadership practices through mutual learning. A comparison of the construction industry with other industries can also help calculate the need for professional ,as well as, leadership development. Research is needed on leadership development initiatives through leadership interventions. These should be multi-level studies that can provide a deeper insight into the leadership challenges and needs in project construction.

Future leadership studies can examine the impact of genuine project leaders on their colleagues and the success of the projects they lead. These studies can also focus on how the authenticity of leadership is perceived in different contexts such as culture, religion, ethnicity and gender. Another dimension in which leadership industry research can focus is on the organizational context, categorized by type of organization (contractors, architects, designers, inspectors, and so on), organization size (small, medium, large, local, multinational and so on), and focus on the activity of the organization.

This multi-layered and multidimensional analysis will help to understand the specific leadership needs and requirements of organizations that belong to different contexts, as well as what influences the tactics used by leaders to be more effective and successful in different contexts.

The idea of authentic leaders and how these leaders should be further developed, with particular attention and emphasis on the construction industry, should be the subject of extensive research.

Chapter 4

4. Management and leadership in construction companies: Case Study

A leader has vision, motivation and organizational skills. Excellent and capable leaders are created and evolved through a never-ending process of self-improvement and exploitation of their education and experience. Leaders are constantly trained and studied to develop and perfect their leadership skills.

Managers in a construction company have as their primary goal and purpose to achieve results in the construction projects of the organization they lead with the aim of the successful completion of the project and at the same time the leadership of their staff.

4.1 Case Study: "Babis Vovos - International Technical SA", Construction Company.

The Company was founded in 1974 by Charalambos Vovos himself under the name "Babis Vovos Hellenic Tourist SA", which in August 1999 was renamed to "Babis Vovos - International Technical SA".

The buildings that the company has constructed and utilized during its 32 years of activity in the field of urban real estate utilization exceed 30 in number and they include some of the most famous and modern buildings of Athens, such as ATRINA, AGORA, POLIS , DELFI CORNER, ATRIUM, MONUMENTAL PLAZA etc.

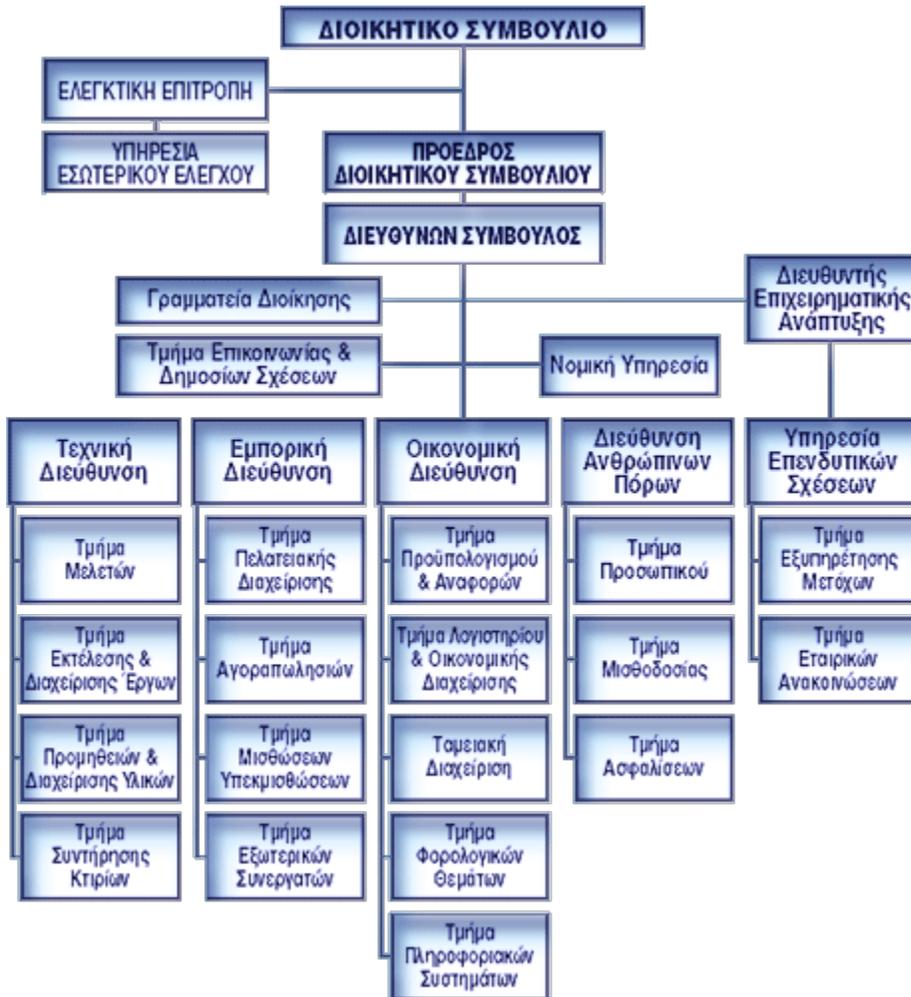The organization chart of the company is presented in figure 1.

