

A COMPARATIVE ANALYSIS OF LEADERSHIP AND E-LEADERSHIP IN IT SECTOR

MONIKA BANSAL*

The present study is an attempt to highlight the importance of the feel and presence of human touch in the work place in Information Technology sector. The researcher has taken exploratory study to gain insight about the IT organizations involved in virtual leadership and the impact of various dimensions under taken in the research. The study has shown that if organizations do not make attempts to understand the importance of human touch, to develop relation between the leaders and the team members, the absence of leader from the work place may have detrimental impact on human dynamics. It was found that Organizational Culture, Motivation and Performance were high where traditional leadership was prevailing as compared to virtual leadership. In case of Trust and Commitment no significant difference was found between leadership and e-leadership.

I- Introduction

The global economy is undergoing a major transition with the advancements in the Information Technology. The rapid advances in Information and communication technology-which allow people to more easily generate, organize, and access information have real implications for the capacities that leaders need. New technology has the potential to affect the distribution of power and the development of relationships in organizations. Therefore, an Information Technology enabled economy is creating a new context for leadership and it becomes important to consider how Information technology interacts with leadership to influence both the structure and effects of leadership and how leadership, in turn, might influence the adoption of advanced Information technology and effects on organization.

Leaders in Today's business world need to grab hold of two interrelated forces. First the work of organizations and leadership has become increasingly global. An organization's divisions and subunits, customers, stakeholders, and suppliers can often extend worldwide. Second, the exponential explosion in communicating technology has resulted to greater frequency of daily interactions

* Lecturer, Department of Business Studies, Deen Dayal Upadhyaya College, University of Delhi

with colleagues, coworkers, subordinates and bosses who are dispersed in different geographic locations. Today, business leaders typically lead teams in which members are located, not in the same office or building, but in different places around the world. Today many leaders and team members stay in contact with each other by interacting through telephone, overnight express mail, fax-machine and groupware tools such as e-mail, bulletin boards, chat and video conferencing.

In response to these changes people have begun to talk about e-leadership to refer to leaders who conduct many of the processes of leadership largely through electronic channels.

Leadership in the electronic age is surely different. We definitely need to think that *what has changed* and *what has remained the same* as the apparent and remarkable developments in computer and communications technology continues to change the world. One tremendously important context for leadership is impact of e-factor on leadership.

According to (Avolio, et al, 2003), it is different because it alters the patterns of how information is acquired, stored, interpreted and disseminated-and that, in turn, alters how people are influenced and how decision are made in organizations. The following are some specific happenings brought about by information technology in a way that alters leadership:

1. Access to Information and Media has changed.
2. Greater workforce Inter connectedness.
3. It is easier to Reach and Touch others.
4. Communication is more Indelible than before.

E-leadership can be defined as a social influence process mediated by information technology to produce a change in attitudes, feelings, thinking, behaviour, and/or performance with individuals, groups, and/or organizations. (Avolio, Kahai, and Dodge, 2001).

The key difference between leadership and e-leadership is that e-leadership takes place in an environment where information technology acts as a go-between. In such a state of affairs, not only may a leader's communication with followers take place via information technology, but the collection and dissemination of information required to support organizational work also takes place

via information technology. The critical differences may be in what is meant by "feeling the leader's presence", as well as reach, speed, permanence, and perception of a leader's communication. But the purpose of e-leadership too is to take the relationship among organizational members defined by an organization's structure.

The most fundamental bottom line is that e-leadership in due course is not about connecting technology, but about connecting people.

Leadership and E-Leadership – A Conceptual Framework

Leadership is a subject that has gained increasing interest among scholars. The term itself indicates images of powerful, dynamic individuals who command victorious armies, direct corporate empires from atop or shape the course of nations.

Questions about leadership have long been a subject of thoughts, but specific research on leadership did not begin until the twentieth century. The focus of much of the research has been on determinants of leadership effectiveness. Behavioural scientists have attempted to discover what traits, abilities, behaviours, sources of power, or aspects of the situation determine how well a leader is able to influence followers and accomplish group objectives. The reason why some people emerge as leaders and the determinants of the way a leader acts are other important questions that have been investigated but the predominated concern has been leadership effectiveness.

As shown in Figure 1.1, most leadership research can be classified into one of the following approaches:

1. Trait Approach
2. Behavioural Approach
3. Contingency Theories
4. Contemporary Approaches

However, in due course of time leadership has taken a new face in the light of communication technology and got connotation like *eleadership or virtual leadership* and can be added to the framework shown below.

