

Transformational Leaders As Change Agents In Information Technology Organisations

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Abstract

Organisations undergo change irrespective of its size, location or industry. The business cycle changes over a period of time and it is inevitable. The changes can be well managed by leaders in the organisation by exhibiting a leadership style that will suit different situations. This study is an attempt to find the factors of transformational leadership style and the existing levels in the organisation. It also aims to study the role of transformational leadership styles on organisational change. This was done by collecting primary data from a group of software engineers who are reporting to a formal leader. Primary data was collected by administering a structured questionnaire. The responses were recorded. From the study it was apparent that there is a significant impact of transformational leadership style on organisational change and transformational leader acts as change agents in the organisations.

Keywords: Change Agent, Leadership Style, Organisational Change, Transformational Leadership

Introduction

Transformational leadership is a style of leadership where the leader is charged with identifying the needed change, creating a vision to guide the change through inspiration, and executing the change with committed members of the group. It is one of the ways for effective organisational change management. Transformational leadership style transforms the employees as well as the organisations. It brings about changes in working style, structure, performance of employees, processes and work designs. Transformational Leaders also change the needs, preferences, and aspirations

of employees so that they work together as a team. It is easier for the transformational leaders to handle change and develop the organisation.

Organisational change is the alteration of work environment in the organisation. It can occur in any part of the organisation and affect the whole organisation. There are various factors that necessitate organisational change. Leaders as change agents bring changes in the organisation and they also maintain equilibrium between various external and internal forces to achieve organisational goals. Information Technology (IT) organisations especially undergo changes on a daily basis. The changes in technology and the advancements in science have made the industry dynamic. Globalization also drives the industry to a faster change. These changes can be well handled by eminent leaders who have the ability to understand the employees. Such leaders exhibit transformational leadership style that can transform the entire organisation to success.

Literature Review

Transformational Leadership Style

Transformational leadership is defined relative to the leader's effect on his/her followers, in which the latter feel trust, admiration, loyalty, and respect toward the former and followers are motivated to do more than they were originally expected to do (Avolio, 1999; Bass, 1985; 1998; Yukl, 1998). Bass identified four transformational leadership behaviours which represent four basic components or "I's" of transformational leadership (Avolio, 1999; Bass & Avolio, 1992). They are Idealized Influence, Individualized consideration, Intellectual Stimulation and Inspirational Motivation.

Idealized influence refers to the way in which transformational leaders act as role models for their followers. They guide the followers by providing challenges and a sense of purpose. Idealised influence (charisma) arouses strong emotions from followers and identification with, and emulation of, the leader (Bass & Avolio, 2001; Yukl, 1998)

Individualized consideration is the degree to which the leader focuses on the follower's needs, mentors and listens to their concerns. Individualised consideration involves providing support, encouragement, coaching (Avolio, 1999; Bass, 1998; Yukl, 1998), delegation, advice, and feedback for use in the personal development of followers (Bass & Avolio, 1992).

Intellectual stimulation is the way the leader stimulates innovation and creativity. The leader paves way for sharing ideas and information. Intellectual stimulation increases awareness of problems and influences followers to view problems from a new point of view (Yukl, 1998). Followers are stimulated to be creative and innovative and also to challenge their own beliefs and values and those of their leaders and organisation (Bass & Avolio, 2001).

Inspirational Motivation refers to the inspiration provided to the employees by the leader and the manner in which the changes are explained to the followers.

Inspirational motivation includes developing and communicating an appealing vision (Avolio, 1994),

These leaders seek new ways of working, new opportunities and prefer effectiveness to efficiency (Lowe, Kroeck & Subramanian, 1996).

Transformational Leaders as Change Agents

Change is an inseparable part of organisations, and it will certainly not disappear or dissipate (Paton & McCalman, 2001). All organisations will undergo a change in any of its phases. Changes are unavoidable and if organisations resist changing, it may lead to downfall of the organisation. Factors of the change content that are considered essential for the creation of employee attitudes toward changes are desirability and justification (Oreg, 2006; Giangreco and Peccei, 2005).

Leadership style is one approach to effectively manage changes in the organisation. Transformational leadership promotes employees' affective commitment to change by influencing their perception of change benefits and expectations fulfillment (Hill et al., 2012) and building trust in them (Caldwell et al., 2008). It influences the attitude of the top management personnel towards goals (Barrick et al., 2008) and makes them committed to the change that results in their active involvement, support and management of the change (Gill, 2003).

