

**IDENTIFY AND CATEGORIZE THE LEADERSHIP  
QUALITIES THAT ENHANCE EMPLOYEE  
PERFORMANCE OF IT PROJECTS  
IN SRI LANKAN IT SECTOR**

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Degree of Master of Business Administration in Information Technology

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University of Moratuwa

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Thesis submitted in partial fulfillment of the requirements for the degree of  
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## DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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Delmi Jayatilaka

Date

The above candidate has carried out research for the Master's thesis under my supervision.

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Dr. Chandana Gamage

Date

## ABSTRACT

In any organizational context, leaders have the ability to make a profound effect on the work of an individual, a team, a departmental or the overall organization. Hence, they need to be adaptive, rationale, and be able to apply various leadership strategies depending on the situation for achieving the best results from the subordinates as stated by Goleman. This line of thinking further supports the concept of Horner that states “leaders were born not made”. An integrated definition to leadership has been mentioned by Winston and Patterson, according to which a leader is a person who inspire and influence the different kinds of followers towards the achievement of one generic vision and mission while continuously motivating them emotionally as well as physically. Leadership has evolved through many eras and accordingly it demonstrates several types of leadership qualities which have been shaped by the organizational and societal contexts in those eras. Some of the qualities of such leadership include delegating, supporting, coaching, directing, openness, conscientiousness, extraversion, agreeableness, neuroticism etc.

As previous research literature proves that these leadership qualities can influence the performance of individuals or groups, this study focuses on identifying the leadership qualities that will enhance employees’ performances in Sri Lankan IT sector. After reviewing several previous research work, six main leadership qualities were selected for this study by incorporating few leadership skills into certain smaller groups, which include personalities and behaviors, interaction/ interpersonal skills/ team player, communication/ feedback, situations/ nature of task, experience/ expertise/ competency and organization/ project culture. Accordingly, the independent variable of the study was the leadership qualities, which has again been derived from sub variables and the dependent variable was the performance of employees and projects. The data were gathered through survey questionnaires and through personal interviews, by creating a sample of IT professionals covering many of the projects based IT companies in Sri Lanka.

**Key Words:** Leadership, Leadership Qualities, Performance, IT Sector, IT Projects

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## List of Abbreviations

<b>Acronym</b>	<b>Definition</b>
IT	Information Technology
SLASSCOM	Sri Lanka Association of Software and Service Companies

# Chapter 1

## 1. Introduction

### 1.1 Background and Context

According to variety of previous researches, it is apparent that there are several factors that affect overall organizational performance, among which the key is individual performance. The individual (i.e. employees') performance is affected by many factors including organizational factors (such as salary, job, superior, etc.) and personal factors (such as family pressure, individual perceptions, education level, residence, social commitments etc.). Similarly, when measuring the tasks as groups or project teams, the success of whole group performance affect by some or many of those organizational or personal factors. This study focused on discussing the performances and success of IT projects, which differs from several other projects of the organizations, since they consist with (comparatively) similar skilled members performing generally IT related goals which include hardware installation and maintenance, software development, upgrading networks and other intra-net infrastructure etc. Since IT projects are difficult to manage owing to higher risks (due to technological changes), the need for expertise knowledge, the need for more and more accurate information etc., they should manage carefully throughout the whole project life cycle (Rouse, n.d.).

Along with the need for proper management of IT projects, the importance of 'leadership' (one of the key organizational concepts) emerges. Goleman (2000) expresses that since leadership make serious effects on individual, team, departmental, organizational and overall working contexts, leaders should be adaptive and rationale, and should apply various strategies depending on the situation for achieving the best results. There are ten core areas through which project managers/ project leaders manage the projects which include project scope management, project schedule management, project costs management quality management, project human resources management, project communication management, project risk management, project procurement management, project stakeholder management, and project integration management. Among them, project human resources management is crucial, since it makes severe influences on overall project performance. Management of project team basically discusses not with 'project managers' but with 'project leaders', while discussing the importance of leadership and its influence on projects and project teams. Accordingly, the structure of this report has focused on IT project

performances with the influence leadership and leadership qualities, where the study has conducted in Sri Lankan IT sector.

However, Sri Lankan IT sector is currently growing with a Compound Annual Growth Rate (CAGR) of 14.2% (for the period of 2014 to 2019), while implementing several numbers of projects. Most of the modern IT projects support for the 'digitalization' concept of the government; and some of them has focused on enterprise or other software development projects, hardware development projects, and some have focused on (Business Process Outsourcing) BPO services. Over 60,000 IT professionals are currently engaged with the IT sector in Sri Lanka and the number is swiftly increasing every year by 20% to achieve the predicted growth rate of 14.2% by a growth of 14% of hardware sales, 17.3% of software sales etc. (ColomboPage, 2015). The graduates from University of Moratuwa, University of Colombo and other IT related institutes have become the employees/ project members of IT project teams. Yet, in some circumstances, there are some doubts regarding the success and effective performance of some of the IT projects, since they demonstrate various communication, guiding, learning etc. related issues.

Correspondingly, IT project and performance issues were emerged for discussions, not only in Sri Lanka, but as a key research area by several international researchers and were agreed that, it is imperative to study and consider the 'peopleware' along with other project subjects (Faraj & Sambamurthy, 2006). The importance of 'leadership' concept took into consideration in conjunction with the 'peopleware' concept, while emphasizing the necessity of proper guidance, communication, monitoring etc. for the success of the projects (Faraj & Sambamurthy, 2006). Later, the studies proved that, different leadership qualities need to be applied with regards to the scale and type of the organization and type of the project etc.

Basically, there are two main types of IT organizations as product based companies (who develop general IT products and sell to almost all his customers with minimum or no customizations, such as hSenid) and project based companies (who develop several products according to the request of the customer, which are not similar). This report focused on identifying leadership qualities which are required for IT sector; and the study has further narrowed for analysing project based IT organizations in Sri Lanka. Project based IT companies possess several statuses in their operations as Long Term Stable Projects, Newly Established Unstable Projects and CodeRed (Critical) Projects; and the leadership qualities required for these statuses are separately identified in this research.

## 1.2 Problem Definition

Frequent change in the work involved in the career as an IT professional is one of the major challenges that an employee is facing in the IT industry. Innovations and the trends changing day by day in the technology, affect the industry since it should correspondent with the new trends to provide the updated technology solutions to the customers and users. Most of the IT employees are allocated to projects where a group of people get together and work for a client to provide the required software services or develop a software product for sales. These projects may run for a long term or some projects may run only for two to three months of short time period. And this results in a frequent change in the job role of an IT employee, which results a person may have to work with different people and perform different tasks within a short time period. Adoption of the frequent changes within a short period, preferably within a day or two has become a must to the IT employees.

It would be a challenging task for an IT professional to keep continuous performance with the frequent changes in the job role. And, it would be an additional work for a lead to gain the best performance of an employee for the project work. Leads should put their effort on every employee to deal with the tasks and enhance the performance. Performance playing a significant role in IT industry since human resources playing a vital role in providing a quality product or service to the customers which ultimately making the decision of the company market share in the industry whether to earn more businesses or lose the existing customers.

Company or the project leadership does not have the luxury of allocating or keeping the best performers within a same project or even within the company for a long term. So, it is leadership's responsibility to gain the best out of the available limited resources. It is apparent that; leadership qualities have a direct impact on the performance of team members and the overall performance of the projects or organization; and leadership qualities differ according to the type and scale of the organization. Identifying which leadership qualities matches with IT industry regarding the scale of the organization, team structure would be beneficial for the company management to take effective decisions on selecting suitable leadership for the project teams.

Thus, this research study focuses on 'Identifying and categorize the leadership qualities that enhance employee performance of IT projects in Sri Lankan IT sector'.

### 1.3 Goals and Objectives

Considering the above factors, studying about the impact of leadership on employee performance would be an interesting area. Identifying which leadership qualities matches with IT industry regarding the scale of the organization, team structure would be beneficial for the company management to take effective decisions on selecting suitable leadership for the project teams.

The research is targeting to identify preferable leadership qualities that enhance the employee performance of the project in different statuses in Sri Lankan IT companies. The research scope is narrow down and only considering the project based IT companies, where many different project statuses can be identified than in the product based companies.

Project statuses that is to be considered within the research,

1. Long Term Stable Projects
2. Newly Established Unstable Projects
3. CodeRed (Critical) Projects

So, the objective of the research is to rank the leadership qualities according to the project status that enables and keep the management at ease when selecting the best match for the project. Though the research is narrow down to project based organizations, the results can be applying to the product based companies as well where long term stable projects are running.

#### Goal

To support the organizational management, to identify the individual personalities with which leadership qualities are suitable for what kind of projects, that support the project team to enhance the productivity and performance.

#### Objectives

To identify and categorize the leadership qualities of the project leadership that suites to the identified project category that enables and keep the management at ease when selecting the best leadership match for the project.

1. Long Term Stable Projects
2. Newly Established Unstable Projects

### 3. CodeRed (Critical) Projects

Apart from the main aim, several specific objectives of the research include,

- Evaluate and measure the link between leadership and performances in IT projects in Sri Lanka
- Identify leadership qualities in projects based IT companies in Sri Lanka
- Categorize leadership qualities in accordance with several project statuses
- Generalize and derive conclusions regarding project based companies as well as product based companies

#### Research Problem

Identify and Categorize the Leadership Qualities that Enhance Employee Performance of IT Projects in Sri Lankan IT Sector

#### **1.4 Summary**

This chapter presented an introduction to the foundation and background of the study, stressing that, leadership directly impacts individual employees' performance and overall organizational performance. When it considers in relation to the IT sector, leadership is vital for success of IT projects, since it ensures proper communication flow, proper coordination, guidance, and monitoring, which become the critical success factors of IT projects. Regardless of the main purpose of the organization, i.e. product based or project based, various leadership qualities can be applied. Thus, the main aim of the research is mentioned as to identify and categorize the leadership qualities in IT projects in Sri Lankan IT sector.

## **Chapter 2**

### **2 Literature Review**

#### **2.1 Leadership**

“Leadership is typically defined by the traits, qualities, and behaviors of a leader” (Horner, 1997, p. 270). Even though the ‘leadership’ is an eminent concept since the early management eras, its true meaning is still debatable due to the imprecise nature of the functions and interpretations of it (Burns, 1978; Seters & Field, 1990). While some researchers argue that the leadership can be inculcated within persons, some argue that it is naturally inherited within persons, which Horner (1997) states as “leaders were born not made” (p 270).

##### **2.1.1 Evolution of Leadership Concept**

However, as Seters & Field (1990) mentioned, the leadership concept has progressed through several management development stages including,

- The Personality Era
  - Great Man Period - the belief of this period was to identify great men and women and to imitate them by others, which was later realized that since different types of leaders possess different sets of qualities, they are unable to imitate.
  - Trait Period - in this period, the researchers focused on studying and developing some specific traits that leaders hold; but it failed since specific traits cannot be identified which are essential for leadership; while anyway this period created a foundation for the later trait based leadership approaches.
- The Influence Era
  - Power Relation Period - developing the theories in personality era, this period believed that leadership is created based on the individual relationships, rather than certain traits and the power of ordering was evaluated.
  - Persuasion Period – while discouraging the forcing power (coercion), researchers emphasized the importance of the dominant features of the leader for making the leader- member relationship.



- The Behaviour Era
  - Early Behaviour Period - in this period, the basic focus was regarding the behaviour of the leader, which measured the concentration of the leader towards the tasks and people.
  - Late Behaviour Period – the researchers developed the concepts of the early behaviour period and created the Managerial Grid Model (9 x 9 Grid) to evaluate the most accurate behaviour of the leaders and finalized that the leaders who get 9 in both production and tasks are better for the management.
  - Operant Period – according to the later understandings of the researchers, they agreed that leadership makes stimuli for the behaviour of individuals rather than directly affecting; and it generated the idea to develop leaders as managers who provide stimulus for the behaviour of subordinates.
- The Situation Era
  - Environment Period – giving more priority to the external environmental factors except to the leader and subordinates, researchers stated that, leaders may create only when the appropriate environment exists, and even the leader changes, the next leader can perform based on the environmental factors.
  - Social Status Period – in this period, the researchers concluded that the behaviour of leaders and subordinates depend on their previous life patterns and the social interactions.
  - Socio-Technical Period – the ideas of both environmental and social periods combined to evaluate the leadership concept in this period.
- The Contingency Era
  - Contingency Theory – the contingency became a significant revolutionary period of the leadership concept, which implied that leadership is shaped depending on all the above aspects in previous periods. Accordingly, the contingency theory focused on evaluating the situation to match it with leadership styles (Fiedler as cited in Seters & Field, 1990).
  - Path-Goal Theory – focused more on making the circumstances for the achievements of the subordinates.

- Situational Theory – this theory highlighted the essence of knowledge generated through situational era.
  - Multiple Linkage Model – this was developed by combining several leadership theories including contingency theory, path-goal theory and normative theory.
  - Normative Theory – stressed the importance of decision making in accordance with the situation and the acceptance level of subordinates.
- The Transactional Era
    - Exchange Period – while starting to discuss on the ‘role differentiation’ and ‘social interaction’, the researchers stressed that the transactions which may occur in between the leader and the subordinate shape their relationship; and they introduced the Vertical Dyad Linkage Theory, Reciprocal Influence Approach and Leader Member Exchange Theory.
    - Role Development Period – the Social Exchange Theory and the Role Making Model were introduced in this period, which demonstrated that when the leader becomes exemplary and facilitates the achievement of goals, the subordinates transmit the status and recognition.
- The Anti-Leadership Era
    - Ambiguity Period – in this period, leadership was reinterpreted only as a conceptual symbol.
    - Substitute Period – the researchers in this period strived to identify the substitutes for the leadership and it was accepted that the need for leadership can be reduced or eliminated in accordance to the organizational factors and the characteristics of the subordinates.
- The Cultural Era
    - The researchers attempted to rebuilt the leadership concept while focusing more on qualitative leadership approach (developing quality and performances through expectations and values) rather than on quantitative leadership approach (on productivity and efficiency) and introduced several theories and models including McKinsey 7S Framework, Theory Z etc.

- The Transformational Era
  - Charisma Period – this period gave priority to the all who has a vision and a mission for the company indicating that leadership is a visionary concept.
  - Self-Fulfilling Prophecy Period – the researchers stressed a transformational process that transform individual concepts and features from leaders to subordinates and from subordinates to leaders.

All these leadership theories support the fact that leadership can be linked to the performances by power, which is stated by Katz and Kahn (as cited in Jogulu & Wood, 2006, p 236) that “any act of influence on a matter of organizational relevance” and the same stated by Michener et al (as cited in Jogulu & Wood, 2006, p 236) that “as a process that takes place in groups in which one member influences and controls the behavior of the other members towards some common goal”. Accordingly, contemporary researchers created a more precise definition for the leadership by mentioning it as “the ability of an individual to influence, motivate, and enable others to contribute towards the effectiveness and success of the organizations of which they are members” (House, Hanges, Javidan, Dorfman & Gupta, 2004, p. 56). According to Yahaya et al., (2011), leadership concept is especially essential to study the group behavior since it directly affects the performances of the groups. After reviewing previous literature, Horner (1997) aligned the culture to the leadership and stressed the importance of the influence of the culture to change the approach of the leadership, and further he emphasized that according to the culture where the leader belongs to, the skills of the leader may vary. A different view to the leadership introduced by Manz and Sims (as cited in Hornes, 1997) as “Super Leadership”, according to which leaders are not the persons who just serve for others, but someone who can direct other to achieve their own visions.

### **2.1.2 Leadership qualities and Practical Scenarios**

According to Vries, R Toe Andailieu (1998), leadership affects the job satisfaction of the subordinates, where people oriented and participative leadership styles increase the job satisfaction. As Jagdeep, Chhokar and Harris (1985, p. 3), state,

...in the planning and preparation of leadership action, Contingency, Trait, and Managerial Grid approaches seem to be among the most leader-individual oriented... Vertical Dyad and Attribution approaches seem to be consistent in their high individual-subordinate orientation and low group-subordinate orientation. Theory Z and System 4 seem to have the highest

group orientation and are among the theories with the least individual orientation.

Thus, Packard and Kauppi (1999) stated that diverse leadership styles create diverse levels of job satisfaction of subordinates. Figure 2.1 demonstrates how the leadership style changes according to the situations and how it creates diverse relationships.

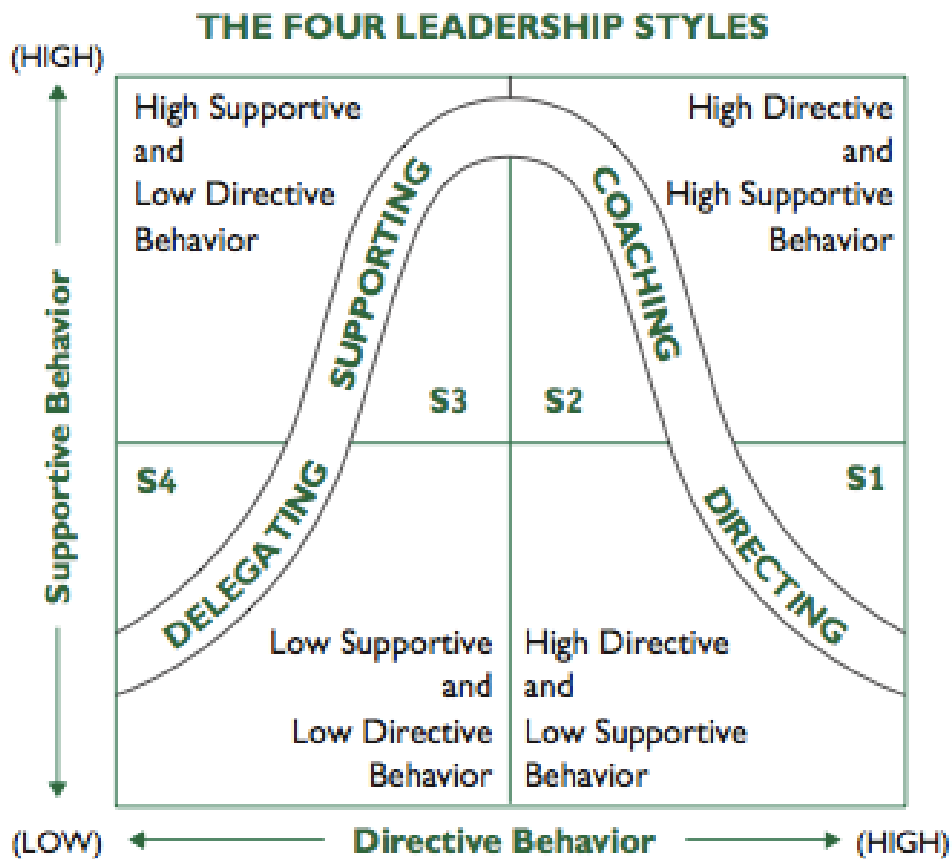


Figure 2.1 Different Leadership Styles

The leadership style also depends on the personal traits of the leader, which can be explained through the Big Five Personality model. Costa and McCrae (1992) state that Big Five model describes five main factors that determine the personality including openness to experiences, conscientiousness, extraversion, agreeableness and neuroticism.

The leaders with openness to experience possess the transformational leadership qualities and can creatively determine the vision of the organization while obtaining the ideas of the subordinates and drive the subordinates for accomplishing the vision (Yahaya et al., 2011b). Since the leaders with conscientiousness possess the qualities such as deliberate, cautious,

self-disciplined, well organized and neat (Costa & McCrae, 1992), they can be considered as more goal oriented leaders (Yahaya et al., 2011a). According to Bass (as cited in Yahaya et al., 2011b), the extroverted leaders who have characteristics such as persuading, influencing and mobilizing others can be categorized under transformational leadership category who can easily direct people for the vision and goals. Agreeableness refers to be “concerned with others (which) may also help transformational leaders to attend to individual needs of followers” (Yahaya et al., 2011b, p. 9641). Since the general idea of neuroticism consists with the negative feelings including anger, fear, sadness, guilt etc. or calm and relaxed, the persons with neuroticism characteristics hesitate to be leaders (Costa & McCrae, 1992). These big five factors are further summarized in figure 2.2.

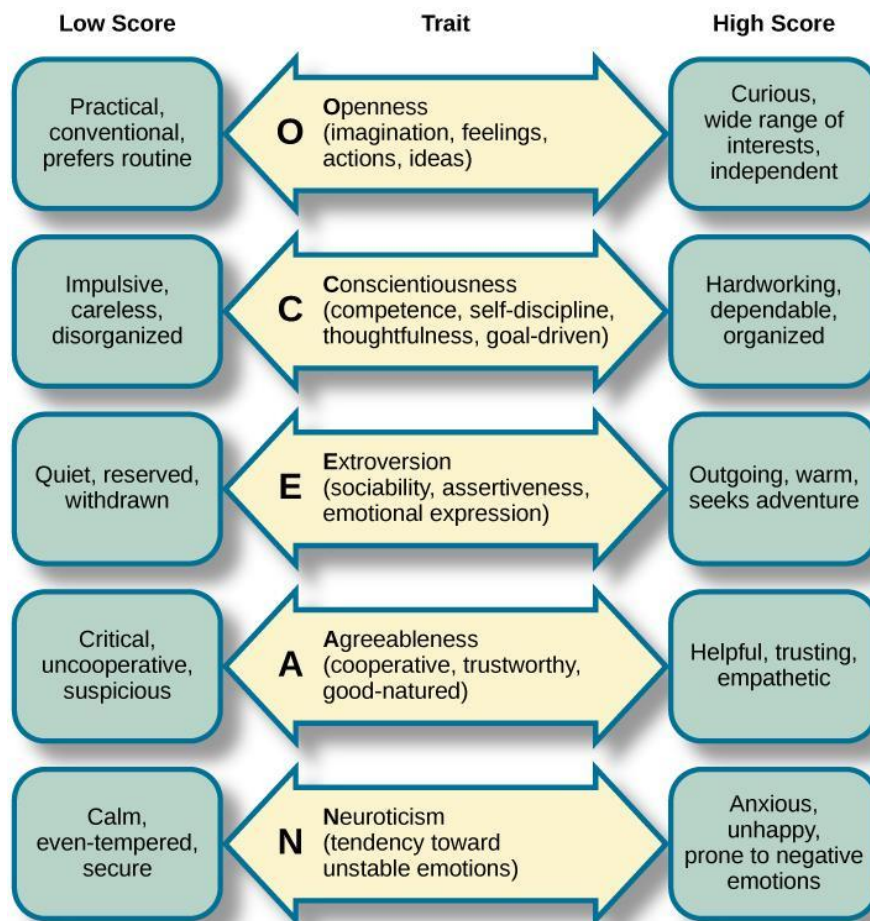


Figure 2.2 Big Five Personality Model for Leadership

Other than these successful characteristics of the leaders, Bentz (as cited in Horner, 1997)

declares that there are some negative behaviours that some leaders possess, but should eradicate, which include untrustworthiness, arrogance, moodiness, compulsiveness, insensitivity, abrasiveness etc.

## **2.2 Performance**

Employees' performance is one of the key success factors for organizations; hence Gruman and Saks (2011) state that it is vital to carefully understand and implement a performance management system while linking it to improve organizational efficiency. The United State Office of Personnel Management defines performance management as a “a systematic process of the workload planning and expectations setting, of the continuous performance motorization, development of the performing capacity, periodically performance evaluation and high-performance re-compensation” (as cited in Vosloban, 2012, p. 661). However, the success of the performance management system depends on the extent that it is truly linked with the goals and objectives of the organization (Aguinis, 2005). Winstanley and Stewart-Smith (1996) developed an approach to create an effective performance management system, which reviews the perceptions of all stakeholders in developing the performance objects and measures, which is identified as “stakeholder synthesis”. According to Cherrington and Cherrington (1974), performance management and appraisals become a reinforce to link available behaviour and expected (reinforcement) behaviour.

The basis of performance management system depends on performance appraisals and performance appraisals should consider both quantitative (objective) and qualitative (subjective) aspects gain a more accurate picture on performance (Cherrington & Cherrington, 1974). According to Opatha (2016), several performance evaluation methods can be identified as graphic rating scale (objective approach, check-list method, multiple choice method, self-evaluation & discussion method, rank order method, alternative ranking method, paired comparison method, Management by Objectives (MBO) method, Behavioural Observation Scales (BOS) etc. However, according to Fedor (1991), the ultimate purpose of the performance appraisal and management system is to provide feedback to employees and to develop them.

