The Impact of Switch Leadership on Project Success

Abstract

The research in the field of project management has already highlighted leadership styles with respect to group and task needs in the project, individual performance levels, this paper is based on the assumptions that leadership challenges are far more dependent on the project life cycle and, more specifically, the sub-phases than previously discussed.

This paper suggests that adaptive changes in the situational leadership style adopted by the project manager toward his team during different sub-phases within the implementation phase in a project life cycle could enhance the probability of getting a higher degree of project success. These changes in the leadership styles are necessitated by the timing element which plays a vital role in a given project situation arising the need to switch.

Introduction

"Switch" refers to a period of time in which one style of leadership is used during a project and indicates that there was a different leadership style immediately preceding or following it.

The Impact of Switch Leadership on Project Success, the title for this paper, studies how the project manager's leadership actions could improve his or her team's ability to reach the desired goal in the nine knowledge areas of project management - management of integration, scope, time, cost, quality, human resources, communication, risk, and procurement. A switch in the leadership style during the implementation phase of the project is not only a mere requirement but also a necessity for the team to meet the project objectives on time and on budget. This paper explores this link between leadership changes and project success.

Guided by the research objectives and relevant literature the following null hypotheses (H_0) were postulated and tested :

1. A switch in leadership style does not produce more overall success on projects.
2. The switch in leadership style follows the team development cycle.
3. The time factor does not have any impact on the preference for the project leadership style.
4. Projects with mainly autocratic project leadership do not tend to be successful.

The focus is on leadership of the project team during the implementation phase. This stage of the project was selected as the starting point as it promises a maximum of leadership interaction between the project manager and his team. Given the wide scope of leader behavior on a project, we chose to concentrate on the project manager's style just with his team and not with other stakeholders.

This research paper gives a brief overview of the basic leadership areas of goal, team and decision-making process through a review of different styles of leadership and measurement of project task success followed by an outline of team dynamics. With these elements a research questionnaire was constructed to identify changes in these aspects during the implementation stage of the project. A description of the research design and results come, next followed by a discussion of the findings and a conclusion.

Practices in the field were studied to identify successful leadership actions at different sub-phases in the project implementation phase and then see if they corresponded to any form of existing

leadership style or whether, by trial and error, project team leaders had unwittingly created their own form of leadership that is quantifiably successful against the Pinto and Slevin (1988) 12-factor model on project success with a score of 76 points or higher.

Does the project manager choose to adapt his leadership pattern exactly to the sub-phases in the implementation stage? Or do changes follow the team development cycle? Are these team dynamics different in a project situation? Do time constraints play a decisive role in a switch in style? With answers to these questions, can a unique project management team leadership model be identified?

Initial research findings did confirm a project success rate 17% higher on the Pinto-Slevin 12-factor model when the project manager exercised switch leadership.

Leadership

2.1 Definitions

In its broadest terms, leadership is the ability to achieve a given task with a group of people. An able leader inspires and attracts the follower to move towards the goal and where possible will exercise transformational leadership to develop the team.

Pinto, Thomas, Trailer, Palmer and Govekar (1998) underline the importance of the interchanging roles of the project manager from manager to problem-solver to facilitator to communicator.

Project leaders must have this ability to display leadership and their chosen style will substantially affect overall project performance. (Odusami, Iyagba, & Omirin, 2003). They are faced with a perplexing array of leadership styles. However, despite the mountain of definitions, theories and hypotheses around leadership, there is one element that can be loosely identified through all modern theories and that is the notion of change and movement.

House's (1971) Path-Goal theory is a dynamic model where leaders must move among four styles; directive, supportive, participative and achievement-oriented. Leaders must fit their behavior to the characteristics of the followers and to the context in which they operate together to progress towards goals.
As Kotter (1990) points out "Leadership … is about coping with change." In shifting project environments, this notion of dynamism is particularly relevant.