Transformational leaders can be referred as change agents. They exhibit a nature of having a vision for the future, revealing the ability to influence others, being an inspiration and encouragement to others, and exhibiting high performance expectations. The outcome of transformational leadership is that the employees are motivated to succeed and the organisation is transformed. Transformational leadership style is a method where the normal employees bring out the best in themselves and others.

Objectives

The following objectives are taken for the study:

- To find the factors of transformational leadership style in the selected Information Technology organisations
- To study the existing level of transformational leadership styles in the selected Information Technology organisations
- To determine the factors of change as perceived by the employees in the selected Information Technology organisations
- To analyse the impact of transformational leadership style factors on organisational change in the selected Information Technology organisations

Methodology

A descriptive research was carried out to find the role of transformational leadership style on organisational change. The study was conducted by selected five Information Technology organizations and from each organization, software engineers were chosen at random. The questionnaire was distributed and received from 350 software

engineers. Out of 350 filled questionnaires, 180 were found to be valid with an approximate usable rate of 51%.

The researcher conducted a pilot study with 80 employees and few corrections were done in the questionnaire based on the feedback. The questionnaire was distributed to the respondents in person by the researcher and also mail responses were collected. The questionnaire was tested for its reliability with Cronbach Alpha test. All the scales had coefficient Cronbach Alpha greater than 0.7.

Results and Discussions

In this study, factors of transformational leadership in selected IT organizations have been identified. The Transformational leadership qualities rated by the IT employees were measured by sixteen variables. Factor analysis with principal component method using vari-max rotation was applied to group the variables in to factors. In this study sixteen variables are reduced in to four factors which explore much of the original data. From the cumulative percentage column, the four factors extracted together accounts for 68.82 % of the total variance (information contained in sixteen variables). The four factors extracted with their components are represented in the table 1. These four factors are the factors named according to the concept Bass and Avolio(1992).

Table 1: Factor Scores of Leadership Qualities

Factor	Components	Factor Scores
Factor 1: Inspirational Motivation	Shows a passion towards work	0.724
	Inspires me constantly with a shared vision of the future	0.611
	Exhibits power and confidence	0.648
	Stands up-front and central during the action	0.525
Factor 2: Intellectual Stimulation	Provides new opportunities to learn	0.762
	Emphasizes team work	0.631
	Asks opinion	0.602
	Gives interesting assignments	0.526
	Looks at new ways of solving issues	0.509
Factor 3: Idealized Influence	Optimistic and excited about goals	0.662
	Insists on morals and values	0.547
	Keeps communication open	0.512
Factor 4:	Guides and directs when needed	0.635

Individualized consideration	Attends to my needs	0.564
	Evaluates my performance without bias	0.514

From the table 1 it is inferred that Factor 1 is a combination of four variables such as “Shows a passion towards work”, “Inspires me constantly with a shared vision of the future”, “Exhibits power and confidence” and “Stands up-front and central during the action” which comes under Inspirational Motivation factor.

Factor 2 is a combination of five variables such as “Provides new opportunities to learn”, “Emphasizes team work”, “Asks opinion”, “Gives interesting assignments” and “Looks at new ways of solving issues” which is named as Intellectual Stimulation factor.

Factor 3 is a combination of three variables such as “Optimistic and excited about goals”, “Insists on morals and values” and “Keeps communication open” which is falls under Idealized influence factor.

Factor 4 is a combination of three variables such as “Guides and directs when needed”, “Attends to my needs” and “Evaluates my performance without bias” which is named as Individualized consideration factor.

Level of Inspirational Motivation By Leaders In IT Organizations

One sample t-test was used to test the level of Inspirational motivation by leaders in selected IT organization. Inspirational motivation was measured by four variables. To test the significant difference between the mean value of the variables measured under Inspirational motivation by leaders in the selected IT organization against the test average response of 3 (mean score). The following null hypothesis was framed:

H₀1(b): Level of Inspirational motivation by Leaders in IT organizations does not differ significantly.

Table 2 shows the results of t-test for variables measured under Inspirational motivation by leaders in IT organizations and average score.

