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PROJECT STAKEHOLDER MANAGEMENT

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Abstract

Today almost every project takes place in a context where stakeholders play a major role in the accomplishment of the tasks. Often the project is sensitive to actions and decisions taken by the stakeholder. Project stakeholders can include clients, end users, contractors, consultants, labor unions, line organization, public authorities, financial institutions, insurance companies, controlling organizations, media, third parties and competitors. A survey was conducted among project managers in Norway to collect their views on stakeholder management. First, research results indicate that clients and end users are the most important project stakeholders. Second, collected data show clients, end users, contractors/suppliers, line organization and public authorities are equal when it comes to causing problems and uncertainty to the project. Third, the findings indicate that more efforts should be made to provide new insights into project stakeholder management. Furthermore, the paper describes a formal and systematic project stakeholder management process. This process includes six steps: initial planning, identification, analysis, communication, action and follow-up. The results from this paper can be of use for a project manager in several ways. First of all, we argue that more attention should be paid to the stakeholders. Second, in managing the stakeholders the project manager can follow the process presented here. Third, the survey results can give the project manager an idea of which stakeholders to focus on in order to understand them better.

Introduction

Project management is a science and profession that is not very old. During the past 40 years, project management has undergone rapid and sometimes unpredictable changes while trying to find suitable answers and countermeasures to the assigned challenges. However, those responses usually had a distinct internal and quantitative focus on development of tools and techniques to control costs, time and quality (Gilbert, 1983). There are many examples of project management planning, scheduling, budgeting and control systems and tools which have been generated to cope with a large amount of data associated with projects. This approach has brought us some very significant successes, both in theory and practice, but it also has some weaknesses.

The purpose of this paper is to create a more extensive picture of what is included in project management. Past research has shown that most projects are sensitive to changes in the environment (Karlsen, 1998). On the other hand, many projects experience that clients, end users and public authorities make tougher demands on project execution. Hence, it is a mistake for project management to ignore the stakeholders or attempt to impose a rigid detailed control. These are challenges and demands which the project manager cannot overlook, but has to take into consideration and manage. It is necessary to develop an understanding which can generate appreciation and trust and can lead to constructive working relationships. According to Jergeas et al. (2000) and Cleland (1986), efficient management of the relationship between the project and its stakeholders is an important key to project success.

This paper consists of two parts. In the first part three questions are addressed:

- Which stakeholder is the most important to the project?
- Which stakeholders cause the most uncertainty and problems to the project?
- What should be developed to improve project stakeholder management?

These questions are answered with the data results from a conducted survey. In the second part a project stakeholder management process is introduced and explained as an expansion of the first part. These two parts are closely integrated as they both try to find appropriate answers to how projects can improve the management of their relationships with stakeholders.

Research Questions

The project and its stakeholders can be viewed as a network in which the actors interact with each other and exchange information, resources and results (Milosevic, 1989). Often the information and the resources that are input to the project are controlled by stakeholders. This control of information and resources gives the stakeholders

a certain power. Changes in access to information or these externally controlled resources can affect the planning, organizing, staffing and directing of the project. It is the project's management process that transforms inputs into outputs, which implies the achievement of a unique change. This alteration is beneficial either for a single client or for a group of project stakeholders. According to Jergeas et al. (2000) it is the stakeholder that ultimately determines whether a project is a success, based on the project results. From this discussion we understand that some stakeholders have power because they control information and resources, while other stakeholders are important because they decide whether the project result is a success or not. Hence, the following question is addressed: *Which stakeholder is the most important to the project?*