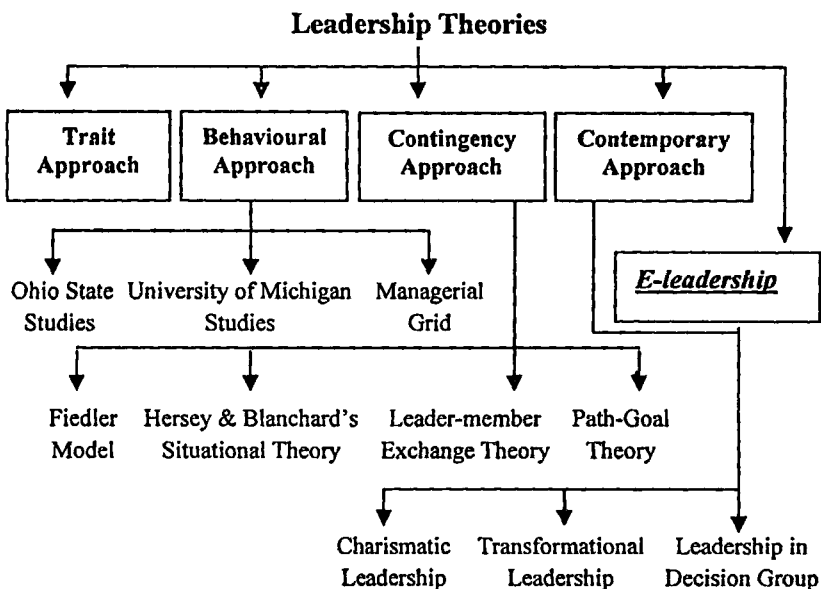


Fig 1.1:
Classification of Major Leadership Theories

Leadership research has been characterized by narrowly focused studies with little integration of findings from different approaches. A general theory of leadership that explains all aspects of the process adequately has yet to be developed. However, an integrated conceptual framework was presented to show the likely relationship among major types of variables included in most prior research on leadership.

Nevertheless, keeping in view the today's scenario it has been beautifully imagined by Susan Annunzio (2001) - What if one morning you arrived at your corporate offices and no one was there? The salespeople, equipped with palmtops, thinkpads and mobile phones were operating in mobile virtual offices. Because of economies, customer service had been moved to another city, as had your distribution warehouse. The R & D team you assembled was a collection of brilliant thinkers located around the world who worked with each other on networked computers and the occasional videoconference. Your support staff- accounting, communications, corporate counsel preferred to telecommute, plugging into the network from home offices and talking to each other via email and

fax. Even your personal assistant actually was located at the offices of your corporate parent, five hundred miles away, you and he communicated via calendar software, page and overnight mail. What if, sitting alone at a big desk, you realize you didn't need a corporate office building at all? What would you do?

That's the world of e-leadership, where business strategies are fluid, workers are smarter and more demanding than ever, and the old rules of business just don't apply.

It's a world of global markets, adhoc teams, telecommuters, e-mail, videoconferences, online ordering, virtual offices, intranets, networked alliances and instant information. And its full of both challenges and opportunities for e-leaders.

Leadership in an Internet economy is about leadership in a connected economy that the personal computers, mobile phones, the PDA and the Internet has made possible. To succeed in such economy, each one of us needs to get the feeling of leadership and discover the difference between things like sourcing and reacting, between what's possible and what's predictable, between transformation and change. At the same time, each one of us needs to develop the ways of being, mindset and behaviour for succeeding in a connected economy.

In outlook of the tremendous and rising importance of Information Technology in business organizations, the present research attempts to find out the effect of IT on certain human dynamics in IT sector i.e, Trust, Commitment, Organizational Culture, Motivation, and Performance.

In the current study traditional leadership or simply leadership has been considered as *"a way where leader is physically present with his team members and leader-follower interaction is face-to-face irrespective of the type of leadership followed by the leader."*

E-leadership has been viewed from a perspective *"where leader is not physically present with the team members and interacts with them through ways which are IT mediated. He has been called as an e-leader."*

The study makes an effort to achieve the following objectives:

II- Objectives of the Study

The specific objectives of the research paper are outlined as below –

- To compare the effectiveness of traditional leadership and e-leadership on motivation.
- To assess the level of trust among employees in organizations with traditional leadership and e-leadership.
- To study the commitment level of employees in organizations in e-leadership vis-à-vis traditional leadership.
- To see the impact of leadership and e-leadership on organizational culture.
- To assess the performance of employees with leadership and e-leadership.

III- Hypotheses of the Study

A set of hypotheses have been generated to evaluate the impact of leadership and eleadership on different dimensions as following:

1. There is a positive impact of e-leadership on motivation as compared to Traditional leadership.
2. E-leadership influence the trust level positively in team members when compared with traditional leadership.
3. There is a favourable bearing of e-leadership on commitment level in leader-follower dynamics as compared to traditional leadership.
4. E-leadership positively influences the organizational culture when compared with traditional leadership.
5. E-leadership plays a positive role in performance of the team members in comparison to traditional leadership.

