

# Project management, non repetitive

Engineering, Project Management



A project can be defined as a unique, complex, non repetitive effort, constrained by time and budget limits, aiming at achievable and realistic targets. Its plan is to meet customer demands, and as a procedure it has distinctive identifiable stages: defining, planning, execution and deliverance. Project Management is the act of planning, managing and organizing all the parameters of a project, from budget to human resources. It is responsible for all the stages of a project mentioned above and incorporates monitoring and controlling the whole process of a project, from its initiation to the final deliverance. The implementation of Project Management is a responsibility for one person, the Project Manager. A Project Manager manages projects within a clearly defined framework, given the circumstances, applying all the techniques and practices required to reach to the wanted result. He or she has to provide a connection within the different departments of the projects, linking a sometimes diverse group of people and make decisions that can formulate the outcome of the project. A Project Manager must be able to take decisions accounting for people, time, budget and performance, and be in a position to quickly and effectively provide solutions for any problem that occurs within the project environment. He or she also has to manage tension between feasibility and customer expectations.

Once an additional luxury, Project Management has now become an essential instrument for industrial and commercial business. Firms are nowadays project oriented, which means that they base their strategic goals on different projects. Securing the success of these separate parts can ensure the success and benefit of the firm. Project Management's value has

increased due to the rapidly changing business environment, and it has been acknowledged as essential for various reasons.

Projects' life cycles have compressed to the point that only a well functioning management can accomplish the desired result within time limits. The market in which the firms compete is not local, but global, and the competition creates upgraded demands. Knowledge required for the different aspects of a project is specific. Specified knowledge as well as experience is now more needed than ever, and ability to deal with complexity, integration and specificity is vital. Customer demands in customization and efficiency are increasing and survival in the business world can only be accomplished by meeting these demands. These aspects have been increasingly altering the strategic scopes of firms. Consequently, Project Management has evolved to the point that it is now an important factor for thriving in the harsh business environment described, and its importance will keep on rising leading to its rapid expansion.

The Project Management process can be analyzed into two directions: technical and sociocultural. The technical approach of project management includes all the processes that have to do with allocation of resources, the planning and monitoring of the project stages, the database available and the information coming in and out of the project's environment. The sociocultural direction emphasizes on the human factor, and the challenge of combining different set of skills with different personalities within diverse environment. Creating a balance for this environment is challenging but extremely critical for the project's vitality. In general technical and

sociocultural issues are of equal significance for a project's background. Negligence of any of those can never lead to a satisfactory result.

As far as the sociocultural approach is concerned, there is a set of issues that requires attention. These issues are outstanding because they are crucial for the functionality of the project's members, and the relationship between them. A project can only be accomplished within a healthy environment. The term healthy in this case describes the collaboration between the team members and the efficiency of their contribution. The issues that are important are:

- \* Leadership
- \* Teamwork
- \* Conflict Management
- \* Negotiation
- \* Ethics and Professionalism

### **Leadership**

Leadership is the ability to ensure subordinates perform their tasks and duties up to the standards that are required, or set prior to the project's planning period, using inspiration or inducement. A Project Manager inevitably must contain leadership features in his/her work. These features include social skills, advanced communicative abilities and flexibility in judgment. The traits of a leader that decide his/her leadership ability are intelligence, self confidence, ability to take initiative (or improvise),

objectivity and conceptualization (ability to connect data received from the team and arrive to conclusions). Some leaders are more suitable to operate in a set of situations than others because of difference in these traits.

The first thing a leader is responsible for is the team building. This procedure is complex, as different personalities from, potentially, different cultural environments have to co-exist, and collaborate in an effective way. A leader has to find the keys to unlock a flow of information and a sense of trust between the team members and between the team members and him/her. This can be achieved by balancing the individual, group, and project needs, and by influencing behaviors, which is a way of accomplishing team binding and performance. On the whole, a leader is responsible for the application of each team member's skills, and has to put efforts into obtaining their best in all cases. In order to allow the talents of the team members lead to flawless execution and stellar results more consistently fundamental individual and team behaviors must adjust to the circumstances. Changes must inescapably take place in personal, social and structural motivations and abilities of each team's member. Overall, a leader has to rally both physical and emotional resources, and make the best out of them in the field of action.

A leader must always have a positive mindset for his/her subordinates, and his/her expectations should be based on peoples' dignity and self-worth. Moreover he/she has to have a strong conviction that the team members are valuable resources, indispensable to the project and trustworthy enough to hold the project's future in their hands.

One of the most significant contributions that a leader must entitle in the project is the creation and clear communication of a shared vision. A leader sets the standards for performance for the team and must endeavor in persuading the team to cooperate and work to meet these standards. Providence of motivation towards a certain objective is vital for the project's success. He/she has to be able to clarify the direction in which to proceed to his or her subordinates. More than that, a leader must, at all times, be in full control of his/her subordinates, interfering to the extent that does not retrieve initiatives from them, but allowing them to creatively carry out their individual or group work. Lessons learned in the process must be efficiently and clearly communicated within the project members. A leader is not expert in teaching, but has to become a facilitator in the process. Influence, motivation, knowledge and commitment are links that bind the leader with the subordinates and the project.