Salem (2003) utters a different view for the performance management system which applies several contemporary models for measuring the efficiency and effectiveness of the performances of individuals or groups which include “benchmarking”, “total quality

management”, “balance scorecard”, “business process reengineering” etc. Especially when measuring the performances of business projects, the Three Es’ concept (Economy, Efficiency and Effectiveness) can be applied which is suggested by Salem (2003) and he further describes it as,

- Economy:
  - Procurement and delivery of inputs
  - Human, physical and financial resources
  - Quantity and quality
  - Cost element
  - Timeliness
  - Operational level
- Efficiency:
  - Utilization of means to achieve results and objectives
  - Rational use of resources
  - Least costs maximum results
  - Activities in perspective of results
  - Work planning and timeliness
  - Tactical levels
- Effectiveness:
  - Achievements of results, objectives, goals
  - Focus on target groups, beneficiaries, clients
  - Medium and long-term perspective
  - Much more difficult to measure and assess
  - Strategic level

Aguinis (2005) states several advantages of performance management system, which include,

- Increasing the motivation to perform with the feedbacks and knowledge gain about the current performances
- Increasing the self-esteem with the feedbacks and appreciations
- Facilitating managers to get overviews about the subordinates
- Convenient way to set and clarify job definition and criteria
- Facilitating employees to get self- overviews about themselves
- Providing applicable information for deciding employee related actions including promotions, rewarding, trainings, transfers and terminations
- Creating a precise understanding (for both management and employees) on organizational goals and objectives and the link of individual employees for achieving them
- Increasing the competition among employees for making better performances
- Facilitating the organization for protecting from legal compliance matters since it creates proper procedures on employee related actions
- Providing more convenient backgrounds to identify good and poor performers separately
- Assisting managers to communicate their expectations and perceptions on performances to employees
- Driving organizational change, since change objectives of the organization can be linked to the individual performances through performance management system

### **2.3 Leadership and Performances of Subordinates**

In organizational context, formal leaders become the managers of the organization and Armstrong (as cited in Vosloban, 2012) states that managers are accountable to create a culture which facilitate high performances of the subordinates. Especially when it comes to the evaluation and management of performances of the subordinates, both managers and employees should interactively work and managers should be more communicative to convey the tasks and expectations clearly to the employees (Vosloban, 2012). According to Horner (1997) organizational transformation and performances changing process significantly depends on the leadership, where successful leaders facilitate team members through proper relationships, coaching and guiding them to achieve optimum results.



According to the previous leadership theories, researchers mainly state about two leadership theories as “professional leadership” with tasks orientation and “personal leadership” with people orientation (Mastrangelo et al., 2004 as cited in Mastrangelo, Eddy & Lorenzet, 2014); and Mastrangelo et al. (2014) mention both leadership orientations are equally important for employees’ and organizational performances. Ozcelik, Langton and Aldrich (2008), mentions it in a different approach stating that, employees’ performances depend on the emotions and Waldman et al. (as cited in Ozcelik et al., 2008) state that leadership behaviors make key impacts in determining emotions of the employees which finally stresses that leader make an impact on employees’ performances through the emotions of the employees. Further, Huy (1999 as cited in Ozcelik et al., 2008) recommended that it is vital to focus on the emotions of the employees in making management decisions and in deciding management practices, to improve the organizational performances ultimately.

Later, researchers found that there is a link among the leader, emotions and individual and group performances (Ozcelik et al., 2008). According to McColl-Kennedy and Anderson (2002 as cited in Ozcelik et al., 2008), if the leader follows a transformational approach, the employees become motivated and inspired which will result in improving the performances. Pirola-Merlo et al (2002 as cited in Ozcelik et al., 2008) proved the same through their research; mentioning that, when the leaders in the group build positive relationships with the subordinates, the working background automatically becomes pleased for subordinates which then affect positively for improving their individual and group performances.

In addition, the transformational leaders could transform his/her team or subordinates and the organization in both micro and macro level which they are working in, along with the individual ethics, values, goals, standards and needs (Bass, 1985), by transforming their lives from usual standards towards better standards (Judge & Piccolo, 2004). As Yahaya et al. (2011) explain, transformational leaders can communicate the organizational vision in an inspiring manner that will enhance the will power of subordinates and drag out the inner strengths of subordinates while encouraging their divergent thoughts and innovations to obtain their support for achieving vision and goals; whereas providing necessary guidance and mentoring for individual development.

However, in contrast, transactional leaders follow a different strategy to ensure individual and group performance by which they straightly attempt to exchange individual and group efforts and contribution for rewards and resources (most of the time for contingent rewards), while

monitoring subordinates closely and making necessary corrective actions when needed which will finally lead for appraising individual and group performances in order to enhance organizational performances (Bono & Judge, 2000). According to Yahaya et al. (2011b), transactional leaders are more prominent in recent times since it follows a tactic of no threat and no much favourism as well.

In addition, Humborstad, Nerstad and Dysvik (2014) mention that it is vital to empower leaders with adequate powers for attaining expected results from the employees and the teams. Because, subordinates create their own judgments regarding the involvement, decision making and autonomy level based on the powers of their leaders; and if they have doubts regarding the powers, i.e. the empowerment level of their leaders, the negative judgments of subordinates can lead for poor performances (Turner, 2009). Thus, Humborstad et al (2014) argue that, leadership affects employees' performances which can be demonstrated through a curvilinear relationship, where leadership can be altered through empowerment which impacts on individuals' inner behavior and external and group behavior; and it is further shaped by the individual factors such as individuals' willingness for attaining goals; which is further briefed through figure 2.3.

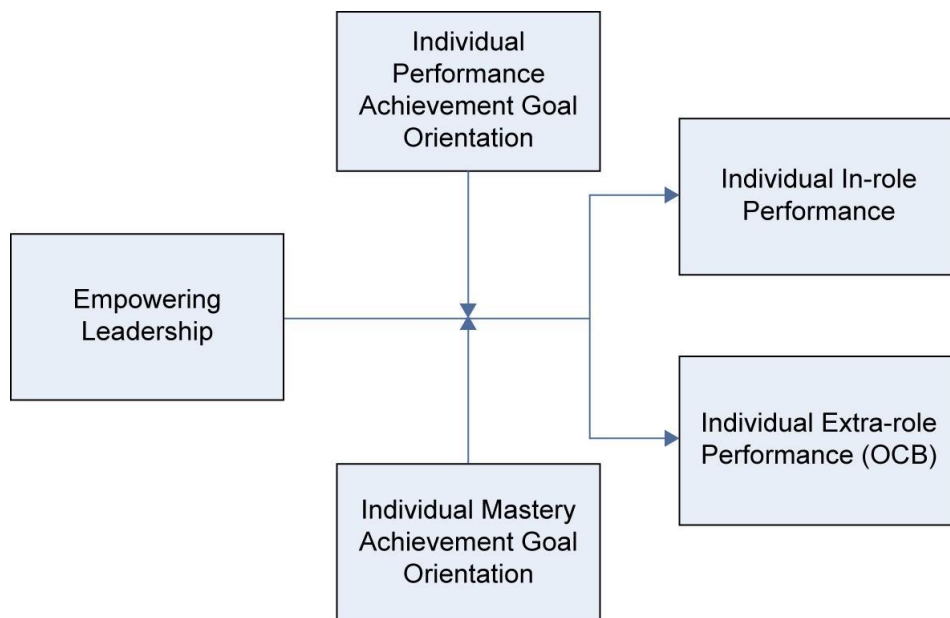


Figure 2.3 The Curvilinear Relationship between Leadership and Employees' Performances

Thus, the performances of subordinates can be altered by the approach and qualities of

leaders, by apply more close, visionary and strong relationships with subordinates or by focusing on the requirements of the job and maintaining formal relationships through formal rewards and punishments.

On the other hand, Davenport and Prusak (2000) suggest a different strategy by stressing the importance of trust in leadership for enhancing employees' performances. Since a sound communication chain is essential for ensuring excellent organizational and individual performances; the communication is shaped not only by the infrastructure, technology and management control but by the trustworthiness in between the leader (as the facilitators and combining point) and the subordinates (Sharkie, 2009). According to the enduring leadership model suggested by Mastrangelo et al. (2014), the trust is highly holds by the leaders who are having personal leadership approach. They are equally bearing the qualities such as expertise, caring, sharing and ethics in addition to the trust, which finally lead towards organizational performances through the cooperation of employees (Mastrangelo et al., 2014) as demonstrated in figure 2.4.

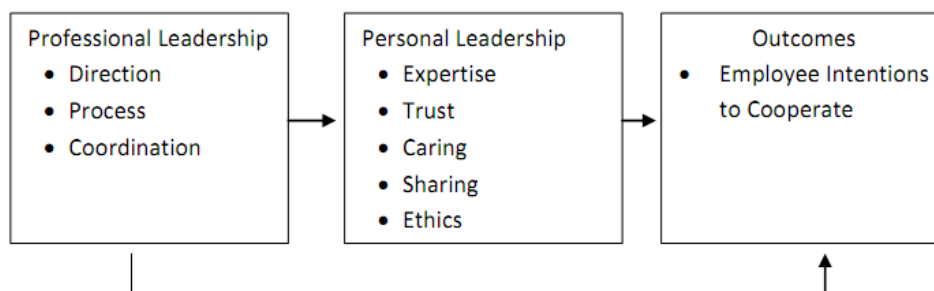


Figure 2.4 The Enduring Leadership Model

Trust effects on individual perception on how the organization and its current management and employees treat, how much fair the organization and management in their decisions and actions, to what extent the organization and management can be trusted in delivering promises and meeting obligations etc. (Guest and Conway, as cited in Sharkie, 2009). Hence, if the trust is lower regarding those aspects, the strength of the leader – subordinate relationship will also become lower and it will affect on the communication flow and will finally decrease the performances (Sharkie, 2009). Von Krogh et al (as cited in Sharkie, 2009), stress that trust makes the key foundation for the performance expectations of employees. Thus, in any of the approach, there should be a sound leader – subordinate fit which ultimately support for

organizational performances (Humborstad et al, 2014).

## **2.4 Leadership and IT Project Performances**

The IT project teams are basically considered as knowledge teams, which are created by incorporating different set of experts in the field, with the strong vision for achieving set expectations and strategies (Faraj & Sambamurthy, 2006). But, there are several evidences regarding the failure of these IT projects, which handled by the experts; mainly due to the lack of proper guidance, coordination, communication and learning (Curtis, Krasner, & Iscoe, 1998).

Among them, leadership is vitally impact on the success of the IT projects and leaders of the project teams should monitor, guide and motivate project team members by pertaining appropriate strategies to ensure highest performances (Kirsch, 2000). Correspondingly, Taylor and Woelfer (2011) state that, the skills of project leaders become crucial for the effectiveness and better performances of the project team. A study (Meta - analysis) done by Burke et al. (2006) revealed that there is a connection among relations, tasks and behaviors, which ultimately impacts to ensure team productivity and effectiveness. Further, Ancona and Caldwell (2007) add that, boundary spanning communication behaviors are important for IT projects handling; where boundary spanning communication includes acting as a buffer to protect the team, collaborating and coordinating with outsiders, acting as an ambassador to represent the team, negotiating resources for the team, scanning the environment etc. which impact on team productivity and performances. Taylor and Woelfer (2011) support the facts of Ancona and Caldwell through their study by revealing that IT project leaders require diverse leadership skills and behaviors for the success of the projects. Thus, several researchers from IT and project management field accept that leadership make significant impacts on the performance and success of IT projects and the performances of project team members as well (Mantei, 1981 as mentioned in Faraj & Sambamurthy, 2006). Most importantly to all the facts, Horner (1997, p. 282) declares that “Leaders are required to think and act differently, using innovation and personal values to help guide their actions, instead of following textbook solutions”.

## **Chapter 3**

### **3 Methodology**

#### **3.1 Research Design and Methodology**

The main aim of this study is to identify leadership qualities that will enhance performance of IT projects in Sri Lankan IT companies, which has developed under ‘Epistemology’ perspective, according to the ‘Realism’ philosophy. Accordingly, the data gathered through observable phenomena from a considerable number of respondents, to ensure the accuracy and reliability, and the results are derived from the data which were gathered concerning the ‘real’ state of people. Further, the research contains both quantitative and qualitative research features. Primarily, it contains quantitative methodology, since the leadership qualities have categorized by measuring the link of each of them to performances. However, qualitative methodology is also applied to a certain extent, to identify available leadership qualities through past literature. Survey method used to gather a large amount of data from many respondents mainly through questionnaires and several interviews also conducted when necessary.

#### **3.2 Conceptual Framework of the Research**

To create the conceptual framework of the research, several variables (i.e. leadership qualities) were identified including as part of literature search as in table 3.1,

Table 3.1 Identified Variables - Litratre Survey Summary

Literature	Variables
The Influence of the Employee's Performance on the Company's Growth - A Managerial Perspective	Interaction/ Interpersonal Skills Communication Feedback
The evolution of the performance appraisal process	Personalities and Behaviors Nature of Task Communication Feedback
Historical analysis of performance measurement and management in operations	Personalities and Behaviors Communication Feedback Rewards
Participation, performance, and appraisal	Rewards
Professional and organizational commitment among engineers conflicting or complementing	Active Contribution / Commitment Employee Job Satisfaction
Exploring quality management practices and high tech firm performance	Interaction/ Interpersonal Skills Creative/ Innovative Turnover Professional Development Professional Development
Appraising the Performance of Performance Appraisals	Communication Feedback Manager's Personal Biases Coaching and Guidance Staffing Decision Professional Developments
The Evolution of Leadership Theory	Personalities and Behaviors Power and Influence Situations Interaction/ Interpersonal Skills Maturity/ Experience Culture Proactive Rather than Reactive Radical Rather than Conservation Creative/ Innovative Active Contribution / Commitment
Leadership theory past present and future	Personalities and Behaviors Situations Interaction/ Interpersonal Skills Culture Nature of Task

Implications of Leadership Theories for Management Development and Practice Contemporary	Personalities and Behaviors Situations
Leadership effectiveness, leadership style and employee readiness	Employee Job Satisfaction Job Performance Job Stress, Turnover
Leadership of information systems development projects	Situations Maturity/ Experience Active Contribution / Commitment Empowering Leadership
Leadership Behaviors in Information Technology Project Management an Exploratory Study	Interaction/ Interpersonal Skills Nature of Task Team Player Manager's Personal Biases
The role of leadership theory in raising the profile of women in management	Personalities and Behaviors Interaction/ Interpersonal Skills
Change oriented leadership satisfaction and performance in work groups Effects of team climate and group potency	Creative/ Innovative Active Contribution / Commitment Employee Job Satisfaction Team Player Change Oriented
Doing well and doing good the relationship between leadership practices that facilitate a positive emotional climate and organizational performance	Interaction/ Interpersonal Skills Active Contribution / Commitment Team Player Communication Feedback Rewards
Trust in leadership is vital for employee performance	Empowering Leadership Team Player Trust
The relationship between enduring leadership and organizational performance	Communication Feedback Coaching and Guidance Trust Expertise/ Competency Coordination
Empowering leadership employee goal orientations and work performance A competing hypothesis approach	Personalities and Behaviors Interaction/ Interpersonal Skills Nature of Task Empowering Leadership Expertise/ Competency
The role of implicit leadership theories in the performance appraisals and promotion recommendations of leaders	Personalities and Behaviors Communication Feedback Manager's Personal Biases

Reviewing all these variables under key theories in relation to leadership and

performance (as separately and as a combination), six variables were derived by evaluating their relevancy to a higher number of leadership and performance related theories. Accordingly, figure 3.1 demonstrates the brief idea behind the research, which implies that these leadership qualities and related factors affect the performance of IT projects.

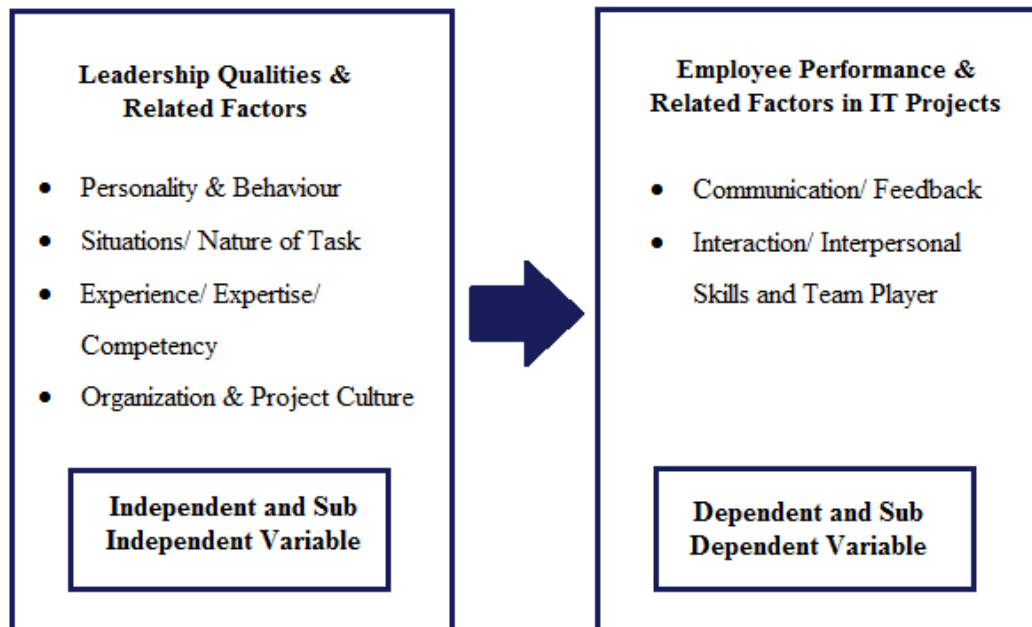


Figure 3.1 Conceptual Framework: Developed by the Author

### 3.3 Population of the Study

The research is focus on the identifying leadership factors that enhance employee performance in different IT projects, since the research is would focus on all the job roles in the Sri Lankan IT industry which has a leadership involvement for their job. The survey was carried out among Sri Lankan IT professionals and the survey will be narrow down and consider only Private Sector IT employees.

As per the National ICT workforce Srvey-2013 by Information and Communication Technology Agency of Si Lanka (ICTA) the prediction of total ICT workforce in Sri Lanka is around 100,000 by 2016. After considering a confidence level of 95 and margin of error as 5 the expected sample size can be calculated as 383.



### 3.4 **Sampling Technique**

Researchers follow two main sampling techniques for collecting data, which represents the ideal population of the targeted subject area which include probability sampling (including systematic random, simple random, stratified, multi stage cluster sampling etc.) and non-probability sampling (snowball, convenience, quota, theoretical etc.). This study focuses on collecting data on leadership qualities to enhance the IT project performance in Sri Lankan IT sector. Thus, it is apparent that the professionals in the entire IT sector of Sri Lanka consider as the population of the research which comprises many IT project.

The sample for the study created in accordance with the simple random sampling technique by selecting a representative sample of IT professionals from almost all the IT project companies in Sri Lanka and the total sample size was 222 including IT Engineers, Team Leaders, Consultants, Managers, and Senior Managers. This sample is consisting of two main categories as Leaders and Employees. It is categorized again as the identified project situations; New and Unstable Projects, Stable and Long Run Projects and CodeRed (Critical) Projects.

### 3.5 **Data Collection**

Required data for the study collected by primary data collection methods as well as secondary data collection methods. In the initial stages of the research secondary data from past literature referred to design the conceptual framework and to build the foundation of the study. Afterwards, articles and related information on Sri Lankan IT sector, the success factors of IT sector, weaknesses and issues in IT sector etc. collected through online news sites, previous industry reports etc.

Primary data played the key role of the research that collected mainly through a survey questionnaire and through personal interviews. Afterwards the results projected on to the

whole population (for both project based and product based IT companies), by aligning the perceptions of the researcher as well.

### **3.5.1 Questionnaire**

The two survey questionnaires that targeted the employees and the leaders, of this study contained 34 structured questions, focusing both demographic data (as part A) and ascertained data (as part B). The questions relating to ascertained data, (part B) has categorized under six main variables i.e.

- Personalities and Behaviors
- Interaction/ Interpersonal Skills/ Team Player
- Communication/ Feedback
- Situations/ Nature of Task
- Experience/ Expertise/ Competency
- Organization/ Project Culture

All the questions in Part B have arranged in a five point Likert scale manner by letting the respondent to select one among five different alternatives, which is summarized below in table 3.2.

Table 3.2 Likert Scale for Questionnaire - Part B

<b>Scale</b>	Very often	Often	Sometimes	Rarely	Not at all
<b>Scale</b>	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
<b>Point</b>	5	4	3	2	1

### 3.6 Methods of Data Analysis

All the collected data for the study analyzed through SPSS 22.0, considering a two-tailed test under significance level at 0.01. The analysis and data presentation has categorized into several sections, where demographic data analyzed through ‘Frequency Analysis’ and ascertained data analyzed through ‘Correlation and Regression Analysis’. However, before conducting the correlation and regression analyses, a ranking system applied to identify key leadership qualities among several leadership qualities, which affect the performance of IT projects in Sri Lanka.

#### 3.6.1 Hypothesis

As described under literature review, it was proved that leadership is essential for the high performance of an IT project, by ensuring proper monitoring and guiding functions (Kirsch, 2000). According to Woelfer (2011) IT project leaders require diverse leadership skills and behaviors for enhancing the performance of the projects. Hence, this study assumes that leadership qualities affect the performance of IT projects and in view of that, the main hypothesis of the study has developed.

##### Hypothesis 1

- Alternative Hypothesis (H1) – There is a positive relationship between leadership qualities and IT project performance in Sri Lankan IT sector.

- Null Hypothesis (H0) – There is no positive relationship between leadership qualities and IT project performance in Sri Lankan IT sector.

The aim of the analysis is to prove the alternative hypothesis and reject the null hypothesis. In addition to the main hypothesis, there are several sub hypotheses which are based on the specific leadership qualities which were identified through the ranking system.

#### Hypothesis 1.1

- Alternative Hypothesis (H1) – There is a positive relationship between personality and behavior and IT project performance in Sri Lankan IT sector.
- Null Hypothesis (H0) – There is no positive relationship between personality & behavior and IT project performance in Sri Lankan IT sector.

#### Hypothesis 1.2

- Alternative Hypothesis (H1) – There is a positive relationship between interactions/ interpersonal skills/ team player and IT project performance in Sri Lankan IT sector.
- Null Hypothesis (H0) – There is no positive relationship between interaction/ interpersonal skills/ team player and IT project performance in Sri Lankan IT sector.

#### Hypothesis 1.3

- Null Hypothesis (H1) – There is a positive relationship between communication/ feedback and IT project performance in Sri Lankan IT sector.
- Alternative Hypothesis (H0) – There is no positive relationship between communications/ feedback and IT project performance in Sri Lankan IT sector.

#### Hypothesis 1.4

- Null Hypothesis (H1) – There is a positive relationship between situations/ nature of task and IT project performance in Sri Lankan IT sector.
- Alternative Hypothesis (H0) – There is no positive relationship between situations/ nature of task and IT project performance in Sri Lankan IT sector.

### Hypothesis 1.5

- Null Hypothesis (H1) – There is a positive relationship between experience/ expertise/ competency and IT project performance in Sri Lankan IT sector.
- Alternative Hypothesis (H0) – There is no positive relationship between experience/ expertise/ competency and IT project performance in Sri Lankan IT sector.

### Hypothesis 1.6

- Null Hypothesis (H1) – There is a positive relationship between organization/ project culture and IT project performance in Sri Lankan IT sector.
- Alternative Hypothesis (H0) – There is no positive relationship between organization/ project culture and IT project performance in Sri Lankan IT sector.

Correspondent to the main hypothesis, the aim is to accept and prove the alternative hypotheses of above mentioned sub hypotheses and to reject null hypotheses through the data analysis by correlation and regression models.

## **3.6.2 Frequency Distribution Rules**

In addition to the correlation and regression analyses to determine the nature and gravity of the relationship, the frequency analysis applied to measure and evaluate the average distribution of the main and sub variables, by interpreting the average value of the Five Point Likert Scale (mean value =  $[5+4+3+2+1] / 5 = 3$ ) as summarized below.

