

Grouping Characteristics of Leadership in IT and Non-IT Organizations - Factor Analysis

¹**Naresh B V**

Ph.D Research Scholar,
Department of Management Studies,
Bharathiar University, Coimbatore, India.

²**Dr.Panatula Murali Krishna**

Professor,
School of Management.
SK University, Anantapur, India.

Type of Review: Peer Reviewed.

DOI: <http://dx.doi.org/10.21013/jmss.v5.n1.p4>

How to cite this paper:

B V, Naresh, & Krishna, P. (2016). Grouping Characteristics of Leadership in IT and Non-IT Organizations - Factor Analysis. *IRA-International Journal of Management & Social Sciences* (ISSN 2455-2267), 5(1), 21-36. doi:<http://dx.doi.org/10.21013/jmss.v5.n1.p4>

© Institute of Research Advances



This work is licensed under a [Creative Commons Attribution-Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/) subject to proper citation to the publication source of the work.

Disclaimer: The scholarly papers as reviewed and published by the Institute of Research Advances (IRA) are the views and opinions of their respective authors and are not the views or opinions of the IRA. The IRA disclaims of any harm or loss caused due to the published content to any party.

ABSTRACT

The growth of IT industry has been rapid compared to any other industry. It can generally be classified as IT Services, Engineering Services, ITes-BPO Services and e-Business. IT Services include Information Services (IS) outsourcing, packaged software support and installation, systems integration, processing services, hardware support and installation and IT training and education. Leaders play a critical role in an organization in its success or failure. Successful organizations have leaders who are responsive to new opportunities and direct the enterprise to progressively execute key strategic imperatives. In the era of technological and dynamic world, leaders have to take up the challenges in the environment of the business and turn these radical and fundamental changes into competitive advantages of the organization. Leaders do things differently, that enhances the efficacy and performance of the organization. Turbulent environments require efficient managers to lead employees towards accomplishing business goals. Managers have different roles and responsibilities at each level of management within an organization. These roles and responsibilities require capabilities of professional maturity for managers. Hence, to find out the characteristics of leadership and group them in IT and Non-IT organizations.

Key words: IT, ITes, Leaders, Enterprises, Performance, Organization, Managers.

Introduction

Leaders play a critical role in an organization in its success or failure. Successful organizations have leaders who are responsive to new opportunities and direct the enterprise to progressively execute key strategic imperatives (Bass & Bass, 2008). In the era of technological and dynamic world, leaders have to take up the challenges in the environment of the business and turn these radical and fundamental changes into competitive advantages of the organization. Leaders do things differently, that enhances the efficacy and performance of the organization. Turbulent environments require efficient managers to lead employees towards accomplishing business goals. Managers have different roles and responsibilities at each level of management within an organization. These roles and responsibilities require capabilities of professional maturity for managers.

Therefore, 'leadership' as a concept is widely being debated, articulated and further researched in the field of management. The body of knowledge throws light on multiple dimensions of leadership. However, research works on comparative analysis of leadership of IT and Non-IT managers and its impacts on organizational excellence in India. Therefore this study compares and contrasts the leadership characteristics of managers of IT and non-IT organizations.

Review of Literature

Vardiman, Houghton, and Jinkerson (2006)¹ propose a model that provides insights in understanding how leaders are identified for growth and development within an organization and further how individuals within those organizations perceive themselves participating in leadership opportunities. Success of any organization is influenced to a large extent by the leadership style of the top level managers.

Agrawal and Thite (2006)² propose seven areas of learning are needed for software professionals, but those seven areas are mainly focused on the leadership, management, and interpersonal relationship. IT organizations face the challenging situation because of the absence of leadership quality in managers. In IT organizations, more often technical employees get promoted to project leaders on the basis of their mere technical knowledge, without considering their people management

Xenikou and Simosi (2006)³ reaffirm this observation and demonstrate that transformational leadership and organizational culture have been theoretically and empirically linked to organizational performance. He suggest impact of leadership development programmes in organizations has concluded that employee empowerment through training programmes has positive effect on organizational excellence.

Kouzes and Posner (2007)⁴ state that an effective leader energizes the human assets of the organization. They also point out that transformational leaders identify changes as opportunities to achieve the shared vision of the organization. They further remark that leadership is not a solo activity and state that it is the by-product of team effort.

Mathew (2007)⁵ carries out a study to understand the impact of organizational culture on productivity and quality in software organizations in the Indian context, and, develop insights on cultural influences on productivity and quality in human centric and data intensive organizations. The study also discusses the impact of organizational culture on organizational effectiveness.

Bruch and Walter (2007)⁶ empirically investigate the hierarchical impacts on specific transformational leadership (TFL) behavioral dimensions like idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. They observe that Idealized Influence and inspirational motivation occur more frequently among senior managers rather than among middle level managers. However the study identifies no major differences for intellectual stimulation and individualized consideration.

