LEADERSHIP AND HUMAN RESOURCE MANAGEMENT IN PROJECT CIRCUMSTANCES
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Abstract
Leadership is a very important issue in any organizations. The complexity of a project makes the role of the project manager as the leader even more challenging because he/she has to work in an organization which has relatively short time period and dealing with many people who come from various backgrounds. This paper discusses various theories of leadership and proposes their application in project circumstances. As it is often said that the project management is effective if it can manage the conflicts that occur within the project's life span, this paper also suggests approaches for managing conflicts in project circumstances.

Key word leadership, human resource management, project management

1. Introduction
To lead can be defined as “a process of motivating and directing the members of the organization to work together doing their tasks in order to achieve the desired goal of the organization”. Leadership is very important for any organizations including a project organization. In order to manage a project effectively managerial ability of the leader is very important. After planning phase of a project, the role of management is then to organize the project resources to achieve its objective. One of those resources is human resource, therefore the role the project manager is to manage human resources to work together as a team in achieving the certain goal of the project. The individual as a member of the organization has his/her own objective, hence the leadership in this context is focused on how to balance the individual needs and the organization goal.

A project has a unique characteristic that is, it has a limited life span and high level of uncertainty, the question will be asked then is how to apply an appropriate leadership style in project circumstances? The aim of this paper is to discuss the appropriate way in managing human resources in the

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project circumstances, which is related to the leadership. Firstly, it will discuss how to direct and influence the human resources which are related to motivation, authority and style of the leadership. It then shows the related theories such as X and Y theory from McGregor (1960), hierarchy of needs theory from Maslow (1943). Finally, it demonstrates how to apply those theories in project circumstances.

2. Directing and Motivating Process
   After determining and formulating the goal of the project, directing and motivating process will begin to take action in order to achieve the goal. Therefore, the leader should be able to understand about attitude, desired and behavior of individual as well as a group. Since the people who work in a project are heterogeneous it is imperative that the human resources are managed properly to avoid problem that can influence the project implementation. Even if we have good equipments, we can not achieve a successful project management without proper human resource management. Adding more budgets, equipments, and so on can solve technical problems. However, human resource problems are quite difficult to solve in the life span of the project, which is relatively short. In order to harmonize the project circumstances, project manager should be able to direct and motivate all of the members. This process has a close relationship with motivation, authority, leadership style, training, supervising, and consultation which are explained below.

   • Motivating is to encourage people to do their tasks by fulfilling their needs or the others incentives.
   • Authority is the right to give orders and to be obeyed.
   • Leadership style is the way of the leader to influence and direct people in order to achieve the goal.
   • Training is an effort to improve abilities and skills of people to do their tasks.
   • Supervising is the process of giving guidance for people to do their tasks properly.

   Beside the above factors, there is another factor that can also influence the leadership effectiveness namely handling conflicts which might occur in a project, this factor will be discussed in section six.

3. Motivation and Human Resource Behavior
   In order to understand leadership one has to pay attention to its close relationship with motivating the human resource. This section discusses the theories of motivating the human resource.

3.1 McGregor’s Theory X and Theory Y
   According to this theory, managing activity should be started from the question of how the manager understands the characteristic of human resource in the relationship with the tasks.

   • Theory X
     - People tend to hate their task, if it is possible they always want to avoid it.
     - Therefore, they have to be directed, pushed, handled even to be treated by some penalties in order to make them work well.
     - People tend to avoid their responsibility, they prefer to be directed and want their safety is guaranteed.

   • Theory Y
     - Working is a natural activity as playing and taking a rest.
     - Punishments or sanctions are not the only way to motivate people to do their work in order to achieve the goals. However, they will do self-direction and self-control in order to achieve the goals.
     - Efforts of fulfilling an agreement have the same value as rewards.
     - People will learn to accept, even seek, responsibility.

   Both of those theories have different assumptions between each
other, theory X assumes that lower-order needs dominate individuals. The employees are controlled and threatened to achieve the desired goals. In contrast, theory Y assumes that higher-order needs dominate individuals. Theory Y focuses on self-control in order to balance between individual needs with the organization’s objectives. Therefore, those theories will influence the role of manager in term of motivation.