Developments in team character are highlighted by Kloppenborg and Petrick (1999), stating that transformational leadership is the development of a group. "A project is an opportunity for team character development" (Kloppenborg & Petrick). Transformation involves taking teams with different backgrounds, needs and expectations and transforming them into a high-performing, cohesive unit. Again, ideas of "going forwards and making different."

Rost (1991, 1993) also evokes notions of movement in explaining that leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes. According to Rost (1991, 1993), leadership is seen in terms of the interaction among the people involved in the process: both leaders and followers. Thus, leadership is not the work of a single person; rather it can be explained and defined as a joint effort towards achievement among group members. The essence of leadership is not the leader, but the symbiotic, developing relationship between the leader and his or her team.

Bass and Avolio's (1994) definition of leadership is centered on the action of transformation. They have demonstrated that the "X-factor," now defined as the 4 "I's" encourages change to address important outcomes. That is because the transformational 4 "I's" (Individual Consideration, Intellectual Stimulation, Inspirational Motivation and Idealized Influence) use internal motivation so that people will move beyond their usual limits. They indicate that transformational leadership is particularly important in the context of changing institutions.

Verma and Wideman (1994) also emphasize that the style of leadership needs to change according to the context of a project as it progresses through its life cycle. Wideman describes different stages of leadership and followership development and the movement from managership to leadership.

2.2 Situational Leadership

Within the wide area of project management leadership research, it is situational leadership that has understandably attracted the closest attention.
Situational leadership preaches differing styles for diverse contexts so changes in leadership are very apparent, as the project manager reacts to widely changing contexts.

Hersey and Blanchard's situational model (based on the Ohio state studies, late 1940's) seems an appropriate approach for projects as it highlights the varying requirements of a leader in accordance both with changing situations and his team's development.

Fiedler's (1967) Contingency Leadership Model accentuates the changing organizational environment. He suggests that the performance of a leader in this moving context depends on two interrelated factors; the degree to which each situation gives the leader the necessary control and influence and also the leader's basic motivation towards the task or relationships.
Fiedler argued that the most effective style depended on the quality of relationships, relative power position between the leader and the led and also the nature of the task itself. Fiedler sees the leader as being obliged to change according to the environment.

Leadership style should be adapted to the development of the employees in terms of their "readiness" in job experience, acceptance of job responsibility and wish to succeed. In this model, the leader shows four approaches to advance his or her team towards completion of the goal.

Kerzner (2003) affirms that "Project managers are under a severe time constraint" and adds that a project manager may have to use the situational leadership model to provide individual leadership for each team member. Kerzner also underlines notions of change, believing that "Effective leadership must be dynamic and flexible rather than static and rigid." and states that effective leaders are neither wholly task or relationship in their actions, but maintain a balance between them.

2.3 Team Dynamics

On a project, the time factor is a powerful driver both in terms of task time constraints and pressure on the individual. Pinto and Thoms (1999) argue that project leaders must possess or develop temporal skills that align with the various tasks and situations that they must deal with to improve their chances for success. This time influence also has a clear effect on the team dynamics during the project. This impact could go so far as to affect the widely accepted team development model of forming, storming, norming and performing. Tuckman (1965) noted that time pressure has an effect on the group transformation process that could shape the cycle.

Let us examine another highly dynamic aspect in the project leadership situation; the changing team and work needs that a project manager must combine to produce a successful outcome. Tuckman's (1965) team development model draws attention to distinct phases of group transformation and development commonly referred to as the forming, storming, norming and performing stages.

Tuckman (1965) believes the team development process can be sub-conscious but if the group is aware of the stages then the team can be more effective more rapidly. This quicker extra performance is of particular interest in project management. Leaders should be able to identify the cycle of their team to know when it is likely to be the most high-performing and also when it will tend to lack motivation.

The forming stage involves identifying the task and accomplishing it. The group gathers information about the tasks and other team members. There is discussion on the standard organizational processes and people are concerned with routines and organizational issues.

Tuckman (1965) does not believe that there is much task accomplishment at this stage, so perhaps not the best stage for a project management team to linger in.