Singh and Krishnan (2007)⁷ have presented that transformational leaders are duty oriented and have critical thinking capabilities and has presented the critical competencies of transformational leadership as strategic thinking, relationship building, execution, and people development.

Neuhauser (2007)⁸ observes that transformational leadership style has a positive result on organizational productivity and the financial results. Emphasize that one of the results of transformational leadership is the improvement of organizational performance. They also state that transactional leadership would not make any significant change in successful and unsuccessful companies.

Fukushige and Spicer's (2007)⁹ study on the followers' leadership preferences in line with the full-range leadership model in Japanese organizations has observed that impact of cultural aspects is more predominant in the responsiveness of the employees.

Beinecke and Spencer's (2007)¹⁰ study on the crisis in leadership in public administration concludes that significant differences in competencies and training are needed for top, middle and lower level managers. The changes in the business environment have increased the challenges and have produced an equal number of opportunities for enterprising leaders.

Avey, Hughes, Norman, and Luthans (2008)¹¹ propose a conceptual model relating concepts of leadership and positive organizational behavior for reducing employee negativity, and enhancing employee empowerment as an important mediator in establishing the causal relationships. It is observed that in case of transformational leadership positive psychological capital is significantly related to feelings of empowerment.

Bass and Bass (2008)¹² argue that if the head or manager is not a leader, he or she will plan but won't envisage an attractive future and will organize and structure the department but won't empower employees to make decisions. However despite differences of opinion on whether leadership is different from management or not, it is clear that leadership and management are complementing each other, though each one has its own functions and activities. While a mere manager achieves the organization's goal by his/her authority, a manager with leadership quality influences his/her subordinates and motivates them to accomplish the goal of the organization. While a mere manager tends to be pure task oriented, manager with leadership quality feels a proper mix of both 'person' and 'task' oriented to achieve the goals of the organizations. In order to maintain equitable positions for organizations to survive in the industry, managers shall develop multiple capabilities and manage situations exhibiting exceptional leadership characteristics.

Jandaghi, Martin, and Farjami (2009)¹³ opine that management is dependent on formal power while leadership is resulted from a social influencing process. Thus the first view gives a clear indication that both management and leadership cannot occur in the same person. A manager in a formal organization has various managerial functions such as planning, organizing, controlling, budgeting, staffing, problem solving and other fundamental tasks necessary to run a business; whereas a leader provides a vision that drives the performance of the organization in accomplishing its goals.

Allio (2009)¹⁴ states that the most important leadership competency required for a leader is adaptability and further points out that leaders are self made even though leadership theory and principles can be taught; but effective leadership behavior has to be learned.

McCallum and O'Connell (2009)¹⁵ have examined the major leadership studies in order to understand the specific roles that human or social capital capabilities play in the modern business environment and for fulfilling the challenges of future leadership requirements. The study reveals evidences of primary focus on human capital capabilities, while social capital skills have begun to receive more attention as a critical component of a leader's skill sets.

A study done by **Jandaghi et al. (2009)**¹⁶ reveals that Transformational leadership is significantly higher in successful companies than unsuccessful one irrespective of the type of the industry.

Ramachandran & Krishnan (2009)¹⁷ observe in their study conducted in US, India, and China that organizational commitment of the individuals is positively related to transformational leadership of their superiors. They also say that the relationship between transformational leadership and followers' organizational commitment varies across cultures. According to them the relationship between transformational leadership of a leader and his/her followers' organizational commitment is stronger in collectivistic cultures than in individualistic cultures.

Jepson's (2009)¹⁸ empirical study to understand the relevance of context on individuals' leadership behavior concludes that the immediate social context influences leadership behaviour apart from other factors like education of employees, present occupations and national origin. Many other studies also show that female leaders tend to score higher in transformational and lower in transactional leadership than their male counterparts.

Ramachandran and Krishnan (2009)¹⁹ have remarked that leadership is the important factor that contributes to successful organizational transformation. Transformational leaders shape such changes and help their organizations stay competitive. They point out that followers trust and emotionally identify with their transformational leaders, so that they are willing to stay with the organization- even under very difficult circumstances. He shows that the performance of an organization is influenced by the corporate culture, and that culture is influenced by leadership style. Thus the performance of an organization is influenced by leadership style through its culture

Hotho and Dowling (2010)²⁰ examine the weaknesses of prevailing approaches to leadership development programmes and reveal that participant interaction with leadership development programmes varies from organization to organization depending on individual and/or contextual factors. The study concludes that aspects like context and participant differences shall be recognized and identified as factors impacting on the excellence of leadership development initiatives.