3.2 Maslow’s Hierarchy of Needs Theory

The best-known theory of motivation is probably Maslow’s (1943) hierarchy of needs theory. Abraham Maslow identified that within every human being there exists a hierarchy of five needs, namely:

- Physiological needs: food, drink, shelter, sexual satisfaction and other bodily requirements.
- Safety needs: security and protection from physical and emotional harm.
- Social needs: affection, belongingness, acceptance and friendship.
- Esteem needs: internal esteem factors such as self-respect, autonomy and achievement; and external esteem factors such as status, recognition and attention.
- Self-actualization needs: growth, achieving one’s potential and self-fulfillment; the drive to become what one is capable of.

Physiological and safety needs are described as lower-order needs, and social, esteem and self-actualization needs are described as higher-order needs. As each need is substantially satisfied, then the next need becomes dominant. That means a particular need is no longer as a motivator after it has been satisfied.

3.3 Application in a Project

The project manager works together with other parties, which have authority in promotion, increasing the salary and so on, therefore the project manager has a limited authority. So the solutions could be developed are:

- Reward
  According to Maslow’s (1943) theory, after people who are working in a project have already been fulfilled of their needs of the money, they need to be motivated by other motivators such as rewarding of their performances in doing their tasks.
- Security and Safety
  Security and safety are important issues in a project. A project is usually finished in a relatively short time, so that it is important that the employees do not worry whether they will get job or not after the project has been completed.
- Threats and Penalties
  Theory X of McGregor assumes that people tend to be lazy to do their jobs. So it is important to control them by giving threats and penalties. However, people cannot be threatened too much otherwise disadvantages will be produced. Rewarding people based on their performance can be a better motivation than giving threats and penalties.
- Desired Objectives
  People will feel more motivated if the objectives are more challenging. Usually, people who are working in a project can see clearly the relationship between their jobs and the project objectives. Therefore, it is very important for the project manager to set the objectives for a group of workers in order to motivate them.

4. Leadership Style

Basically, leadership style can be divided into two categories namely task oriented and participative oriented. In task oriented, the leader will only focus on the implementation of the job and achieving the objectives, in this category the leader seems to be autocracy. In participative oriented, the leader put the full attention to their
employees and always has consultations with their employees before doing important things, in other words it is democratic.

The effectiveness of both leadership categories depend on factors such as characteristic of jobs, a group being leaded, the leader, and understanding about relationship between human beings.

4.1 Situational Leadership

One of the most widely followed leadership style is the situational leadership theory of Hersey and Blanchard (1982). Situational leadership is a contingency theory that focuses on followers who accept or reject the leader. Therefore, followers’ actions can influence leadership effectiveness. Hersey and Blanchard argue that in order to achieve successful leadership it is important to select the right leadership style which is pertinent to the level of the followers’ maturity.

Hersey and Blanchard (1982) define maturity as the ability and willingness of people to take responsibility for directing their own behavior. The term maturity has two components, namely:

- **Job maturity**
  It relates to one’s knowledge and skills. Individuals who are high in job maturity have the knowledge, ability and experience to perform their job tasks without direction from others.

- **Psychological maturity**
  It relates to the willingness or motivation to do something. Individuals who are high in psychological maturity do not need much external encouragement because they are already inherently motivated.

Situational leadership contains two leadership dimensions namely task and relationship which Hersey and Blanchard (1982) consider each as either high or low and then combining them into four specific leadership styles. Four specific leadership styles are:

- **Telling** (high task-low relationship). The leader defines roles and tell people what, how, when and where to do various tasks.
- **Selling** (high task-high relationship). The leader provides both directive behavior and supportive behavior.
- **Participating** (low task-high relationship). The leader and follower share in decision making, the main role of the leader being facilitating and communicating.
- **Delegating** (low task-low relationship). The leader provides little direction or support.

In Hersey and Blanchard’ theory the term maturity is defined into four stages, namely:

- **M1**: People are both unable and unwilling to take responsibility for doing something. They are neither competent nor confident.
- **M2**: People are unable but willing to do the necessary job tasks. They are motivated but currently lack the appropriate skills.
- **M3**: People are able but unwilling to do what the leader wants.
- **M4**: People are both able and willing to do what is asked of them.