The project environment is complex and changing (Gilbert, 1983). If stakeholder management is not adequately addressed in the project, this can mean unexpected problems and uncertainty to the project caused by stakeholders. For instance, a clear and comprehensive definition of project success and failure may not be determined, and consequently the project manager may strive to meet goals that were never intended by the stakeholders (Meredith and Mantel, 2000). Additional problems and uncertainty caused by stakeholders that contribute to project failure include poor communication, inadequate resources assigned to the project, changes in the scope of work, unfavourable news about the project in the press, and negative community reactions to the project. During the project some stakeholders will cause high uncertainty. Working proactively to reduce or minimize the potential for uncertainty and problems caused by stakeholders, it is interesting to consider which stakeholders that generally cause the most uncertainty and problems to the project. Hence, the following question is addressed: *Which stakeholders cause the most uncertainty and problems to the project?*

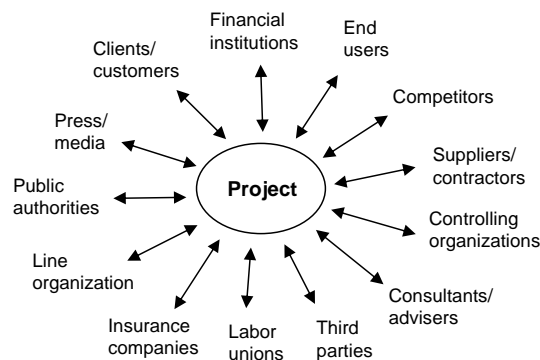
Results from earlier research have identified that in many projects, management of stakeholders lacks strategies, plans and methods (Karlsen, 1998). Stakeholder management is often characterized by spontaneity and causal actions, which in some situations are not coordinated and discussed within the project team. The result of this practice is often an unpredictable outcome. To meet this challenge, several stakeholder management methods and guidelines have been introduced (Gilbert, 1983; Cleland, 1986; Savage et al., 1991; Jiang et al., 2002). These guidelines include the execution of the management functions of planning, organizing, motivating, directing, and controlling the resources used to cope with stakeholders' strategies. Despite these methods and guidelines, there seems to be a need for further development within the field of project stakeholder management. Hence, the following question is addressed: *What should be developed to improve project stakeholder management?*

Project Stakeholders

The project environment can be defined in many ways. Daft (2001) defines the environment as "...all elements existing outside the boundary of the organization that have the potential to affect all or parts of the organization".

In an attempt to explore this concept, Dill (1958) differentiates between task and general environment. Task environment is used to describe those actors and stakeholders of the environment that are explicitly relevant for and involved in the project work, e.g. clients. In exhibit 1 different project stakeholders are illustrated.

Exhibit 1. Project stakeholders



There are several definitions of stakeholders. Juliano (1995) defines stakeholders as "...an individual, individuals, team or teams affected by the project". PMBOK (1996) defines stakeholders as "...individuals and

organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion". These stakeholders are actors outside the authority of the project manager. The number of stakeholders interested in the project can dramatically increase the complexity. Each of these stakeholders usually has his/her own interest in the project and this may cause different priorities and conflicts.

In the literature further attempts have been made to differentiate between these groups e.g. between internal and external stakeholders, and primary and secondary stakeholders (Cleland, 1998).

The general environment consists of other factors that are also of interest and potentially relevant for the project organization. Miles (1980) defines the general environment as "...it is those factors that are just out there". The general environment includes technological factors, legal factors, economic factors, political factors, physical factors, supply of labour, cultural factors, environmental factors. Generally speaking, these are factors which can have an impact upon both the project process and stakeholders, but which cannot easily be influenced by either the project members or stakeholders. In this paper the focus will be placed on the task environment and stakeholders.

Research Method

The present study consists of a survey conducted in Norway in 2001 to investigate the management of stakeholders in projects. The first part of the research instrument contained forced-answer questions with a five-point Likert scale ranging from a high of 5 to a low of 1. In addition, the survey contained open questions where the respondents were asked to give their comments.

The survey instrument was sent electronically to members of the Norwegian Center of Project Management. It was assumed that these firms would tend to have project managers with stakeholder management experience. After a reminder, a total sample of 78 was returned, each representing a specific project. After studying early and late responses, as well as responding firms, there is no reason to believe that there is any significant non-response bias.