Table 2: t-test for Inspirational motivation by Leaders

Statements	Mean	SD	t-value	p-value
He shows a passion towards work	3.66	1.024	16.696**	<.001
He inspires me constantly with a shared vision of the future	3.57	1.027	14.493**	<.001
He exhibits power and confidence	3.61	1.006	15.754**	<.001
He stands up-front and central during the action	3.62	1.001	15.939**	<.001

** significant at 1% level

From table 2, t-value for Inspirational motivation by Leaders 16.696, 14.493, 15.754 and 15.939 are significant at 1% level. This shows that there is significant

difference between the mean responses given by the employees towards the Inspirational motivation by Leaders and the test average score (=3). Shows a passion towards work is the vital factor in Inspirational motivation of a Leader and Stands up-front and central during the action, Exhibits power and confidence, Inspires constantly with a shared vision of the future are considered as important factors for Inspirational motivation by Leaders. Hence from the above analysis it is concluded that showing passion towards work is the most important factor in Inspirational motivation of a Leader.

Level of Intellectual Stimulation By Leaders In IT Organization

To test the level of Intellectual stimulation by leaders in selected IT organization one sample t-test was used. Intellectual stimulation was measured by five variables. To test the significant difference between the mean value of the variables measured under Intellectual stimulation by leaders in selected IT organization against the test average response of 3 (mean score). The following null hypothesis was framed:

H₀(c): Level of Intellectual stimulation by Leaders in IT organizations does not differ significantly.

Table 3 shows the results of t-test for variables measured under Intellectual stimulation by Leaders in IT organizations and average score.

Table 3: t-test for Intellectual stimulation by Leaders

Statements	Mean	SD	t-value	p-value
He provides new opportunities to learn	3.76	1.999	9.802**	<.001
He emphasizes team work	3.68	0.985	17.970**	<.001
He asks opinion	3.59	1.077	14.256**	<.001
He gives interesting assignments	3.47	1.083	11.147**	<.001
He looks at new ways of solving issues	3.57	0.991	14.952**	<.001

** significant at 1% level

Table 3 shows the t-values for Intellectual stimulation by Leaders at 1% level. There is significant difference between the mean responses given by the employees towards the Intellectual stimulation by Leaders and the test average score (=3). Emphasizes team work, Asking opinion, Looks at new ways of solving issues and Gives interesting assignments are considered as important factors for Intellectual stimulation of Leaders. Hence from the above analysis it is concluded that providing new opportunities to learn is the most important factor for Intellectual stimulation of a Leader.

Level of Idealized Influence by Leaders in IT Organization

One sample t-test was used to test the level of Idealized influence by Leaders in IT organization. Idealized influence was measured by three variables. To test the significant difference between the mean value of the variables measured under

Idealized influence by Leaders in IT organization against the test average response of 3 (mean score). The following null hypothesis was framed:

H₀1(d): Level of Idealized influence by Leaders in IT organizations does not differ significantly.

Table 4 shows the results of t-test for variables measured under Idealized influence by Leaders in IT organizations and average score.

Table 4: t-test for Idealized influence by Leaders

Statements	Mean	SD	t-value	p-value
He is optimistic and excited about goals	3.62	1.030	15.654**	<.001
He insists on morals and values	3.62	0.975	16.494**	<.001
He keeps communication open	3.64	1.116	14.797**	<.001

** significant at 1% level

Table 5 indicated the t-values for Idealized influence by leaders at 1% level. It is clear that there is significant difference between the mean responses given by the employees towards the Idealized influence by Leaders and the test average score (=3). Keeps communication open is the vital factor for Idealized influence of a Leader and Optimistic, Excited about goals and Insists on morals and values are considered as important factors for Idealized influence of a Leader. Hence from the above analysis it is concluded that Keeps communication open is the most important factor for Idealized influence of a Leader.

Level of Individualized consideration by Leaders in IT organization

One sample t-test was used to test the level of Individualized consideration by Leaders in IT organization. Individualized consideration was measured by three variables. To test the significant difference between the mean value of the variables measured under Individualized consideration by Leaders in IT organization against the test average response of 3 (mean score). The following null hypothesis was framed:

H₀1(e): Level of Individualized consideration by Leaders in IT organizations does not differ significantly.

Table 5 shows the results of t-test for variables measured under Individualized consideration by Leaders in IT organizations and average score.