Figure 1. The organization chart of the company Babis Vovos - International Technical SA

The construction company Babis Vovos - International Technical SA is associated with the name

of its founder Babis Vovos, who was also the CEO of the company.

Charalambos (Babis) Vovos is a civil engineer, who started working as a civil engineer in 1957 in a large construction company in Athens. In 1974 he created his own company (Babis Vovos - International Technical SA).

In 1974, he built the first office building in Athens which was also the first glass building he built according to the standards he was subjected to in New York, although the building itself did not have the same specifications. At that time he was constantly traveling collecting images, experiences and trends. In collaboration with Greek, American and Italian architects, he built the Atrina Tower in 1977 and the glass shopping center on Kifissias Avenue in Athens, which would become the beginning of a feverish construction process.

4.2 Charalambos Vovos: Civil engineer - Manager of a construction company

One of the key characteristics of a leader is vision. The case of Babis Vovos is a typical case of a leader with a vision. This is evident from the state-of-the-art glass constructions that his company built utilizing a model of similar constructions in America. Like all leaders, he was constantly evolving through a never-ending process of self-improvement and by using his education and experience. Babis Vovos associated his name with the impressive glass buildings in Athens.

At the same time, Babis Vovos has always had the reputation of being a workaholic and very strict in matters of education and training, wanting to inspire his staff. It is characteristic of capable leaders to seek continuous education and learning for both themselves and their associates. There was always a positive environment of leadership containing elements such as

ethics, beliefs, values and ambitions. Vovos's leadership includes all those elements of a modern construction manager and an authentic leader.

Conclusions

The general consensus is that there is a lack of literature and, by analogy, research on leadership in the construction sector. It is suggested therefore that the traditional behavior of construction managers - leaders is due to various factors that are inherent in the construction industry. It is argued that there is a need for a significant change in the way project managers operate and project guidance. They need to develop as effective leaders rather than as managers. Current challenges and future leadership requirements call for a change in the type of leadership used as well as the way it has been practiced so far. This paper proposes the application of authentic leadership at all levels of construction organizations. It is necessary to further develop this concept, and to conduct research to test authentic leadership throughout the construction industry. Authentic leadership must become part of the organizational culture. The development of authentic leadership in project leaders is a solution to the leadership crisis that the construction industry is currently facing.

Bibliography

- Yousif, Eng Yousif A., Chowdhury Hossan, and Nicola McNeil. "Evaluation of Leadership Styles in the Construction Sector of UAE." *International Journal of Business and Management* 10, no. 12 (2015): 71.

- Igbaekemen, G. O., and J. E. Odivwri. "Impact of leadership style on organization performance: A critical literature review." *Arabian Journal of Business and Management Review* 5, no. 142 (2015): 1-7.

- Khet Raj Dahal and Manoj KC, Leadership Management among Construction Professionals in the Context of Nepal. *Journal of Entrepreneurship Organization Management* 5 (2016).

- Pretorius, Suzaan, Herman Steyn, and Taryn Jane Bond-Barnard. "Exploring project-related factors that influence leadership styles and their effect on project performance: a conceptual framework." *South African Journal of Industrial Engineering* 28, no. 4 (2017): 95-108.

- Arcila, J. H. L. (2006). How Much Construction Should We Teach in Civil Engineering Programs? Proceedings of *CIB W107 Construction in Developing Countries International Symposium "Construction in Developing Economies: New Issues and Challenges"*, Santiago, Chile.

- Avolio, B. J. and Luthans, F. (2006) *The High Impact Leader*. New York: McGraw-Hill.

- Avolio, B. J., and Gardner, W. L (2005) Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, Vol. 16, No. 3, pp. 315-338.

- Bass, B. M. and Steidlmeier, P. (1999) Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, Vol. 10, No. 2, pp 181-217.

- Bresnen, M., Bryman, A., Beardsworth, A., Ford, J., and Keil, E. (1986) Leader orientation of construction site managers. *Journal of Construction Engineering and Management, ASCE*, Vol. 112, No. 3, pp 370–386.

- Bolman, L. G., and Deal, T. E. (1997) *Reframing Organizations: Artistry, Choice and Leadership* (2nd edition). San Francisco: Jossey-Bass.

- Bonasso, S. G. (2001) Engineering, Leadership, and Integral Philosophy. *Journal of Professional Issues in Engineering Education and Practice*, Vol. 127, No. 1, pp. 17-25.

