

## **Patterns of Leadership for Effective Project Management**

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### **Abstract**

*Organizations are shifting towards project organizations thus creating a need to understand the factors that lead to effective project management. The present study explores effective project management in the context of leadership behaviour (concern for task and people) in more and less global projects. We identify factors based on leadership behaviour and propose a model for effective project management. We use t test to test our hypotheses. Results show that both concern for task and concern for people are equally important for both more global and less global projects. The findings of this study have significant implications for leadership behavior at project management workplace.*

**Key Words:** *Leadership behaviour, effective project management, more global and less global projects.*

### **Introduction**

Project management effectiveness refers to the success of the project (Hyva<sup>ri</sup>, 2006). Achieving projects' success depends on people as people are the most critical project management resource. In the current study, we examined project effectiveness from people's perspective as how do they contribute towards project effectiveness. In recent years, researchers have become increasingly interested in factors that may have an impact on project management effectiveness. The objective of this paper is to investigate the effectiveness of project management in terms of leadership behaviour in less global and more global projects. Cleland (1995) suggest that research on project leadership is still limited though calls have been made for more project leadership research within the field of project management for more than a decade. Huemann *et al.* (2007) suggests that the project is a social system, and includes several areas focused on organizational behavior, leadership, communication, team building, and human resource management. Virtual project is an important area for research particularly in view of the growing diversity of project teams and global sourcing of project work.

With the transition of organizations from traditional to virtual the teams in project environment are neither purely collocated nor purely virtual. Most of the teams in today's organizations fall into a hybrid category (Griffith *et al.*, 2003). Researchers have proposed level of virtuality in the description of virtual teams (Griffith *et al.*, 2003; Kirkman and Mathieu, 2005). We measured the level of virtuality in the project context with two traditional dimensions, spatial distance and use of virtual tools like email, teleconferencing and video conferencing.

For this research, we take less global projects as the projects where project team members and team leader are collocated but having reliance on technology and latest communication channels. We define more global projects being projects in which project professionals worked in a single team from start to finish of the project collaborating with other virtual team members dispersed in different countries.

Virtual projects involve people cooperating from internationally distributed sites and even different organizations (Adams and Adams, 1997). Professionals working geographically distributed, participate in multi-cultural projects with a global focus (Townsend *et al*, 1996). In the current research we call these projects as more global projects. These virtual projects pose new challenges to project management practitioners and researchers (Odenwald, 1996). Nauman and Iqbal (2005) provide insight into the challenges experienced in virtual project management and identify factors that lead to effective virtual project management. They also propose ways for improving virtual processes. With the increase in the use of virtual project teams it is important to understand what leadership style lead to effective project management in work place. The present study tries to fill this gap in the context of leadership behaviour.

## **Theoretical Framing and Hypotheses**

### **1. Leadership Defined**

Leadership affects all facets of human enterprise. Though there are many definitions of leadership, each definition has different focus on leadership. Due to limits of the research focus we'll use the definition, which highlights and reflects on the behavior of the leader.

Leadership according to Hemphill and Coons (1957), is a "behavior of an individual...directing the activities of a group toward a shared goal" (in Gregoire and Arendt 2004, p.396). Fiedler (1967) advances almost similar definition, as follows, "by leadership behavior we generally mean the particular acts in which a leader engages in the course of directing and coordinating the work of his group members. This may involve such acts as structuring the work relations, praising or criticizing group members, and showing consideration for their welfare and feelings". Hersey and Blanchard (1993) defined leadership as the process of influencing the activities of an individual or group in efforts toward goal achievement in a given situation.

### **2. Leadership Theories**

Over the last seventy years, leadership theory can be categorized into six main schools of leadership (Handy, 1982; Partington, 2003):

- a) The trait school
- b) The behavioral or style school
- c) The contingency school
- d) The visionary and charismatic school
- e) The emotional intelligence school
- f) The competency school

In the present research paper, we focused our review on the first three leadership approaches. Trait theories assume that leaders are born not made. Trait theories are concerned with the personal characteristics and have found different characteristics, which make the differences between leaders and non-leaders (Bass, 1981; Armandi *et al*. 2003). Turner (1999) identified seven traits of effective project managers including problem - solving ability, results orientation, energy and initiative, self confidence, perspective, communication and negotiating ability.

Most of well-known studies for style/behavioural approach were conducted at Ohio State University and University of Michigan in the 1950s and 1960s (Blake and Mouton, 1968; Northouse, 2004). This approach suggests multiple styles of leadership with the underlying assumption that there is a best way to lead i.e. high along both dimensions (concern for task, concern for people). These studies suggested that the most effective leaders are those who engage in both task and relationship behaviors. Perhaps the most popular approach to understanding leadership based on style is Blake and Mouton's Managerial Grid, which has since been refined and revised by Blake and McCauley and named the leadership grid (Blake and McCauley, 1991).