Jogulu (2010)²¹ examines the cultural linkage of the leadership styles and observes significant differences between leadership styles and cultural groups and argues that culture and leadership interact in different dimensions in diverse contexts. It is also suggested that transactional leadership is found to be strongly aligned with the ratings of leaders from Malaysia, and transformational leadership scales correlated more with Australian managers. The practical implication of the study discusses the importance of understanding the required leadership skills and knowledge for managers and leaders working in organizations operating at the global level. The issue is equally important for

enterprises which propose to operate beyond their national boundaries.

Atwood, Mora, and Kaplan (2010)²² have evaluated leadership diffusion in a federal agency within the context of organizational learning and cultural change and observe that familiarity is the most important predictor of behavior change across all co-worker subgroups. It is also understood that co-workers with more exposure to the leadership programmes have increased levels of leadership behavior.

Arnone and Stumpf (2010)²³ suggest that in learning organizations shared leadership structure is considered as an acceptable leadership strategy that add the benefit of grooming business leaders. He suggest the relationship between leader traits and leadership behavior to understand leadership excellence across various situations and points out that effective leaders shall be warm, outgoing, kind, and trustworthy.

Grint (2010)²⁴ opines that leadership is not often regarded as a difficult process. Study on hotel industry argues that organizations get better results if the leadership is shared between task-oriented and relations-oriented leaders.

Ooi (2010)²⁵ proposed that in the challenging business environment continuous transformation of the organization is necessary for the survival of the organization. He defines culture as “the deep structure of organizations, which are rooted in the values, beliefs and assumptions held by organizational members”.

Arslanturk (2011)²⁶ study determines the impact of employee empowerment on job satisfaction. The results show that empowerment has significant effect on job satisfaction, and the effect is much higher while psychological and behavioral empowerment aspects are also taken into consideration.

Stephenson (2011)²⁷ It should be understood that the presence of women in top management will add new perspective like societal relevance, Corporate Social Responsibility (CSR) and 360 degree empathy to the organizations. Holistic concerns about TBL (Triple Bottom Line of Planet, People and Profit) can best be handled by inducting suitable women into the higher levels of the hierarchy. This may help bring down corporate corruption, improve communication within and outside the organization and help handle change. So organizations should become “gender bilingual” to take full advantage of women’s talent.

Nuutinen and Lappalainen (2012)²⁸ suggest insights on barriers to business development in manufacturing companies from the perspective of leadership and organizational culture, and propose a framework for understanding the transformation and change within an organization.

Perrin et al. (2012)²⁹ have examined that whether the nature of leadership theories proposed in the early twenty-first century are valid among leaders of enterprises across the world and found that there exist significant differences in their approaches for decision making. He suggest the nature of leadership in the early years of the twenty-first century as conceptualized in the body of knowledge and propose strategies that help leaders examine and improve their own leadership abilities and styles.

Objectives of the study

To find out the characteristics of leadership and group them in IT and Non-IT organizations.

Significance of the Study

This study aims at identifying and comparing the leadership characteristics of managers working in IT and Non-IT organizations. It also tries to examine the influence of leadership characteristics of managers on organizational superiority mediated through the intervening variables like organizational transformation and organizational culture, together described as organizational synergy. Many studies have been conducted to assess the leadership characteristics of managers. However, the review of literature shows the absence of comparative studies on leadership of managers of IT and Non-IT organizations, and its impact on organizational synergy and organizational superiority.

In the current global economic scenario, organizations require capable administrators with transformational and transactional leadership characteristics in ensuring organizational effectiveness and superiority. Hence, the study is significant in adding literature to the exiting body of knowledge on leadership characteristics of managers of IT and Non-IT organizations and to know its influences on organizational transformation, and organizational culture leading to organizational superiority. The study throws light on multiple dimensions of leadership characteristics on organizational excellence and is of unique relevance to the future researchers and professionals.

Statement of the Problem

The competitive business environment in the IT and Non-IT organizations has posed numerous leadership challenges to managers. Apart from the administrative skill sets, the modern day managers also require leadership capabilities which ensure effectiveness in managing the teams and achieving organizational goals. Even though there are visible diversities in the leadership requirements in IT and Non-IT organizations, the basic leadership challenges are almost similar. Hence, it is relevant to understand those leadership aspects that a leader shall possess in positively contributing to organizational quality. Therefore, this study on leadership characteristics of managers of IT and Non-IT organizations examines the similarities and differences in leadership characteristics of managers in two kinds of organizations- IT and Non-IT. Further the study also explores the impact of leadership on organizational fineness while proposing a model for leadership and organizational quality.