The priorities set within a project are a leader's responsibility. Critical issues in need of attention must be pointed out. A leader is a decision maker and has to be capable of deciding and support his/her decisions. Furthermore, decisions that the leader makes must be within the project's objectives, and, nevertheless, result in a positive outcome for the project and its elements. Finally, a project manager as a leader must be a sufficient advocate for the project. He/she has to have complete knowledge of the project's status and agenda, and be able to describe or report any aspect of the project to the client, the shareholders or other team members.

**Teamwork**

Another important issue for the process of Project Management is teamwork. Teamwork is the ability of a group of people to combine their knowledge and efforts towards a common goal. A team consists of carefully chosen individuals with certain knowledge that can be used in the project. Best ideas do not usually originate from a group of intelligent individuals alone, but through positive communication. Every individual has a unique perspective on both problems and solutions.

In general, teamwork encompasses the opportunity of shared growth and enhanced creativity within project limits. However, the notion of teamwork is neither intuitive nor easy to accomplish. A project leader has to put effort into forming a team and supervise its function.

Effectively implementing teamwork in the process of management in a project can lead to successful results. In order to achieve teamwork a project manager must go through a certain process of his/her team modification. Establishing safety and credibility will ensure a healthy environment for the team members. Every team member should feel as an active part of the project, and be able to express ideas and disagreements in a polite and productive way. All issues under consideration must be expressed so everyone can deal with them in the open.

Complete understanding of the ramifications of an issue requires digging down to an advanced level of detail than many work groups typically do. Specificity about next steps, assigning responsibilities, and decision making must be communicated. This will eventually cause the elimination of any lack

of clarity within the team. Goals and processes have to be aligned. Decisions in general do have a different impact to each member, and only when these impacts are acknowledged by the rest of the team does an eventual balanced outcome occur. Clearance in targets and full agreements on how to complete them is a vital stage in the team building and management process and can prove the team's unity. When every team member is aligned with the project's purposes and culture any action has the assurance of being the correct one and will probably be executed well.

The sustainability of the team's coherence and effectiveness is measured by the results. These results, however, should be evaluated consistently and with careful scrutiny. The evaluation must ensure accountability for the outcomes of a task and the behaviors of all members. All actions taken during the process must be apparent to all the team, assessed by all team members, and evaluated considering the standards set. These actions need to be identified and those that oppose the purpose or commitment of the group must be dealt with accordingly.

However traditional teamwork, where the concept of “ building the most powerful and capable team” applies, is not entirely functional in today's business setting. Customer demands are increasing, competition is pressuring, technology is rapidly evolving and problems are, by definition, more complex than they used to be. Therefore it is extremely difficult to form a team which knowledge and experience background suffices for the desired results. Teams should not focus internally, but observe and use resources available on the outside. Classifying technology requirements, and



utilizing experiences and expertise from the outside should help a team reach beyond its personal agenda, and focus more on the customer satisfaction itself rather than exploiting their capabilities to the fullest when not necessarily needed.

### **Conflict Management**

Conflict is an integral and inevitable aspect of a workplace, even within successful firms. Disagreements may occur for various reasons: from priorities, to resource allocation or solutions to certain problems. Conflicts take place unavoidably throughout the whole process of a project (defining – planning – execution – delivery). Its inevitability nowadays is accepted up to the point where certain methodologies and guidance have been created in order to mitigate the negative effects of conflicts on the project and the organization. This has led to eventually regarding conflict as, in fact, an opportunity and catalyst for organizational growth and development.

Conflict Management refers to all the necessary actions that need to be taken in order to deal effectively with arguing ideas and actions. Most workplace conflicts stem from the working environment's culture, the organizational structure, the extent of individual specialization within the team, the firm's rules, the management style, the procedures, the communication and the stress induced. The identification of the exact causes can show the way of neutralizing key obstacles and malfunctions in the project management process.

Conflict can be categorized into functional and dysfunctional. Functional conflict characterizes the disagreements that promote and enhance the

project objectives. A team's common target can only be achieved through constant elegant and constructive criticism that will eventually lead to a conflict, but will provide new ideas and new approaches. A project manager must be able to encourage debates on project issues but on the same time, maintain a viable relational breakdown-free environment. He/she must cultivate a productive conflict landscape for the team, and try to discourage defensive attitudes by showing appreciation on any contribution from a team member.

Dysfunctional conflict most of the times is an unwanted evolution of functional conflict. It occurs when conflict becomes so intense that the participants utilize tension and provocative actions in order to convince for their arguments. These actions are to the most part irrational and can result in (consequent or deliberate) underperformance, delays and unacceptable behaviors. A project manager dealing with a dysfunctional conflict can proceed to a specified set of options and chose the one that is applicable in each case. According to the nature and the extent of conflict, a manager can mediate it (if the situation is negotiable), arbitrate it (if imposing a solution is the only way to resolve the conflict), control it, accept it (if its inevitability is stronger than the means for resolution), and finally eliminate it (when the conflict is harmful to the project) by removing one or both the parties of the conflict from the project environment.