### Mean value of the leadership qualities (LQ)

If  $4 < LQ < 5$ ; then the impact of leadership qualities is positive

If  $2 < LQ < 4$ ; then the impact of leadership qualities is moderate

If  $1 < LQ < 2$ ; then the impact of leadership qualities is negative

### Mean value of personality & behavior (PB)

If  $4 < PB < 5$ ; then the impact of personality & behavior is positive

If  $2 < PB < 4$ ; then the impact of personality & behavior is moderate

If  $1 < PB < 2$ ; then the impact of personality & behavior is negative

Mean value of interaction/ interpersonal skills/ team player (IIT)

If  $4 < IIT < 5$ ; then the impact of interaction/ interpersonal skills/ team player is positive

If  $2 < IIT < 4$ ; then the impact of interaction/ interpersonal skills/ team player is moderate

If  $1 < IIT < 2$ ; then the impact of interaction/ interpersonal skills/ team player is negative

Mean value of communication/ feedback (CF)

If  $4 < CF < 5$ ; then the impact of communication/ feedback is positive

If  $2 < CF < 4$ ; then the impact of communication/ feedback is moderate

If  $1 < CF < 2$ ; then the impact of communication/ feedback is negative

Mean value of situations/ nature of task (SN)

If  $4 < SN < 5$ ; then the impact of situations/ nature of task is positive

If  $2 < SN < 4$ ; then the impact of situations/ nature of task is moderate

If  $1 < SN < 2$ ; then the impact of situations/ nature of task is negative

Mean value of experience/ expertise/ competency (EEC)

If  $4 < EEC < 5$ ; then the impact of experience/ expertise/ competency is positive

If  $2 < EEC < 4$ ; then the impact of experience/ expertise/ competency is moderate

If  $1 < EEC < 2$ ; then the impact of experience/ expertise/ competency is negative

Mean value of organization/ project culture (OP)

If  $4 < OP < 5$ ; then the impact of organization/ project culture is positive

If  $2 < OP < 4$ ; then the impact of organization/ project culture is moderate

If  $1 < OP < 2$ ; then the impact of organization/ project culture is negative

### 3.7 Summary

This chapter focused on portraying the origins of the study, which mentioned that this study consists of quantitative aspects under the realism perspective. The study conducted in a survey manner while considering all the professionals in Sri Lankan IT sector as the population and representative sample of 222 professionals selected according to the simple random sampling technique. The independent variable of the study is 'the leadership qualities' and the dependent variable is 'the performance of IT project sector'. Among several leadership qualities discussed by the previous researchers, four main qualities selected to evaluate the impact on performance as personalities and behaviors, situations/ nature of task, experience/ expertise/ competency and organization/ project culture. And, interaction/ interpersonal skills/ team player, communication/ feedback, were used for measuring independent variable. The data for the survey collected through a survey questionnaire and several interviews, where the questionnaire was designed in a Likert Five Scale manner. The analysis of the data conducted through SPSS 22.0 by applying frequency, correlation and simple regression analysis to determine the distribution of variables, nature of the relationships and the gravity of the relationship respectively.

## **Chapter 4**

### **4 Data Analysis**

#### **4.1 Introduction**

This study mainly focuses on identifying the leadership qualities that would affect positively in enhancing the performance of IT projects in Sri Lanka. All the data which were gathered through survey questionnaires and interviews have presented in this chapter with relevant interpretations and demonstrations.

The analysis initially presents the validity and reliability of the questionnaire through Cronbach's alpha test. Subsequently all demographic data and the features of the sample selected for the study through frequency analysis. Afterwards, the analysis has focused evaluating frequency distribution of main variables through histograms. Later, the Pearson's Coefficient Correlation is calculated to measure the relationships between set variables and Simple Regression Analysis to measure the gravity of the relationships if any. All hypotheses developed under section 3.5.1 are tested and evaluated in the later section of the chapter.

#### **4.2 Pattern of Data Gathering**

Data was gathered in 2 different criteria such that employee and leaders, and below figures indicate the progress of the response to both the questionnaires.

##### **Employee Perspective**

The frequency distribution graph (Figure 4.1) interprets the data collection progress of the questionnaire targeted for employees during the data collection period of 3 months. But after a time of one month, the rate of the responses was low and it has become 2 or 3 responses per week, and it is not worth to continue data collection further with such a rate since it may take a long time to reach the required responses. And the gathered responses within the first month not only included the online survey, but had to use paper based questionnaires to increase the number of responses.



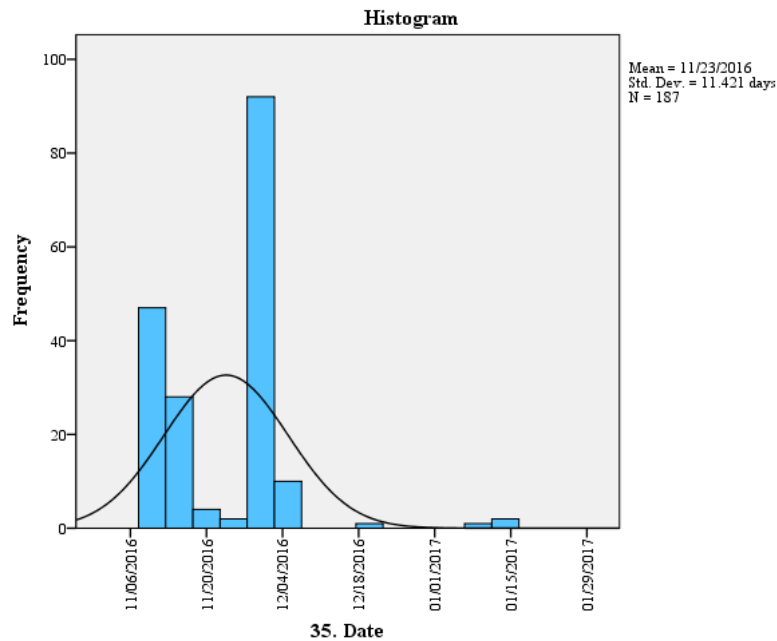


Figure 4.1 Response Frequency of the Respondents (Employees) : Survey Data

### Leaders Perspective

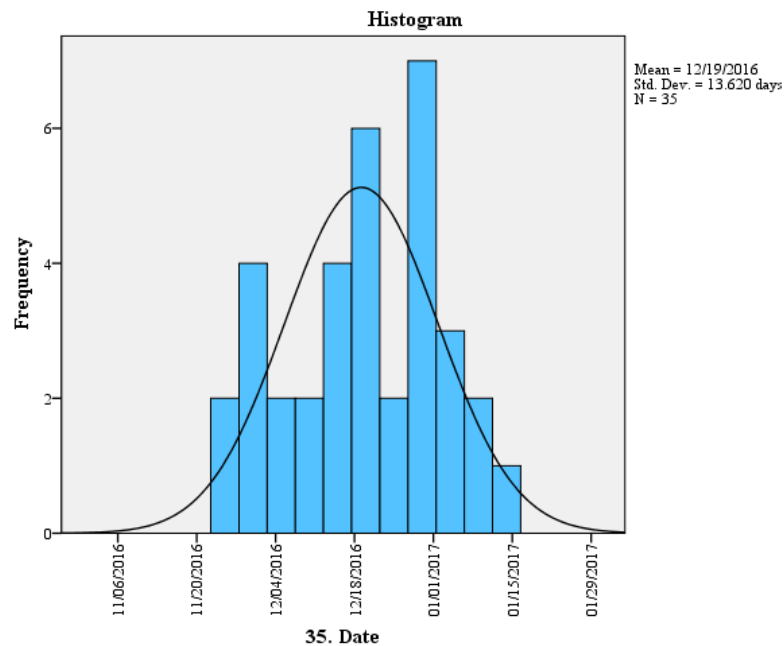


Figure 4.2 Response Frequency of the Respondents (Leaders), Survey Data

There are no clear statistics on the exact number of people who is playing the lead role in Sri Lankan IT industry, therefore, the number of collected data during the 3 months data collection period was considered as the sample size. This data collection progress and the rate of response rate were low from the beginning.

### 4.3 Validity and Reliability of the Instruments

Checking validity and reliability of an instrument before using it for data collection is a must to ensure the accuracy of the data and the accuracy of the collection process as well. Thus, validity and reliability of the instrument of this study measured by applying the Cronbach's Alpha value in SPSS; and according to the set standards of Cronbach's Alpha, the value should be greater than 0.7 to ensure that the instrument (i.e. the questionnaire in this study) is appropriate for using as a data collection tool (Goforth, 2015, online). Accordingly, Table 4.1 and Table 4.2 illustrate the validity and reliability of the questionnaire respectively, which used for measuring and identifying leadership qualities in enhancing the performance of IT projects in Sri Lanka

#### 4.3.1 Leadership

##### 4.3.1.1 Reliability Results of Personality and Behavior

Personality and Behavior factors are analyzed by question number 9 to 13 of both the questionnaires aimed for employees and leaders.

#### For all the Project Types

#### For all the Project Types (Employees)

Table 4.1 Validity and Reliability of the Instrument (Employee) – Personality and Behavior (All 3 Project Types)

		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.557	.601	5

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.2 Item Total Statistics (Employee) – Personality and Behavior (All 3 Project Types)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
9. My lead behaved in a manner that is thoughtful for my personal needs		.431
10. My lead behaved in a manner that is thoughtful for my professional needs		.333
11. My lead gave the opportunities to the team members to take personal responsibility for the effectiveness of the team		.362
12. My lead motivated the team members to frequently go beyond what is required and take initiatives		.388
<b>13. My lead is having relationship-building competencies, and help new team members to easily get along with the team</b>		<b>.801</b>

Once the Question number 13 is ignored as in above table 4.4, Cronbach's Alpha reach to an acceptable level of 0.801

Table 4.3 Validity and Reliability of the Instrument Updated (Employee) – Personality and Behavior (All 3 Project Types)

		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.801	.800	4

a. Listwise deletion based on all variables in the procedure.

**For all the Project Types (Leaders)**

Table 4.4 Validity and Reliability of the Instrument (Leaders) – Personality and Behavior (All 3 Project Types)

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

Listwise deletion based on all variables in the procedure.

Cronbach's Alpha <sup>a</sup>	Cronbach's Alpha Based on Standardized Items	N of Items
-1.661	.282	5

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

According to Tavakol & Dennick (2011), Cronbach’s Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.5 Item Total Statistics (Leaders) – Personality and Behavior (All 3 Project Types)

	Cronbach's Alpha if Item Deleted
9. I am considering/ thoughtful for my team/ subordinates' personal needs	-2.697 <sup>a</sup>
10. I am considering/ thoughtful for my team/ subordinates' professional needs	-2.767 <sup>a</sup>
11. I have given the opportunity to my team members to take personal responsibility for the effectiveness of the team	-2.072 <sup>a</sup>
12. I motivate team members to go beyond what is required and take initiatives	-2.978 <sup>a</sup>
<b>13. I am confidence about my relationship-building competencies, and I help new team members to easily get along with the team</b>	<b>.818</b>

Once the Question number 13 is ignored, Cronbach's Alpha reach to an acceptable level of 0.818 as the below table 4.8.

Table 4.6 Validity and Reliability of the Instrument Updated (Leaders) – Personality and Behavior (All 3 Project Types)

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.818	.819	4

### For the New and Unstable Project Types

### For the New and Unstable Project Types (Employees)

Table 4.7 Validity and Reliability of the Instrument (Employees) – Personality and Behavior (New and Unstable Projects)

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
	Total	37	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.575	.623	5

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.8 Item Total Statistics (Employee) – Personality and Behavior (New and Unstable Projects)

	Cronbach's Alpha if Item Deleted
9. My lead behaved in a manner that is thoughtful for my personal needs	.419
10. My lead behaved in a manner that is thoughtful for my professional needs	.428
11. My lead gave the opportunities to the team members to take personal responsibility for the effectiveness of the team	.422

12. My lead motivated the team members to frequently go beyond what is required and take initiatives	.313
<b>13. My lead is having relationship-building competencies, and help new team members to easily get along with the team</b>	<b>.817</b>

Once the Question number 13 is ignored, Cronbach's Alpha reaches to an acceptable level of 0.817

Table 4.9 Validity and Reliability of the Instrument (Employees) Updated – Personality and Behavior (New and Unstable Projects)

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
	Total	37	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.817	.817	4

#### For the New and Unstable Project Types (Leaders)

Table 4.10 Validity and Reliability of the Instrument (Leads) – Personality and Behavior (New and Unstable Projects)

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha <sup>a</sup>	Cronbach's Alpha Based on Standardized Items	N of Items
-.281	.310	5

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.11 Item Total Statistics (Leads) – Personality and Behavior (New and Unstable Projects)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
9. I am considering/ thoughtful for my team/ subordinates' personal needs		.158
10. I am considering/ thoughtful for my team/ subordinates' professional needs		-.738 <sup>a</sup>
11. I have given the opportunity to my team members to take personal responsibility for the effectiveness of the team		-.857 <sup>a</sup>
12. I motivate team members to go beyond what is required and take initiatives		-1.208 <sup>a</sup>
<b>13. I am confidence about my relationship-building competencies, and I help new team members to easily get along with the team</b>		<b>.634</b>

Even after the Question number 13 is ignored, Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95.

Table 4.12 Validity and Reliability of the Instrument (Leads) Updated – Personality and Behavior (New and Unstable Projects)

Case Processing Summary			
		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.634	.614	4

a. Listwise deletion based on all variables in the procedure.

### For the Stable and Long Run Project Types

### For the Stable and Long Run Project Types (Employees)

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.13 Validity and Reliability of the Instrument (Employee) – Personality and Behavior (Stable and Lon Run Projects)

Case Processing Summary				Reliability Statistics		
		N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Cases	Valid	121	100.0			
	Excluded <sup>a</sup>	0	.0			
Total		121	100.0	.566	.621	5

a. Listwise deletion based on all variables in the procedure.

Table 4.14 Item Total Statistics (Employee) – Personality and Behavior (Stable and Lon Run Projects)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
9. My lead behaved in a manner that is thoughtful for my personal needs		.400
10. My lead behaved in a manner that is thoughtful for my professional needs		.322
11. My lead gave the opportunities to the team members to take personal responsibility for the effectiveness of the team		.379
12. My lead motivated the team members to frequently go beyond what is required and take initiatives		.432
<b>13. My lead is having relationship-building competencies, and help new team members to easily get along with the team</b>		<b>.820</b>

Table 4.15 Validity and Reliability of the Instrument (Employee) Updated – Personality and Behavior (Stable and Lon Run Projects)

Case Processing Summary				Reliability Statistics		
		N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Cases	Valid	121	100.0			
	Excluded <sup>a</sup>	0	.0			
Total		121	100.0	.820	.821	4

a. Listwise deletion based on all variables in the procedure.

Once the Question number 13 is ignored, Cronbach's Alpha reaches to an acceptable level of 0.820.



**For the Stable and Long Run Project Types (Leaders)**

Table 4.16 Validity and Reliability of the Instrument (Employee) – Personality and Behavior (Stable and Lon Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha <sup>a</sup>	Cronbach's Alpha Based on Standardized Items	N of Items
-3.080	.414	5

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.17 Item Total Statistics (Leads) – Personality and Behavior (Stable & Long Run Projects)

	Cronbach's Alpha if Item Deleted
9. I am considering/ thoughtful for my team/ subordinates' personal needs	-15.373 <sup>a</sup>
10. I am considering/ thoughtful for my team/ subordinates' professional needs	-15.373 <sup>a</sup>
11. I have given the opportunity to my team members to take personal responsibility for the effectiveness of the team	-3.020 <sup>a</sup>
12. I motivate team members to go beyond what is required and take initiatives	-3.020 <sup>a</sup>
<b>13. I am confidence about my relationship-building competencies, and I help new team members to easily get along with the team</b>	<b>.918</b>

Table 4.18 Validity and Reliability of the Personality and Behavior (Leads) Updated – Personality and Behavior(Stable & Long Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.918	.921	4

a. Listwise deletion based on all variables in the procedure.

Once the Question number 13 is ignored, Cronbach's Alpha reaches to an acceptable level of 0.918.

**For the CodeRed (Critical) Project Types**

**For the CodeRed (Critical) Project Types (Employees)**

Table 4.19 Validity and Reliability of the Instrument (Employee) – Personality and Behavior (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.532	.494	5

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.20 Item Total Statistics (Employee) – Personality and Behavior (CodeRed/ Critical Projects)

<b>Item-Total Statistics</b>		Cronbach's Alpha if Item Deleted
9. My lead behaved in a manner that is thoughtful for my personal needs		.582
10. My lead behaved in a manner that is thoughtful for my professional needs		.211
11. My lead gave the opportunities to the team members to take personal responsibility for the effectiveness of the team		.230
12. My lead motivated the team members to frequently go beyond what is required and take initiatives		.302
<b>13. My lead is having relationship-building competencies, and help new team members to easily get along with the team</b>		<b>.741</b>

Once the Question number 13 is ignored, Cronbach's Alpha reach to an acceptable level of 0.714.

Table 4.21 Validity and Reliability of the Instrument (Employee) Updated – Personality and Behavior (CodeRed/ Critical Projects)

<b>Case Processing Summary</b>			
		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.741	.692	4

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types (Leaders)**

Table 4.22 Validity and Reliability of the Instrument (Leads) – Personality and Behavior (CodeRed/ Critical Projects)

		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha <sup>a</sup>	Cronbach's Alpha Based on Standardized Items <sup>a</sup>	N of Items
-.469	-.449	5

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 4.23 Item Total Statistics (Leads) – Personality and Behavior (CodeRed/ Critical Projects)

	Cronbach's Alpha if Item Deleted
9. I am considering/ thoughtful for my team/ subordinates' personal needs	-1.011 <sup>a</sup>
10. I am considering/ thoughtful for my team/ subordinates' professional needs	-.178 <sup>a</sup>
<b>11. I have given the opportunity to my team members to take personal responsibility for the effectiveness of the team</b>	<b>.107</b>
12. I motivate team members to go beyond what is required and take initiatives	-1.043 <sup>a</sup>
13. I am confidence about my relationship-building competencies, and I help new team members to easily get along with the team	-.038 <sup>a</sup>

Even after the Question number 11 is ignored, Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95.

Table 4.24 Validity and Reliability of the Instrument (Leads) Updated – Personality and Behavior (CodeRed/ Critical Projects)

		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.107	.337	4

a. Listwise deletion based on all variables in the procedure.

### 4.3.1.2 Reliability Results of Situations/ Nature of Task

Situation/ Nature of Tasks factors are analyzed by question number 22 to 26 in both the questionnaires aimed for employees and leaders.

**For all the Project Types**

**For all the Project Types (Employees)**

Table 4.25 Validity and Reliability of the Instrument (Employee) – Situation/ Nature of Tasks (All the Project Types)

		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.857	.864	5

a. Listwise deletion based on all variables in the procedure.

**For all the Project Types (Leaders)**

Table 4.26 Validity and Reliability of the Instrument (Leads) – Situation/ Nature of Tasks (All the Project Types)

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.907	.913	5

a. Listwise deletion based on all variables in the procedure.

**For the New and Unstable Project Types**

**For the New and Unstable Project Types (Employees)**

Table 4.27 Validity and Reliability of the Instrument (Employee) – Situation/ Nature of Tasks (New and Unstable Projects)

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
	Total	37	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.842	.850	5

a. Listwise deletion based on all variables in the procedure.

**For the New and Unstable Project Types (Leaders)**

Table 4.28 Validity and Reliability of the Instrument (Leads) – Situation/ Nature of Tasks (New and Unstable Projects)

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.827	.773	5

**For the Stable and Long Run Project Types**

**For the Stable and Long Run Project Types (Employees)**

Table 4.29 Validity and Reliability of the Instrument (Employee) – Situation/ Nature of Tasks (Stable & Long Run Projects)

		N	%
Cases	Valid	121	100.0
	Excluded <sup>a</sup>	0	.0
	Total	121	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.879	.884	5

**For the Stable and Long Run Project Types (Leaders)**

Table 4.30 Validity and Reliability of the Instrument (Leads) – Situation/ Nature of Tasks (Stable & Long Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.921	.929	5

**For the CodeRed (Critical) Project Types**

**For the CodeRed (Critical) Project Types (Employees)**

Table 4.31 Validity and Reliability of the Instrument (Employee) – Situation/ Nature of Tasks (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.677	.684	5

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.



Table 4.32 Item Total Statistics (Employee) – Situation/ Nature of Tasks (CodeRed/ Critical Projects)

<b>Item-Total Statistics</b>		Cronbach's Alpha if Item Deleted
<b>22. My lead implemented specific plans to help the team, assume their new responsibilities when the roles changed</b>		<b>.677</b>
23. My lead make sure that overlapping or shared tasks and responsibilities do not create problems for team members		.577
24. My lead trusted me and let me to make the appropriate decisions in my job		.638
25. My lead gave me special recognition when my work is very good		.595
26. We celebrated even a simple achievement of the team member(s)		.627

Even after the Question number 22 is ignored, Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95.

**For the CodeRed (Critical) Project Types (Leaders)**

Table 4.33 Validity and Reliability of the Instrument (Leads) Updated – Situation/ Nature of Tasks (CodeRed/ Critical Projects)

<b>Case Processing Summary</b>			
		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

a. Listwise deletion based on all variables in the procedure.

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.828	.839	5

### 4.3.1.3 Reliability Results of Experience/ Expertise/ Competency

Experience/ Expertise/ Competency factors are analyzed by question number 27 to 30 of both the questionnaires aimed for employees and leaders.

#### For all the Project Types

#### For all the Project Types (Employees)

Table 4.34 Validity and Reliability of the Instrument (Employee) – Experience/ Expertise/ Competency (All the Project Types)

		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.846	.847	4

#### For all the Project Types (Leaders)

Table 4.35 Validity and Reliability of the Instrument (Leads) – Experience/ Expertise/ Competency (All the Project Types)

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.863	.877	4

**For the New and Unstable Project Types**

**For the New and Unstable Project Types (Employees)**

Table 4.36 Validity and Reliability of the Instrument (Employee) – Experience/ Expertise/ Competency (New and Unstable Projects)

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
	Total	37	100.0

a. Listwise deletion based on all variables in the procedure.

		Cronbach's Alpha	
		Based on	
		Standardized	
Cronbach's Alpha	Items		N of Items
.838	.840		4

**For the New and Unstable Project Types (Leaders)**

Table 4.37 Validity and Reliability of the Instrument (Leads) – Experience/ Expertise/ Competency (New and Unstable Projects)

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

a. Listwise deletion based on all variables in the procedure.

		Cronbach's Alpha	
		Based on	
		Standardized	
Cronbach's Alpha <sup>a</sup>	Items <sup>a</sup>		N of Items
-3.000	-5.290		4

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.38 Item Total Statistics (Leads) – Experience/ Expertise/ Competency (New and Unstable Projects)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
27. I am giving the opportunities and motivate the team to come up with their ideas on the given tasks in different perspectives		-.353 <sup>a</sup>
28. I have simulated situations when appropriate with the individuals and let them look at the old problems in new ways		-1.875 <sup>a</sup>
29. I conduct/ make arrangements for essential training and development programs for my team when required		.
30. I keep track on skill gap analysis of every team member		-.353 <sup>a</sup>

**For the Stable and Long Run Project Types**

**For the Stable and Long Run Project Types (Employees)**

Table 4.39 Validity and Reliability of the Instrument (Employee) – Experience/ Expertise/ Competency (Stable & Long Run Projects)

Case Processing Summary			
		N	%
Cases	Valid	121	100.0
	Excluded <sup>a</sup>	0	.0
	Total	121	100.0

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.858	.858	4

a. Listwise deletion based on all variables in the procedure.

**For the Stable and Long Run Project Types (Leaders)**

Table 4.40 Validity and Reliability of the Instrument (Leads) – Experience/ Expertise/ Competency (Stable & Long Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.916	.924	4

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types**

**For the CodeRed (Critical) Project Types (Employees)**

Table 4.41 Validity and Reliability of the Instrument (Leads) – Experience/ Expertise/ Competency (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.696	.706	4

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.42 Item Total Statistics (Employee) – Experience/ Expertise/ Competency  
(CodeRed/ Critical Projects)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
27. My lead exposed ideas that have forced me to rethink some of my own ideas I have never questioned before		.580
28. My lead has stimulated me to think about old problems in new ways		.660
29. My lead conducted/ made arrangements for essential training and development programs when required		.622
30. My lead kept track on skill gap analysis of every team member		.669

Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95. Removing any of the questions doesn't make any deference to the existing Cronbach's Alpha value.