Analysis of Data

The data collected are coded and tabulated. This is analyzed using statistical package (SPSS) and all relevant outputs were generated. Descriptive techniques like averages, percentages and frequencies were generated. The statistical techniques like t-test, ANOVA, Correlation and Regression Analysis, Garrett Ranking Technique, Kruskal Wallis Test, Weighted Average Score Analysis, Chi-square Analysis, Factor Analysis. Friedman Rank Test was used for further analysis and testing of the hypotheses.

Analysis and Interpretation – Factor Analysis

Factor analysis is a multivariate analysis procedure that attempts to identify any underlying ‘factors’ that are responsible for the co-variation among group independent variables. The goals of a factor analysis are typically to reduce the number of variables used to explain a relationship or to determine which variables show a relationship. The variables must represent indicators of some common underlying dimension or concept such that they can be grouped together theoretically as well as mathematically.

The characteristics of leadership personalities of managers in IT and Non-IT organizations are discussed with the factor analysis multivariate technique. However, before applying factor analysis, the data were tested for its appropriateness. For this purpose, thirty six variables has been selected viz., Var 1 (I provide others with assistance in exchange for their efforts), Var 2 (I re-examine critical assumptions to question whether they are appropriate), Var 3 (I fail to interfere until problems become serious), Var 4 (I focus attention on irregularities, mistakes, exceptions and deviations from standards), Var 5 (I avoid getting involved when important issues arise), Var 6 (I talk about my most important values and beliefs), Var 7 (I am absent when needed), Var 8 (I seek differing perspectives when solving problems), Var 9 (I talk optimistically about the future), Var 10 (I instill pride in others for being associated with me), Var 11 (I discuss in specific terms who is responsible for achieving performance targets), Var 12 (I wait for things to go wrong before taking action), Var 13 (I talk enthusiastically about what needs to be accomplished), Var 14 (I specify the importance of having a strong sense of purpose), Var 15 (I spend time teaching and coaching), Var 16 (I make clear what one can expect to receive when performance goals are achieved), Var 17 (I show that I am a firm believer in “If it ain’t broke, don’t fix it), Var 18 (I go beyond self – interest for the good of the group), Var 19 (I treat others as individuals rather than just as a member of a group), Var 20 (I demonstrate that problems must become chronic before I take), Var 21 (I act in ways that build others’ respect for me), Var 22 (I concentrate my full attention on dealing with mistakes, Complaints), Var 23 (I consider the moral and ethical consequences of decisions), Var 24 (I keep track of all mistakes), Var

25 (I display a sense of power and confidence), Var 26 (I articulate a compelling vision of the future), Var 27 (I direct my attention toward failures to meet standards), Var 28 (I avoid making decisions) and Var 29 (I consider an individual as having different needs, abilities and aspirations from others), Var 30 (I get others to look at problems from many different angles), Var 31 (I help others to develop their strengths), Var 32 (I suggest new ways of looking at how to complete assignments), Var 33 (I delay responding to urgent questions), Var 34 (I emphasize the importance of having a collective sense of mission), Var 35 (I express satisfaction when others meet expectations), Var 36 (I express confidence that goals will be achieved). All the 36 factors were selected for factor analysis by using principle component extraction with an orthogonal (Varimax) rotation. The factor matrix is a matrix of loading and correlations between the variables and the factors.

TABLE 5.1
COMMUNALITIES
– BEFORE REMOVAL OF LOW LOADING VARIABLES

Factors	Initial	Extraction
I provide others with assistance in exchange for their efforts	1.000	.585
I re-examine critical assumptions to question whether they are appropriate	1.000	.766
I fail to interfere until problems become serious	1.000	.646
I focus attention on irregularities, mistakes, exceptions and deviations from standards	1.000	.701
I avoid getting involved when important issues arise	1.000	.555
I talk about my most important values and beliefs	1.000	.599
I am absent when needed	1.000	.652
I seek differing perspectives when solving problems	1.000	.673
I talk optimistically about the future	1.000	.668
I instill pride in others for being associated with me	1.000	.672
I discuss in specific terms who is responsible for achieving performance targets	1.000	.631
I wait for things to go wrong before taking action	1.000	.664
I talk enthusiastically about what needs to be accomplished	1.000	.610
I specify the importance of having a strong sense of purpose	1.000	.692
I spend time teaching and coaching	1.000	.623
I make clear what one can expect to receive when performance goals are achieved	1.000	.573
I show that I am a firm believer in “If it ain’t broke, don’t fix it	1.000	.594
I go beyond self – interest for the good of the group	1.000	.651
I treat others as individuals rather than just as a member of a group	1.000	.557
I demonstrate that problems must become chronic before I take	1.000	.607
I act in ways that build others’ respect for me	1.000	.514
I concentrate my full attention on dealing with mistakes, Complaints and failures	1.000	.697
I consider the moral and ethical consequences of decisions	1.000	.651
I keep track of all mistakes	1.000	.628
I display a sense of power and confidence	1.000	.619
I articulate a compelling vision of the future	1.000	.596
I direct my attention toward failures to meet standards	1.000	.637