The projects in the sample include construction projects, product development projects, IT/IS projects and organizational development projects. The sample includes both projects that are characterized by routine work as well as research projects. The average size of each project in the sample was 50 million US Dollars. The data indicate that 66% of the respondents were project managers. Two other major respondent groups were project participants or consultants. Approximately 20% of the projects had a public source of funds, 44% were privately financed and the rest had a mixed source of funding.

Statistical Data and Results

Exhibits 2 to 4 contain the results of statistical analyses. Means and t-tests (to assess the statistical significance of the difference between two independent sample means) were used to examine the data from the survey.

Exhibit 2 shows descriptive statistics regarding stakeholder importance, which give an answer to the first research question. The response scale ranged from 1 to 5 (1 = not important stakeholder and 5 = very important stakeholder). As we can see from the table, the clients ($m = 4.53$) and the end users ($m = 4.36$), are the most important project stakeholders. Data confirm no significant difference in importance between these two stakeholders, but both clients and end users are significantly more important than all the other stakeholders. From the table we can also see that financial institutions and insurance companies are the significantly least important project stakeholder ($m = 1.68$). The table shows that there are fifty-two significant differences. An interesting finding is that consultants and advisors are found to be just as important as contractors and suppliers to the project. We can also observe from the table that these two stakeholders are significantly more important than public authorities.

Exhibit 2. Stakeholder importance

Variable	Mean	t-values										
		2	3	4	5	6	7	8	9	10	11	12
1 Clients	4.53	1.36	5.03**	4.74**	5.91**	6.65**	11.87**	10.34**	11.25**	12.04**	15.52**	20.12**
2 End users	4.36		3.37**	3.57**	3.70**	4.88**	11.13**	8.64**	10.13**	9.13**	12.93**	18.01**
3 Contractors/suppliers	3.82			.06	.29	2.01*	6.57**	5.76**	7.02**	7.49**	8.35**	12.75**
4 Consultants/advisers	3.81				.23	2.02*	6.59**	5.99**	6.42**	6.03**	9.73**	12.55**
5 Line/base organization	3.77					1.91	7.14**	6.23**	6.12**	7.67**	10.56**	14.18**
6 Public authorities	3.40						3.96**	4.07**	5.23**	4.35**	6.95**	9.72**
7 Press/media	2.74							.35	1.25	1.55	3.60**	6.95**
8 Third parties	2.69								.93	1.33	3.37	6.61**
9 Controlling organizations	2.53									.34	1.98	5.50**
10 Competitors	2.46										1.65	4.86**
11 Labor unions	2.15											3.11**
12 Financial institutions/ insurance companies	1.68											

Note: The statistical significance of the t-values is ** for $p < .01$ and * for $p < .05$

Exhibit 3 shows descriptive statistics regarding project problems and uncertainty caused by stakeholders, which give an answer to the second research question. The response scale ranged from 1 to 5 (1 = no problems and 5 = large problems). From the table we can see that the clients has the highest mean score ($m = 2.92$), but it is not possible to conclude that this stakeholder causes the most problems and uncertainty to the project, since there is no significant difference. The table shows that there are forty-five significant t-values, and there are several interesting observations. First we can note that clients, end users, contractors/suppliers, line organization and public authorities are equal when it comes to causing problems and uncertainty to the project. Another interesting observation is that financial institutions and insurance companies are the stakeholders causing significantly the least problems and uncertainty to the project ($m = 1.56$). The data show that labor unions are another stakeholder that causes minor problems and uncertainty to the project.