Figure 1 shows the situational leadership that is related to various components. If followers have high levels of maturity in their jobs, the leader will respond by both continuing to decrease control over activities and continuing to decrease relationship behavior. At stage M1, followers need clear and specific directions. At stage M2, both high-task and high-relationship behavior is needed. M3 creates motivational problems that are best solved by a supportive, non-directive, and participative. The last stage is M4 in which the leader does not have to do much because followers are both willing and able to take responsibility.
4.2 Application in a Project

The project manager works in an environment which involving expert, team, staff, functional manager, consultant, contractor and so forth. Those people can be classified in the category of M3 and M4 that have high levels of maturity. Therefore, the best leadership style to be used is participative oriented.

In development project and high technology project, people who have high education background and experience have a positive response to the leadership style at stage M4. At this stage, the leader identify problem and target which then will be delegated to the members who responsible in implementing tasks. However, it does not mean that the project manager is restricted to use only one style. For example, the project manager is better to use task oriented leadership style in coping with urgent situation such as a pressure to accomplish tasks to meet the schedule and the budget.

5. Authority

The process of getting activities completed efficiently with and trough other people is the management’s philosophy. Therefore, it is important that the leader of the organization needs to have authority in order to direct and make decision. Project management has different concept compared with

Figure 1. The situational leadership model
Source: Hersey and Blanchard (1982).
classic management or traditional management, where all the required authorities will not be delegated to the project manager only. So, the project manager must work together with functional managers.

5.1 Formal Authority

Formal authority is the rights inherent in a managerial position to give orders and to expect the orders to be obeyed. Formal authority is based on the letter that is made by the organization to clarify the given authority. The examples of formal authority are analyzing and deciding rewards or penalties to followers.

In classic management, the top level of management has a greater formal authority than the lower level. It is based on an assumption that the top level of management shows a better understanding of the problem therefore it has a good position in decision making. However, that assumption is no longer appropriate for the organization in dealing with high technology and uncertain environment because the leader need to get some advises and ideas from experts and his/her followers in decision-making.

5.2 Personal Authority

Personal authority is unwritten authority and it is not given by the organization but exist in a person because of she/he has charisma, knowledge, experience, personality, etc. Personal authority is often categorized as expert power and referent power.

- Expert Power
  A person who gains a personal authority because of she/he has expertise and experience in his/her discipline.

- Referent Power
  A person who gains a personal authority because of she/he has desirable resources or personal traits. Referent power develops out of admiration of others and a desire to be like that person. You might consider the person you identify with as having charisma. If you admire someone to the point of modeling your behavior and attitudes on him/her, this person possesses referent power over you.

Personal authority is strongly required as a supplement to formal authority for the project manager.

5.3 Application in a Project

In construction industry, the project manager has two kinds of relationship in his/her job namely vertical and horizontal relationships. The vertical relationship deals with the leader of organization and the owner of the project. The horizontal relationship deals with external and internal functional managers, the leaders of subcontractor and clients.

In matrix organization, the project manager has formal authority only in relationship with project’s members in functional department. Meanwhile, in terms of subcontractor and client, the project manager works in the form of horizontal relationship because the project manager does not have boss-subordinate relationship with them. Therefore, to deal with that condition, the project manager needs to develop personal authority, which is based on expert power and referent power.

It is important for the project manager to understand relationship between human beings in terms of human resources in the project in order to have a good communication with all members in gaining essential information and ideas that are needed in decision making.

5.4 Project Authority

Project authority is a total authority including both formal authority and personal authority that the project manager must have in order to implement the project effectively. The total authority includes defining certain aspects of cost, schedule, and quality of the project, through vertical and horizontal relationship. The project authority must be based on
coordinating all components of the project’s activities that are implemented by various organizations to complete the project effectively and efficiently.