- Cameron, K. S., Dutton, J. E., and Quinn, R. E. (Eds.). (2003). *Positive organizational scholarship: Foundation of a new discipline*. San Francisco: Barrett-Koehler.

- Carrato, P. and Haryott, R. (2003) Building leaders of a global society. *Journal of Professional Issues in Engineering Education and Practice*, Vil. 29, No. 3, pp 125-128.

- Chanlat, J.F. (1996) From cultural imperialism to independence: Francophone resistance to Anglo-American definitions of management knowledge in Quebec. In Clegg S. R. and Palmer G. (eds.) *The Politics of Management Knowledge*, Sage, London, pp. 121–40

- Chemillier , P . (1988) Facing the urban housing crisis : Confused responses to growing problems . *Building Research and Practice*, Vol. 16, No. 2, pp 99-103.

- Dirks, K. T., & Ferrin, D. L. (2002) Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, Vol. 87, pp 611–628.

- Drewer, S. (2001) A Perspective of the International Construction System. *Habitat International,* Vol. 25, pp 69-79.

- Dulaimi, M. and Langford, D.A. (1999) Job Behavior of Construction Project Managers: Determinants and Assessment. *Journal of Construction Engineering and Management*, Vol. 125, No. 4, pp. 256-264.

- Dulaimi, M. F. (2005) The Influence of Academic Education And Formal Training on the Project Manager's Behavior. *Journal of Construction Research*, Vol. 6, No. 1, pp 179-193.

- Fellows, R., Liu, A., and Fong, C. M. (2003) Leadership style and power relations in quantity surveying in Hong Kong. *Construction Management and Economics,* Vol. 21, 809–818

- Fiedler, F. E. (1967) *A Theory of Leadership Effectiveness*, McGraw-Hill, New York.

- Fraser, C. (2000) The influence of personal characteristics on effectiveness of construction site managers. *Construction Management & Economics*, Vol. 18, No. 1, pp 29-36.

- Gardner, W. L. and Schermerhorn Jr., J. R. (2004) Unleashing Individual Potential: Performance Gains Through Positive Organizational Behavior and Authentic Leadership. *Organizational Dynamics,* Vol. 33, pp 270-281.

- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., and Walumba, F. O. (2005) Can you see the real me? A self-based model of authentic leader and follower development. *The Leadership Quarterly*, Vol. 16, pp 343-372.

- George, William W. (2003) *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value*. San Francisco: Jossey-Bass,

- Giritli, H. and Oraz G. T. (2004) Leadership Styles: Some Evidence from the Turkish Construction Industry. *Construction Management and Economics,* Vol. 22, pp 253-262.

- Haynes, N. S. and Love, P. E. D. (2004) Psychological adjustment and coping among construction project managers. *Construction Management and Economics.* Vol. 22, pp 129–140

- Herbert, A., Martvall, K. and Wirdenius, H. (1970) Site management and production disturbances. *Building Technology and Management*, Vol. 7, pp 19–20.

- Hughes, L. (2005) Developing Transparent Relationships through Humor in the Authentic Leader-Follower Relationship. In: Gardner, W. L., Avolio, B. J., and Walumbwa, F. O. (Eds.) *Authentic Leadership Theory and Practice: Origins, Effects and Development* (pp 84-107) Elsevier JAI.

- Huovinen, P. (2006) Value-Based Management of Highly Dynamic Construction and Engineering Businesses. *Proceedings of 2nd Specialty Conference on Leadership and management in Construction*.

- Keegan, A.E. & Den Hartog, D. N. (2004) Transformational leadership in a project based environment: a comparative study. *International Journal of Project Management*, Vol. 22, pp 609-617.

- Kets De Vries, M. R. F. (1997) The Leadership Mystique, in K. Grint (ed.) *Leadership: Classical, Contemporary, and Critical Approaches. Oxford University Press, UK,* pp 250-271.

- Koskela L. and Vrijhoef R. (2001) Is the current theory of construction a hindrance to innovation?. *Building Research and Information,* Vol. 29, No. 3, pp 197-207.

- Küpers, W. (2005) Phenomenology and Integral Pheno-Practice of Wisdom in Leadership and Organization. *Critical Management Conference, University of Cambridge*.

- Kwakye, A. A. (1997) *Construction Project Administration in Practice*, Addison Wesley Longman, London.

- Long D. N., Ogunlana, S. O. and Lan, D. T. (2004) A Study on Project Success Factors on Large Construction Projects in Vietnam. *Engineering, Construction and Architectural Management,* Vol. 11, No. 6, pp 404-413.

- Luthans, F. (2002) The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, Vol. 23, pp 695–706.