Hackman and Johnson (2004) noted that "styles can be pared down to two primary models of communication: one model compares authoritarian, democratic, and laissez-faire styles of leadership communication; a second model contrasts task and interpersonal leadership communication". Leader style is a behaviorally oriented approach to understand leadership. The style approach focuses on behavior and explains how leaders combine task and relationship behaviors to influence subordinates in their efforts to reach a goal. This theory of leadership follows the task-versus-relationship categorization creating a grid of encompassing key styles of leadership (Northouse, 2004). Thus there is a range of a leader's behaviour who is highly concerned with results with a very low concern for people.

- Leadership behaviour highly concerned with production with a very low concern for people is labeled as authority compliance management.
- A high concern for people and low concern for results is labeled a country club management style.
- The "middle-of-the-road" leader has an equal balance for both task and results.
- Impoverished management leader lacks concern in both areas.
- Team management leader has a high focus on both people relationships and task efficiency.

Blake and McCauley (1991) believe that the ideal leadership style is categorized within the dimension called "team management," which has a high concern for both people and production.

Trait theories are not particularly useful as a tool as they merely make distinction of leaders from non leaders. The primary objective of behavioural approach is to emphasize what leaders actually do in the job rather than just looking on the traits of the leaders. Behavioural theories, in contrast, thus provide a useful tool to analyze what leaders actually do and how one may be trained to be a more effective leader.

The contingency theories of leadership assume that the effectiveness of leader behaviors that is, task or relationship orientation of the leader depends on the context and situational factors such as task and organizational conditions (House, 1971; Katz, 1977). Though the contingency view of leadership provides a richer model for predicting leadership effectiveness, however it does not completely explain all leadership situations.

### **3. Virtual Leadership Behaviour**

Virtual teams are a collection of individuals who are dispersed (geographically, organizationally, or otherwise), and who collaborate using information technology in order to accomplish a specific goal (Zigurs, 2003). Zigurs (2003) propose that team working in virtual context may or may not have an assigned leader but leader behaviour need to occur to move the team forward. Zigurs also suggests that cultural dispersion is one of the dimensions of virtuality along with geographic, organizational and temporal dispersions. More recently researchers have turned to a definition that allows for degrees of “virtualness” on a continuum (Griffith *et al.* 2003).

There have been studies which focused on leadership traits in multicultural management (Wills and Barham, 1994; Bloom *et al.* 1994). Wills and Barham (1994) found that cognitive complexity, emotional energy, and psychological maturity are common factors in successful multicultural managers. Bloom *et al.* (1994) studied leaders in European companies and suggest some common characteristics for multicultural leaders including managing international diversity, social responsibility, internal negotiation, general orientation in people rather than task orientation and manage to find a consensus in the multicultural environment.

According to Makilouko (2004), there has not been enough research on multicultural teams excluding virtual teams. Moreover, no studies are available that clearly show effective patterns in multicultural leadership. Makilouko (2004) states that the question of coping with foreign culture is still an unanswered one. Project GLOBE (Global Leadership and Organizational Behavior Effectiveness) is a major long-term multiphase, multi-method research project that studied cross-cultural leadership differences and similarities among countries. Javidan *et al.* (2006) in their paper used findings from the GLOBE research program to provide a sound basis for conceptualizing worldwide leadership differences. They suggest that countries can be different on some cultural dimensions and similar on others.

However, no study gives patterns of effective leadership style in multicultural environment. Reflecting on the literature, though there have been studies, which compared collocated and virtual teams, these studies have either been strictly from a ‘performance’ perspective (Sambamurthy *et al.* 1993; Straus and McGrath, 1994) or from a team dynamics perspective (Cramton, 2001; Jarvenpaa and Leidner, 1999; Maznevski and Chudoba, 2000). Only few articles have been written about leadership and virtual teams (Avolio and S. Kahai, 2003; Cascio, and Shurygailo, 2003; Zigurs 2003). These studies explain differences between virtual and collocated teams and provide general guidance on how negative issues associated with these differences can be minimized and how to use technology to maximize any new opportunities for such teams. Moreover, few studies have examined the effects of partially distributed teams but none have examined their impact on virtual leadership (Cohen and Prusak 2001; Walther, 1995; Kiesler, and Cummings, 2002). Other research studies provides only high level approach to overcome the inherent challenges of leading a virtual team like it discusses how high level of trust; media richness and leadership processes lead to positive team outcomes (Avolio and Kahai, 2003; Avolio *et al.* 2001; Bell and Kozlowski 2002; Spreitzer, 2003). Kayworth & Leidner (2001) discuss the nature of virtual leadership in experimental laboratory settings. Malhotra & Majchrzak (2006) in their research outline

strategies for virtual team leaders. However, to understand the nature of leadership behaviour in managing challenges of dispersion and culture in virtual projects is yet to be reported.