**For the CodeRed (Critical) Project Types (Leaders)**

Table 4.43 Validity and Reliability of the Instrument (Leads) – Experience/ Expertise/  
Competency (CodeRed/ Critical Projects)

Case Processing Summary			
		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.816	.862	4

### 4.3.1.4 Reliability Results of Organization/ Project Culture

Organization/ Project Culture factors are analyzed by question number 31 to 34 of both the questionnaires aimed for employees and leaders.

#### For all the Project Types

#### For all the Project Types (Employees)

Table 4.44 Validity and Reliability of the Instrument (Leads) – Organization/ Project Culture (All the Project Types)

Case Processing Summary				Reliability Statistics		
		N	%	Cronbach's Alpha		
Cases	Valid	187	100.0	Cronbach's Alpha Based on Standardized Items	Cronbach's Alpha	N of Items
	Excluded <sup>a</sup>	0	.0			
	Total	187	100.0			
				.324	.311	4

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.44 Item Total Statistics (Employee) – Organization/ Project Culture (All the Project Types)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I can reach any level of leadership of the company for my concerns		.184
<b>32. I have a positive experience of getting my problem resolved after having discussions with my lead</b>		.460
33. I had to seek my skip level managers(senior person to my reporting manager) / company managers to get my problems resolved		.367
34. My company is having HR policies to cope with Employees' Grievances and any related problems of employees		-.107 <sup>a</sup>

Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95. Removing any of the questions doesn't make any deference to the existing Cronbach's Alpha value. But removing

question number 32 increase the Cronbach's Alpha value to 0.460.

Table 4.45 Validity and Reliability of the Instrument (Employee) Updated – Organization/ Project Culture (All the Project Types)

**Case Processing Summary**

		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.460	.454	3

**For all the Project Types (Leaders)**

Table 4.46 Validity and Reliability of the Instrument (Leads) – Organization/ Project Culture (All the Project Types)

**Case Processing Summary**

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.315	.077	4

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.



Table 4.47 Item Total Statistics (Leads) – Organization/ Project Culture (All the Project Types)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I motivate my team to reach any level of leadership of the company for their concerns		.156
<b>32. I sort out the issues that my subordinates bring to me</b>		.687
33. My subordinates should seek their skip level managers (my reporting manager)/ company managers to get their problems solved		-.310 <sup>a</sup>
34. My company is having HR policies to cope with Employees' Grievances and any related problems of employees		-.175 <sup>a</sup>

Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95. Removing any of the questions doesn't make any deference to the existing Cronbach's Alpha value. But removing question number 32 will results 0.687, which is a better value than 0.315.

Table 4.48 Validity and Reliability of the Instrument (Leads) Updated – Organization/ Project Culture (All the Project Types)

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.687	.693	3

a. Listwise deletion based on all variables in the procedure.

**For the New and Unstable Project Types**

**For the New and Unstable Project Types (Employees)**

Table 4.49 Validity and Reliability of the Instrument (Employee) – Organization/ Project Culture (New and Unstable Projects)

Case Processing Summary				Reliability Statistics	
		N	%	Cronbach's Alpha <sup>a</sup>	N of Items
Cases	Valid	37	100.0	-.214	4
	Excluded <sup>a</sup>	0	.0		
	Total	37	100.0		

a. Listwise deletion based on all variables in the procedure.

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

According to Tavakol & Dennick (2011), Cronbach’s Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.50 Item Total Statistics (Employee) – Organization/ Project Culture (New and Unstable Projects)

Item-Total Statistics	
	Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I can reach any level of leadership of the company for my concerns	-.045 <sup>a</sup>
32. I have a positive experience of getting my problem resolved after having discussions with my lead	-.630 <sup>a</sup>
<b>33. I had to seek my skip level managers (senior person to my reporting manager) / company managers to get my problems resolved</b>	.276
34. My company is having HR policies to cope with Employees’ Grievances and any related problems of employees	-.575 <sup>a</sup>

Cronbach's Alpha doesn’t reach an acceptable level of 0.7 to 0.95. Removing any of the questions doesn’t make any deference to the existing Cronbach's Alpha value. But removing question number 33 increase the Cronbach's Alpha value to 0.276.

Table 4.51 Validity and Reliability of the Instrument (Employee) Updated – Organization/ Project Culture (New and Unstable Projects)

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
	Total	37	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.276	.312	3

### **For the New and Unstable Project Types (Leaders)**

Table 4.52 Validity and Reliability of the Instrument (Leads) – Organization/ Project Culture (New and Unstable Projects)

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.319	.148	4

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.53 Item Total Statistics (Leads) – Organization/ Project Culture (New and Unstable Projects)

	Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I motivate my team to reach any level of leadership of the company for their concerns	.369
32. I sort out the issues that my subordinates bring to me	.113
33. My subordinates should seek their skip level managers (my reporting manager)/ company managers to get their problems solved	-.844 <sup>a</sup>
<b>34. My company is having HR policies to cope with Employees' Grievances and any related problems of employees</b>	.606

Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95. Removing any of the questions doesn't make any deference to the existing Cronbach's Alpha value. But removing

question number 34 will results 0.606, which is a better value than 0.319.

Table 4.54 Validity and Reliability of the Instrument (Leads) Updated – Organization/  
Project Culture (New and Unstable Projects)

Case Processing Summary				Reliability Statistics		
		N	%	Cronbach's Alpha Based on Standardized		
Cases	Valid	6	100.0	Cronbach's Alpha	Items	N of Items
	Excluded <sup>a</sup>	0	.0	.606	.610	3
	Total	6	100.0			

a. Listwise deletion based on all variables in the procedure.

It is noticed that if the question number 32 is removed along with 34, the Cronbach's Alpha value reached to the acceptable level of 0.935.

Table 4.55 Validity and Reliability of the Instrument (Leads) Updated – Organization/  
Project Culture (New and Unstable Projects)

Item-Total Statistics	
	Cronbach's Alpha if Item Deleted
<b>31. My organization practically implemented open door policies and I motivate my team to reach any level of leadership of the company for their concerns</b>	<b>.935</b>
32. I sort out the issues that my subordinates bring to me	.453
33. My subordinates should seek their skip level managers (my reporting manager)/ company managers to get their problems solved	-.333 <sup>a</sup>

**For the Stable and Long Run Project Types**

**For the Stable and Long Run Project Types (Employees)**

Table 4.56 Validity and Reliability of the Instrument (Employee) – Organization/ Project Culture (Stable & Long Run Projects)

Case Processing Summary			Reliability Statistics		
		N	%		
Cases	Valid	121	100.0	Cronbach's Alpha	
	Excluded <sup>a</sup>	0	.0	Based on	
	Total	121	100.0	Standardized	
				Items	N of Items
				.407	.405
					4

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach’s Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.57 Item Total Statistics (Employee) – Organization/ Project Culture (Stable & Long Run Projects)

Item-Total Statistics	
	Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I can reach any level of leadership of the company for my concerns	.283
<b>32. I have a positive experience of getting my problem resolved after having discussions with my lead</b>	.555
33. I had to seek my skip level managers (senior person to my reporting manager) / company managers to get my problems resolved	.400
34. My company is having HR policies to cope with Employees’ Grievances and any related problems of employees	-.024 <sup>a</sup>

Table 4.58 Validity and Reliability of the Instrument (Employee) Updated – Organization/ Project Culture (Stable & Long Run Projects)

		N	%
Cases	Valid	121	100.0
	Excluded <sup>a</sup>	0	.0
	Total	121	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.555	.552	3

Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95. Removing any of the questions doesn't make any deference to the existing Cronbach's Alpha value. But removing question number 32 increase the Cronbach's Alpha value to 0.555.

**For the Stable and Long Run Project Types (Leaders)**

Table 4.59 Validity and Reliability of the Instrument (Leads) – Organization/ Project Culture (Stable & Long Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items <sup>a</sup>	N of Items
.409	-.310	4

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.60 Item Total Statistics (Leads) – Organization/ Project Culture (Stable & Long Run Projects)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I motivate my team to reach any level of leadership of the company for their concerns		.347
<b>32. I sort out the issues that my subordinates bring to me</b>		.714
33. My subordinates should seek their skip level managers (my reporting manager)/ company managers to get their problems solved		-.389 <sup>a</sup>
34. My company is having HR policies to cope with Employees' Grievances and any related problems of employees		-.056 <sup>a</sup>

Even after the Question number 32 is ignored, Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95.

Table 4.61 Validity and Reliability of the Instrument (Leads) Updated – Organization/ Project Culture (Stable & Long Run Projects)

Case Processing Summary			
		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.714	.721	3

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types**

**For the CodeRed (Critical) Project Types (Employees)**

Table 4.62 Validity and Reliability of the Instrument (Employee) – Organization/ Project Culture (CodeRed/ Critical Projects)

Case Processing Summary				Reliability Statistics		
		N	%			
Cases	Valid	29	100.0			
	Excluded <sup>a</sup>	0	.0			
	Total	29	100.0			
				Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
				.222	.120	4

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach’s Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.63 Item Total Statistics (Employee) – Organization/ Project Culture (CodeRed/ Critical Projects)

Item-Total Statistics	
	Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I can reach any level of leadership of the company for my concerns	-.582 <sup>a</sup>
<b>32. I have a positive experience of getting my problem resolved after having discussions with my lead</b>	.518
33. I had to seek my skip level managers (senior person to my reporting manager) / company managers to get my problems resolved	.317
34. My company is having HR policies to cope with Employees’ Grievances and any related problems of employees	-.167 <sup>a</sup>

After the Question number 32 is ignored, Cronbach's Alpha doesn't reach an acceptable level of 0.7 to 0.95.



Table 4.64 Validity and Reliability of the Instrument (Employee) Updated – Organization/ Project Culture (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.518	.519	3

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types (Leaders)**

Table 4.65 Validity and Reliability of the Instrument (Leads) – Organization/ Project Culture (CodeRed/ Critical Projects)

		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.310	.130	4

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.66 Item Total Statistics (Leads) – Organization/ Project Culture (CodeRed/ Critical Projects)

	Cronbach's Alpha if Item Deleted
31. My organization practically implemented open door policies and I motivate my team to reach any level of leadership of the company for their concerns	-1.241 <sup>a</sup>
<b>32. I sort out the issues that my subordinates bring to me</b>	<b>.757</b>
33. My subordinates should seek their skip level managers (my reporting manager)/ company managers to get their problems solved	.251
34. My company is having HR policies to cope with Employees' Grievances and any related problems of employees	-.583 <sup>a</sup>

After the Question number 32 is ignored, Cronbach's Alpha reached an acceptable level of 0.7 to 0.95.

Table 4.67 Validity and Reliability of the Instrument (Leads) Updated – Organization/ Project Culture (CodeRed/ Critical Projects)

Case Processing Summary				Reliability Statistics		
		N	%		Cronbach's Alpha Based on Standardized Items	N of Items
Cases	Valid	8	100.0	Cronbach's Alpha		
	Excluded <sup>a</sup>	0	.0			
	Total	8	100.0	.757	.723	3

a. Listwise deletion based on all variables in the procedure.

### 4.3.2 Performance

#### 4.3.2.1 Reliability Results of Interaction/ Interpersonal Skills/ Team Player

Interaction/ Interpersonal Skills/ Teams Player factors are analyzed by question number 14 to 16 of both the questionnaires aimed for employees and leaders.

#### For all the Project Types

#### For all the Project Types (Employees)

Table 4.68 Validity and Reliability of the Instrument (Employee) – Interaction/ Interpersonal Skills/ Teams Player (All the Project Types)

Case Processing Summary				Reliability Statistics		
		N	%		Cronbach's Alpha Based on Standardized Items	N of Items
Cases	Valid	187	100.0	Cronbach's Alpha		
	Excluded <sup>a</sup>	0	.0			
	Total	187	100.0	.678	.675	3

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.69 Item Total Statistics (Employee) – Interaction/ Interpersonal Skills/ Teams Player (All the Project Types)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
14. My lead always work on developing team attitude and spirit of the team		.523
15. Myself and my team were rewarded for being team players		.478
<b>16. We were collaborating with other teams (Dev/ QA/ BA/ PM etc.) to reach the project goal</b>		<b>.717</b>

After the Question number 16 is ignored, Cronbach's Alpha reached an acceptable level of 0.7 to 0.95.

Table 4.70 Validity and Reliability of the Instrument (Employee) Updated – Interaction/ Interpersonal Skills/ Teams Player (All the Project Types)

Case Processing Summary			
		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.717	.717	2

a. Listwise deletion based on all variables in the procedure.

**For all the Project Types (Leaders)**

Table 4.71 Validity and Reliability of the Instrument (Leads) – Interaction/ Interpersonal Skills/ Teams Player (All the Project Types)

Case Processing Summary			
		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.739	.746	3

a. Listwise deletion based on all variables in the procedure.

**For the New and Unstable Project Types**

**For the New and Unstable Project Types (Employees)**

Table 4.72 Validity and Reliability of the Instrument (Employee) – Interaction/ Interpersonal Skills/ Teams Player (New and Unstable Projects)

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
Total		37	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.707	.720	3

a. Listwise deletion based on all variables in the procedure.

**For the New and Unstable Project Types (Leaders)**

Table 4.73 Validity and Reliability of the Instrument (Leads) – Interaction/ Interpersonal Skills/ Teams Player (New and Unstable Projects)

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
Total		6	100.0

Cronbach's Alpha <sup>a</sup>	Cronbach's Alpha Based on Standardized Items <sup>a</sup>	N of Items
-1.875	-1.701	3

a. Listwise deletion based on all variables in the procedure.

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 4.74 Item Total Statistics (Leads) – Interaction/ Interpersonal Skills/ Teams Player (New and Unstable Projects)

<b>Item-Total Statistics</b>		Cronbach's Alpha if Item Deleted
14. I always consider and work on developing team attitude and spirit of the team		-2.600 <sup>a</sup>
15. My team is always rewarded for being team players		-.941 <sup>a</sup>
16. It is my responsibility to build up the relationship with other teams and we are collaborating with other teams (Dev/ QA/ BA/ PM etc.) to reach the project goal		.195

Table 4.75 Validity and Reliability of the Instrument (Leads) Updated – Interaction/ Interpersonal Skills/ Teams Player (New and Unstable Projects)

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.195	.232	2

a. Listwise deletion based on all variables in the procedure.

**For the Stable and Long Run Project Types**

**For the Stable and Long Run Project Types (Employees)**

Table 4.76 Validity and Reliability of the Instrument (Employee) – Interaction/ Interpersonal Skills/ Teams Player (Stable & Long Run Projects)

		N	%
Cases	Valid	121	100.0
	Excluded <sup>a</sup>	0	.0
	Total	121	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.713	.712	3

a. Listwise deletion based on all variables in the procedure.

**For the Stable and Long Run Project Types (Leaders)**

Table 4.77 Validity and Reliability of the Instrument (Leads) – Interaction/ Interpersonal Skills/ Teams Player (Stable & Long Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.898	3

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types**

**For the CodeRed (Critical) Project Types (Employees)**

Table 4.78 Validity and Reliability of the Instrument (Employee) – Interaction/ Interpersonal Skills/ Teams Player (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.286	.286	3

a. Listwise deletion based on all variables in the procedure.

According to Tavakol & Dennick (2011), Cronbach's Alpha should be in between 0.7 and 0.95. So, this is not within the acceptable level of validity.

Table 4.79 Item Total Statistics (Employee) – Interaction/ Interpersonal Skills/ Teams Player (CodeRed/ Critical Projects)

<b>Item-Total Statistics</b>		Cronbach's Alpha if Item Deleted
14. My lead always work on developing team attitude and spirit of the team		.316
15. Myself and my team were rewarded for being team players		-.322 <sup>a</sup>
16. We were collaborating with other teams (Dev/ QA/ BA/ PM etc.) to reach the project goal		.457

Table 4.80 Validity and Reliability of the Instrument (Employee) Updated – Interaction/ Interpersonal Skills/ Teams Player (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.457	.483	2

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types (Leaders)**

Table 4.81 Validity and Reliability of the Instrument (Leads) – Interaction/ Interpersonal Skills/ Teams Player (CodeRed/ Critical Projects)

		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.804	.819	3

a. Listwise deletion based on all variables in the procedure.

### 4.3.2.2 Reliability Results of Communication/ Feedback

Communication/ Feedback factors are analyzed by question number 17 to 21 of both the questionnaires aimed for employees and leaders.

#### For all the Project Types

#### For all the Project Types (Employees)

Table 4.82 Validity and Reliability of the Instrument (Employee) – Communication/ Feedback (All the Project Types)

		N	%
Cases	Valid	187	100.0
	Excluded <sup>a</sup>	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.839	.840	5

#### For all the Project Types (Leaders)

Table 4.83 Validity and Reliability of the Instrument (Leads) – Communication/ Feedback (All the Project Types)

		N	%
Cases	Valid	35	100.0
	Excluded <sup>a</sup>	0	.0
	Total	35	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.859	.857	5



**For the New and Unstable Project Types**

**For the New and Unstable Project Types (Employees)**

Table 4.84 Validity and Reliability of the Instrument (Employee) – Communication/ Feedback (New and Unstable Projects)

**Case Processing Summary**

		N	%
Cases	Valid	37	100.0
	Excluded <sup>a</sup>	0	.0
	Total	37	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.854	.859	5

**For the New and Unstable Project Types (Leaders)**

Table 4.85 Validity and Reliability of the Instrument (Leads) – Communication/ Feedback (New and Unstable Projects)

**Case Processing Summary**

		N	%
Cases	Valid	6	100.0
	Excluded <sup>a</sup>	0	.0
	Total	6	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha <sup>a</sup>	Cronbach's Alpha Based on Standardized Items <sup>a</sup>	N of Items
-.061	-.207	5

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 4.86 Item Total Statistics (Leads) – Communication/ Feedback (New and Unstable Projects)

Item-Total Statistics		Cronbach's Alpha if Item Deleted
17. I make sure that our team meetings are very productive and address to the points		-.092 <sup>a</sup>
18. I am giving constructive feedback to my team and motivate them to seek feedback from the other team members		-.933 <sup>a</sup>
19. I encourage and lead the team to review the completed tasks and even the mistakes, as they are opportunities for learning and growth		.182
20. I frequently acknowledge my team members' good performance		.182
21. I am giving my team's performance appraisal feed-backs without any delay		-.092 <sup>a</sup>

**For the Stable and Long Run Project Types**

**For the Stable and Long Run Project Types (Employees)**

Table 4.87 Validity and Reliability of the Instrument (Employee) – Communication/ Feedback (Stable & Long Run Projects)

		N	%
Cases	Valid	121	100.0
	Excluded <sup>a</sup>	0	.0
	Total	121	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.844	.845	5

a. Listwise deletion based on all variables in the procedure.

**For the Stable and Long Run Project Types (Leaders)**

Table 4.88 Validity and Reliability of the Instrument (Leads) – Communication/ Feedback (Stable & Long Run Projects)

		N	%
Cases	Valid	21	100.0
	Excluded <sup>a</sup>	0	.0
	Total	21	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.828	.838	5

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types**

**For the CodeRed (Critical) Project Types (Employees)**

Table 4.89 Validity and Reliability of the Instrument (Employee) – Communication/ Feedback (CodeRed/ Critical Projects)

		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.790	.792	5

a. Listwise deletion based on all variables in the procedure.

**For the CodeRed (Critical) Project Types (Leaders)**

Table 4.90 Validity and Reliability of the Instrument (Leads) – Communication/ Feedback (CodeRed/ Critical Projects)

		N	%
Cases	Valid	8	100.0
	Excluded <sup>a</sup>	0	.0
	Total	8	100.0

Cronbach's Alpha	Based on Standardized Items	N of Items
.924	.928	5

a. Listwise deletion based on all variables in the procedure.

**4.4 Demographic Analysis**

Results presentation demonstrates following main steps:

1. Presentation and interpretation of the distribution of demographic variables
2. Presentation and interpretation of the distribution of independent variables
3. Presentation and interpretation of the relationships among the variables
4. Presentation and interpretation of the results of hypothesis testing

**4.4.1 Presentation and Interpretation of Demographic Variables**

To begin with the presentation of collected data, results regarding the demographic variables are interpreted in relation to age, gender, designation and service years of the respondent in the industry.

**4.4.1.1 Age of the Respondents**

According to the table 4.93 and to the figure 4.3, most of the IT professionals in the sample belong to the age group of 25-30 years, which is 72.7%. Along with these statistics and according to other general statistics in the country, it is apparent in the IT sector of Sri Lanka that many young graduates are drastically moving to the IT related professions mainly due to the tech- savvy nature of the modern generation. Correspondingly, IT and similar technology related companies are more willing to recruit young professionals for their entry level jobs. On the other hand, only 2.1% of professionals represent the age group of 35 - 40 years, which

again proves that the demand for the talent in IT related jobs are higher for youngsters but not for aged personnel. The aged professionals are mostly representing the senior management level of the companies.

And to the 4.94 and to the figure 4.4, the age statics of the leaders of the industry indicate that there are no or less number of leaders form below 25 ae categories while 30 to 35 age categories is having a 48.57%. Both less than 30 years and greater than 35 categories are having 25.71% of the leaders according to the received responses.

### Employee Respondents

Table 4.91 Age (Employees)

		1. Age (years)			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	< 25	15	8.0	8.0	8.0
	25 to 30	136	72.7	72.7	80.7
	30 to 35	32	17.1	17.1	97.9
	35 to 40	4	2.1	2.1	100.0
	Total	187	100.0	100.0	

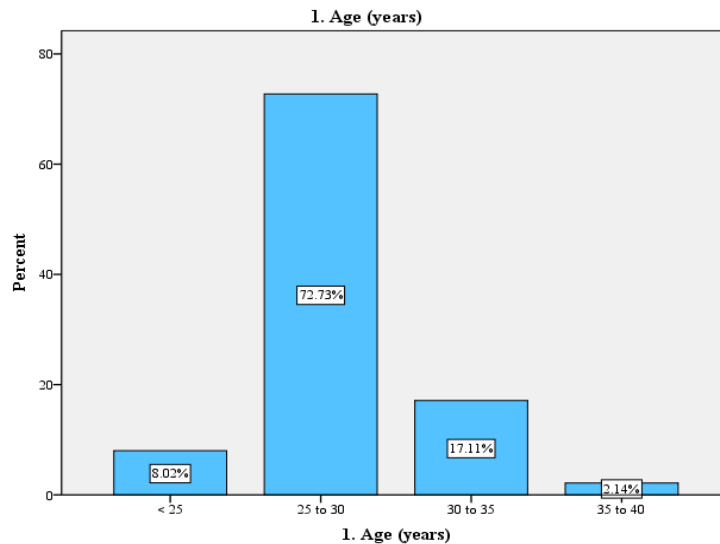


Figure 4.3 Age (Employee)

## Leader Respondents

Table 4.92 Age (Leads)

		1. Age (years)- Leads			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25 to 30	9	25.7	25.7	25.7
	30 to 35	17	48.6	48.6	74.3
	35 to 40	9	25.7	25.7	100.0
Total		35	100.0	100.0	

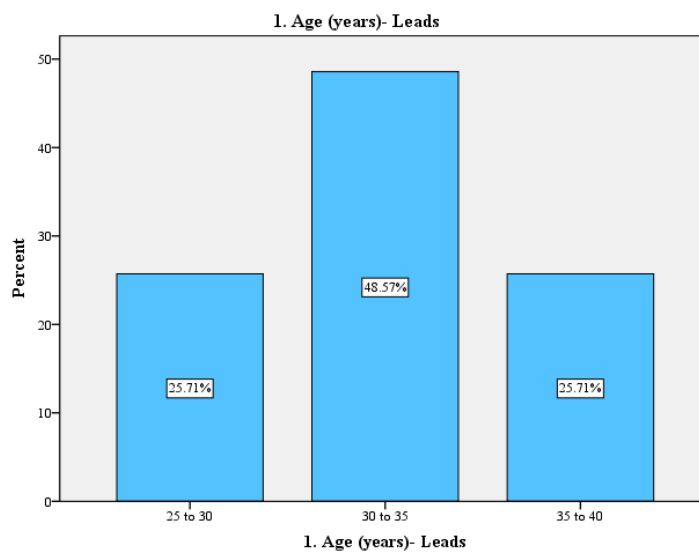


Figure 4.4 Age (Leads)

### 4.4.1.2 Gender of the Respondents

As demonstrated in 4.95 and to the figure 4.5, a drastic difference of male IT professionals and female IT professionals not seems in Sri Lankan IT sector. Thus, the sample represents 36.4% of females but number of males is higher to a little extent where 63.6% of males were included in the sample. However, in real world scenario, many of the technical related jobs are highly attractive for the males than females. And, the distribution of the leaders according to the gender also demonstrate similar results as in 4.96 and to the figure 4.6 where 28.6% of the responders are women while 71.4% represents males. Apart from the sample data as demonstrated in the survey results, industry observations show a higher number of males in the IT sector.