As the team advances into the storming stage, the group members argue amongst themselves, whether they agree or not on the immediate tasks to be performed. There is discord, tension and powerplays.

In the third phase, norming, the task goal takes priority over individual quarrels and there is more willingness to adhere to the group and avoid conflict so discussions are friendlier. People listen more to each other and the team is able to develop group processes that start to produce a more practical level of task performance.

Performing, sees the individual changing his behavior in accordance with group and task needs. The group learns how to solve conflicts so that it can move on with the task in hand. There is interdependence and flexibility. The processes are carefully refined to produce a high level of performance.

Awareness of the forming, storming, norming and performing cycle can be useful to a project manager. Verma (1997) thinks that progress from one stage to the next may vary from team to team, influenced by the maturity level of the team members, the project manager and overall project environment. He believes that the project manager must move the team along the cycle to the last performing stage as fast as possible.

This study carefully observes the exact sequence of the team development cycle to see if it corresponds to sub-phases in the implementation stage of the project, follows the planned timing of the project and also details if the project manager's switches in leadership style corresponded to the development stages of his team, either to move the team cycle along more quickly or as a reaction to changes in the team cycle.

2.4 The Project Goal

To measure the project manager's leadership success against the set project objective the Pinto-Slevin (1988) model was chosen. This model, based on a survey of 400 projects, lists 12 success factors, divided into two sections—task-related achievement and a wider customer focus.

In contrast to the moving elements on a project is the permanent nature of the defined goal that the project manager must lead his or her team towards completing in a fixed timescale.
"Achieving the goal or final aim is the ultimate test of leadership" (Verma, 1997).

This traditional definition of a successful project is by its adherence to budget, deadlines and functional quality. This view, now widely debated, looks at project success from the perspective of the project team. (Turner, 2002). That close link between the performance of the project team and project success met our requirement to find a success model as closely related to the implementation stage of the project as possible, bearing in mind that the other project phases that could impact the final, wider success of the project were out of the scope of this paper.

The success factors of Grude, Andersen, Grude, Haug & Turner (1987), Morris (1994), Baker, Murphy & Fisher (1988), were therefore not considered to be appropriate nor Westerveld and Walters' (2001) project excellence model (PEM) or the Seven Forces Model, Turner (1999, 2000), as they all measure a wider scope of project success, which is more distanced from the implementation stage than the Pinto and Slevin model.

Pinto and Slevin's (1987) project implementation profile (PIP) contains practical aspects of the project work, or the management process, that can be controlled by the project manager or the project team so as to increase the chance of achieving a successful outcome but it was not

considered suitable as our success measurement instrument for the purposes of this study as it deals with an analysis of process performance. The authors of this paper preferred a more global, quantitative measurement of the task success with the 12-Factor model.

2.5 Project Leadership Style

"Nothing is more difficult, and therefore more precious, than to be able to decide." (Napoleon, Maxims, 1804). Adler (1990) states the importance of decision-making to successful global leaders. The situational nature of project management leadership requires a peak level of this skill with the ability to combine rigid and dynamic elements to meet a fixed timescale and task and to incorporate changing team and work needs.

According to Pinto and Trailer (1998), the project manager's choice of his leadership style is made according to three criteria: context questions with problem attributes pressures where the leader wants to make a decision, organization/group pressures where conflict could arise and also leader personality pressures where he won't change his leadership style.

The project manager's natural decision-making leadership style was studied to see if there was a systematic unchanging application of his normal leadership during the whole of the implementation phase or if he switched according to either the fixed goal and timescale or dynamic group pressures.

To identify the project manager's natural leadership decision-making style the Jerrell and Slevin management diagnostic instrument was used. This model comprises 20 statements reflecting personal leadership behavior and asks the manager to state his preferences using a 5-point Likert scale.

The Jerrell and Slevin (1984) instrument requires the manager to ask two key questions concerning decision-making: whom do I ask to get sufficient information? And who makes the decision?
Slevin points out that this instrument describes the manager's leadership style but it doesn't measure the performance level of the decision. Our study used the Pinto and Slevin 12-factor Model to evaluate the decision outcome for project success.