#### **4. *Rationale for selecting Leadership style Instrument for Projects***

Organizations involved in projects are now focusing on effective leadership as an important success factor (Pinto 1986; Pinto and Slevin 1988). Crawford (2000) suggests that project leadership is the highest ranking category among project management competence factors. Project management leadership style affects overall project performance. Recent research supports the idea that successful projects are led by individuals who possess not only a blend of technical and management knowledge, but also leadership skills that are internally compatible with the motivation of the project team (Slevin and Pinto, 1988; Turner *et al.* 1998). Zimmerer and Yasin (1998) found that positive leadership contributed almost 76% to the success of projects. Negative or poor leadership contributed 67% to the failure of projects. Projects which virtual in nature and are rapidly changing their structure make project leadership more challenging. Project leaders need both relationships and task oriented leadership styles to cope up with the challenges of different phases of project (Slevin and Pinto, 1991). In projects, project leaders must lead his or her team towards completing the defined goal with in a fixed time scale. Verma (1997) states “Achieving the goal or final aim is the ultimate test of leadership”. Goals or tasks are achieved through people thus making people an important resource for projects.

The aforementioned discussion provides us the rationale to take the style approach to study leadership behaviour in project environment.

#### **5. *Leadership style Instrument***

We used Clark’s (2004) managerial grid which is based on open communication, task monitoring, conflict management, delegation of power and authority, participative decision making, time management, coaching, and team work, which are critical for the effectiveness of any project. The items pertaining to concern for task include, “Nothing is more important than accomplishing a goal or task”, “I closely monitor the schedule to ensure a task or project will be completed in time”, “The more challenging a task is, the more I enjoy it”, “When seeing a complex task through to completion”, “I ensure that every detail is accounted for”, “I find it easy to carry out several complicated tasks at the same time”, “I manage my time very efficiently”, “Breaking large projects into small manageable tasks is second nature to me”, “I enjoy analyzing problems” and “I enjoy reading articles, books, and trade journals about my profession; and then implementing the new procedures I have learned”.

The items pertaining to concern for people include, “I encourage my team to participate when it comes decision making time and I try to implement their ideas and suggestions”, “I enjoy coaching people on new tasks and procedures”, “I encourage my employees to be creative about their job”, “I enjoy reading articles, books, and journals about training, leadership, and psychology; and then putting what I have read into action”, “When correcting mistakes, I do not worry about jeopardizing relationships”, “I enjoy explaining the intricacies and details of a complex task or project to my employees”, “Nothing is more important than building a great team”, “I honor other people's boundaries”, and “Counseling my employees to improve their performance or behavior is second nature to me”.

**Chronbach alpha** internal reliability was assessed for the scale. The scale has acceptable reliability, with their alphas above 0.70 criterion (Nunnally, 1978). Reliabilities were: concern for task,  $\alpha = .836$  and concern for people,  $\alpha = .827$  thereby indicating high internal construct consistency and reliability.

## **6. Hypotheses**

Drawing upon from literature, it is evident that Managerial Grid constitutes issues regarding concern for people and task, which are very much inherent in project management. The project manager has to achieve the tasks of project as well as manage his team members (Pheng and Lee, 1997). Moreover, the concern for task involves quantitative dimension (cost) of a project as completing tasks within time and budget would result in profit. The tasks are completed through people thus making concern for people as an indispensable resource for a project.

We propose that high concern for both task and people would result in better management of these factors in projects thus resulting in effective project management. Virtual teams tend to have more of a task-focus and less of a social-focus than traditional teams although, over time, virtual teams appear to lessen their task-focus (Chidambaram and Bostrom, 1993; Walther, 1995). Previous studies suggest that project managers prefer task-oriented to people-oriented leadership styles. Kayworth and Leidner (2001) found that highly effective on line leaders exhibit relationship-oriented behaviors (e.g., mentoring the members and demonstrating understanding of them) as well as task-oriented behaviors (e.g., communicating with the members promptly). Strang (2007) proposed that effective project leaders in a dynamic project environment display more relationship and change behaviours. Based on above arguments, we propose the following hypotheses:

**H1:** *Concern for people is equally important for both less global and more global virtual projects.*

**H2:** *Concern for task is equally important for both less global and more global virtual projects.*

## **Methods**

### **1. Sample**

The sample comprised of 117 project management professionals working in IT companies in Pakistan, Australia, Saudi Arabia, Malaysia and USA. The projects of these professionals were either less global or more global; the distinction is made on the basis of distance and use of technology. Sixty-seven respondents describe their project as less global and fifty respondents explicate their project as more global. Out of 117, 22.2 percent respondents were females and 77.8 percent were males (S.D .418) and an educational level of at least 32.5% a graduate degree and 56.4% a master's degree. Most respondents had been with the company between one and five years (33.3%) and six to ten years (35%) and others more than ten years 31.7% (S.D.1.599). The entry level professionals participated in this survey were 7.7%, middle management professionals 59.8%, executive management professionals 23.9% and top management 8.5% (S.D.743). 31.5% participants were PMP certified.

Data were collected over the Internet as well as paper surveys were sent through personal contact. Response rate was low as out of 1000 questionnaires sent, only 123 were received. Out of 123, 117 were used for data analysis. The questionnaire was sent to project management professionals who were either members of Project Management Institute or working in the IT/software sector asking them to participate in the study.

**2. Level of Analysis**

Since the primary purpose of our study is to know which leadership style is predominant in project environment and how it contributes to effective project management, we examined the variable at the individual level keeping in view the recommendations made by Kozlowski and Klein (2000), who pointed out the importance of specifying the level of analysis at which variables and associations are conceptualized.

**3. Measure**

For measuring leadership style, we used Clark’s (2004) five-point Managerial Grid scale (1, = “never,” to 5 = “always”) that measured task oriented behavior and relationship oriented behaviour. The questions of this scale are found to be pertinent for measuring leadership style in a project environment as projects involve both people and tasks. Respondents rated the current project on these variables. As there is no cutoff point when a project becomes more global, we assessed the level of virtuality with the two dimensions that are most often proposed in the literature, spatial distance and level of technological support (Griffith *et al* 2003; Kirkman and Mathieu, 2005). Moreover, in the questionnaire, the terms more global and less global projects were defined and participants were specifically asked whether they work in less global or more global projects.

**Results**

**Analysis Method**

We employ ‘t’ test to compare concern for people and concern for task in less global and more global projects.

**T test**

We fail to observe a difference for concern for task and concern for people between professionals working in less global (M=4.28, SD =. 506),  $t(115) = 1.358, p>.05$  and more global projects (M=4.30, SD =. 492),  $t(115) = 1.370, p>.05$ . The findings support hypotheses H1 and H2.

**Leadership Style**

Using the formula given by Clark, we first calculated the leadership style among project management professionals shown in table 1. We found that 98.3 percent project management professionals fall in the category of team management leader (high concern for both task and people) and 1.7 percent fall in the country club.

**Table 1: Leadership style of Project Professionals**

Authority compliance management	Country club management	Middle-of-the-road	Impoverished management	Team management
0%	1.7%	0%	0%	98.3%

## **Discussion**

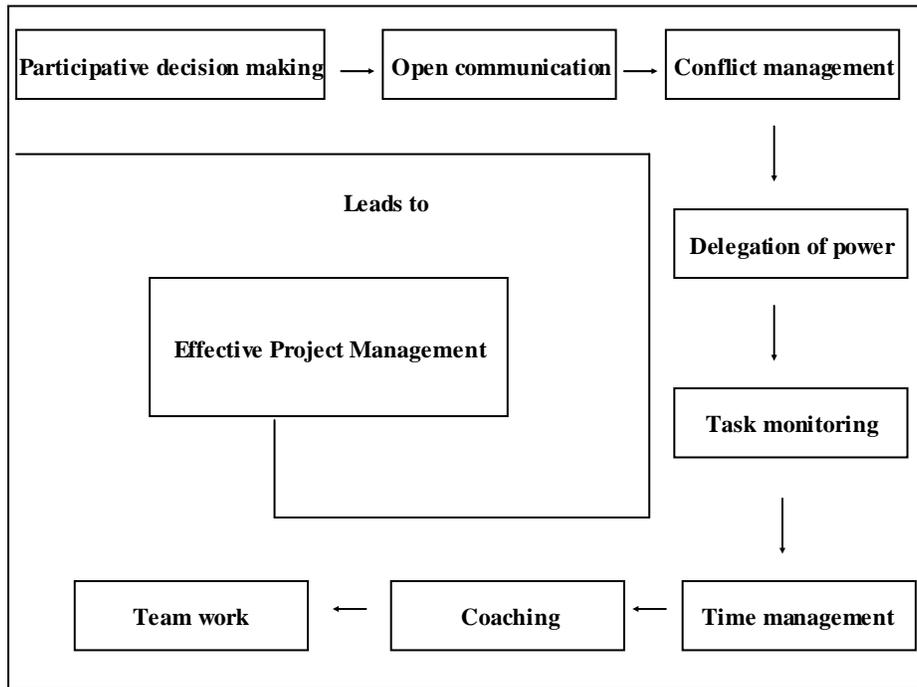
This research study has two primary objectives. First is to explore the prevalent leadership style in project environment. Secondly, to propose a model for effective project management. The results of t test in our study found that concern for task is not higher in more global projects as compared to less global projects  $p > .05$ , thus negating the work of earlier researches (Chidambaram and Bostrom, 1993; Walther, 1995). Moreover, the results show no significance for concern for people in less global than more global projects thus negating the work of previous research  $p > .05$  (Chidambaram and Bostrom, 1993; Walther, 1995). Our research findings indeed support the work of Kayworth and Leidner (2001) that both relationship oriented and task oriented behavior are important for more global as well as less global leaders in project environment. However, further analysis of the items of concern for task and concern for people demonstrates few differences in less and more global projects. It shows that importance for accomplishing goals or task, managing time efficiently, practically applying new concepts/procedures in work learnt through reading articles, books, and trade journals about profession and respect for other people's boundaries are found to be higher in more global than less global projects ( $p > .05$ ).