I avoid making decisions	1.000	.719
I consider an individual as having different needs, abilities and aspirations from others	1.000	.782
I get others to look at problems from many different angles	1.000	.752
I help others to develop their strengths	1.000	.764
I suggest new ways of looking at how to complete assignments	1.000	.747
I delay responding to urgent questions	1.000	.773
I emphasize the importance of having a collective sense of mission	1.000	.748
I express satisfaction when others meet expectations	1.000	.684
I express confidence that goals will be achieved	1.000	.750
Extraction Method: Principal Component Analysis		

The above table 5.1 enumerates that the communalities of the selected 36 variables have good reliability and keenly checked that no one variable has low loading, i.e., less than 0.5. Thus finally, the 26 variables are selected for the factor analysis. The appropriateness of the data for the factor analysis is discussed in the following KMO and Bartlett's test.

**TABLE 5.2
KMO AND BARTLETT'S TEST**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.956
Bartlett's Test of Sphericity	Approx. Chi-Square	2.098E4
	df	630
	Sig.	0.000

The table 5.2 replicates that Kaiser-Meyer-Oklin (KMO) Measure of Sampling Adequacy (MSA) and Bartlett's test of Sphericity are applied to verify the adequacy or appropriateness of the data for factor analysis. In this study, the value of KMO for overall matrix is found to be good (0.956) and Bartlett's test of Sphericity is highly significant ($p < 0.001$). The results thus indicate that the samples taken are appropriate to proceed with the factor analysis. Also, the Bartlett's Test of Sphericity, the KMO Measure of Sampling Adequacy and Community values of all the variables are observed.

Further, to define the factors clearly, it was decided to delete any variable that had loading below ± 0.50 . With this criterion, a series of factor analysis was performed on the data. Following each analysis, items which did not meet the criteria were deleted from the analysis. After this preliminary step, factor analysis with principal component analysis as an extraction method was performed on the remaining items.

TABLE 5.3
TOTAL VARIANCE EXPLAINED

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.574	46.040	46.040	16.574	46.040	46.040	7.159	19.887	19.887
2	4.252	11.810	57.850	4.252	11.810	57.850	7.010	19.472	39.359
3	1.800	5.000	62.850	1.800	5.000	62.850	4.998	13.883	53.242
4	1.154	3.205	66.056	1.154	3.205	66.056	4.613	12.813	66.056
5	.968	2.689	68.745						
6	.867	2.407	71.152						
7	.706	1.962	73.114						
8	.680	1.890	75.004						
9	.653	1.814	76.818						
10	.592	1.644	78.462						
11	.553	1.536	79.998						
12	.500	1.388	81.386						
13	.486	1.350	82.736						
14	.445	1.237	83.973						
15	.442	1.227	85.200						
16	.424	1.177	86.377						
17	.384	1.067	87.444						

18	.379	1.052	88.496						
19	.354	.982	89.478						
20	.331	.919	90.397						
21	.322	.895	91.292						
22	.303	.840	92.133						
23	.287	.797	92.930						
24	.264	.732	93.662						
25	.256	.710	94.372						
26	.243	.675	95.047						
27	.233	.647	95.694						
28	.224	.624	96.318						
29	.208	.578	96.895						
30	.192	.533	97.429						
31	.178	.495	97.924						
32	.175	.485	98.409						
33	.158	.440	98.849						
34	.152	.423	99.272						
35	.145	.404	99.676						
36	.117	.324	100.000						
Extraction Method: Principal Component Analysis									

Total Variance Explained

The following table (5.3) depicts the total variance explained with rotation. The Eigen values for the factors 1, 2, 3 and 4 are 16.574, 4.252, 1.800 and 1.154 respectively. Percentage of variance after the rotation for the factors 1, 2, 3 and 4 are 19.887, 19.472, 13.883 and 12.813 respectively. Cumulative percentage for the factors 1, 2, 3 and 4 after the rotation are 19.887, 39.359, 53.242 and 66.056 respectively. It indicates that the 4 factors extracted from the total of 36 variables have a cumulative percentage up to 66.056 per cent of the total variance.

Rotated Component Matrix

After obtaining the factor solutions, in which all the variables have a significant loading on a factor, the researcher attempted to assign meanings to the pattern of factor loadings. Variables with higher loadings are considered more important and have a greater influence on the name or the label selected to represent a factor. The researcher has already examined all the underlined variables for a particular factor and placed greater emphasis on those variables with higher loadings to assign a name or a label to a factor that accurately reflects the variables' loading on that factor. The names or labels are not derived or assigned by the factor analysis computer programme, rather, the label is intuitively developed by the factor analyst based on its appropriateness for representing the underlying dimension of a particular factor. All the 4 factors are given appropriate names on the basis of the variables represented in each case.