An unresolved conflict can cause a high price for the firm and the team members. This price can be wasted time, poor decision-making, unwanted changes, unpleasant atmosphere and legal issues. In order to avoid these

outcomes, Conflict Management should play an integral part in the process of Project Management.

### **Negotiation**

Negotiation is a procedure of argumentative discussion between two parties, aiming at resolving disputes, deciding actions to be taken, bargaining for advantage or construct results to meet various expectations. It plays an integral role within company limits, but acts and as a communication route for any types of transactions happen with the company and the clients.

Contemporary business strategies value negotiation as a very important feature than advances the opportunities for benefits, strengthens relationships and creates a certain profile for the company. Effectiveness in negotiation is vital for successful collaboration on various levels. Problems arise every day in business environments, internally and externally, and negotiation is the only way to ensure best solutions and satisfaction.

Negotiation involves both agreement procedures and implementation of these agreements as well. A project manager must be able to make use of negotiation in daily basis, confronting all issues required. Negotiation is not a competitive way of resolving disputes or contradicting benefits. It is basically a vigorous manner of creating win-win situations.

The proper way of implementing negotiation is by using the principled negotiation process. This process enables both parties to try to find a solution that is satisfactory for both, meets acceptable standards and does not allow exploitation from either side. Principled negotiation methods are based on certain standards that create options for successful negotiations.

Any problem that occurs must be separated from the human factor.

Personalizing the negotiation process can result in friction between the two parties involved. A solution can only be viable when it is taken under consensual agreement and that can only be achieved when relationships between the two parties are not threatened by emotional chain reactions. Furthermore parties must be willing to put aside any egoistic and unhelpful arguments and try to induce flexibility in their policy in order to allow the negotiation procedure to have positive results. This flexibility however must materialize into mutual gain for both parties, and this can only be accomplished by collaboration. Identifying and respecting the needs of the opposition will eventually close down the gap and allow a solution to be established. The standards of the negotiating parties must be substantiated by objective criteria, usually found outside the negotiation environment. These standards could be knowledge gained from benchmarking, research or examples from other similar situations. Finally, when irrational policies cannot be alleviated then alternative negotiation measures must be taken. These measures can eventually aim at getting the best out of nothing given the circumstances.

A project manager must involve certain criteria when negotiating. He/she should always be in search of flexibility and scalability, aiming at win-win situations, and sustainability in the process. Negotiations are an everyday reality, and no matter how small or large their extent is, cautious approaches must be realized and applied.

**Ethics and Professionalism**

Project Management ethics define the application of certain values, such as honesty, integrity and fairness, on the behavior of those participating in the process. The ethical codes that govern the project form the project's culture. The commitment to high standards of ethics involves the management of non-financial aspects of performance. This commitment is created by the responsibility of the way the project procedures are conducted, and the impact they have on people within the company, the clients or the environment, beyond the concern for the objective. Organization expectations, moral values and legal boundaries should be taken into consideration in all stages of a project.

Companies should approach ethical performance management systematically. Ethical dysfunctions or abnormalities can damage a company's reputation beyond repair. In the presence of ambiguous decisions, time budget and performance pressures and harsh competition, the risk of compromising a project's procedures is more than present. Results can be easily obtained by overriding ethical codes, but this will eventually cost more to the company than the benefit it provided. Danger of cultural misbehavior within a project could lead to a flawed reputation which will eventually lead to scandals and financial decline.

Professionalism is the conscious beneficial implementation of the certain knowledge and behaviors within a project. A project manager must exhibit all the distinctive competences that allow him/her to create performance and behavioral standards within the working environment. These standards are

usually controlled by contractual restrictions, client needs and company's capabilities.

A project manager must always demonstrate a moral, ethical and legal behavior and set the example to be followed by his/her subordinates. These features will eventually lead to the acceptance of the team and the built of trust and respect between the team member and the Project Manager.

All the issues discussed above contribute in the productivity and effectiveness in the management of projects. Although their value is not directly linked to financial benefits, they make the management process more efficient, enhancing the project's successful outcome.

Modern Project Management has evolved in complete alignment with the market needs. Completion has created new standards for the Project Management process. Mastering technical aspects of a project's environment although necessary, it is not sufficient enough to deliver exceptional results. Nowadays technical efficiency can be achieved more easily than it was many years ago. Evolution in Informational Systems and Technology, and outsourcing strategies has made knowledge and expertise accessible. The strategic advantage can only be accomplished by a distinction in the process of Project Management in a sociocultural manner. Communication, leadership, teamwork, client-orientations, ethics, conflict management, human-resource management, professionalism and politics are the aspects that a project manager must pay attention to in order to increase efficiency in his/her project. They must be considered as fundamental and worth investing to since they have indirect impact on financial revenue, they

provide a strategic advantage and create a well functioning workforce to stand up to the market competition.

As Project Management evolves these issues will play an important role in the strategy and implementation of a firm's projects and will inevitably require consideration. A project manager must be in a position to clarify all these issues and be able to communicate them to all team members. This will lead to functionality inside a team, and consequently to a positive result for the project. The completion of these issues and their additional value in a project's environment is a duty for the project manager.