Table 5: t-test for Individualized consideration by Leaders

Statements	Mean	SD	t-value	p-value
He guides and directs when needed	3.82	2.206	9.602**	<.001
He attends to my needs	3.60	1.058	14.615**	<.001
He evaluates my performance without bias	3.63	1.018	15.955**	<.001

** significant at 1% level

From the table 5 t-values for Individualized consideration by Leaders 9.602, 14.615 and 15.955 are significant at 1% level. This shows that there is significant difference between the mean responses given by the employees towards the Individualized consideration by Leaders and the test average score (=3). Guides and directs when needed is the vital factor for Individualized consideration of a Leader and Evaluation of performance without bias and Attending the staff needs are considered as important factors for Individualized consideration of a Leader. Hence from the above analysis it is concluded that Guides and directs when needed is the most important factor for Individualized consideration of a Leader.

Weighted average score was calculated to rank the factors of change as perceived by the employees in the selected IT organisations. Table 6 tabulates the weighted average of all the factors and their corresponding rank. The ranks are calculated based on the weighted average from 1 to 10. The factor with highest weighted average is ranked 1.

Table 6: Weighted Average Scores and Ranks of Factors of Organisational Change

S.No.	Factors	Weighted Average	Rank
1	External Environment	51.2	3
2	Leadership	52.7	1
3	Guidance	49.93	6
4	Organisational Structure, tasks and work related aspects	51.9	2
5	Communication	50.1	5
6	Work culture and Norms	50.77	4
7	Employee skills	48.81	8
8	Information System	48.3	10
9	Human Resources System	49.23	7
10	Morale	48.53	9

Table 6 shows that leadership plays a vital role in organisational change (Weighted Average = 52.7). It is also evident that organisational structure, task and work related aspects (Weighted Average = 51.9) and external environment (Weighted Average = 51.2) also has a major contribution to organisational change. There are also other factors like work culture, communication, guidance, HR systems, Morale and Information Systems which influence organisational change.

Predictability of Transformational Leadership qualities on Organisational Change

Multiple regression analysis was conducted by taking organisational change as dependent variable and Inspirational motivation, Intellectual stimulation, Idealized influence and Individualized consideration are taken as independent variables (shown in the table 6)

Table 6: Regression analysis for predictability of Transformational leadership qualities on Organisational Change

Variables	R ²	Beta	F-statistics	t- value
Inspirational motivation	0.366	0.454	88.524**	2.834**
Intellectual stimulation	Adjusted R ²	0.330		3.008**
Idealized influence		0.861		4.391**
Individualized consideration	0.362	0.224		3.256**

** significant at 1% level

It is observed from the table 6, the regression model’s F value is 88.524 and it is significant at 1% level. The regression model’s coefficient of determination (R²) is 0.366 (36.6% of variability) and its adjusted R² is 0.362. One unit increase in Inspirational motivation leads to an increase of 0.454 units in organisational change. This shows that Inspirational motivation improves organisational change. One unit increase in Intellectual stimulation leads to an increase of 0.330 units in organisational change. Idealized influence is serving as significant predictor for organisational change and increasing organisational change by 0.861 units. It is clear that Idealized influence is one of the main reasons for improving organisational change. Individualized consideration also serves as significant predictor by improving organisational change by 0.224 units. The regression equation for Employee’s performance in IT organization is:

$$\text{Organisational change} = 30.37 + 0.454 (\text{Inspirational motivation}) + 0.330 (\text{Intellectual stimulation}) + 0.861 (\text{Idealized influence}) + 0.224 (\text{Individualized consideration})$$

Hence Inspirational motivation, Intellectual stimulation, Idealized influence and Individualized consideration are the transformational leadership qualities serve as significant predictors of organisational change in IT organizations.

Conclusion

The present study examines the factors of transformational leadership style and the existing level of transformational leadership styles in the selected IT organisations. It also studied the factors of organisational change and analysed the impact of transformational leadership style on the factors of organisational change. It is clear that leadership has a major role to play in orgnaisational change. The study concludes that there is also an association between the transformational leadership qualities and organizational change. It shows the importance of the he leaders in the IT organisations to exhibit transformational leadership style that will cause a successful change in the organisation. Transformational leaders thus act as change agents. They will be to steer the organisation to a transformation that has a positive effect on the organisation.

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