Table 5.4
Rotated Component Matrix

Variables	Component			
	F1	F2	F3	F4
Var 1			0.649	
Var 2			0.788	
Var 3			0.689	
Var 4			0.756	
Var 5				0.509
Var 6				0.570
Var 7			0.613	
Var 8				0.632
Var 9				0.609
Var 10				0.661
Var 11				0.558
Var 12			0.624	
Var 13				0.679
Var 14				0.612
Var 15			0.491	
Var 16		0.693		
Var 17		0.678		
Var 18		0.663		
Var 19		0.592		
Var 20		0.648		
Var 21		0.585		
Var 22		0.689		
Var 23		0.740		

Var 24		0.702		
Var 25		0.657		
Var 26		0.666		
Var 27		0.720		
Var 28	0.823			
Var 29	0.841			
Var 30	0.822			
Var 31	0.832			
Var 32	0.830			
Var 33	0.849			
Var 34	0.836			
Var 35	0.780			
Var 36	0.815			
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 6 iterations.				

The above table (5.4) explains the rotated component matrix, in which the extracted factors are assigned a new name related together. Based on the fixing criteria, it is noted that no one loading variable are having the loading value less than 0.5 and so no variables are removed from this analysis. Further 4 factors have been taken for naming of new variables.

Factor 1 explains 19.887 percent of the variation and consists of nine variables. The variables, I avoid making decisions (0.823), I consider an individual as having different needs, abilities and aspirations from others (0.841), I get others to look at problems from many different angles (0.822), I help others to develop their strengths (0.832), I suggest new ways of looking at how to complete assignments (0.830), I delay responding to urgent questions (0.849), I emphasize the importance of having a collective sense of mission (0.836), I express satisfaction when others meet expectations (0.780) and I express confidence that goals will be achieved (0.815) shows highly inter-correlated with together. The nine variables reflect the characteristics of leadership personalities of managers in IT and Non-IT organizations framed certain rules and regulation and involved in decision making of the critical situation. Hence, the researcher names this segment of the managers is **Independent Leadership of IT and Non-IT organizations**. The reliability of these sixteen variables is measured by using Cronbach’s Alpha and its value is 0.965.

Factor 2 is the most important factor which explains 19.472 percent of the variation. I make clear what one can expect to receive when performance goals are achieved (0.693), I show that I am a firm believer in “If it ain’t broke, don’t fix it (0.678), I go beyond self – interest for the good of the group (0.663), I treat others as individuals rather than just as a member of a group (0.592), I demonstrate that problems must become chronic before I take (0.648), I act in ways that build others’ respect for me (0.585), I concentrate my full attention on dealing with mistakes, Complaints and failures (0.689), I consider the moral and ethical consequences of decisions (0.740), I keep track of all mistakes (0.702), I display a sense of power and confidence (0.657), I articulate a compelling vision of the future (0.666) and I direct my attention toward failures to meet standards (0.720) shows highly inter-correlated with together. These statements reflect the characteristics of leadership personalities of managers in IT and Non-IT organizations framed certain rules and regulation and followed strictly. Hence, the researcher names this segment of the managers is **Controlling Leadership of IT and Non-IT organizations**. The reliability of these twenty seven variables is measured by using Cronbach’s Alpha and its value is 0.962.

Factor 3 explains 13.883 percent of the variation and consists of nine variables. The variables, I provide others with assistance in exchange for their efforts (0.649), I re-examine critical assumptions to question whether they are appropriate (0.788), I fail to interfere until problems become serious (0.689), I focus attention on irregularities, mistakes, exceptions and deviations from standards (0.756), I am absent when needed (0.613), I wait for things to go wrong before taking action (0.624), I spend time teaching and coaching (0.491) shows highly inter-correlated with together. These statements reflect the characteristics of leadership personalities of managers in IT and Non-IT organizations framed certain rules and regulation and followed very rigorously. Hence, the researcher names this segment of the managers is **Demanding Leadership of IT and Non-IT organizations**. The reliability of these twenty seven variables is measured by using Cronbach's Alpha and its value is 0.945.

Factor 4 explains 12.813 percent of the variation and consists of nine variables. I avoid getting involved when important issues arise (0.509), I talk about my most important values and beliefs (0.570), I seek differing perspectives when solving problems (0.632), I talk optimistically about the future (0.609), I instill pride in others for being associated with me (0.661), I discuss in specific terms who is responsible for achieving performance targets (0.558), I talk enthusiastically about what needs to be accomplished (0.679), I specify the importance of having a strong sense of purpose (0.612) shows highly inter-correlated with together. These statements reflect the characteristics of leadership personalities of managers in IT and Non-IT organizations framed certain rules and regulation and followed neatly. Hence, the researcher names this segment of the managers is **Self confidence Leadership of IT and Non-IT organizations**. The reliability of these twenty seven variables is measured by using Cronbach's Alpha and its value is 0.972.