## Employee Respondents

Table 4.93 Gender (Employee)

		2. Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	68	36.4	36.4	36.4
	Male	119	63.6	63.6	100.0
	Total	187	100.0	100.0	

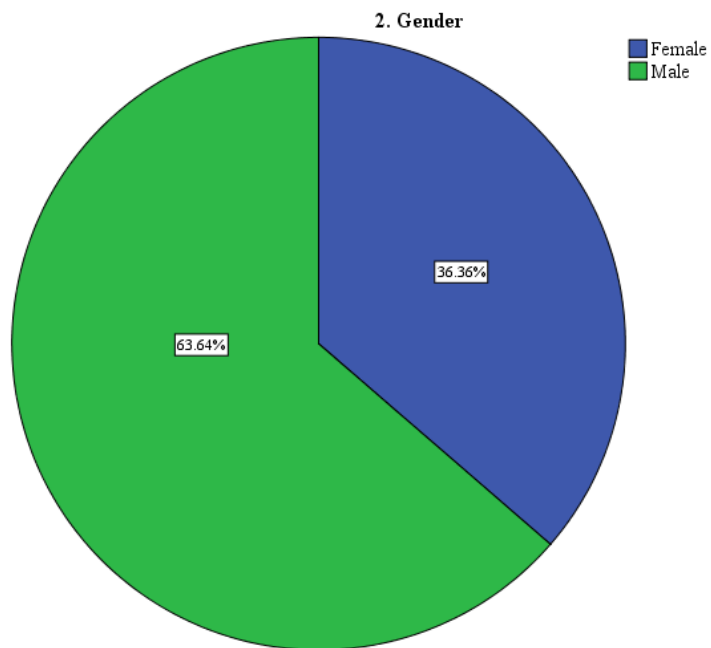


Figure 4.5 Gender (Employees)

## Leader Respondents

Table 4.94 Gender (Leads)

		2. Gender - Leads			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	10	28.6	28.6	28.6
	Male	25	71.4	71.4	100.0
	Total	35	100.0	100.0	

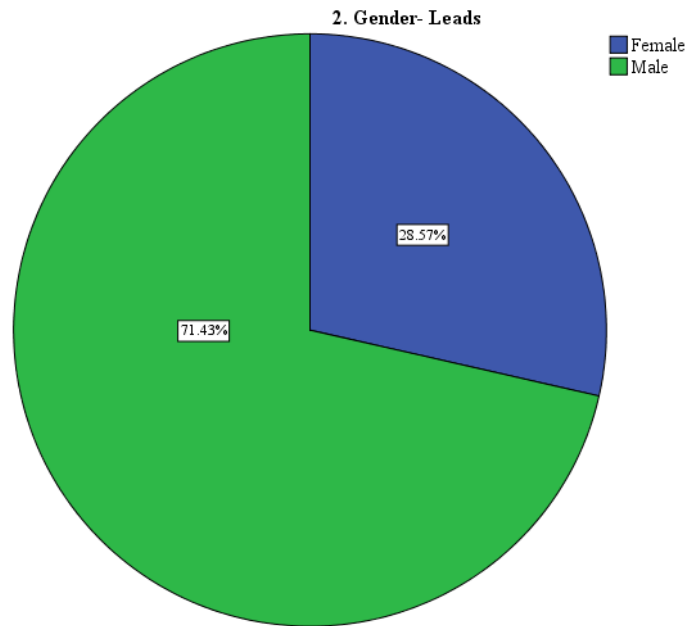


Figure 4.6 Gender (Leads)

#### 4.4.1.3 Designation of the Respondents

The representative sample includes a majority of engineer or similar professionals, i.e. 63.6%, where it is apparent that many of the personnel in IT and specially project based IT sector are engineers. A lesser number of managerial or senior managerial professionals can be identified in the sample, which implies that those senior job levels are lesser in number, not in IT sector, but almost in all other sectors as well. However, since this study evaluates the leadership qualities and employee performances, it was vital to select managerial and senior level professionals for the sample. Most importantly, team leaders represent 15% of the sample, who are important in final data analysis and interpretation purposes of the study. Representation details are illustrated in table 4.97 and to the figure 4.7 below.

And when considering the sample data set of the leaders; table 4.98 and to the figure 4.8 illustrates that more than 60% of the respondents are consultants. And the team leads are around 20 while manager level employees are around 15%. The recent designation change in employee hierarchy of a giant IT organization in the country could be a reason for having a considerable high number of consultants than the team leads. Since there is a change in the higher-level position of engineer designation to a lower level position of consultant and increase in the number of tires within the consultant designation.



## Employee Respondents

Table 4.95 Designation (Employee)

		4. Designation			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Consultant or Similar	36	19.3	19.3	19.3
	Engineer or Similar	119	63.6	63.6	82.9
	Manager or Similar	2	1.1	1.1	84.0
	Senior Manager or Similar	2	1.1	1.1	85.0
	Team lead or Similar	28	15.0	15.0	100.0
	Total	187	100.0	100.0	

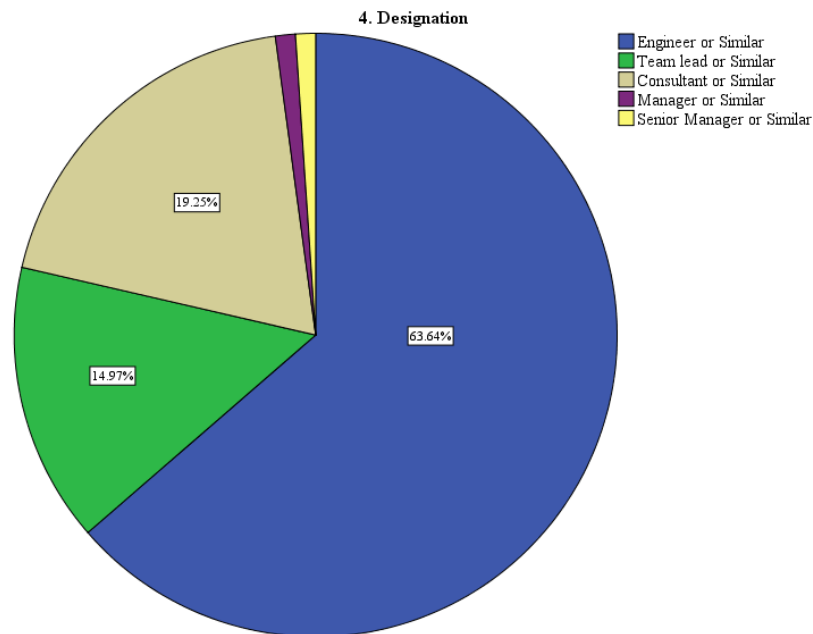


Figure 4.7 Designation (Employee)

## Leader Respondents

Table 4.96 Designation (Leads)

		4. Designation- Leads			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Consultant or Similar	22	62.9	62.9	62.9
	Manager or Similar	5	14.3	14.3	77.1
	Team lead or Similar	8	22.9	22.9	100.0
	Total	35	100.0	100.0	

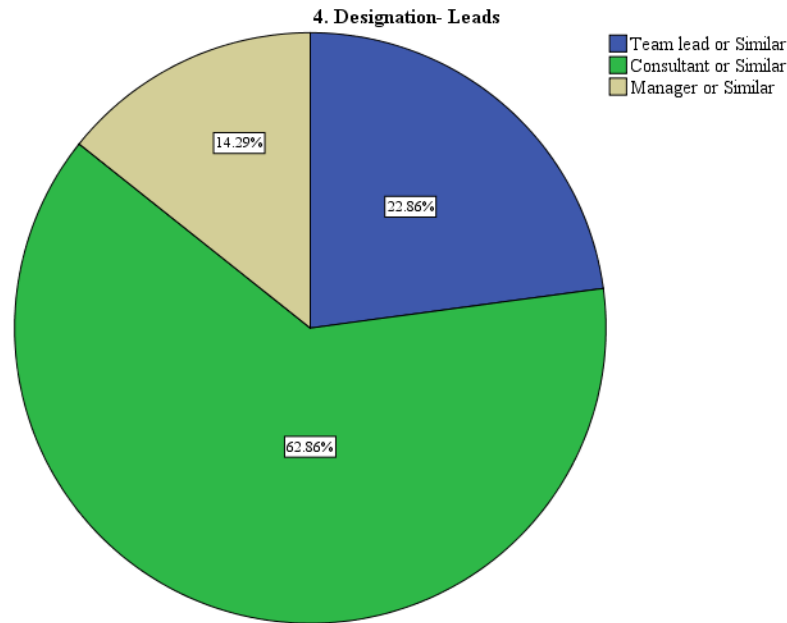


Figure 4.8 Designation (Leads)

#### 4.4.1.4 Industry Experience of the Respondents

As demonstrated in table 4.99 and to the figure 4.9, many of the professionals (i.e. 54%) who represent the sample possess 2 – 4 years of service experience in the industry. According to the general understanding, a certain period of experience is a must to be in the project based IT sector, which assist in increasing the expertise of the personnel, by then it will enhance the worth of the personnel to the industry. Significantly lesser number of personnel (i.e. 4.8%) possesses more than 8 years of industry experience. On the other way it implies that, this industry is more attractive to the young and fresh resources with novel knowledge and expertise. Moreover, due to the rapid updating of IT related knowledge and technology, many years of industry experience do not necessarily important for the operations, but fresh knowledge on fresh technologies act in contrast.

Table 4.100 and to the figure 4.10 illustrates the distribution of leads according to the years of experience and 4-8 and 8-12 groups have the higher amount while no leads below 2 years of industry experience.

## Employee Respondents

Table 4.97 Industry Experience (Employee)

5. Industry Experience (years)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 2	34	18.2	18.2	18.2
	2 to 4	101	54.0	54.0	72.2
	4 to 8	43	23.0	23.0	95.2
	8 to 12	9	4.8	4.8	100.0
	Total	187	100.0	100.0	

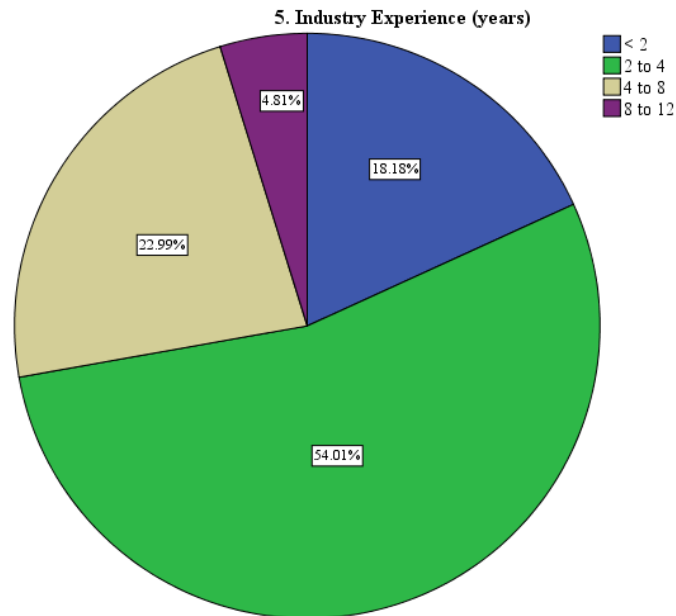


Figure 4.9 Industry Experience (Employee)

## Leader Respondents

Table 4.98 Industry Experience (Leads)

5. Industry Experience (years)- Leads					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12 +	2	5.7	5.7	5.7
	2 to 4	5	14.3	14.3	20.0
	4 to 8	9	25.7	25.7	45.7
	8 to 12	19	54.3	54.3	100.0
	Total	35	100.0	100.0	

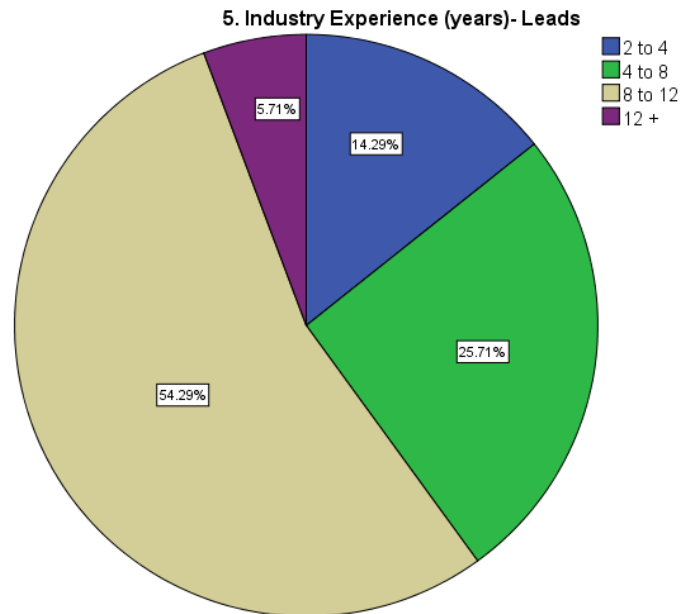


Figure 4.10 Industry Experience (Leads)

#### 4.4.1.5 Recent Project Experience of the Respondents

The study initially mentioned three main types of projects as CodeRed, New & Unstable and Stable & Long Run projects. CodeRed projects implies the most critical projects where only 15.5% of the professionals in the sample are engaged in those kinds of projects as illustrated in table 4.99 and figure 4.11. However, this percentage shows the expertise talent who can handle critical projects. Similarly, lesser number of personnel from the sample is handling new and unstable projects, which is approximately 20% from the total. In contrast, many are handling stable and long run projects (i.e. 64.7%), where risk and expertise is comparatively lower.

And in leaders' perspective, the highest contribution is on stable projects while the other project types have comparatively lesser contribution from the leads as per table 4.100 and figure 4.12. It indicated similarities with the employee distribution as well.

Employee Respondents

Table 4.99 Recent Project Experience (Employee)

**7. My recent project experience is a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid CodeRed(critical) project	29	15.5	15.5	15.5
New and unstable project	37	19.8	19.8	35.3
Stable and long run project	121	64.7	64.7	100.0
Total	187	100.0	100.0	

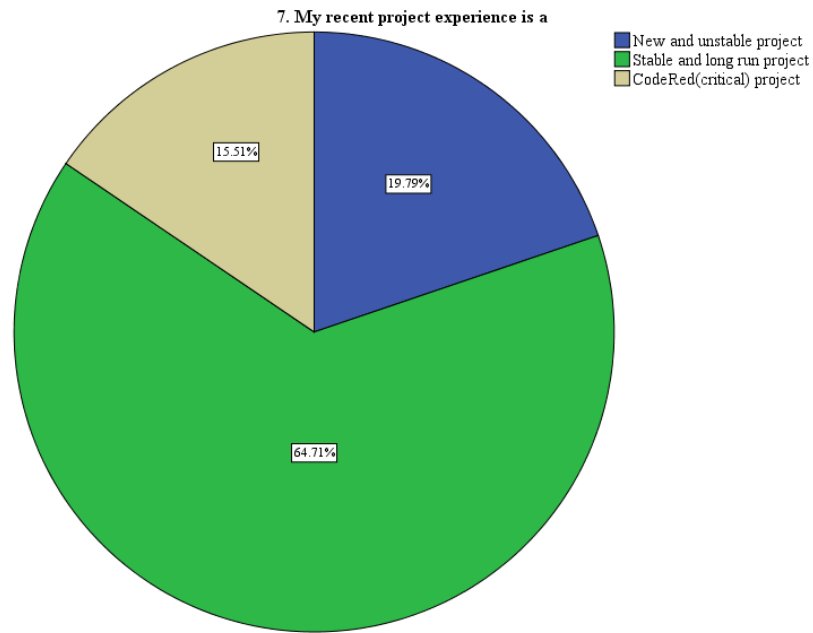


Figure 4.11 Recent Project Experience (Employee)

**Leader Respondents**

Table 4.100 Recent Project Experience (Leads)

**7. My recent project experience is a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid CodeRed(critical) project	8	22.9	22.9	22.9
New and unstable project	6	17.1	17.1	40.0
Stable and long run project	21	60.0	60.0	100.0
Total	35	100.0	100.0	

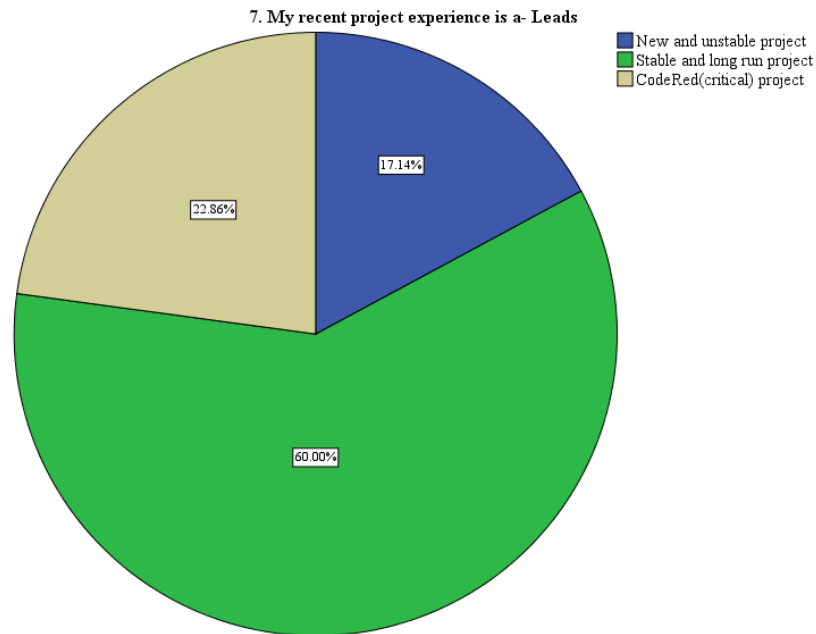


Figure 4.12 Recent Project Experience (Leads)

#### 4.4.1.6 Number of Employees in the Company

As demonstrated in table 4.103 and figure 4.13, the majority (i.e. 54%) of the sample represents the companies with more than 300 employees, and it was observed as Virtusa Polaris, WSO2, Pearson and IFS according to the comprehensive analysis of the data. In addition, 6.4% of the sample represents companies having lesser than 20 employees. And 4.104 and figure 4.14 illustrates that the lead respondent distribution is also having comparatively same status to this.

Sri Lankan IT sector comprises of several number of service providers for both product based and project based services. The sample of this study represents many of those companies including Virtusa Polaris, hSenid, Addovation, Dialog Axiata, ESI etc. Among them, the industry power as well as the sample power holds by Virtusa Polaris, where 30% of the sample representatives are employed there.

## Employee Respondents

Table 4.101 Total number of employees work for your company (Employee)

6. Total number of employees work for your company					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 20	12	6.4	6.4	6.4
	100 to 300	28	15.0	15.0	21.4
	20 to 50	27	14.4	14.4	35.8
	300 +	101	54.0	54.0	89.8
	50 to 100	19	10.2	10.2	100.0
	Total	187	100.0	100.0	

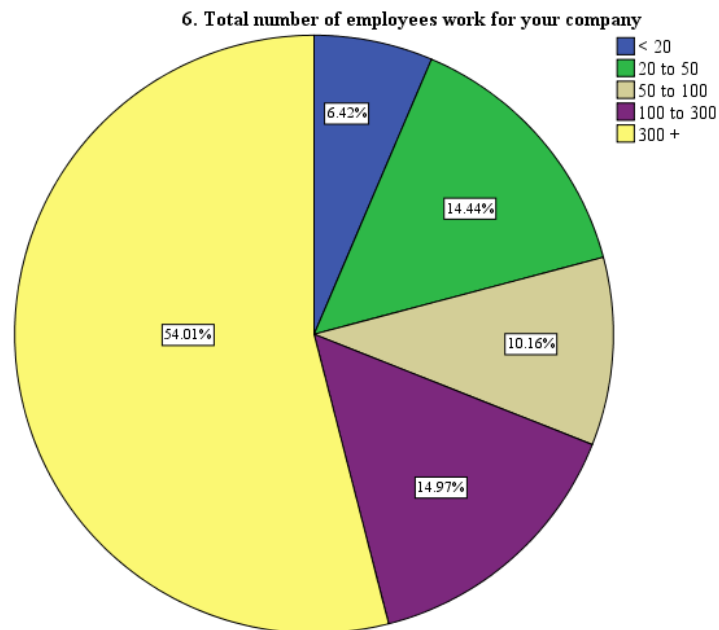


Figure 4.13 Total number of employees work for your company (Employee)

## Leader Respondents

Table 4.102 Total number of employees work for your company (Leads)

6. Total number of employees work for your company					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100 to 300	4	11.4	11.4	11.4
	20 to 50	1	2.9	2.9	14.3
	300 +	30	85.7	85.7	100.0
	Total	35	100.0	100.0	

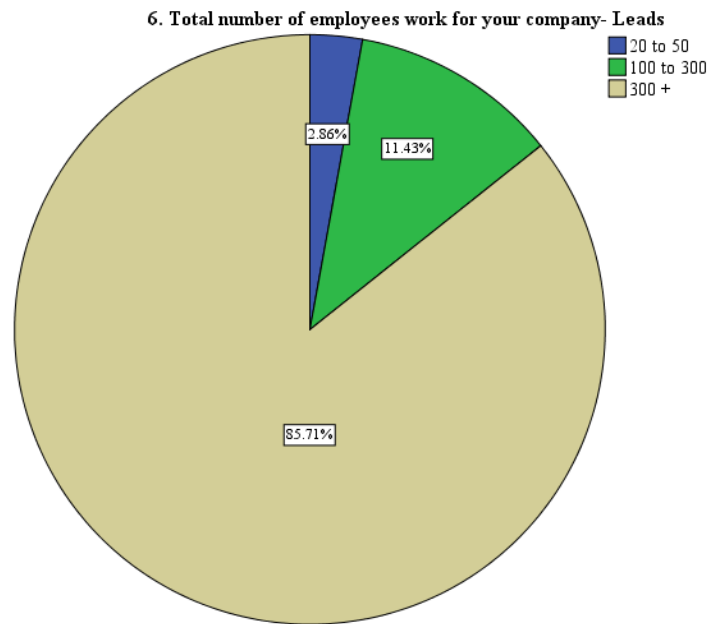


Figure 4.14 Total number of employees work for your company (Leads)

One significant feature in the employee composition and the number of the IT sector can be segregated, where unlike other organizations, even the lesser number of employees entail a higher cost. Since many of the employees are executives, engineers and professionals, rather than worker grade employees or office assistants, their cost of employment is notably higher, which may be due to the expertise knowledge and specialized project handling role.



## **4.4.2 Presentation and Interpretation of Independent/ Dependent Variables**

The distribution of frequencies of main and sub independent variables are presented in this section, while interpreting collected data according to the rules created in above 3.5.2, and while demonstrating all the results through tables and histograms by evaluating mean value, mode, median, skewness, kurtosis etc.

### **4.4.2.1 Frequency Distribution for Leadership (Overall)**

#### **All Three Project Types**

Table 4.105 and figure 4.15 illustrates that the mean value of the distribution of overall leadership qualities is 3.34 for a distribution of 187 respondents. According to the frequency distribution rules, created in 3.7.2, the mean value of  $2 < 3.94 < 4$ . It implies that the impact of leadership qualities is ‘moderate’ so that they can link them to enhance the performances of the employees. In addition, the skewness value (- .803), as mentioned in the table 4.105 is a negative value, implying that the distribution is negative. It implies that, when the tail of the distribution is pointing to the left, the majority agree that the leadership qualities are positive. Similarly, the positive value of kurtosis signifies that, the distribution is flatter than normal.