IV- Data Source, Sample Design and Measures Used in the Study

The present research work is an empirical one based on both primary and secondary data. The theory is basically developed from secondary sources of information and a thorough study of various academic works in the field has been attempted. Primary data were collected with the help of a self administered questionnaire.

For the present study, questionnaires were distributed to around 110 respondents. From whom 91 correctly completed questionnaires have been obtained, yielding a response rate of approximately 83% and convenience sampling was used to collect the data. The

measures needed for the study were, Trust, Commitment, Organizational Culture, Performance and Motivation. For the purpose of identifying the trust level among team members, an acquired Trust scale developed by Jack R. Gibb (1972) was used. Commitment was studied using a scale developed by Buchanan (1974). Organizational Culture was measured by using the Organizational Climate Questionnaire (OCQ) by Adrian Furnham and Leonard D. Goodstein (1997). The scale by Pam Jones and Joy Palmer (1996) was used to measure Performance. To measure the motivation level, a scale of 9 items as developed by M. S. Shookla (2004) was used. Sample consisted of 91 respondents working in three different IT organizations. Distribution of sample is as shown in table 1.1:

Table: 1.1

The data so obtained was analyzed using SPSS Package and statistical techniques like mean scores, t-test, and correlation analysis.

Sector	No. of Respondents		Total
	Leadership	Eleadership	
IT	51	40	91

V- Findings and Discussion

The summary of the means and standard deviation of dimensions under leadership and eleadership in IT Sector (comprising of three companies) is presented in Table 1.2 and 1.3 respectively.

The results show that Trust in Leadership in IT Sector has a mean score of 3.19 with a standard deviation of 0.38 while commitment shows a mean score of 3.36 and standard deviation of 0.53. In case of other dimensions i.e, Organizational Culture, Performance and Motivation mean score is found to be. 3.77, 4.12 and 4.03 respectively. Likewise, standard deviation of 0.37, 0.49, and 0.52 is seen for Organizational Culture, Performance and Motivation respectively.

As per table 1.2 Performance under traditional leadership in IT sector has the highest mean score while trust has least mean score.

Commitment shows the highest standard deviation and Organizational Culture shows lowest standard deviation.

Table 1.3 shows the Means and Standard deviation of dimensions under eleadership in IT Sector. The table shows that mean score of Trust under eLeadership in IT Sector is 3.12 with a standard deviation of 0.42. Mean score for Commitment is 3.27 with standard deviation of 0.61. In case of Organizational Culture the standard deviation is 0.65 with a mean score of 3.53. Performance and Motivation shows a mean score of 3.77 and 3.72 respectively. While standard deviation is 0.74 and 0.83 for performance and motivation respectively.

As per table 1.3 Performance under eleadership in IT sector has the highest mean score while trust has lowest mean value. The highest and lowest standard deviation is shown by Motivation and Trust respectively.

Table 1.2:
Means and Standard deviation of dimensions of leadership under IT Sector

S.No	Dimension	Mean	Standard Deviation
1	Trust	3.19	0.38
2	Commitment	3.36	0.53
3	Organization Culture	3.77	0.37
4	Performance	4.12	0.49
5	Motivation	4.03	0.52

Table 1.3:
Means and Standard deviation of dimensions under leadership in IT Sector

S.No	Dimension	Mean	Standard Deviation
1	Trust	3.12	0.42
2	Commitment	3.27	0.61
3	Organization Culture	3.53	0.65
4	Performance	3.77	0.74
5	Motivation	3.72	0.83

Since descriptive scores do not help us in drawing inferences about the significance of the mean scores and also the differences in the perceptions of leadership in IT sector, t-test has been carried out to find out the significant differences, if any, across the various dimensions with respect to the perception of leadership.