We can therefore, from the aforementioned discussion, conclude that both leadership behaviors are equally important and practiced in more global and less global projects thus leading to project management effectiveness.

## **Proposed Model for Effective Project Management**

In various studies on project success or failure, effective leadership (Ammeter and Dukerich, 2002), good communication, (Pettersen, 1991; White and Fortune, 2002), the ability to operate under pressure, in a complex environment (Pettersen, 1991; White and Fortune, 2002) were found to be important skills required by project managers. Verma (1995) lists the following people skills that are important for project managers, apart from the technical knowledge and decision- making skills that they require: communication, motivation and negotiation, self-confidence, reliability, maturity and emotional stability, a constructive, positive attitude, and flexibility and tolerance for ambiguity and uncertainty. Kerzner (2003) states that effective leaders are not completely task or relationship focused in their action rather they maintain a balance between the two. These findings augment our research that team management leader is the predominant style of leadership for effective project management. Indeed this style constitutes factors which are critical for effective project management like participative decision making, open communication, conflict management, delegation of power, task monitoring, time management, coaching, and team work. Based on Clark's (2004) managerial grid, we, propose a model for effective project management in the context of leadership behaviour as shown in fig 1.

**Fig.1. Model for Effective Project Management in Leadership Context**



**Implications**

Leadership behaviour is particularly important for project’s success. The present study supports this in the context of project management and identifies factors which foster effective project management. Another implication of this study is that leadership behaviour is the same regarding concern for both task and people for less global and more global projects. This study provides evidence on project management effectiveness with the intent of contributing to a better understanding and improvement of project management practices in the leadership behaviour context. The findings of this study have also implications for teaching project leadership as within the project management literature; there is a lack of studies with a leadership perspective in general.

**Limitations**

The research uses self-report data, which is very common in management research. This allowed us to include members from a wide variety of teams, organizations and countries, but at the same time our results may be inflated due to common source bias. Despite this limitation, self reported measures have been found most suitable for the study of individual human behaviour and when employed as a part of rigorous research design, may even superior to other approaches (Howard, 1994; Schmitt 1994). Future research can be conducted using 360-degree approach for collecting data at the team level.

**Conclusion and Recommendations**

In this paper we examined leadership behaviour in less global and more global projects. Numerous questions remain, but the current findings advance understanding significance of leadership style, and suggest that continuing research on these lines is likely to yield new

theoretical insights as well as practical interventions to enhance effective project management both in less global and more global projects. Based on the aforementioned discussion, we propose some of the basic principles of leadership which lead to effective project management:

- Encourage participative decision making.
- Practice open communication skills for the flow and easy access of project information.
- Be supportive, advocating, and empowering by delegating authority.
- Resolve conflicts within a team: recognize areas of tension between individuals and apply conflict-resolution techniques.
- Provide coaching on new tasks as well as on improving performance and behaviour.
- Do task monitoring of important tasks based on ranking from most important to least important tasks.
- Inculcate the skill of breaking down a large complicated task into small manageable tasks in team members.
- Be the role model in managing your time to meet the goals and tasks.
- Strengthen team work by determining roles and responsibilities by involving the team.

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