Exhibit 3. Problems and uncertainty caused by stakeholders

Variable	Mean	t-values										
		2	3	4	5	6	7	8	9	10	11	12
1 Clients	2.92	.40	.89	1.22	1.69	2.32*	3.60**	4.94**	4.83**	5.64**	7.73**	9.17**
2 Contractors/suppliers	2.86		.33	.72	1.20	1.82	3.25**	4.24**	4.58**	4.58**	6.70**	8.86**
3 Line/base organization	2.81			.46	.86	1.70	2.97**	4.01**	4.54**	5.16**	7.70**	8.93**
4 Public authorities	2.73				.30	1.23	2.76**	3.77**	4.34**	4.65**	7.71**	8.26**
5 End users	2.68					.87	2.32*	3.38**	4.14**	3.91**	6.49**	8.40**
6 Consultants/advisers	2.55						1.61	2.78**	3.17**	2.82**	5.96**	7.01**
7 Third parties	2.32							1.09	1.35	1.82	4.79**	5.79**
8 Controlling organizations	2.15								.09	.64	3.07**	5.08**
9 Press/media	2.14									.53	2.89**	4.41**
10 Competitors	2.06										2.48*	3.97**
11 Labor unions	1.76											2.72**
12 Financial institutions/ insurance companies	1.56											

Note: The statistical significance of the t-values is ** for $p < .01$ and * for $p < .05$

Exhibit 4 shows the descriptive statistics as regards areas for development of stakeholder management, which give an answer to the third research question. The response scale ranged from 1 to 5 (1 = not important and 5 = very important). The table shows that there are nine significant differences. As we can see from the data, development of strategies and plans for management of the project's stakeholders are emphasized as significantly more important than all the other areas. It is also interesting to observe that the significantly least important area is development of theories about project stakeholder management. There is no significant difference between visions, objectives, tools, methods, procedures, routines and evaluations, which means that they are equally important concerning development of stakeholder management.

Exhibit 4. Areas for development of stakeholder management

Variable	Mean	t-values				
		2	3	4	5	6
1 Strategies and plans	4.45	4.12**	4.26**	5.51**	5.00**	10.29**
2 Visions and objectives	3.99		.80	1.27	1.50	5.91**
3 Procedures and routines	3.86			.29	.78	4.60**
4 Evaluations	3.82				.38	4.65**
5 Tools and methods	3.77					4.55**
6 Theories	3.18					

Note: The statistical significance of the t-values is ** for $p < .01$ and * for $p < .05$

Discussions and Implications

This research has yielded some results that can improve the knowledge of project stakeholder management.

From the data analysis it seems that the project stakeholders play a major role in project execution. This result corresponds with previous research, which underlined that stakeholder management has to be adequately addressed in the project (Jergeas et al., 2000). In their study of critical success factors across the project's life cycle, Pinto and Slevin (1988) emphasize the importance of interaction with the project's clients throughout the duration of the project. Data from this study show that clients and end users are significantly more important than other stakeholders. Working with these stakeholders is a key to success, since it is the clients who defines and finances the project and the end users who decide the usefulness of the project results.

Second, the study shows that stakeholders create both problems and uncertainty regarding project execution. According to some respondents, these problems and uncertainties are caused by "...decisions that were not taken", "...unexpected changes in specifications", "...the client was too focused on details", "...the stakeholder did not understand his/her role in the project", "...political guidelines that were unexpectedly changed" and "...the end user did not know his/her needs." These observations underline that communication with the client and other stakeholders throughout the project cannot be stressed too much (Pinto and Slevin, 1988). An interesting observation is that the data analysis did not point out a specific stakeholder that causes more problems and uncertainty to the project than others. Results show that clients, end users, contractors/suppliers, line organization and public authorities are equal when it comes to causing problems and uncertainty to the project.

Third, the findings indicate that more efforts should be made to provide new insights into project stakeholder management. The respondents especially underlined the need for development of strategies and plans. Data results also show that development of visions, objectives, tools, methods, procedures, routines and evaluations are important areas. An interesting observation is that the significantly least important area is development of new theories. This observation is in accordance with the findings made by Jergeas et al. (2000), who emphasize a practical process that will identify stakeholders to the project manager, who will be aware of their interests and will try to manage them as best he/she can to prevent them from adversely impacting the project.