And the mean value of the distribution of overall leadership qualities is 3.94 for a distribution of 35 leads sample. According to the frequency distribution rules, created in 3.7.2, the mean value of 3.94;  $2 < 3.94 < 4$ . It implies that the impact of leadership qualities is ‘moderate’ so that they can link them to enhance the performances of the employees in leaders’ perspective as well.

Table 4.103 Frequency Distriburion of Leadership (All Project Types)

Statistics			Statistics		
		Leadership			Leadership (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.341	Mean		3.9381
Median		3.444	Median		4
Skewness		-0.803	Skewness		-0.098
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.661	Kurtosis		-0.311
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

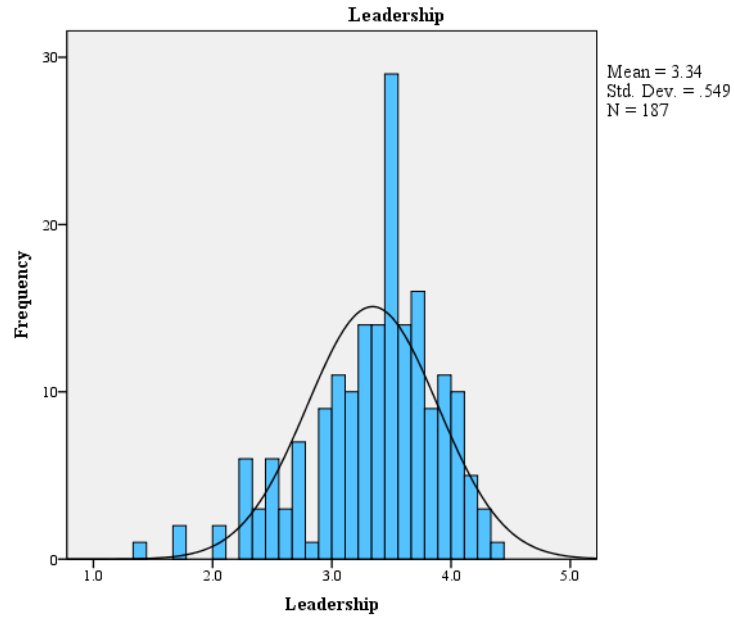


Figure 4.15 Frequency Distriburion of Leadership (All Project Types) – (Employee Perspective)

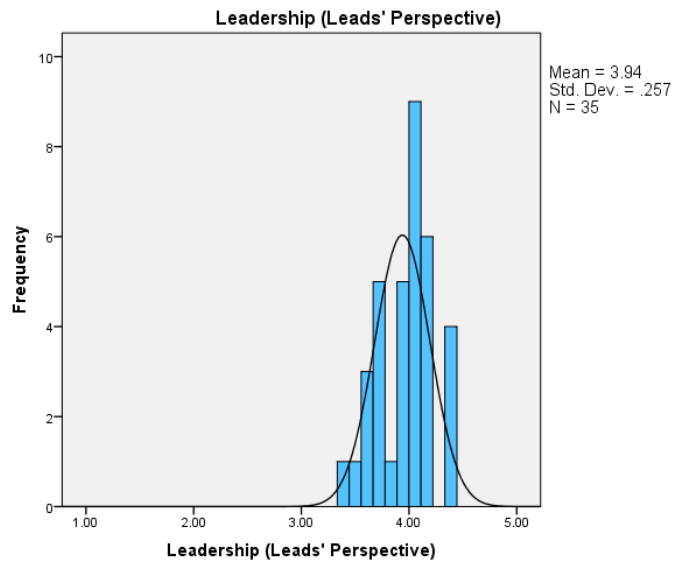


Figure 4.16 Frequency Distribution of Leadership (All Project Types) – (Leads Perspective)  
**For New and Unstable Projects**

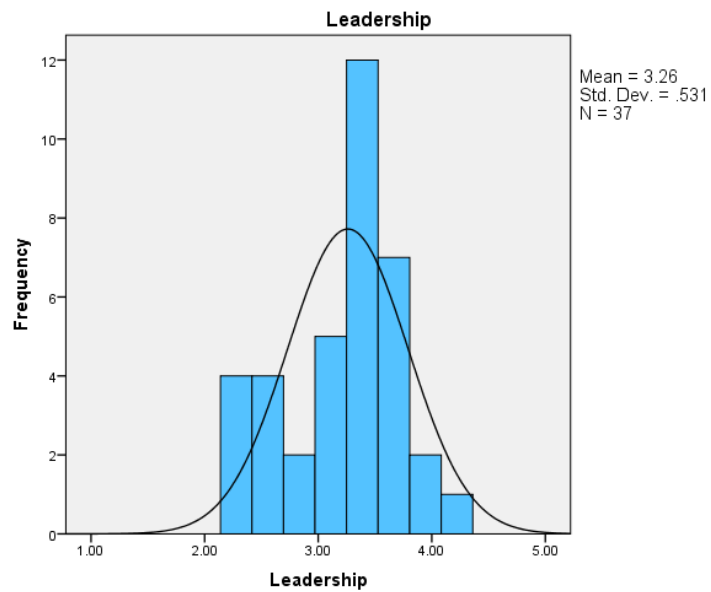


Figure 4.17 Frequency Distribution of Leadership (New and Unstable Projects) – (Employee Perspective)

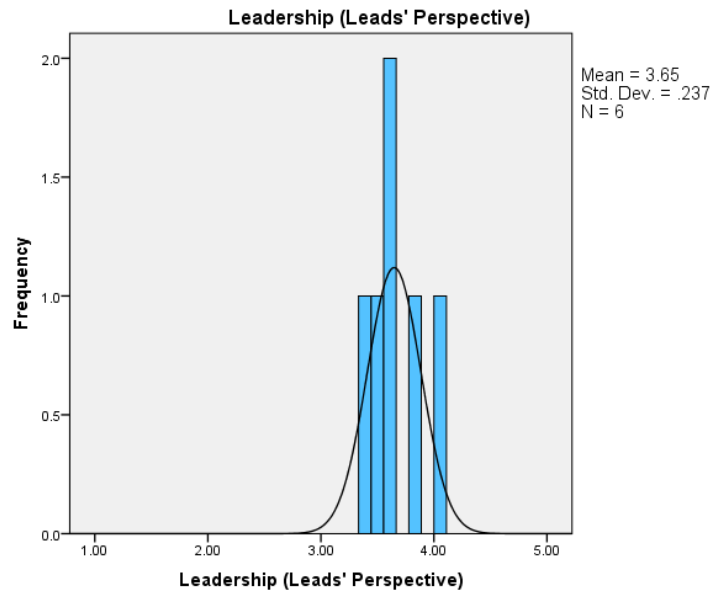


Figure 4.18 Frequency Distribution of Leadership (New and Unstable Projects) – (Leads Perspective)

The mean value of the leadership of the employees' perspective for new and unstable projects got a mean value of 3.26 which is  $2 < LQ < 4$ . This indicates that the impact of leadership qualities is 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 3.65 for new and unstable projects, and this too implies that the new and unstable projects' employee performance has an impact from leadership qualities.

## For Stable and Long Run Projects

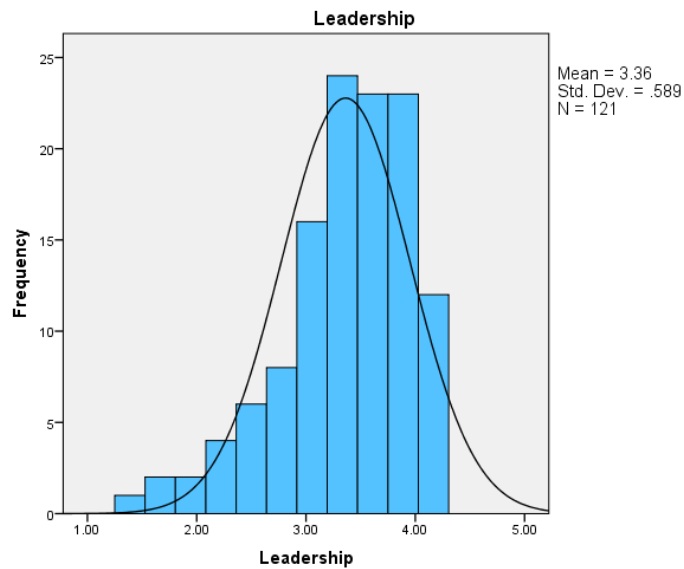


Figure 4.19 Frequency Distribution of Leadership (Stable & Long Run Projects) – (Employee Perspective)

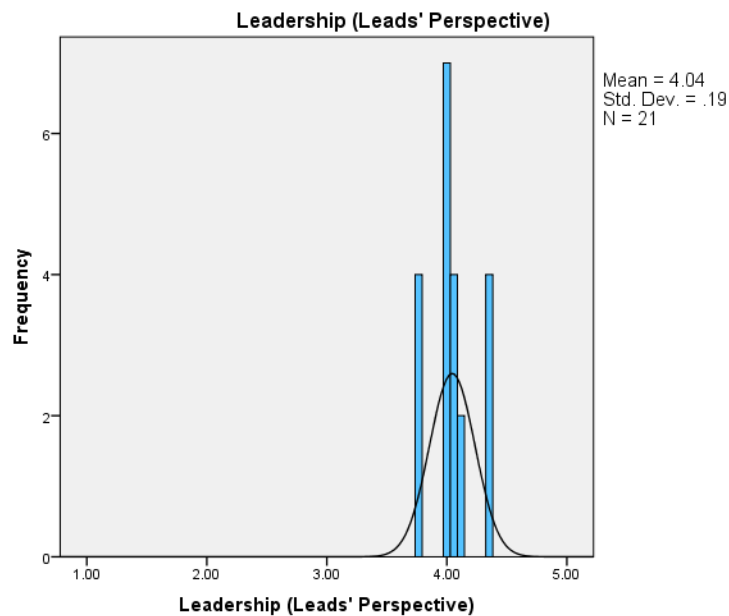


Figure 4.20 Frequency Distribution of Leadership (Stable & Long Run Projects) – (Leads Perspective)

The mean value of the leadership of the employees' perspective for stable and long run projects got a mean value of 3.36 which is  $2 < 3.36 < 4$ . This indicates that the impact of leadership qualities is 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 4.04 where  $4 < 4.04 <$

5 for stable and long run projects, and this implies that the stable and long run projects' performance has a positive impact from leadership qualities.

**For CodeRed (Critical) Projects**

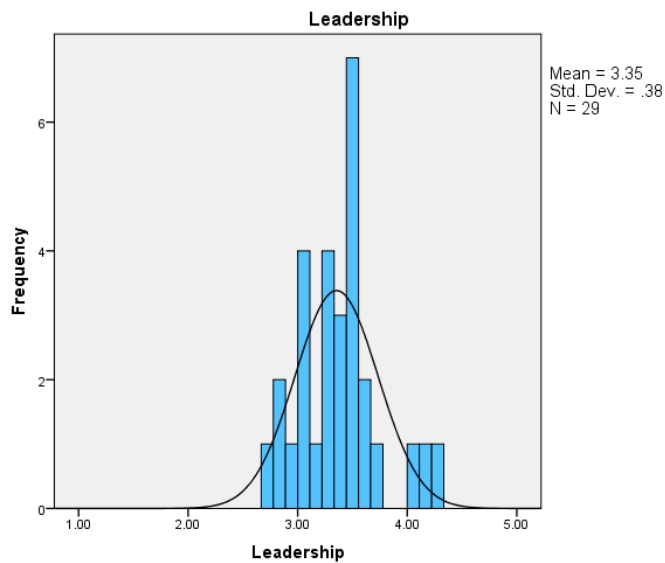


Figure 4.21 Frequency Distribution of Leadership (CodeRed Projects) – (Employee Perspective)

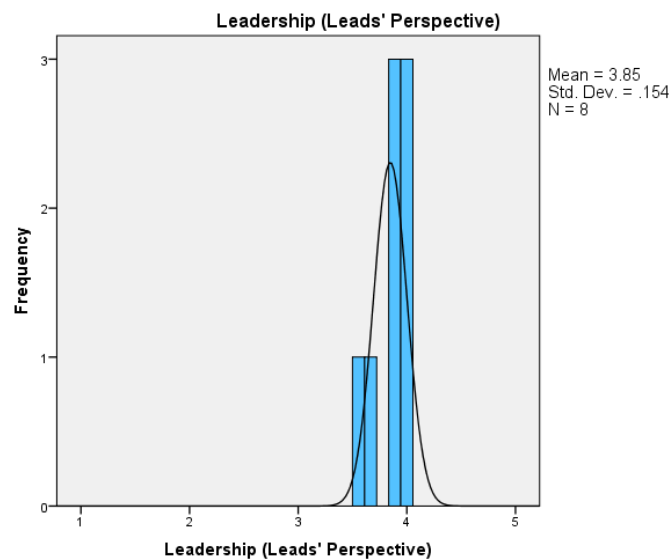


Figure 4.22 Frequency Distribution of Leadership (CodeRed Projects) – (Leads Perspective)

The mean value of the leadership of the employees' perspective for CodeRed projects got a mean value of 3.35 which is in between 2 to 4. This indicates that the impact of leadership qualities is 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 3.85 for CodeRed projects, and this too implies that the CodeRed projects' performance has an impact from leadership

qualities.

#### **4.4.2.2 Frequency Distribution for Personality and Behavior**

##### **All Three Project Types**

According to table 4.104 and figure 4.23, the mean value of the distribution of personality and behavior qualities is 3.62 for a distribution of 187 respondents. In relation to the frequency distribution rules the mean value of  $2 < 3.62 < 4$ . It implies that the impact of personality and behavior is 'moderate' so that they can link them to enhance the performances of the employees. As shown in the table 4.104 for skewness and kurtosis values, the skewness value (- .860), which is a negative value, stressing that the distribution is negative. It implies the same as mentioned in above section 4.2.2.1 that when the tail of the distribution is pointing to the left, most of the people agree that the personality and behavior are positive. Similarly, the positive value of kurtosis signifies that, the distribution is flatter than normal.

And the mean value of the distribution of personality and behavior is 4.44 for a distribution of 35 leads sample. According to the frequency distribution rules, created in section 3.7.2, the mean value of 4.44;  $4 < 4.44 < 5$ . It implies that the impact of leadership qualities is 'positive' so that they can link them to enhance the performances of the employees in leaders' perspective as well.

Table 4.104 Frequency Distribution of Personality and Behavior (All Project Types)

Statistics			Statistics		
		Personality and Behavior			Personality and Behavior (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.6176	Mean		4.4429
Median		3.75	Median		4.5
Skewness		-0.806	Skewness		-0.318
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.448	Kurtosis		-0.889
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

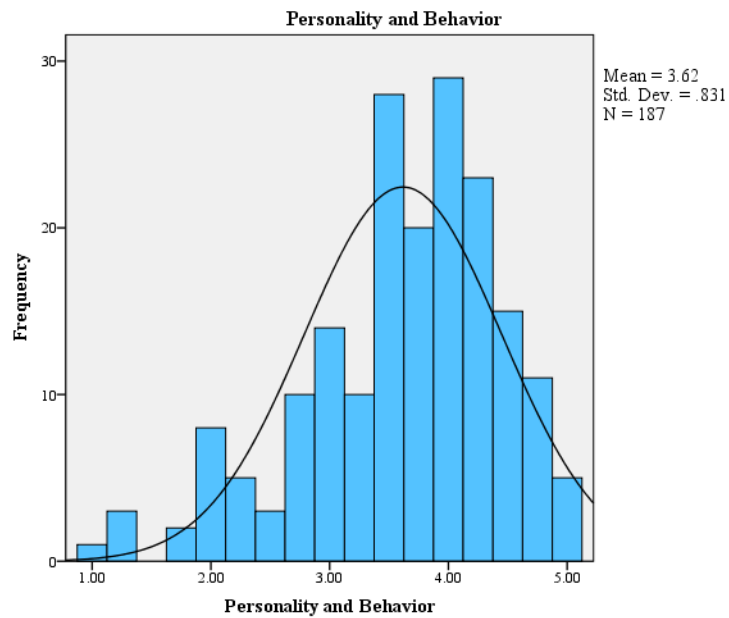


Figure 4.23 Frequency Distribution of Personality and Behavior (All Project Types) – (Employees Perspective)



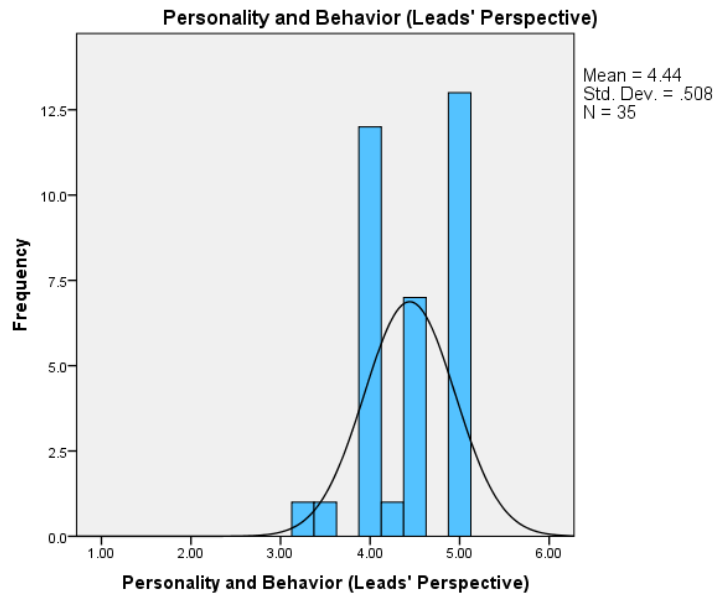


Figure 4.24 Frequency Distribution of Personality and Behavior (All Project Types) – (Leads Perspective)

**For New and Unstable Projects**

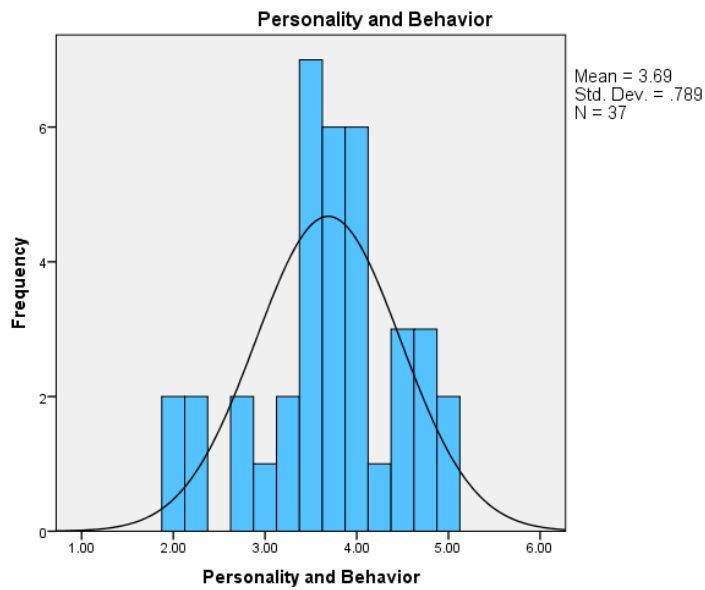


Figure 4.25 Frequency Distribution of Personality and Behavior (New & Unstable Projects) – (Employee Perspective)

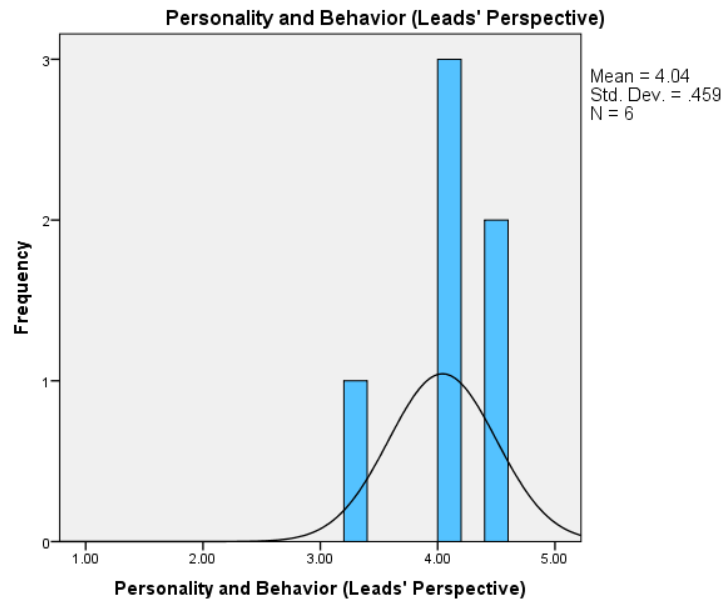


Figure 4.26 Frequency Distribution of Personality and Behavior (New & Unstable Projects) – (Leads Perspective)

The mean value of the personality and behavior of the employees' perspective for new and unstable projects got a mean value of 3.69 which is between 2 and 4. This indicates that the impact of personality and behavior is 'moderate', so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 4.04 for new and unstable projects, and this implies that the new and unstable projects' performance has an impact from leadership qualities.

## For Stable and Long Run Projects

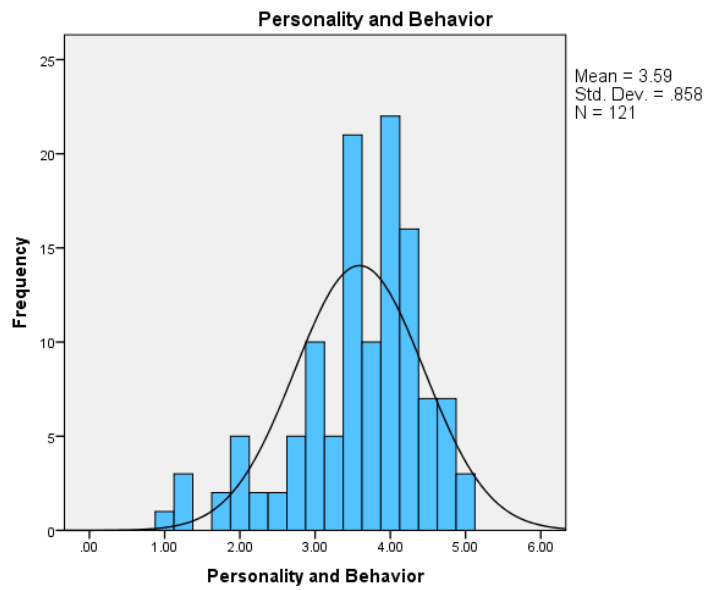


Figure 4.27 Frequency Distribution of Personality and Behavior (Stable & Lon Run Projects) – (Employee Perspective)

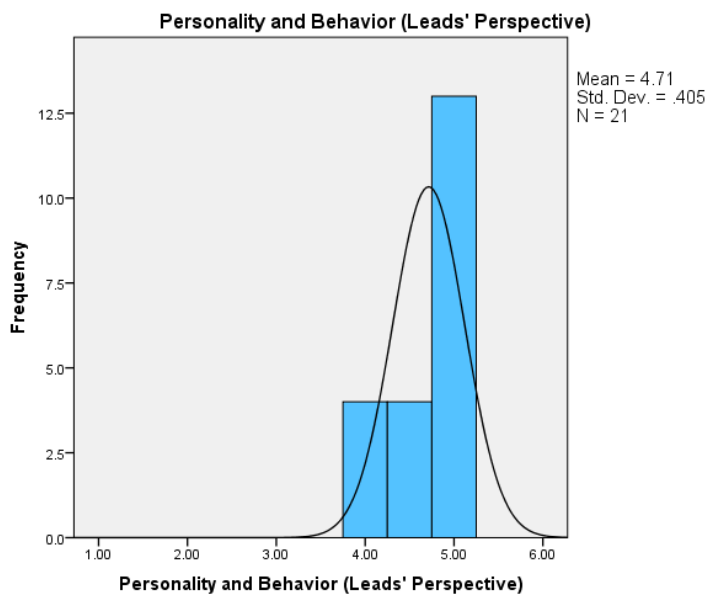


Figure 4.28 Frequency Distribution of Personality and Behavior (Stable & Lon Run Projects) – (Leads Perspective)

The mean value of the personality and behavior of the employees' perspective for stable and long run projects got a mean value of 3.59. This indicates that the impact of personality and behavior is 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 4.71 for stable and long

run projects, and this too implies that the stable and long run projects' performance has an impact from personality and behavior.