The diagnostic instrument divides managers into four types that correspond to styles described in the Bonomo-Slevin model (1998). The four styles are autocratic, consultative autocrat, consensus and shareholder. The autocrat makes the final decision himself. The consultative autocrat has input from the team members but reserves the decision to him. The consensus style gives the team a larger degree of freedom to make its own decision with the leader remaining informed. The shareholder approach leaves the ultimate authority to the group.

This model is close to the Vroom and Yetton (1973) decision-making model that was developed to deal with the issue of a switch in leadership style to match the situation based on leader subordinate interaction in decision-making. This model highlights the degree of freedom accorded to a team by its leader. It reflects decision-making styles that could be described as autocratic AI and AII, consultative CI and CII and group method (G).

The Vroom and Yetton model explicitly recognized that an effective style depended on situational variables including the leader's expertise, the task structure and the follower's willingness to accept a solution. They found that the key elements in sharing of leader power are the maximization of technical effectiveness and subordinate motivation or acceptance.

If technical effectiveness is not crucial and motivation and acceptance are not important, the decisions are made by the leader alone. On the other hand, if the technical difficulties are important but motivation is low, the leader tends to obtain more information. If the problem is high on a technical level and there is need for acceptance, then the decision is shared with the group. When technical effectiveness is unimportant, but motivation and acceptance are high, delegation becomes a useful approach.

In this research study, the project managers were not asked to detail their decision-making process criteria in such detail. The focus was on the number and type of switches in the leadership on the

timeline and the decision outcome relating to project success, so project managers were simply asked to identify their decision-making style between the autocratic, participative, democratic and laissez-faire.

Russo and Schoemaker (1989) emphasize the importance of decision-making process skills but in this study no attempt was made to measure the effectiveness of separate decisions along the implementation sub-phases as highly detailed investigation would have been necessary regarding the decision-making process skills of the respondents. Instead overall decision-making effectiveness was measured against the project goals.

Research Design

3.1 Introductory Presentation of Research

The data collection via questionnaire consisted of three sections:
- The measurement of project success
- Diagnosis of the leadership style of the project manager and changes in style during different sub-phases in the implementation phase
- The demographic profile of the project manager.

Was the project leader's natural leadership orientation the same as his situational approach? When changes in style were evident, it was clear that further investigation would be necessary to ascertain why the project manager changed his style of leadership: did this come from team dynamics? Was it time pressures? Task demands?

3.2 Assumptions

The following null hypotheses (H_0) were postulated and tested:

- A switch in leadership style does not produce more overall success on projects
- The switch in leadership style follows the team development cycle
- The time factor does not have any impact on the choice of the project leadership style
- Projects with mainly autocratic project leadership do not tend to be successful.

The following alternative hypotheses (H_1) were also framed:
- A switch in leadership style produces more overall success on projects
- The switch in leadership style does not follow the team development cycle
- The time factor has an impact on the choice of the project leadership style
- Projects with mainly autocratic project leadership tend to be successful.

3.3 Limitations

- In the present study, the project managers assessed their own leadership style and the views of the team were not taken into account to give a 360° view
- The managers gave a subjective analysis of their project success. It is possible that bias was introduced as managers, in their retrospections, cannot or do not always accurately recall the state of the decision situation attributes. The passing of time may add to the error of recalls.

3.4 The Survey Instrument

The instrument comprises a six-part questionnaire. A survey was considered an appropriate method of data collection to reach a maximum of respondents across several countries. Among the six sections of the questionnaire, the first five are examined in the present research and are divided as follows:

1. Questions in the first part were aimed at finding data concerning a particular project carried out and completed by the project manager to know the project objective, duration, classification and business sector and the team composition.

2. The second part was based on Pinto and Slevin's 12-factor model instrument to measure project success as perceived by the project manager on a 7-point Likert scale from 1 *strongly agree*, to 7 *strongly disagree*.