5.5 Authority Effectiveness

The project manager generally working with professionals, experts, managers and supervisors, therefore his/her authority effectiveness will be different from with boss-subordinate relationship. In order to obtain those people support for his/her leadership, the project manager should choose the most effective way to do so. For instance, in case of dealing with experts the project manager should explain a rationale of the faced problem and shows an open attitude for the feedback. Table 1 shows the effectiveness of the project manager’s influence which can be used to gain a support from project participants.

It can be seen from Table 1 that the most important influence of the project manager in order to gain a support comes from the formal authority (3.0). However, it also can be seen that the influence that comes from the expertise (3.3) and the job challenge (3.2) are the very important factors - which almost equal with the formal authority- to gain a positive influence, they are much more important than the influence that comes from coercion (7.8). In short, Table 1 shows that the project manager needs the formal authority to accomplish his/her tasks effectively, however it is important to note that the participative oriented leadership style is an important factor to deal with the increase of the project’s complexity and the use of horizontal relationship.

Table 1. The Effectiveness of the Project Manager’s Influence.

<table>
<thead>
<tr>
<th>Sources of the project manager’s influence</th>
<th>The quality of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>3.0</td>
</tr>
<tr>
<td>A right of the project manager to be obeyed.</td>
<td></td>
</tr>
<tr>
<td>Work challenge</td>
<td>3.2</td>
</tr>
<tr>
<td>The project manager’s ability to encourage his/her staff to like their job.</td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>3.3</td>
</tr>
<tr>
<td>The project manager’s expertise in his/her discipline.</td>
<td></td>
</tr>
<tr>
<td>Future Assignment</td>
<td>4.6</td>
</tr>
<tr>
<td>The project manager’s ability in the future assignment of his/her personnel after the project completion.</td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td>4.6</td>
</tr>
<tr>
<td>The project manager’s ability to affect the increase of personnel’s salary.</td>
<td></td>
</tr>
<tr>
<td>Promotions</td>
<td>4.8</td>
</tr>
<tr>
<td>The project manager’s ability to strive for his/her personnel promotions.</td>
<td></td>
</tr>
<tr>
<td>Friendship</td>
<td>6.2</td>
</tr>
<tr>
<td>A friendship between the project manager and his/her personnel.</td>
<td></td>
</tr>
<tr>
<td>Coercion</td>
<td>7.8</td>
</tr>
<tr>
<td>The project manager’s ability to affect a penalty.</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from Hersey and Blanchard (1982).
Note: the lower the score the higher the quality.
6. Project Manager Qualification

Like in any other organizations, the success of the project depends on those in the key position such as the project manager. Therefore, the project manager qualification should meet some requirements as described below.

6.1 Project Goal Orientation Leadership

The project manager must have strong will to achieve the project’s goal, therefore she/he should have the following characteristics.
- Full of initiative
- Flexibility in solving problems without sacrificing the primary target
- Ready to take more responsibility than his/her given authority
- Ready to take risks, after accurate analysis

6.2 Specialist and Generalist

It has been widely accepted that the project manager should be a generalist person with wide perspective and rich experience. Generalist means that besides she/he has knowledge in particular project’s technical aspects, she/he must have knowledge in business and managerial aspects as following, as well.
- Planning and controlling company resources.
- Understand business aspects such as marketing, contract negotiation process, rules related to general business and rules related specifically to project’s activity.
- Ability to train personnel.
- General knowledge in accounting, finance, and administration.

This generalist category distinguishes the project manager from the functional managers such as engineering manager, personnel manager, who have deep experience and knowledge in one particular area. To accomplish his/her job, the project manager uses a particular approach in order to achieve coordination between activities in functional departments involving in the project. So, the important thing for the project manager is the skill to integrate all the projects’ activities into harmony. The Project manager might have deep technical knowledge in one particular area, but usually no more than two areas.

In the complex projects, which activities consist of a number of specialists, the project manager must be able to create such conditions that encourage harmony between functional departments and project’s organization departments.

On the other hand, the functional manager is a specialist in one particular area. Therefore, as a specialist he/she should be a master not only in technical aspects, but also in operational aspects of his/her area, and generally she/he uses an analytical approach in the effort to solve a problem. Therefore, the functional manager is a source and a guide for project manager about how to accomplish a particular task.