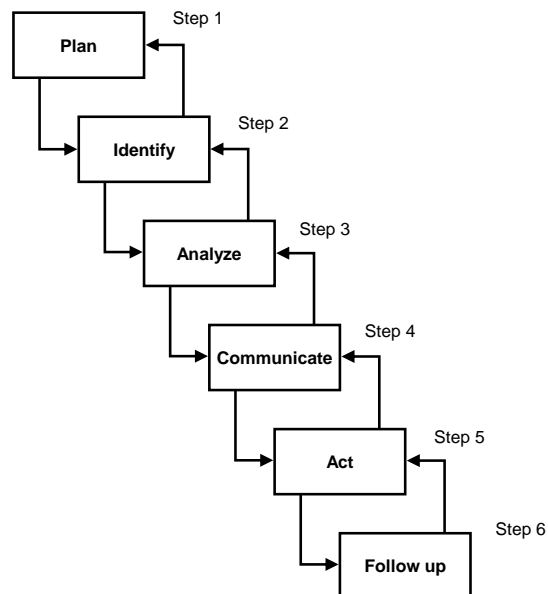
A Stakeholder Management Process

Feedback from the respondents points out that in many projects a formal and systematic project stakeholder management process does not exist. The management of the stakeholders is random, since there are no well-functioning strategies, plans, methods or processes. In most situations the relationship with the stakeholder is taken care of by the project manager. Consequently, the results are dependent on the project manager's experience, relationships and capability. Many comments from the respondents pointed out the need for a formal and systematic process that is founded on clear objectives and strategies.

As a result of this, a six-step stakeholder management process is developed. Several of these steps have been written about both in articles (Gilbert, 1983; Cleland, 1986; Savage et al., 1991; Jiang et al., 2002) and in textbooks (Field and Keller, 1998). In this paper these steps are put together to form a process. It is a flexible process. If it is needed the project team can go back and do the step again. The process is illustrated in exhibit 5.

The reasons for performing a stakeholder management process are several: First, to become acquainted with the projects' stakeholders; Second, it is important for ensuring the balance between contribution and reward; Third, it is a basis for managing the stakeholders; Fourth, it is a basis for deciding who should be involved in determining the project goals and how success should be measured.

Exhibit 5. A project stakeholder management process



The first step focuses on the initiation of the process. One important task in this phase is to define the purpose of the stakeholder management process. This step also includes planning activities regarding the process. Some of the questions that have to be answered are: "...how the process should be organized?", "...how much time and resources shall we use on the process?", "...how often shall we do it?" and "...what kind of documentation is necessary?"

The second step focuses on identification of stakeholders. This includes both stakeholders that are involved in the project and potential stakeholders. There are several techniques that can support this work, e.g. interviews with experts, brainstorming in group meetings and the use of checklists. What one team member identifies as a potential stakeholder may not be obvious for others. This identification procedure should therefore take place in a group of participants with different background, which will also improve the support and ownership to the stakeholder management process.

The third step focuses on analyzing the stakeholders. One possible consideration is to evaluate the stakeholder in relation to selected issues, e.g. his/her area of interests in the project, desired contribution to the project, expected rewards, domains, attitudes, possible moves, etc. Another technique is to assess the stakeholder along two