3. In the third part of the instrument, called the project timing (exhibited in the Appendix) the respondent had to identify the different sub-phases in the implementation stage only of his chosen project by marking them on a timeline. They then had to specify the team dynamics during the implementation stage using "forming, storming, norming and performing" criteria, again on a timeline. They had descriptions of these behaviors and were asked to choose the ones that best corresponded to their team dynamics.

   Project managers were then requested to identify their leadership styles on a timeline across the implementation stage using Bonoma-Slevin's model with four leadership styles; Autocratic, Consultative, Consensus and Shareholder (Laissez-faire). They had descriptions of these types and were asked to select the one that best matched their approach.
   They then identified the point at which the team processes of communication, feedback and troubleshooting all started to function well on the team.

4. The fourth part collected data to assess the project manager's leadership style using the Jerrell and Slevin 20-point leadership diagnostic instrument. For each of the 20 indicators, the respondents had to rate their level of agreement for various statements on a 5-point Likert scale (from 1 strongly disagree to 5 strongly agree).

5. The final part of the questionnaire collected demographic data about the project leader (his gender, age, professional status and experience) and subjective data relating to his or her views on project manager success and failure to try to identify any other leadership behaviors not covered in our questionnaire or give explanation for actions taken.

   The population of interest for this study was project leaders in various industries mainly in France but also from the Asia-Pacific region, North America, Europe, the Middle East and South East Asia to provide data from different business management cultures.

   One hundred questionnaires were distributed to project managers as a pilot study and 50 were returned, giving a response rate of 50%. (Two hundred more were circulated, the data collection and analysis of which is still underway.)

   This accounts for 50 projects. The data analysis began in early 2004.

Results

4.1 Descriptive Results

Data from project managers over a cross-section of industries was collected with the average budget 28 Million Euros and the average length 64 weeks with 20 team members with an average age of 35 years. Thirty percent of managers had five years of experience or less and the average for the remaining was 16 years. The average age of the project managers was 41.

In terms of natural leadership style, as measured by the Jerrell and Slevin instrument; 16% were autocratic, 18% were consultative, 21% were consensus and 18% displayed shareholder style leadership.

On the Pinto and Slevin 12-factor performance model, 23% of the project managers achieved an average performance level of 76 points and the remaining 77% scored 66 points.

4.2 Hypothesis 1

The first hypothesis states that a switch in leadership style does not produce more overall success on projects. A successful project was defined as being one that achieved a score of 90% or higher on the Pinto-Slevin 12-factor model. The percentage of successful projects was 23% out of the total number of projects. Less successful was a project with a score lower than 90% on the success model.

Successful projects recorded an average score of 78 on the Pinto and Slevin 12-Factor model, whereas less successful ones scored an average of 66 points.

The number of switches was identified and a comparison was made between successful and less successful projects.

Fifty percent of less successful projects had two or three leadership switches, compared with 70% of successful projects (see Exhibit 1).

Exhibit 1

No.of leadership switches	% Successful projects	% Less Successful projects
1	20%	25%
2	30%	31%
3	40%	19%
4	10%	22%
5	0%	3%

The main trend is for project managers to start their project with an autocratic style (47% of all project managers) while a higher proportion of successful projects start in the autocratic style (60%).

Only 16% of the switches follow the sub-phases in the implementation phase and on successful projects the manager changes the leadership style in accordance with the implementation stages in only 10% of the switches.

On successful projects, only 8% of switches involve a shareholder style whereas less successful project managers have 21% of their switches in this laissez-faire style.

Project managers were able to identify why they changed from an autocratic or consultative style to another in 47% of this type of switch. However, project managers were less able to say why

they changed from consensus or laissez-faire style to a more autocratic approach; in only 10% of these switches did they explain why.

4.2 Hypothesis 2

Hypothesis 2 states that the switch in leadership style follows the team development cycle.
The switches in leadership style as observed in this study were not significantly linked to the stages in the team development cycle. This could be because the complete consecutive Tuckman cycle was clearly identified on only 26% of the projects studied and another 33% of projects showed the three consecutive stages of forming, storming and norming. All projects showed some stages of the cycle, even if they were not consecutive.