6.3 Technical Skill

Even though the project manager qualification tends to be a generalist, she/he must have technical skill as well, i.e. she/he must have adequate technical knowledge (technology) and technical background in order to understand technical and operational aspects in the project’s activities. If the project manager is a specialist in one particular technical area, the first thing she/he must to do is to change his/her orientation from detailed technical aspect to managerial aspect as mentioned before.

7. Conflict in Project Circumstances

Managing human resources means managing one important aspect that could occur from human interaction, i.e. conflict. In every organization, the differences of opinion, vision, and objective will encourage a friction that inevitably leads towards conflict. Conflict will occur in any organization and is particularly likely in the project circumstances. This is so because the project’s members come
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from various organizations, have never worked together before and have different experiences. They must face a dynamic situation within a relatively short period. Conflict occurs, for example, within the owner/consultant/contractor triad, between the project and functional departments etc.

A certain level of conflict is natural but if it is excessive and not proportional anymore, it can damage working relationships. However if it is managed properly, conflict could be a positive means of change and become an important element of the problem solving process, that is to find the best alternative from the different ideas.

The positive aspects of conflict including:
- It can bring out the problem, so the project manager can help to find the best solution for the project.
- It can bring out new ideas.
- It forces people to review their opinion and learn to understand and appreciate each other.

7.1 Conflict within a Project Life Cycle

It is often said that the project management is effective if it can manage the conflicts that occur within the project’s life span. This is because there are many conflict sources that can be identified and anticipated before they obscure the success of the project. Figure 2 shows some conflict sources and their intensity within a project’s life span.

It can be seen that the schedule is the most frequent conflict source within the project life span, the schedule conflict can occur between field staff and head office, between owner and main contractor and so on.

7.2 Confronting or Problem Solving Approach

There are some conventional approaches to solving conflict such as; compromise, reconciliation, using authority to justify one opinion and so forth. The use of those approaches is depending on the situation. In project circumstances the appropriate approach to conflict resolution that is to face it directly. This approach includes defining a problem that’s causing conflict and then inviting those involved to explain their opinion. Table 2 shows some examples of how to solve conflict.

Figure 2. The intensity of various conflicts within the project life spans.
Table 2. Conflict solutions in project circumstances.

<table>
<thead>
<tr>
<th>Conflict sources</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
</table>
| 1. Schedule.     | Differing opinions about the time and sequence of the tasks. | ▪ Arrange the schedule properly.  
▪ Involve those who have responsibility in task execution. |
| 2. Priority.     | Differing opinions between the project’s members about the level of importance of each task. | ▪ Set the specific plan.  
▪ Involve the concerned parties in decision making. |
| 3. Staffing.     | Personnel allocation (time span, quality and quantity). | ▪ Estimate the staff requirements as early as possible.  
▪ Discuss tasks with those who are assigned them. |
▪ Describe the design philosophy that is used in the project. |
| 5. Administration and operating procedure. | Differing opinions about operating procedure, reporting procedure, authority and responsibility. | ▪ Set operating procedure handbook. |
| 6. Personality.  | Differing personalities and perspectives amongst the project participants. | ▪ Encourage a harmonious atmosphere.  
▪ Increase communication. |
| 7. Cost          | Differing perceptions about amount and cost allocation for various task packages. | ▪ Explain reasons for cost allocations and budgeting. |

8. Conclusion

It can be seen that to lead is a process to bring the organization’s members to work together in order to achieve organization’s goal. In project circumstances, Maslow’s hierarchy of needs theory should be applied in a specific condition, so its emphasis will meet the purpose.

In terms of the leadership style, it is assumed that participative style is better than autocratic style, this assumption is based on the fact that in project circumstances, especially in the head office, usually have a high percentage of experts and specialists in its composition.

It is also assumed that the formal authority of the project manager is very limited therefore to increase the leadership effectiveness the project manager should has the expert power and the referent power.

The project manager qualification should be emphasized on his/her abilities to encourage cooperation among the project participant, which need intensive coordination and integration. Therefore, the project manager, until a certain level, can be compared to a general manager i.e. the project manager should be a generalist person who shows an understanding of the basic principles
of management and the relevant technical skill.

9. References


