LEADERSHIP ASSIGNMENT
Advanced Software Project Management-PA2513

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Introduction:

A leader is born or made? Can leadership be taught? Leader moves his people to great heights, i.e. make them achieve which they didn't achieve yet. Although it took second half of twentieth century for leadership to appear in literature but first attempt to define leadership took place in 1930s [1]. Leadership isn't attributed to single person, but is based on social context and exchange within a group. Leading cannot occur in isolation, but it comes being led.

Leadership is one of the most interesting research issues in organizations. Thus, two different types of research in the field of leadership emerged, which are approaches that study leadership in a hierarchical framework based on stability and approaches that study leadership in a complex, flexible, and changing framework based on adjustment to the changing environment [2].

Nowadays, the ability to integrate project components has found to be a key responsibility for project leaders. So, project teams may vary in size depending on the solution to be developed but success relies on the project leader or project manager [3]. A project might have sufficient goods to take off, but it requires an effective project management for the completion of the project without any chance of failing. Diagnosing, Adapting and Communicating are the three competencies required for influencing their team members. A project manager must understand a situation, adapt according to the situation and should be able to interact with others so that people can understand and accept [4]. Planning, Scheduling, Controlling, Staffing and Motivating are the important phases in the project to be implemented by a project manager [5].

The limelight is on understanding the role of leadership in team selection for a software development scenario. Some researchers claim 'leader' and 'manager' are two different terms [6] but for our convenience both were considered same.

A software project was assigned to me where I am the project manager, where a team of 11 people were assigned. The team consists of 8 developers, 2 testers and 1 documentation writer. Out of 11, three people are already available. Next parts of the essay are how I would structure the team according to their personal characteristics, profile of our team and justification according to relevant theoretical background. Even characteristics that rest of the employees have in order to work better with the people I already have.

Team:

As a manager it is important to structure the team according to the personal characteristics of the people. So age, gender, level of experience, marital status, qualification, communication a will be the criterion for the selection of the team. During the selection of the team level of experience would play a key role as tasks can be assigned according to their experience. Effective communication must be present between the team members and team leader must be present for good outcomes. Checking education qualification of the team member for the selection criterion. Full-time available employees were selected for the project.

The process of organizing and managing project team is called project human resource management [7]. Human resource planning, acquiring, developing and managing project team are the four stages of project human resource management [7]. The project has already acquired its team members and the responsibility of human resource planning, developing and managing team is assigned to the project manager [7]. This involves identifying and documenting project roles, responsibilities and relationships and enhancing project performance through interaction [7].

The project manager develops the team structure and profile using organization charts and position descriptions technique considering all the inputs of HR planning [7]. Hierarchical-type organizational chart is preferred by the project manager as several employees can be grouped under one administrator [7]. The following figure illustrates the team structure and is drawn on the basis of their personal characteristics.

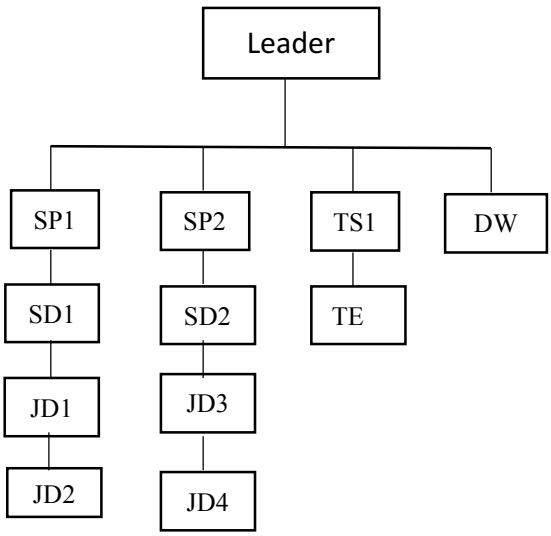

Diagram 1: Hierarchal team structure

All the newly acquired developers who are young are administered under the senior programmer 2 who is 5 years younger than the other senior programmer 1. Considering the skills and readiness developers SD1, JD1, JD2 are administered under senior programmer 1. Since the test engineer 2 who is not very skillful and needs a mentor is administered under the tester 1. This is the motivation for the chosen hierarchical structure.

Efficiency of the team members is identified by using Situational Leadership model. Efficiency is given by the readiness and styles, according to the model. According to the work experience, Readiness can be determined [4].

Readiness is scaled from R1-R4,

Where:

R1(Low Readiness): Unable and unwilling and insecure

R2(Low to moderate readiness): Unable but willing or confident

R3(Moderate to high readiness): Able but unwilling or insecure

R4(High Readiness): Able and willing or confident.