Only 20% of successful projects show all four stages of the Tuckman's team development cycle.

It was found that where the cycle occurs, successful project managers follow it to the same extent as less successful ones (30% vs. 35%) but there was not sufficient evidence to establish any relation between the success on projects and the leaders switching their style to follow Tuckman's consecutive team cycle.

An average of 22% of the time was spent on achieving the required high task performance, 25% on the forming stage and 19% on the storming stage. Autocratic leaders had storming on their project 15% of the time, consultative 28%, consensus 15% and shareholder 21%.

There seems to be no link between the natural leadership style and differences in the development cycle.

For 26% of less successful projects, team cycles are closely related to the different implementation phases. 30% of successful projects also show the same trend.

Projects do not seem to start with a storming phase (only 5% of them) and no link was found between any natural leadership style and excessive conflict on the team.

4.3 Hypothesis 3
Hypothesis 3 states that the time factor does not have any impact on the choice of the project leadership style. Forty four percent of successful project managers cited time as a reason for changing their leadership style and they had an average score of 79 on the Pinto-Slevin 12-factor model—60% of these were autocrats. Other reasons cited for a change in leadership style were task-related or planning issues.

4.4 Hypothesis 4
Hypothesis 4 states that projects with mainly autocratic project leadership do not tend to be successful. The fourth hypothesis was set up to establish which style is best in terms of project success against the Pinto-Slevin 12-factor model. In terms of success the autocratic approach seems to be the most favored. Successful projects are implemented 75% of their time frame in the autocratic leadership style (autocratic or consultative). Less successful projects are led 46% of the time in the autocratic style.

A clear difference is noted between the project manager's natural style as identified with the Jerrell and Slevin management instrument and their real leadership style on the field during the project.
Seventy percent of successful project managers are naturally consensus or shareholder style but they only spend 25% of the project duration taking this approach.
Sixty five percent of less successful project managers are naturally consensus or shareholder style and they spend 54% of the project duration with this approach.

Respondents were asked to identify their own leadership style. Seventy two percent incorrectly identified themselves and of these 32% wrongly thought that they were a consultative style. Fifty three percent of autocratic leaders correctly identified their leadership style indicating strong notions self awareness.

Discussion of the Findings

5.1 A Switch in Leadership Style Produces More Overall Success on Projects

The result of the test of hypothesis shows that there is a statistically significant relationship between switches in leadership style and a high success level on a project. This suggests that a project manager should exercise switch leadership in a project situation.
The optimal number of switches is three; irrespective of the duration, size, industry, classification or team composition of the project.

Eighty six percent of these switches were from the autocratic form toward a more consultative phase showing a tendency for project managers to start a project in the autocratic mode and thereafter switch to a more consultative approach.

The reasons for a project leader's decision to exercise switch leadership could arise from an awareness that the project is either progressing too slowly towards the desired goals, veering in the wrong direction, not moving at all, slipping backwards or that the team has lost direction.

5.2 The Switch in Leadership Style Does Not Follow the Team Development Cycle

The switch in leadership style does not follow the team development cycle. The team development cycle stands alone from the task demands and the leadership styles and switches. The changes in leadership styles that were observed could therefore be more driven by a collection of situational variables that could include assessment of team and task needs but not be solely governed by team requirements.

This supports the view of Tuckman (1965) that the change in context will have an effect on the specific content of the stages, the rate of progression through the sequence and the order of the sequence itself.

Hans J. Thamhain (1988) points out that context, leadership, qualified personnel and a stable work environment are environmental factors that can have an effect on the team dynamics. The team cycle is not the only factor.

Tuckman suggests that the variable duration of group life can perhaps account for cases where the stages do not fit the forming, storming, norming and performing model.