dimensions – the potential for threatening or affecting the project and the potential for collaboration with the project. This assessment permits the project manager to classify the stakeholders by four categories – supportive, marginal, non-supportive and mixed blessing (Savage et al., 1991). The supportive stakeholder is low in potential to affect the project but high in potential for collaboration. This is an ideal stakeholder that supports the project's goals and actions and most project managers wish all their stakeholders were of this type. Supportive stakeholders may include suppliers, consultants, and financial institutions. Marginal stakeholders are neither highly threatening nor especially collaborative. Although they potentially have a stake in the project and its decisions, they are generally not concerned about most issues. Stakeholders of this kind may include third parties like neighbours or groups of environmentalists. However, certain issues such as pollution from the project could activate one or more of these stakeholders, thus increasing their potential for either affecting or cooperating. Non-supportive stakeholders which have a high potential to affect the project but are low on the potential for collaboration are the most distressing for a project and the project manager. Typical non-supportive stakeholders include competing organizations, labor unions, public authorities and sometimes the media. The mixed blessing stakeholders can play a major role in the project. Here, the project manager faces a stakeholder whose potential to affect or to collaborate is equally high. This group of stakeholders may include clients, end users and line organization. These categories of stakeholders are shown in exhibit 6. The survey data (exhibit 2 and 3) indicate that some stakeholders are more important and cause more problems and uncertainty to the project than others. These results may indicate that there are some stakeholders that we need to understand better.

Exhibit 6. Project stakeholder categories

		Potential to affect the project	
		<i>High</i>	<i>Low</i>
Potential for collaboration with the project	<i>High</i>	Mixed blessing	Supportive
	<i>Low</i>	Non-supportive	Marginal

The fourth step focuses on communication of the stakeholder assessment to both the management and the project members. The purpose of this step is that both the management and the project members should get an idea of who the stakeholders are and how they can affect the project. Such a common understanding of the situation is also important as regards development of strategies for dealing with the stakeholders.

The fifth step in managing project stakeholders is to develop implementation strategies for dealing with them. Based on the typology of project stakeholders, four different strategies are identified – involve, monitor, defend and collaborate (Savage et al., 1991). The supportive stakeholders are often ignored as stakeholders to be managed, and therefore their cooperative potential may also be overlooked. This group of stakeholders should be informed and involved in relevant issues. By choosing this strategy the project manager can encourage cooperation potential to a maximum extent. Marginal stakeholders whose potential for both affecting the project and for collaboration is low should be monitored. By recognizing that these stakeholders' interests are narrow and issue-specific, the project manager can minimize the project expenditure of resources. Only when making decisions that may have a negative influence should the project manager monitor the interests and possible moves of marginal stakeholders. Non-supportive stakeholders initially are managed best by using a defensive strategy. Such a defensive strategy tries to reduce the dependence that forms the basis for the stakeholders' interests in the project. Sometimes this strategy is difficult, therefore others argue that the non-supportive stakeholder is best managed by keeping him/her satisfied all the time. The mixed blessing stakeholder, high on both dimensions of potential affect on the project and potential cooperation, may be managed best through collaboration. We will argue that the collaboration must be based on mutual trust and must be beneficial for both parties. The collaboration can take place on both an administrative and

an operational level. The advantages of collaboration can be several, e.g. reduced administrative costs, improved exploitation of resources and better communication. These four strategies are illustrated in exhibit 7.

Exhibit 7. Project stakeholder management strategies

		Potential to affect the project	
		High	Low
Potential for collaboration with the project	High	Collaborate	Involve
	Low	Defend	Monitor

The sixth step focuses on following up the strategies and actions that have been implemented. In case the relationship between the stakeholder and the project has been changed, a different strategy or action should be considered.

Conclusions and Recommendations

This study provides some empirical insights into the process of project stakeholder management. First, the data analysis points out that the clients and the end users are the stakeholders that are the most important to the project. Second, the results show that clients, end users, contractors/suppliers, line organization and public authorities are equal when it comes to causing problems and uncertainty to the project. Third, the findings indicate that more efforts should be made to provide new insights into project stakeholder management.

The results from this paper can be of use for a project manager in several ways. Overall, we will argue that project managers should be more externally oriented and more attention should be given to the stakeholders. The survey results will give the project manager an idea of which stakeholder to focus on. By performing the stakeholder management process presented here, the project team will be better prepared for possible adverse stakeholder action. Based on the type of stakeholder, the paper suggests various stakeholder management strategies.

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