S No.	Position	Gender	Age	Level of Experience	Qualification	Skills	Readiness
1	Senior Programmer 1(SP1)	Male	37	15	Master of Technology	Able and willing	R4
2	Senior Programmer 2(SP2)	Female	32	10	Master of Technology	Able and unwilling	R4
3	Junior Developer 1(JD1)	Female	26	5	Bachelor of Technology	Able and unwilling	R2
4	Junior Developer 2(JD2)	Male	27	4	Bachelor of Technology	Unable and willing	R3
5	Junior Developer 3(JD3)	Male	26	3	Bachelor of Technology	Able and willing	R2

6	Junior Developer 4(JD4)	Male	27	4	Bachelor of Technology	Able and willing	R2
7	Senior Developer 1(SD1)	Female	31	9	Bachelor of Technology	Unable and willing	R1
8	Senior Developer 2(SD2)	Male	32	10	Bachelor of Technology	Able and willing	R2
9	Tester 1(TS1)	Female	28	6	Bachelor of Technology	Able and willing	R3
10	Tester 2(TE)	Male	24	1	Bachelor of Technology	Able and willing	R1
11	Document Writer(DW)	Male	28	5	Bachelor of Technology	Able and willing	R4

Table1: Profile of the project team

Frederick Herzberg's Motivation-Hygiene theory, where hygiene factors supports query process and provide a basic 'task content' for information seeking that allows users to access relevant information and motivation factors help users navigate and comprehend the retrieved information, related to the 'task-content' aspect of information seeking. Hygiene factors are effective in attracting users while motivation factors are more effective in retaining than in attracting users. Hygiene factors induce work motivation for shorter period of time [4].

Work will be assigned to the team members according to their work experience. The one with most experience will be assigned more work and less experienced members will have to work hard in order to complete the tasks assigned to them. Experience of an individual plays an important role in a project but in some cases they fail to adapt or lead to bias against novel approaches [8]. So, for preventing it lesser experienced developers were also chosen for the project. They will also invoke enthusiasm and concern into the team environment [9]. Even their previous teamwork experience is taken into consideration. Selecting senior developers for the project as project not only depends on capable team but also experienced one [10].

Leader:

The profile of the project manager is determined by his behaviour in terms of task and relationship with the followers. In this case the project manager adopts situational leadership for the project progress. Since the project team members vary in terms of their ability and willingness, the manager changes his leadership style in order to match the readiness of the followers [4]. Though this transition from one level to other leads to apprehension, but the outcomes are expected to be favourable [4]. As mentioned in the previous section, the readiness of the followers in the project vary from high to low. Therefore, leader-directed decisions and follower directed decisions are taken in the low and high levels of readiness respectively [4]. The following table illustrates clearly the leadership style employed.

Readiness	**Employees**	**Leadership style**	**Measures**	**Means of communication**
R1	SD1, TE	Telling	Provide task info Directly, generate consequences and reduce fear [4].	One-way and effective
R2	JD1, JD3, JD4, SD2	Selling	Focus more on discussions and questionnaires [4].	Two way and effective
R3	JD2, TS1	Participating	Build confidence, praise work	Two way with involvement

R4	SP1, SP2, DW	Delegating	Delegating tasks and remain accessible [4].	Follower made decisions and effective

Table2: Transition of leadership styles

The project manager uses effective means of communication through providing feedbacks and listening actively, thus
developing his relationship behaviour.

Motivating the team (leader's perspective):

Team leader must set goal and describe his vision. Team leader must ensure that each member understands the project goal and each member understands their part in the project. This ensures their skills are linked and improves the performance of the team [11]. Objectives must be divided without any confusion [12].

Team leader should boost the confidence of the team members. He must tell each member that they possess a typical role and make them believe that they can cope up with any issue [12].

Team leader must set project landmarks and delivery deadlines. He must establish administrative control procedures so that everything is done within the deadline [12].

Every employee must be trained and developed for maximum benefit [13]. As there is progress in technology, every member must be trained continuously, this also refers to senior officials [14].

Team leader must take part in decision making and update the progress of the project which leads to better results [15].

Team leader must organize proper meetings, knowledge transfer sessions and team outings which leads to successful teams [16].

Team leader must ensure a friendly environment and act as a mediator in case of conflicts and solve those issues in the beginning [12].

Team leader must gain his team's trust on him [12].

Conclusion:

Hence, with the help of the discussed theories we can conclude that leaders will be successful if he values the word of every member of the team and this leads to true results. By proper planning of the project and good coordination between the team members, with a balanced team in terms of knowledge and experience results in a successful project.

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