5.3 The Time Factor Has an Impact on the Choice of the Project Leadership Style

There is a clear, overriding element of the set timescale in a project leadership situation. This temporal aspect gives researchers a natural, fixed starting point from which to develop a project management leadership model and this was the angle taken for this research study.
Indeed, 44% of successful project managers cited time as a reason for employing switch leadership to closely adhere to the project deadline. The others may have adapted their style to combine fixed and moving elements on a project such as team and short-term tasks, as the team cycle alone or the project work cycles were not closely linked to changes in the leadership style; the different phases did not all move on to the next stage at the same moment.

Successful project managers are therefore able to carefully join time elements on a project.
Pinto and Thoms (1999) underlined the importance of personal temporal skills as being desirable to a project manager: timeline orientation, future time perspective, time span and polychronic or monochronic preference. Furthermore, "They (project managers) need to understand how their own temporal alignment will impact their leadership ability… to vary their time orientation" (Pinto & Thoms).

This further emphasis on the time element of project leadership corresponds to the findings of the present research.

5.4 Projects With Mainly Autocratic Project Leadership Tend to be More Successful

In terms of success the autocratic approach seems to be the most favored and even when the leader adopts this approach, there is not a high degree of storming on the team; only 15%.

Verma (1997) sees project team leaders as using a shared leadership style that emphasizes participation, empowerment and trust Successful project managers we interviewed practice a switch to or from this style but do not remain in it all through the implementation sub-phases.

Fifty three percent of autocratic leaders correctly identified their leadership style indicating an awareness of being highly task-oriented. Project managers who were able to justify why they changed from an autocratic or consultative style to a more consensus or laissez-faire approach demonstrated this same consciousness of leadership style.

Conclusion

In conclusion, a switch in leadership style produces more overall success on projects but this switch in leadership style does not always or necessarily need to follow the team development cycle. The time factor has a critical impact on the choice of the project leadership style. Projects with mainly autocratic project leadership tend to be more successful than ones run principally with the forms of leadership of consultative, consensus or shareholder.

The time element provides a platform for future research. Future emphasis could be placed on the other phases in the project to discover if the same phenomena occur. Only the implementation phase of the project has been taken into consideration in this study.

The leadership switches demand further investigation. An ongoing "diary" study would be useful in ascertaining this and the specific content of the stages could be studied. Do the project manager's actions closely mirror Tuckman's definitions of forming, storming, norming and performing or do they differ slightly?

To achieve success on a project, we suggest that the permanently fixed parameters of time and task require the complementary intransigency of the autocratic leadership style but that this should be sharply contrasted with flexibility and temporary changes in style to produce the necessary drive on the project to move the team along to a positive outcome due to the moving team and environment dynamics.
Switch leadership is the conscious ability to maneuver from one leadership approach to another to enhance performance in a project situation. It is not therefore a new type of leadership in itself but a successful methodology to employ existing leadership styles for optimum performance. The situational approach places emphasis on matching the leadership style to the task and team whereas switch leadership is more dependent on time factors.
A suitable analogy may be the marathon runner who, in order to complete the necessary 26 miles with a good time score, alternates between running, jogging and walking; the switch from one style of forward movement to the other being planned or as a reaction to his physical state.
Every project follows a life cycle, each phase of which is unique and whose sub-phases pose a series of challenges to be tackled. As an optimal leadership response mechanism, evidence presented in this study suggests that, for project managers, a Switch in Time Saves Nine …

Definitions

Implementation phase: execution or operations phase
Leadership: the combination of task and relationship behaviors displayed by the project manager
Project leadership: leadership in the context of a project
Project life cycle: the four sequential major time periods through which any project passes, namely: concept, definition, execution (implementation or development) and finishing
Project Manager: the manager given the responsibility of leading the project team during the implementation phase
A successful project: a project with a score of 76 or higher on the Pinto-Slevin scale
A less successful project: a project with a score of less than 76 on the Pinto-Slevin scale
Situational leadership: changing one's leadership style to adapt to a changing environment
Subphase: a work stage in the implementation phase of the project
Switch: a period of time in which one style of leadership is used
Switch leadership: the conscious ability to maneuver from one leadership approach to another to enhance performance in a project situation
Task: the project goal including all tasks completed during the implementation phase to achieve it
Team development life cycle: the Tuckman team cycle of forming, storming, norming, and performing
Timing element: the fixed timescale for the implementation phase of the project