Table 1.4:
Comparison between different dimensions under Leadership and eLeadership for the IT Sector

IT Sector						
S.No	Variable	Mean (L)	Mean (EL)	S.D (L)	S.D (EL)	t-value
1	Trust	3.19	3.12	0.38	0.42	0.93
2	Commitment	3.36	3.27	0.53	0.61	0.77
3	Organizational Culture	3.77	3.53	0.37	0.65	2.28**
4	Performance	4.12	3.77	0.49	0.74	2.71*
5	Motivation	4.03	3.72	0.52	0.83	2.17**
* Significant at 0.01 level						
** Significant at 0.05 level						

As shown in Table 1.4 the comparison on the dimensions under Leadership and eLeadership for the IT Sector shows that the two types of leadership i.e., traditional leadership and eleadership are significantly different on the dimension of Organizational Culture, Performance and Motivation. The mean value for Organizational Culture in traditional leadership is 3.77 and for eLeadership is 3.53. The mean value is higher in case of traditional leadership as compared to eLeadership with a significant t-value. Therefore, traditional leadership has much impact on the organizational culture as compared to the eleadership. For the dimension of Performance, the mean value in traditional leadership is higher than that for eLeadership i.e., 4.12 and 3.77 respectively with a significant t-value. The scores clearly imply that traditional leadership has much impact on the performance level of the team members as compared to the situation in eleadership. In case of Motivation also the mean score is 4.03 in traditional leadership situation which is higher than the mean score in eleadership i.e., 3.72. t-value is also significant which shows that traditional leadership has more impact on motivation as compared to eleadership. For other dimensions of leadership/eleadership viz., Trust and Commitment t-value is not significant.

Traditional leadership and eleadership are found to be significantly different on the dimension of Organizational Culture, Performance and Motivation when a comparison was done for the various dimensions of Leadership and eLeadership for the IT Sector.

According to the results of t- test it is clear that in IT sector eleadership has negative impact on Organizational Culture, Motivation and Performance and no significant impact on Trust and Commitment as compared to traditional leadership. Subsequently, hypotheses stated that- eleadership has positive impact on Organizational Culture, Motivation, Performance, Trust and Commitment can not be accepted.

Significant difference was not found between leadership and eleadership in case of Commitment to the organization in IT sector. As people get escalation once they shift from one organization to another because their experience is reckoned in a better way as compared to the parent organization. Subsequently, they are more

likely to change the organization. This view point was explored during the personal interviews.

But as far as Performance and Motivation level is concerned definitely traditional leadership has an upper hand. The results are supported by several studies which have been carried out in past.

Bass (1985) and Yammarino and Bass (1990) showed that leaders high in transformational behaviours achieve maximum performance from followers because they are able to inspire followers to raise their criteria for success and develop innovative problem solving skills.

Bass (1985) also extended charismatic leadership to a theory of transformational leadership where the leader is able to inspire and activate subordinates to "perform beyond expectations" and to achieve goals beyond those normally set. Bass's theory posits that the transformational leader achieves greater than expected performance through any one of three interrelated ways: (a) An increased level of awareness by subordinates about the importance of designated outcomes, (b) by getting individuals to transcend their own self-interest for the sake of the team, and (c) by altering the subordinates' need levels on Maslow's hierarchy or expanding the set of needs.

Tvorik and McGivern (1997) also showed that leadership is one of the most important areas that contribute to performance.

There are evidences that transformational leaders enhance follower effort, satisfaction, commitment, and performance (Lowe, Kroeck, & Sivasubramaniam, 1996; Podsakoff, MacKenzie, Moorman, and Fetter, 1990; Yammarino, Spangler, and Bass, 1993).

Building on the work of Burns (1978), Bass (1985) defined transformational leadership and established a measurement instrument for the construct. From his perspective, transformational leaders motivate their followers to perform beyond normal expectations by transforming their thoughts and attitudes. They enlist their followers to buy into their vision and strive for its fulfillment. To accomplish this, transformational leaders exhibit the following kinds of behaviors: attributed charisma, inspirational motivation,

intellectual stimulation, and individualized consideration (Bass and Avolio, 1994; Conger 1999).

Also studying transactional leadership, Hunt (1991) found that this type of leadership motivates followers by appealing to their self-interests (pay, status, rewards) because these are used in exchange for work.

VI- Conclusion and Limitations of the Study

The present study, to a certain extent, highlights the importance of the feel and presence of human touch in the work place. The present study has shown that if organizations do not make attempts to understand the importance of human touch, to develop relation between the leaders and the team members, the absence of leader from the work place may have detrimental impact on human dynamics. It was found that Organizational Culture, Motivation and Performance were high where traditional leadership was prevailing as compared to e-leadership. In case of Trust and Commitment no significant difference was found between leadership and e-leadership. Hence, the hypotheses stated earlier in the study can not be accepted.

No research work, however, is complete to its fullest extent – it's an ongoing process. The generalizations occurring from this study are more conducive and are based on the perceptions of a limited to a particular group of employees who were included. The study was confined to Delhi and NCR and only three companies in the IT industry were taken for the purpose of the study. Since E-leadership is relatively a new and evolving concept and only a limited number of resources are available that can be studied in detail. The importance and utility of this small effort lies in its practicality and if this work is able to stimulate further research in this area, it would achieve its purpose.

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