### For CodeRed (Critical) Projects

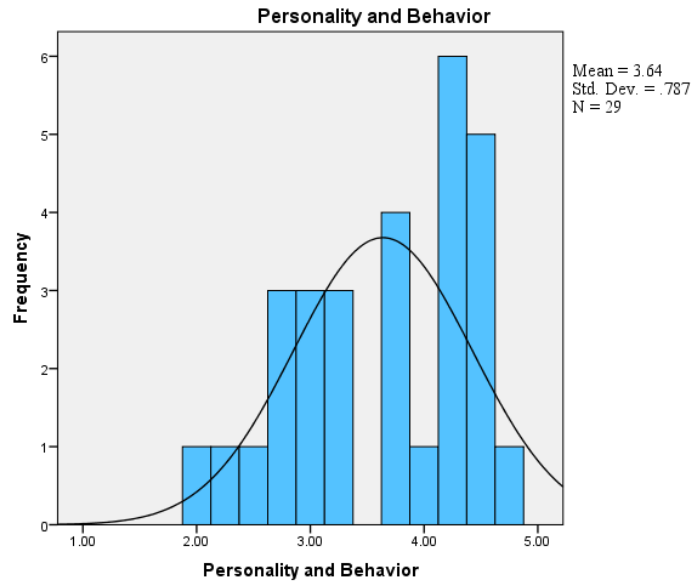


Figure 4.29 Frequency Distribution of Personality and Behavior (CodeRed Projects) – (Employee Perspective)

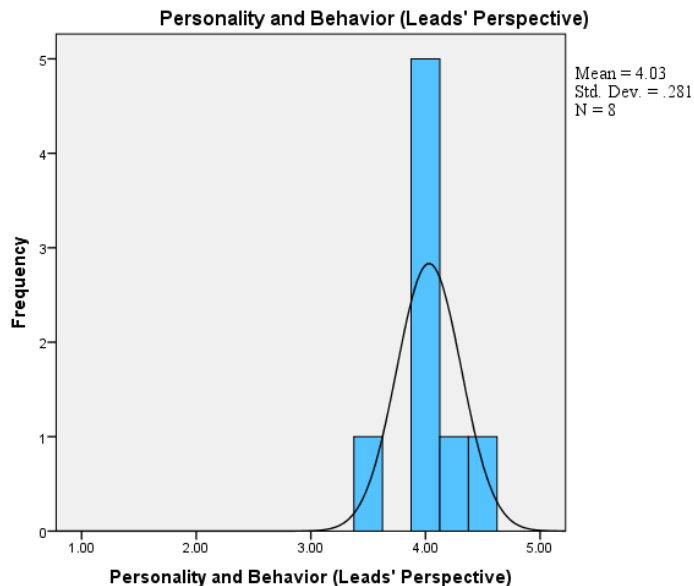


Figure 4.30 Frequency Distribution of Personality and Behavior (CodeRed Projects) – (Leads Perspective)

The mean value of the personality and behavior of the employees' perspective for CodeRed projects got a mean value of 3.64. This indicates that the impact of personality and behavior is 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 4.03 for CodeRed projects, and this too implies that the CodeRed projects' performance has an impact from personality and behavior.

#### 4.4.2.3 Frequency Distribution for Situation and Nature of Tasks

##### All Three Project Types

As demonstrated in table 4.105 and figure 4.31, the mean value of the distribution of situations and nature of task is 3.48 for a distribution of 187 respondents. When comparing it with the frequency distribution rule, the mean value of  $2 < 3.48 < 4$ . It implies that the impact of situation and nature of task is 'moderate', through which the performances of the employees can be improved. As shown in the table 4.105 for skewness and kurtosis values, the skewness value (-.597), which is a negative value, stressing that the distribution is negative. It implies that when the tail of the distribution is pointing to the left, most of the people agree that the situation and nature of task are positive. Similarly, the positive value of kurtosis, i.e. 0.102 signifies that, the distribution is flatter than normal.

And the mean value of the distribution of situation/ nature of tasks is 4.29 for a distribution of 35 leads sample. According to the frequency distribution rules, created in 3.7.2, the mean value of 4.29. It implies that the impact of leadership qualities is 'positive' so that they can link them to enhance the performances of the employees in leaders' perspective as well.

Table 4.105 Frequency Distribution of Situation & Nature of Tasks (All Project Types)

Statistics			Statistics		
		Situations/ Nature of Task			Situations/ Nature of Task (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.4856	Mean		4.2971
Median		3.6	Median		4.2
Skewness		-0.597	Skewness		-0.377
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.102	Kurtosis		-1.069
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

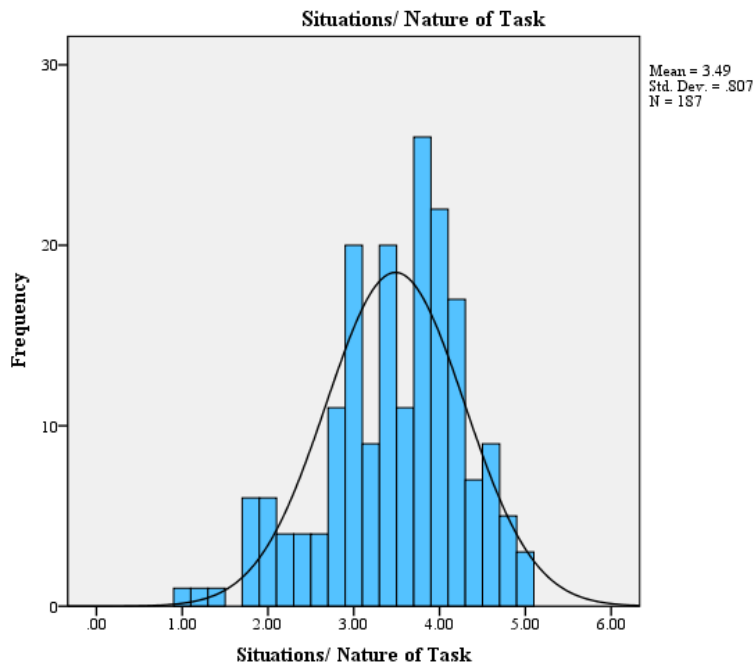


Figure 4.31 Frequency Distribution of Situation & Nature of Tasks (All Project Types) – (Employees Perspective)

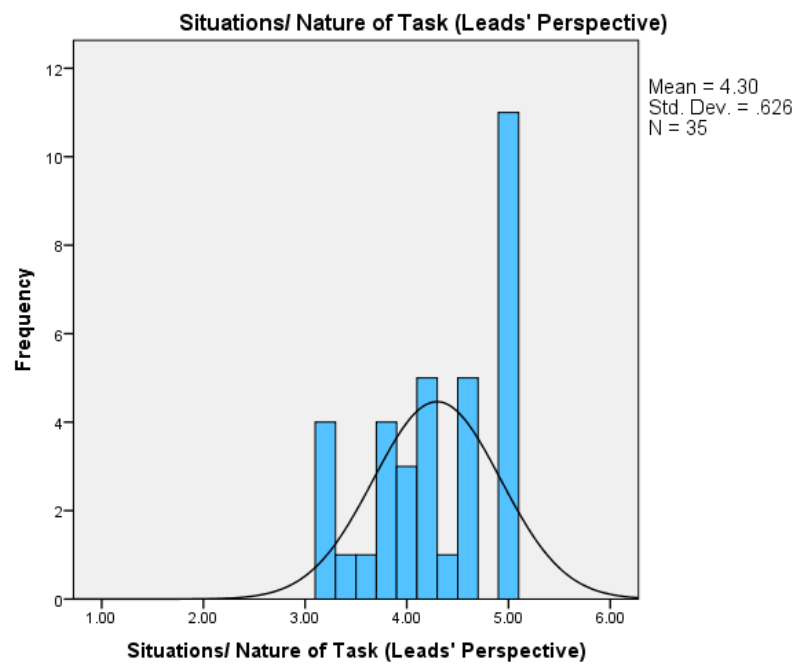


Figure 4.32 Frequency Distribution of Situation & Nature of Tasks (All Project Types) – (Leads Perspective)

## For New and Unstable Projects

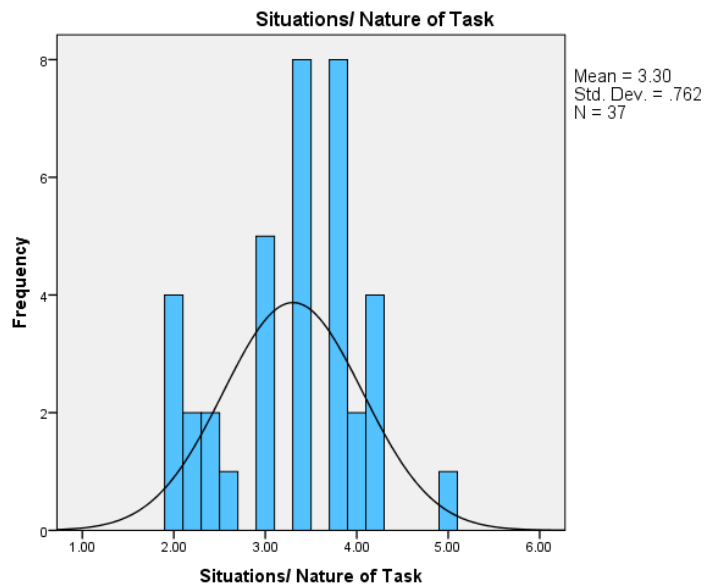


Figure 4.33 Frequency Distribution of Situation & Nature of Tasks (New & Unstable Projects) – (Employee Perspective)

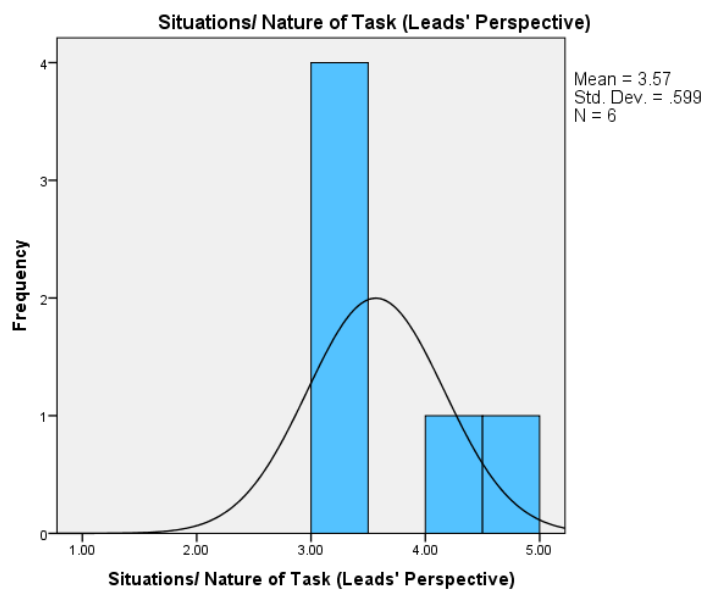


Figure 4.34 Frequency Distribution of Situation & Nature of Tasks (New & Unstable Projects) – (Leads Perspective)

The mean value of the situation/ nature of tasks of the employees' perspective for new and unstable projects got a mean value of 3.30. This indicates that the impact of situation/ nature of tasks are 'moderate', so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 3.57 for new and unstable projects, and this implies that the new and unstable projects' performance has a positive

impact from the factor situation/ nature of tasks.

### For Stable and Long Run Projects

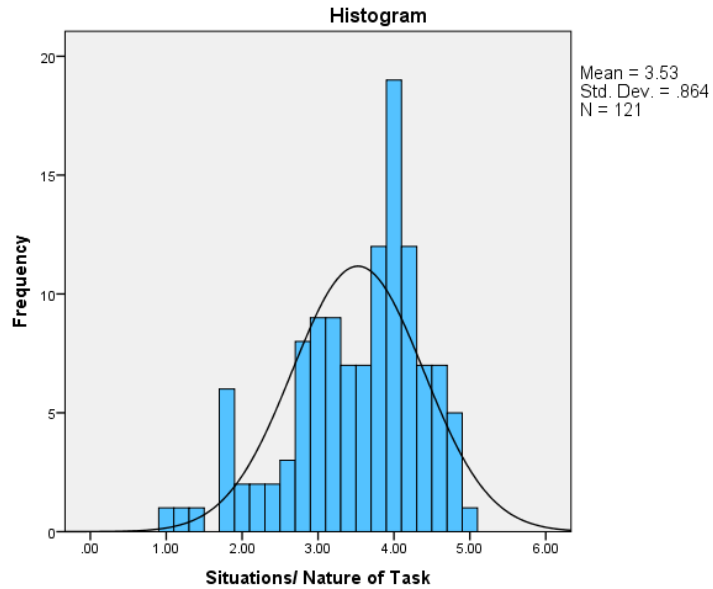


Figure 4.35 Frequency Distribution of Situation & Nature of Tasks (Stable & Lon Run Projects) – (Employee Perspective)

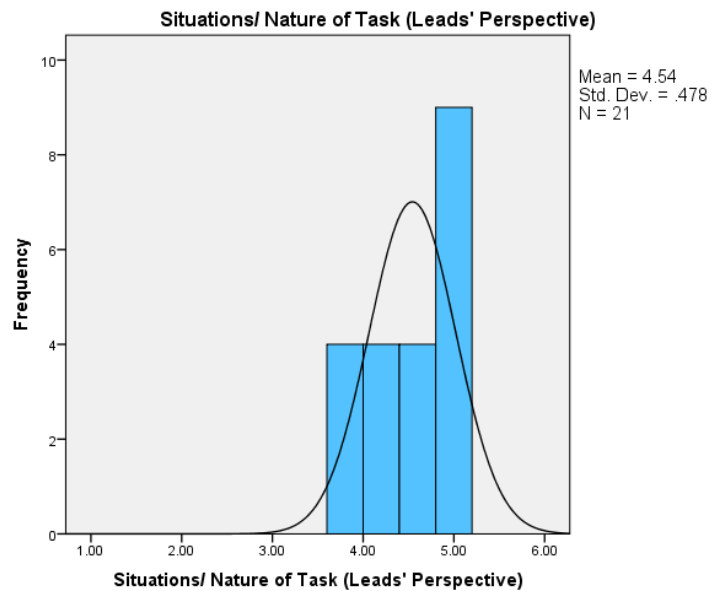


Figure 4.36 Frequency Distribution of Situation & Nature of Tasks (Stable & Lon Run Projects) – (Leads Perspective)

The mean value of the situation/ nature of tasks of the employees' perspective for stable and long run projects got a mean value of 3.53. This indicates that the situation/ nature of tasks is



‘moderate’ so that they can link them to enhance the performances of the employees. In leaders’ perspective, the mean value is calculated as 4.54 for stable and long run projects, and this implies that the stable and long run projects’ performance has a positive impact from situation/ nature of tasks.

**For CodeRed (Critical) Projects**

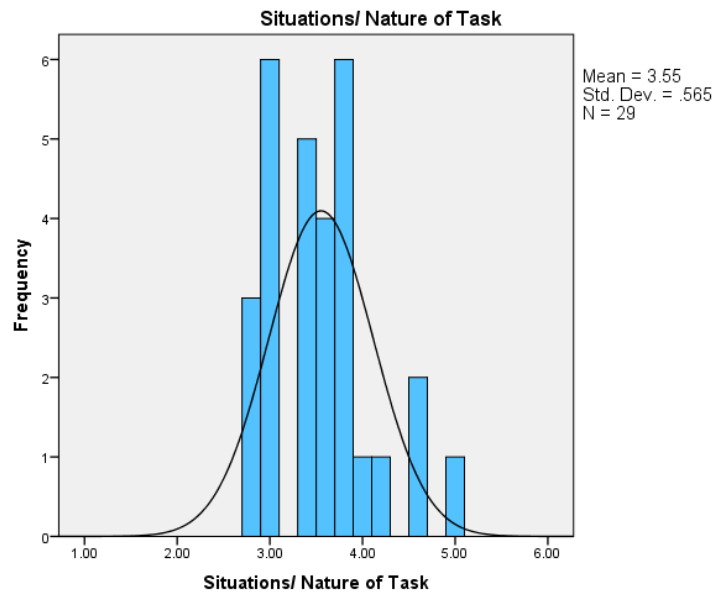


Figure 4.37 Frequency Distribution of Situation & Nature of Tasks (CodeRed Projects) – (Employees Perspective)

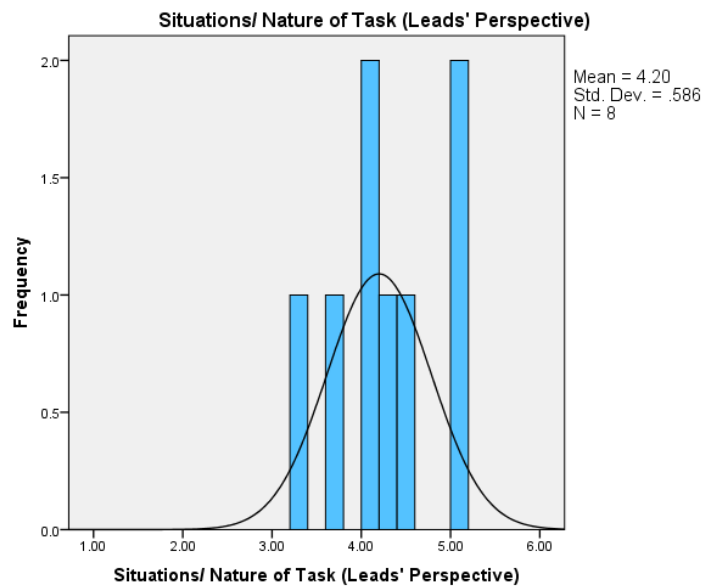


Figure 4.38 Frequency Distribution of Situation & Nature of Tasks (CodeRed Projects) – (Leads Perspective)

The mean value of the situation/ nature of tasks of the employees' perspective for CodeRed projects got a mean value of 3.55. This indicates that the impact of situation/ nature of tasks are 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 4.20 for CodeRed projects, and this too implies that the CodeRed projects' performance has a positive impact from situation/ nature of tasks.

#### **4.4.2.4 Frequency Distribution for Experience/ Expertise/ Competency**

##### **All Three Project Types**

As demonstrated in table 4.106 and figure 4.39, the mean value of the distribution of experience, expertise and competency is 3.27 for a distribution of 187 respondents. When comparing it with the frequency distribution rule, the mean value of 3.27. It implies that the impact of experience, expertise and competency is 'moderate', through which the performances of the employees can be improved. As shown in the table 4.106 for skewness and kurtosis values, the skewness value (-.234), which is a negative value, stressing that the distribution is negative. It implies that when the tail of the distribution is pointing to the left, most of the people agree that the experience, expertise and competency are positive. In contrast, the negative value of kurtosis, i.e. -0.435 signifies that, the distribution is peaked than normal.

And the mean value of the distribution of experience/ expertise/ competency is 4.25 for a distribution of 35 leads sample. According to the frequency distribution rules, created in 3.7.2, the mean value of 4.25. It implies that the impact of leadership qualities is 'positive' so that they can link them to enhance the performances of the employees in leaders' perspective as well.

Table 4.106 Frequency Distribution of Experience, Expertise & Competency (All Project Types)

Statistics			Statistics		
		Experience/ Expertise/ Competency			Experience/ Expertise/ Competency (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.2727	Mean		4.25
Median		3.25	Median		4
Skewness		-0.234	Skewness		0.218
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		-0.435	Kurtosis		-1.395
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

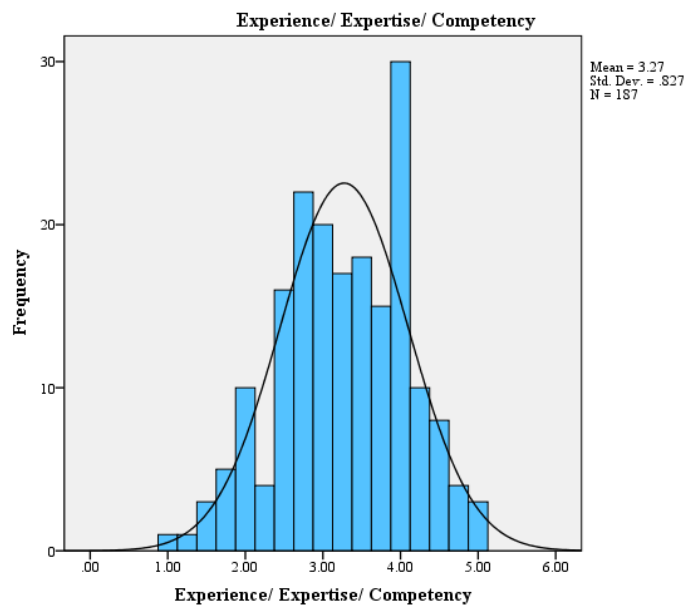


Figure 4.39 Frequency Distribution of Experience, Expertise & Competency (All Project Types) - (Employee Perspective)

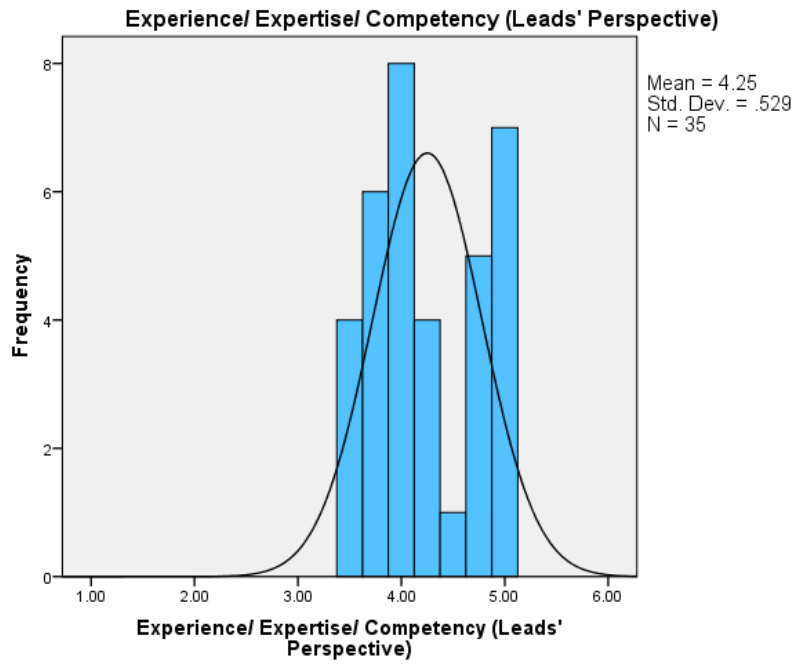


Figure 4.40 Frequency Distribution of Experience, Expertise & Competency (All Project Types) - (Leads Perspective)

**For New and Unstable Projects**

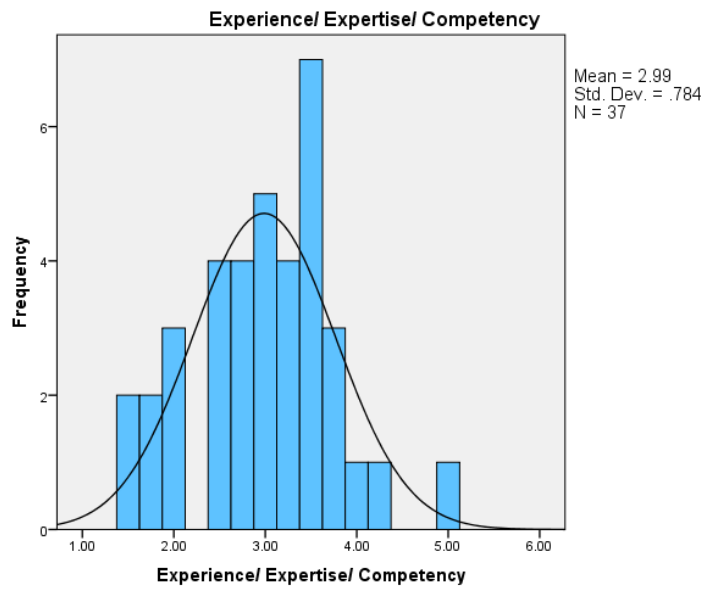


Figure 4.41 Frequency Distribution of Experience, Expertise & Competency (New & Unstable Projects) - (Employee Perspective)

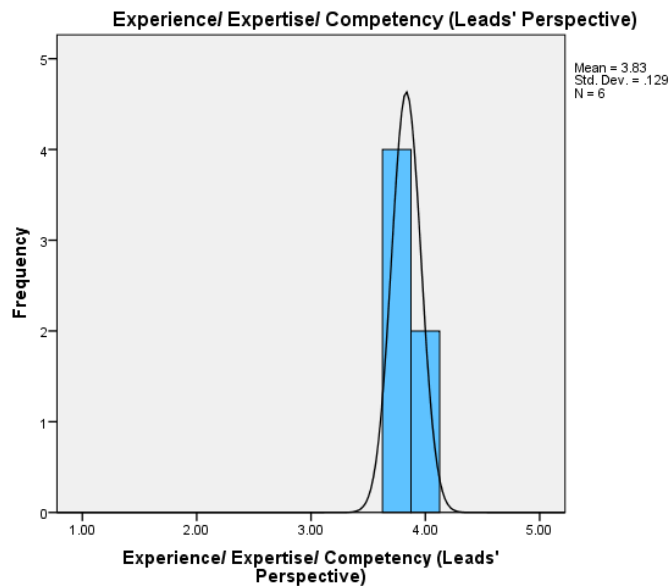


Figure 4.42 Frequency Distribution of Experience, Expertise & Competency (New & Unstable Projects) - (Leads Perspective)

The mean value of the experience/ expertise/ competency of the employees' perspective for new and unstable projects got a mean value of 2.99 which is  $2 < 2.99 < 4$ . This indicates that the impact of experience/ expertise/ competency is 'moderate', so that the fact of experience/ expertise/ competency cannot be used as an indicator of enhancing the performances of the employees, in employee perspective. In leaders' perspective, the mean value is calculated as 3.83 for new and unstable projects, and this implies that the new and unstable projects' performance has a positive impact from the factor experience/ expertise/ competency.