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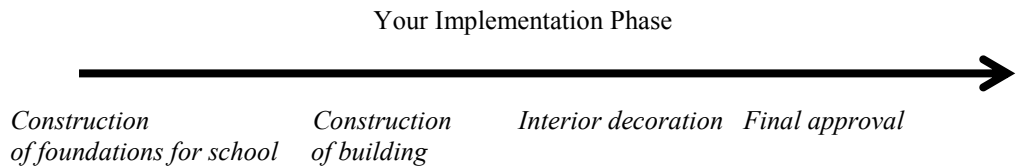Verma, V. K. (1997). *Managing the project team* (p. 72). Newtown Square, PA: Project Management Institute.

Appendix

Project Timing

1. Please indicate on the chart below the different phases in the IMPLEMENTATION / EXECUTION STAGE ONLY of your last project.
    This is the stage where you did the operational work with your project team.
    You can use your own criteria to divide your implementation stage into phases

For Example :   Your construction project could be as follows :

Your Implementation Phase

Construction   *Construction*   *Interior decoration*   *Final approval*
of foundations for school   *of building*

Now, as in the example above, please name on the line below the stages in the implementation phase of your project.
Please space them out along this line as they actually occurred on your project, so that we can see the length of each part as in the example above.
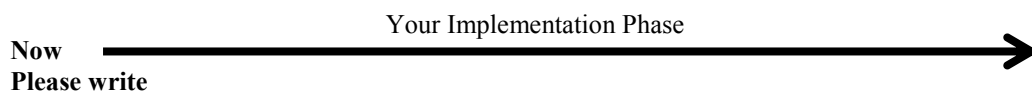
Your Implementation Phase

Implementation
Completion
start
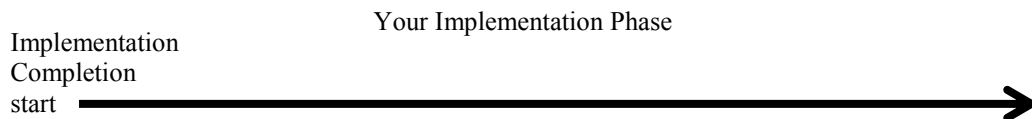
Please write
here :

_____

2. Please indicate on the chart below with A, B, C or D's the different phases in the IMPLEMENTATION STAGE ONLY of your last project for the changes in the team dynamics
A.   Forming: the team gets to know each other
B.   Storming: tension on the team, the team members start to argue
C.   Norming: the group members settle down and start to function as a team together
D.   Performing: the team shows a high performance

For example :

A _____ C

Your Implementation Phase
Now
Please write

_____

3. Please indicate on the chart below marking A, B, C or D's the different phases in the IMPLEMENTATION STAGE of your last project for the changes in your leadership style
A.   I had a directive style of leadership: I made the decisions
B.   I let the team participate in decisions, but I had the final word
C.   I trusted the team to decide but I kept myself informed
D.   I let the team make their own decisions with a minimum of input from me

Your Implementation Phase

———————————————————————————————————▶

**Please write
here :**

_____

4. If you did change your leadership style: please briefly indicate why?

5. This question is about the way the team worked together (processes/procedures):

Please indicate on your project implementation stage below, the point at which the team processes
of communication, feedback and troubleshooting *all started to work well*
(you can tick on the boxes)

Your Implementation Phase

———————————————————————————————————▶

Your start date ☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Completion

6.   Did the processes of initiation, planning, executing, controlling and closing run
     simultaneously on your project or *consecutively*?

        Please write the % of each
        Your Answer:
        % Simultaneously
        % Consecutively

7.   Did you follow the same project implementation plan as was scheduled initially at the
     very start of the project ?