The characteristics of leadership personalities of managers in IT and Non-IT organizations in the present study compose four factors namely Independent Leadership, Controlling Leadership, Demanding Leadership and Self confidence Leadership characteristics. The initial instrument which is having 36 variables was adjusted to account for 4 factors.

Table shows the total composition of each factor that provides information regarding the items that constituted these two factors with their factor loadings, eigen values and the variance explained by each factor. The four-factor solution accounted for 66.056 per cent of the explained variance. The four-factor solution might be suggested for the characteristics of leadership personalities of managers in IT and Non-IT organizations. All the dimensions are named on the basis of the contents of final items making up each of the four dimensions. The commonly used procedure of Varimax Orthogonal Rotation for the factors whose eigen values are greater than 1.0, is employed in the analysis. The factors so generated have the eigen values between 16.574 and 1.154. All the items are found highly loaded under these four factors, which indicate that, the characteristics of leadership personalities of managers in IT and Non-IT organizations. The values of communalities (h^2) range from 0.514 to 0.782 for various factors. It means that the factor analysis extracted a good amount of variance in the variables.

Regression Analysis

To assess the overall effect of the characteristics of leadership personalities of managers in IT and Non-IT organizations and to determine the relative importance of the individual dimension of the generated scale, Multiple Regression analysis is performed. For regression analysis, the study adopts the use of a single-item direct measures of overall characteristics of leadership in the study area is excellent at five-point Likert scale. The regression model considers the 4 dimensions as the independent variables and the overall influencing factors as the dependent variable. The adjusted R^2 of 0.921 ($p=0.000$) indicates that 92.1 per cent of variance in overall characteristics of leadership personalities of managers in IT and Non-IT organizations is predicted. Further, the results also indicate that all the four variables Independent Leadership, Controlling Leadership, Demanding

Leadership and Self confidence Leadership characteristics to be the significant predictors ($p < 0.001$) of overall characteristics of manager in IT and Non-IT organization. Further, VIF values score from 1.168 to 1.197 indicates that multi-collinearity among the independent variables is not a problem.

TABLE 5.5
EFFECT AND RELATIVE IMPORTANCE OF THE INDIVIDUAL DIMENSIONS OF LEADERSHIP CHARACTERISTICS – MULTIPLE REGRESSION ANALYSIS

S.No	Factor	Standardized Coefficients (β)	t value	p value	VIF
	Constant	1.072			
1	Independent Leadership	0.739	2.395	0.054	1.168
2	Controlling Leadership	0.685	1.985	0.012	1.134
3	Demanding Leadership	0.612	1.673	0.132	1.753
4	Self confidence Leadership	0.545	1.766	0.128	1.197

The resulted equation is

Characteristics of Leadership

$$= 1.072 + (0.739 \times \text{Independent Leadership} + 0.685 \times \text{Controlling Leadership} + 0.612 \times \text{Demanding Leadership} + 0.545 \times \text{Self confidence Leadership})$$

It is found that, one unit increase of characteristics of leadership is predicted from 0.739 unit increases of Independent Leadership, 0.685 unit increase of Controlling Leadership, 0.612 unit increase of Demanding Leadership and 0.545 unit increases of Self confidence Leadership.

Conclusion

It could be found from the factor analysis that the selected 36 factors related to the characteristics of leadership personalities of managers in IT and Non-IT organizations into four major factors representing Independent Leadership, Controlling Leadership, Demanding Leadership, and Self confidence Leadership and noticed that the characteristics of leadership personalities of managers in IT and Non-IT organizations is predicted from 0.739 unit increases of Independent Leadership, 0.685 unit increase of Controlling Leadership, 0.612 unit increase of Demanding Leadership and 0.545 unit increases of Self confidence Leadership and these four factors are having significant impact on the overall the characteristics of leadership personalities of managers in IT and Non-IT organizations. Further, among the four factors, Independent Leadership is one of the major occupied factor than the Controlling Leadership, Demanding Leadership and Self confidence Leadership among the selected IT and Non-IT organizations in Karnataka.