- Luthans, F. and Avolio, B. J. (2003) Authentic leadership development. In K. S. Cameron and J. E.Dutton and R. E. Quinn (Eds.), Positive organizational scholarship: Foundations of a new discipline: 241-258. San Francisco, CA: Berrett-Koehler

- Michie, S. and Gooty, J. (2005) Values, emotions, and authenticity: Will the real leader please stand up? *The Leadership Quarterly*, Vol. 16, No. 3, pp 441-457.

- Monaghan T. J. (1981) An investigation of leadership styles and organizational structure, and their influence on the conduct of construction projects, *M. Sc. thesis*, Heriot-Watt University.

- Nguyen, T. H. (2003) *Organizing Construction Process*. Hanoi, Construction Publisher House, pp 1-5.

- Odusami, KT (2002) Perceptions of construction professionals concerning important skills of effective project leaders. *Journal of Management in Engineering*, Vol. 18, pp 61-67.

- Odusami, K. T., Iyagba, R. R. O., & Omirin, M. M. (2003) The relationship between project leadership, team composition and construction project performance in Nigeria. *International Journal of Project Management,* Vol. 21, pp 519–527.

- Ogunlana, S. O. Siddiqui, Z, Yisa, S. and Olomolaiye, P. (2002) Factors and procedures used in matching project managers to construction projects in Bangkok. *International Journal of Project Management,* Vol. 20, pp 385–400.

- Ofori, G. (1993) Research on construction industry development at the crossroads. *Construction Management and Economics*, Vol. 11, pp 175-185.

- Ofori, G. (2003) Preparing Singapore's construction industry for the knowledge-based economy: practices, procedures and performance. *Construction Management & Economics*, Vol. 21 No. 2, pp 113-125.

- Pries, F., Doree, A., Van Der Veen, B., and Vrijhoef, R. (2004) The Role Of Leaders' Paradigm In Construction Industry Change. *Construction Management and Economics*, Vol. 22, pp. 7-10.

- Raftery, J., Pasadilla, B., Chiang, Y.H., Hui, E.C.M. and Tang, B.S. (1998) Globalization and construction industry development: implications of recent developments in the construction sector in Asia. *Construction Management & Economics*, Vol. 16 Issue 6, pp 729-737.

- Rowlinson, S., Ho, T., and Yun, P. K. (1993) Leadership styles of construction managers in Hong Kong. *Construction Management and Economics*, Vol. 11, pp 455–465.

- Russell, J. S. and Stouffer, B. (2003) Leadership: Is It Time for an Educational Change? Editor's Letter, *Leadership and Management in Engineering.* pp 2-3.

- Schaub, J. H. and Pavlovic, K. (1983) Engineering Professionalism and Ethics, Wiley.

- Schwartz, S. H. (1994) Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, Vol. 50, pp 19–45.

- Seymour, D. and Abd Elhaleem, T. (1991) 'Horses for Courses'-Effective leadership in construction. *International Journal of Project Management.* Vol. 9, No. 4, pp 228-232.

- Skipper, C. and Bell, L. (2006). "Leadership Development of Construction Project Managers", Proceedings: *2nd Specialty Conference on Leadership and Management in Construction*, pp 124-134.

- Songer, A., Chinowsky, P., and Butler, C. (2006) Emotional intelligence and leadership behavior in construction executives. *Proceedings of 2nd Specialty Conference on Leadership and management in Construction*, pp 248-258.

- Toor, S. R. and Ogunlana, S. O. (2006) Successful Project Leadership: Understanding The Personality Traits of Project Managers and Organizational Factors. *Proceedings of the CIB W107, Construction in Developing Economies International Symposium.* Santiago, Chile.

- Toor, S. R. and Ofori, G. (2006a) An Antecedental Model of Leadership Development. *Proceedings of Joint International Symposium of CIB Working Commissions W55/W65/W86,* October, Rome, Italy.

- Toor, S. R. and Ofori, G. (2006b) Leadership Flashback: An Antecedental Approach to Authentic Leadership Development. *Proceedings of the Second Biennial Gallup Leadership Institute Summit,* October, Washington D. C., USA.

- Vroom, V. H. and Jago, A. G. (1988) *The New Leadership: Managing Participation in Organizations*, Prentice-Hall, Englewood Cliffs, N. J.

- Winch, G. (1998) Zephyrs of Creative Destruction: Understanding the Management of Innovation in Construction. *Building Research and Information*, pp 268-279.

- Shamas-ur-Rehman Toor, George Ofori, IN QUEST OF LEADERSHIP IN THE CONSTRUCTION INDUSTRY: NEW ARENAS, NEW CHALLENGES! CCIM2006 Sustainable Development through Culture and Innovation, 26-29 November 2006, Dubai, UAE, pp 18 -31