References:

1. Vardiman, P. D., Houghton, J. D., & Jinkerson, D. L. (2006). Environmental leadership development: Toward a contextual model of leader selection and effectiveness. *Leadership & Organization Development Journal*, 27 (2), 93-105.
2. Agrawal, N. M., & Thite, M. (2006). Nature and importance of soft skills in software project leaders. *Asia Pacific Management Review*, 11 (2), 405-413.
3. Xenikou, A., Simosi, M. (2006). Organisational culture and transformational leadership as predictors of business unit performance. *Journal of Managerial Psychology*, 2 (6), 566-579.
4. Kouzes, J. M., & Posner, b. Z. (2007). *The leadership challenges* (4th ed.). Sanfrancisco: Jossey – Bass.
5. Mathew, J. (2007). The relationship of organisational culture with productivity and quality: A study of Indian software organisations. *Employee Relations*, 29 (6), 677-695.
6. Bruch, H., & Walter, F. (2007). Leadership in context: Investigating hierarchical impacts on transformational leadership. *Leadership & Organization Development Journal*, 28 (8), 710-726.
7. Singh, N., & Krishnan, V. R. (2007). Transformational leadership in India: developing and validating a new scale using grounded theory approach. *International Journal of Cross Cultural Management*, 7 (2), 219-236.
8. Neuhauser, C. (2007). Project manager leadership behaviors and frequency of use by female project managers. *Project Management Journal*, 38 (1), 21-31.
9. Fukushige, A., & Spicer, D. P. (2007). Leadership preferences in Japan: an exploratory study. *Leadership & Organization Development Journa* , 28 (6), 508-530.
10. Beinecke, R., & Spencer, J. (2007). International leadership competencies and issues. *International Journal of Leadership in Public Services* , 3 (3), 4-14.
11. Avey, J., Hughes, L. W., Norman, S. M., & Luthans, K. W. (2008). Using positivity, transformational leadership and empowerment to combat employee negativity. *Leadership & Organization Development Journal* , 29 (2), 110-126.
12. Bass, B. M., & Bass, R. (2008). *The Bass handbook of leadership-Theory, research, & managerial applications*. New York: Free Press.
13. Jandaghi, G., Martin, H. Z., & Farjami, A. (2009). Comparing transformational leadership in successful and unsuccessful companies. *International Journal of Human and Social Sciences*, 4 (3), 212-217.
14. Allio, R. J. (2009). Leadership: The five big ideas. *Strategy & Leadership*, 37 (2), 4-12.
15. McCallum, S., & O'Connell, D. (2009). Social capital and leadership development: Building stronger leadership through enhanced relational skills. *Leadership & Organization Development Journal*, 30 (2), 152-166.
16. Jandaghi, G., Martin, H. Z., & Farjami, A. (2009). Comparing transformational leadership

- in successful and unsuccessful companies. *International Journal of Human and Social Sciences*, 4 (3), 212-217.
17. Ramachandran, S., & Krishnan, V. (2009). Effect of Transformational Leadership on Followers' Affective and Normative Commitment: Culture as Moderator. *Great Lakes Herald*, 3 (1), 23-38.
 18. Jepson's (2009). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, 26 (2), 37-49.
 19. Ramachandran, S., & Krishnan, V. (2009). Effect of Transformational Leadership on Followers' Affective and Normative Commitment: Culture as Moderator. *Great Lakes Herald*, 3 (1), 23-38.
 20. Hotho, S., & Dowling, M. (2010). Revisiting leadership development: The participant perspective. *Leadership & Organization Development Journal*, 31 (7), 609-629.
 21. Jogulu, U. D. (2010). Culturally-linked leadership styles. *Leadership & Organization Development Journal*, 31 (8), 705-719.
 22. Atwood, M. A., Mora, J. W., & Kaplan, A. W. (2010). Learning to lead: Evaluating leadership and organizational learning. *Leadership & Organization Development Journal*, 31 (7), 576-595.
 23. Arnone, M., & Stumpf, S. A. (2010). Shared leadership: From rivals to co-CEOs. *Strategy & Leadership*, 38 (2), 15-21.
 24. Grint, K. (2010). Leadership: An enemy of the people? *International Journal of Leadership in Public Services*, 6 (4), 22-25.
 25. Ooi, T. W. M. (2010). Exploring the key success factors of organization transformation. Faculty of Management, Multimedia University Malaysia.
 26. Arslanturk (2011) *Transformational and charismatic leadership: The road ahead*. Oxford: Elsevier Press.
 27. Stephenson, C. (2011). The impact that women board directors bring on profitability, *Business Economy*, 6 (11), 54-55.
 28. Nuutinen, M., & Lappalainen, I. (2012). Towards service-oriented organisational culture in manufacturing companies. *International Journal of Quality and Service Sciences*, 4 (2), 137-155.
 29. Perrin, C., Perrin, P. B., Blauth, C., Apthorp, E., Duffy, R. D., & Bonterre, M. D. (2012). Factor analysis of global trends in twenty-first century leadership. *Leadership & Organization Development Journal*, 33 (2), 175-199.