**For Stable and Long Run Projects**

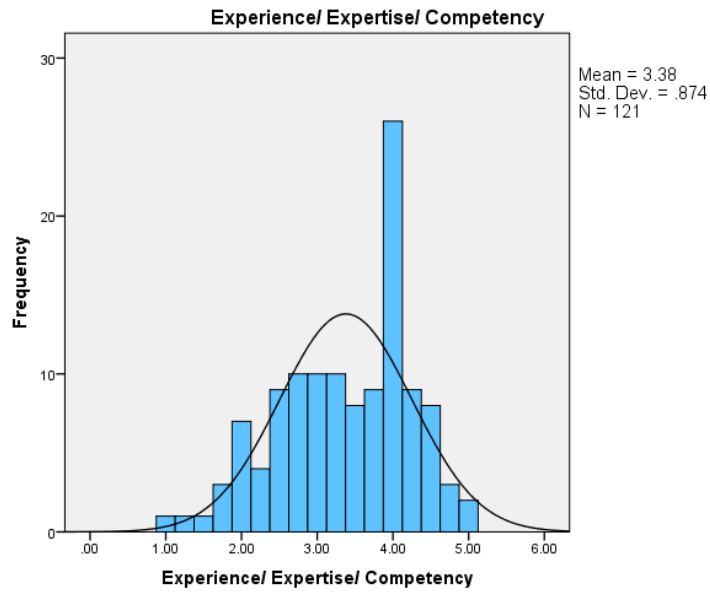


Figure 4.43 Frequency Distribution of Experience, Expertise & Competency (Stable & Long Run Projects) - (Employees Perspective)

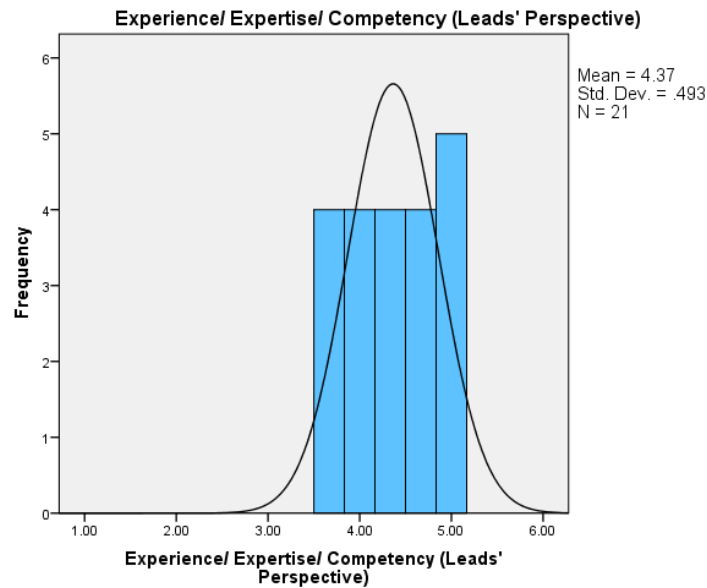


Figure 4.44 Frequency Distribution of Experience, Expertise & Competency (Stable & Long Run Projects) - (Leads Perspective)

The mean value of the experience/ expertise/ competency of the employees’ perspective for stable and long run projects got a mean value of 3.38. This indicates that the experience/ expertise/ competency is ‘moderate’ so that they can link them to enhance the performances of the employees. In leaders’ perspective, the mean value is calculated as 4.37 for stable and

long run projects, and this too implies that the stable and long run projects' performance has a positive impact from experience/ expertise/ competency.

**For CodeRed (Critical) Projects**

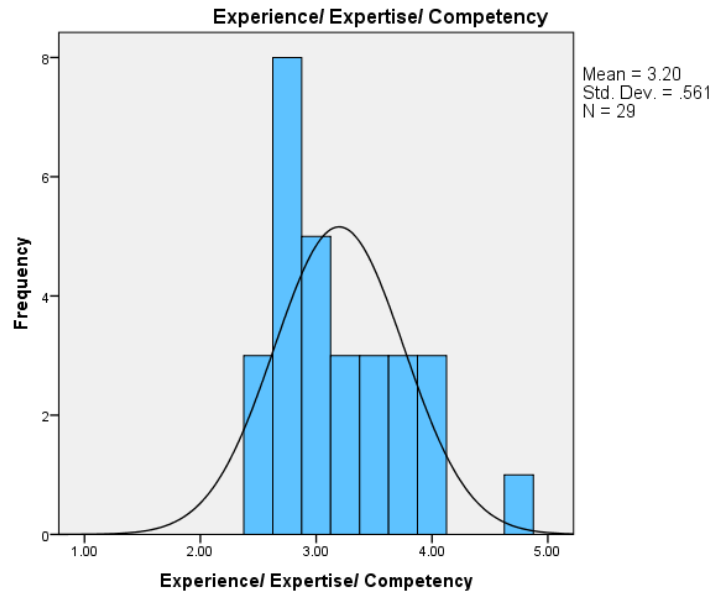


Figure 4.45 Frequency Distribution of Experience, Expertise & Competency (Critical Projects) - (Employee Perspective)

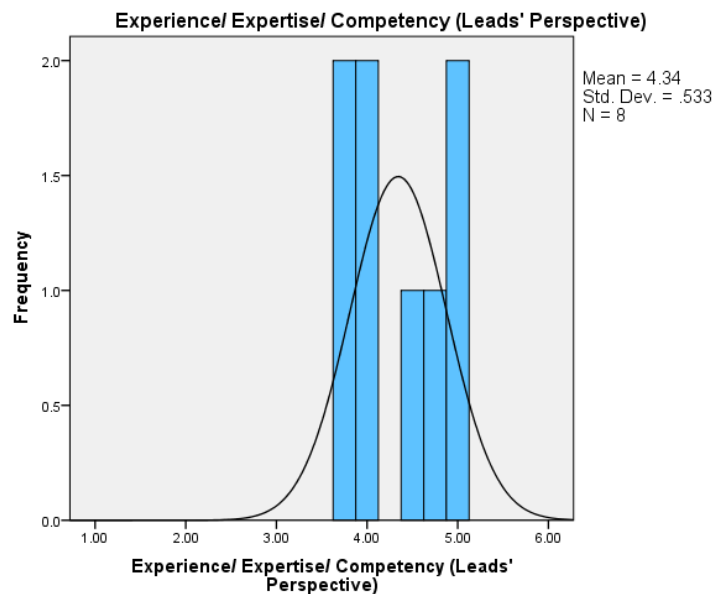


Figure 4.46 Frequency Distribution of Experience, Expertise & Competency (Critical Projects) - (Leads Perspective)

The mean value of the experience/ expertise/ competency of the employees' perspective for CodeRed projects got a mean value of 3.20. This indicates that the impact of experience/

expertise/ competency is ‘moderate’ so that they can link them to enhance the performances of the employees. In leaders’ perspective, the mean value is calculated as 4.34 for CodeRed projects, and this implies that the CodeRed projects’ performance has a positive impact from experience/ expertise/ competency.

#### **4.4.2.5 Frequency Distribution for Organization/ Project Culture**

##### **All Three Project Types**

As demonstrated in table 4.107 and figure 4.47, the mean value of the distribution of organization and project culture is 2.95 for a distribution of 187 respondents. When comparing it with the frequency distribution rule, the mean value of  $2 < 2.95 < 4$ . It implies that the impact of organization and project culture is ‘moderate’, through which the performances of the employees can be improved. As shown in the table 4.107 for skewness and kurtosis values, the skewness value (- .844), which is a negative value, stressing that the distribution is negative. It implies that when the tail of the distribution is pointing to the left, most of the people agree that the organization and project culture is positive. In contrast, the negative value of kurtosis, i.e. 0.08 signifies that, the distribution is peaked than normal.

And the mean value of the distribution of organization and project culture is 2.69 for a distribution of 35 leads sample. According to the frequency distribution rules, created in 3.7.2, the mean value of  $2 < 2.69 < 4$ . It implies that the impact of leadership qualities is ‘moderate’ so that they can link them to enhance the performances of the employees in leaders’ perspective as well.



Table 4.107 Frequency Distribution of Organization and Project Culture (All Project Types)

Statistics			Statistics		
		Organization/ Project Culture			Organization/ Project Culture (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		2.9537	Mean		2.6952
Median		3	Median		3
Skewness		-0.844	Skewness		-0.551
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.088	Kurtosis		-0.863
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

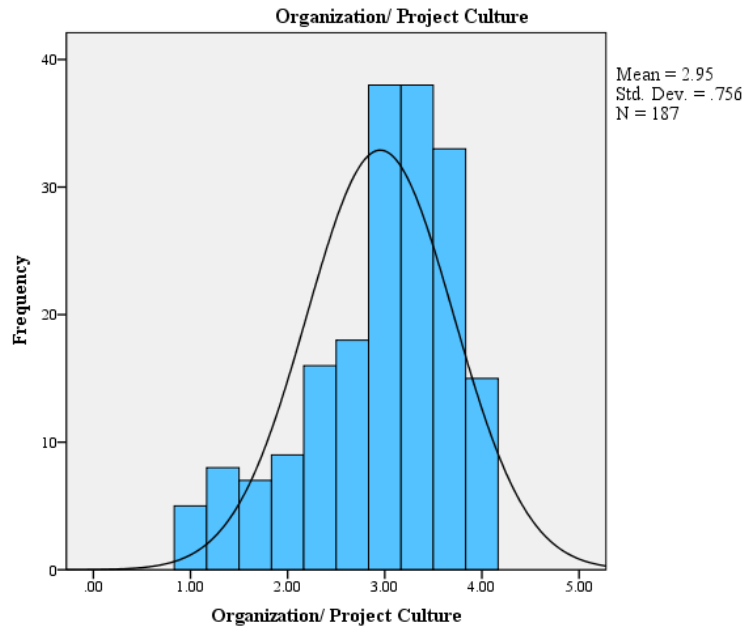


Figure 4.47 Frequency Distribution of Organization and Project Culture (All Project Types) - (Employee Perspective)

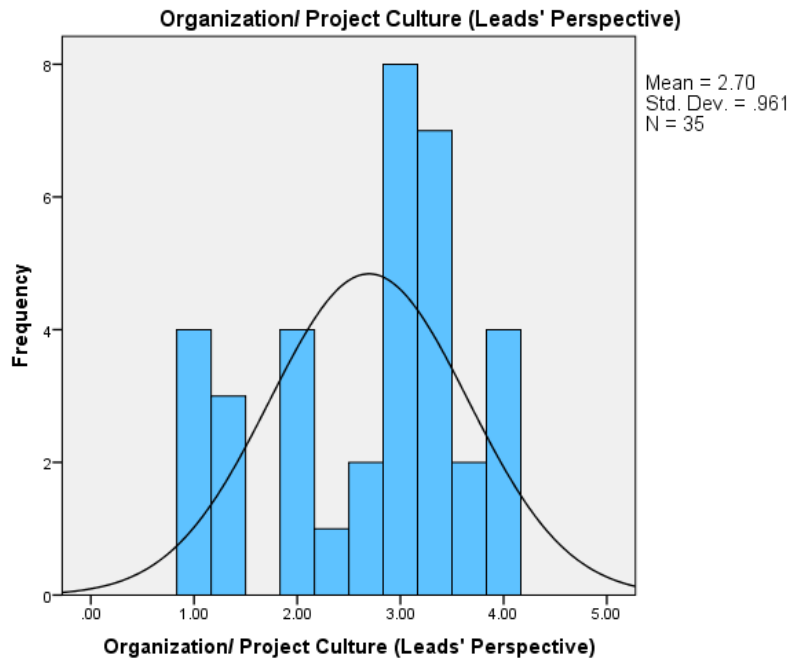


Figure 4.48 Frequency Distribution of Organization and Project Culture (All Project Types) - (Leads Perspective)

**For New and Unstable Projects**

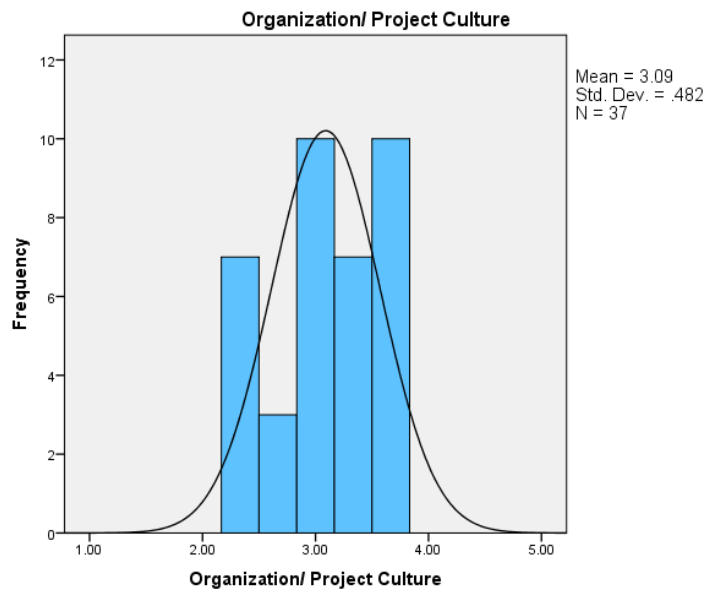


Figure 4.49 Frequency Distribution of Organization and Project Culture (New & Unstable Projects) - (Employee Perspective)

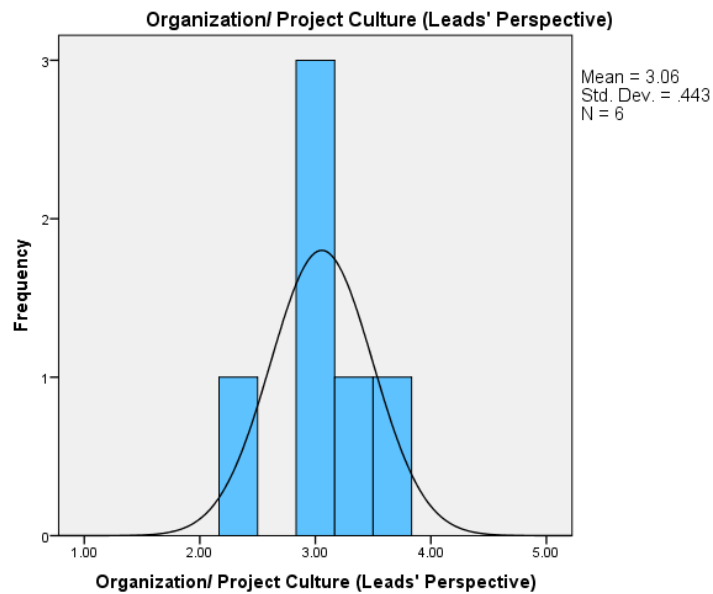


Figure 4.50 Frequency Distribution of Organization and Project Culture (New & Unstable Projects) - (Leads Perspective)

The mean value of the organization and project culture of the employees' perspective for new and unstable projects got a mean value of 3.09. This indicates that the impact of organization and project culture is 'moderate', so that the fact of organization and project culture cannot be used as an indicator of enhancing the performances of the employees, in employee perspective. In leaders' perspective, the mean value is calculated as 3.06 for new and unstable projects, and this implies that the new and unstable projects' performance has an impact from the factor organization and project culture.

## For Stable and Long Run Projects

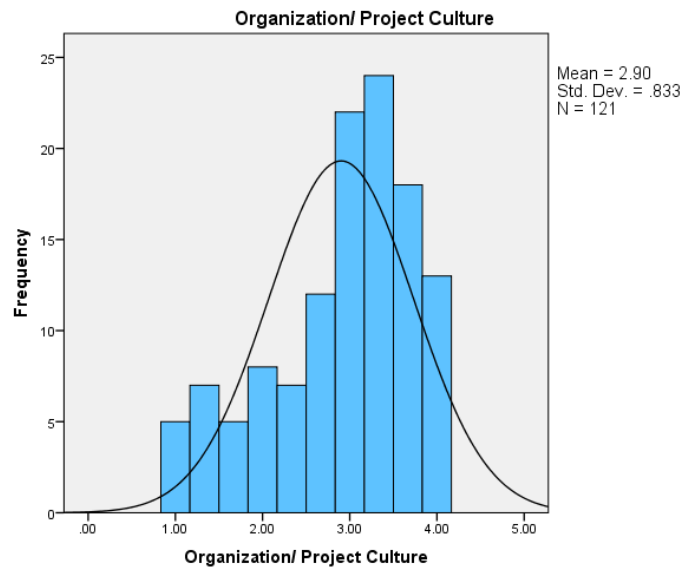


Figure 4.51 Frequency Distribution of Organization and Project Culture (Stable & Long Run Projects) - (Employee Perspective)

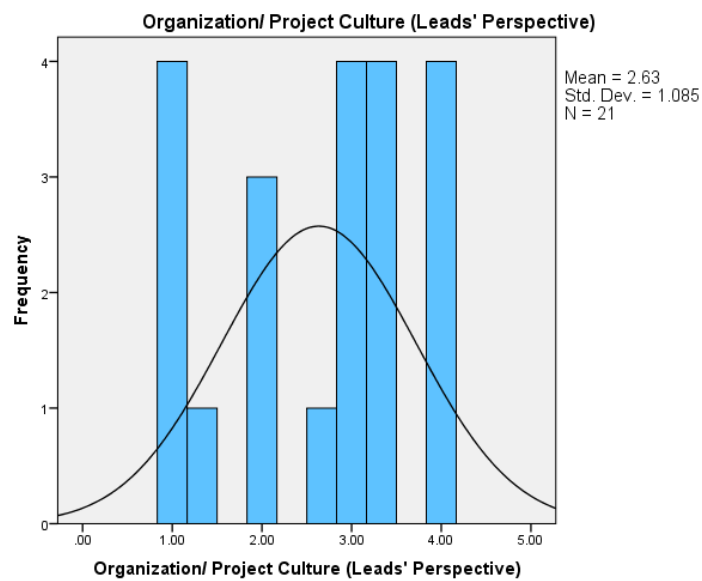


Figure 4.52 Frequency Distribution of Organization and Project Culture (Stable & Long Run Projects) - (Leads Perspective)

The mean value of the organization and project culture of the employees' perspective for stable and long run projects got a mean value of 2.90. This indicates that the organization and project culture is 'moderate' so that they can link them to enhance the performances of the employees. In leaders' perspective, the mean value is calculated as 2.63 for stable and long

run projects, and this too implies that the stable and long run projects' performance has a positive impact from organization and project culture.

**For CodeRed (Critical) Projects**

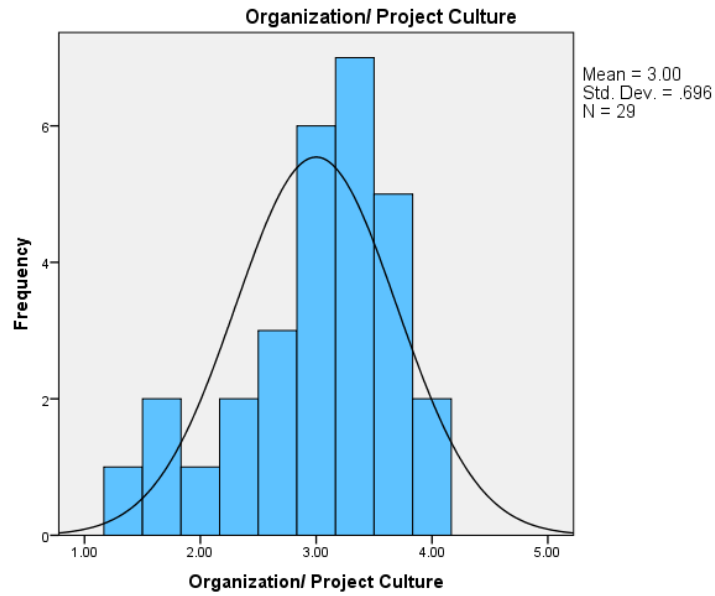


Figure 4.53 Frequency Distribution of Organization and Project Culture (CodeRed Projects) - (Employee Perspective)

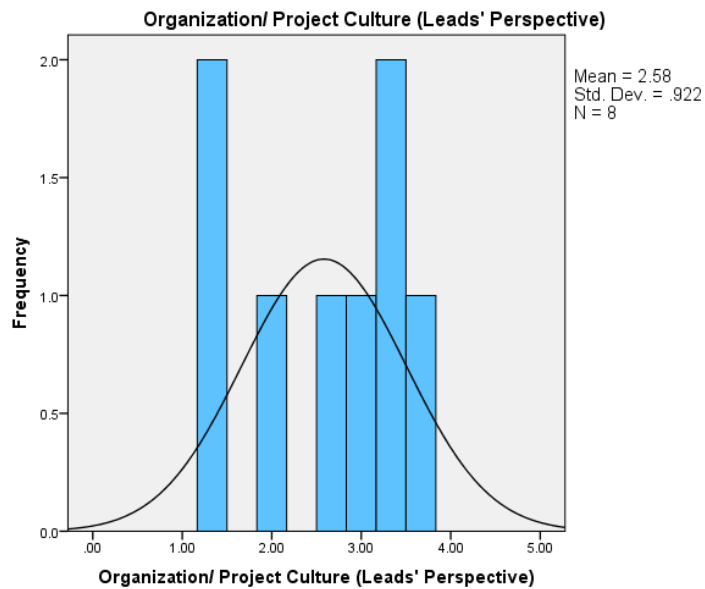


Figure 4.54 Frequency Distribution of Organization and Project Culture (CodeRed Projects) - (Leads Perspective)

The mean value of the organization and project culture of the employees' perspective for CodeRed projects got a mean value of 3.00. This indicates that the impact of organization and

project culture is ‘moderate’ so that they can link them to enhance the performances of the employees. In leaders’ perspective, the mean value is calculated as 2.58 for CodeRed projects, and this implies that the CodeRed projects’ performance has an impact from organization and project culture.

#### 4.4.2.6 Frequency Distribution for Performance (Overall)

##### All Three Project Types

Table 4.108 Frequency Distribution of Performance (All Project Types)

Statistics			Statistics		
		Performance			Performance (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.6163	Mean		4.4536
Median		3.75	Median		4.5
Skewness		-0.678	Skewness		-0.459
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.964	Kurtosis		-0.901
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

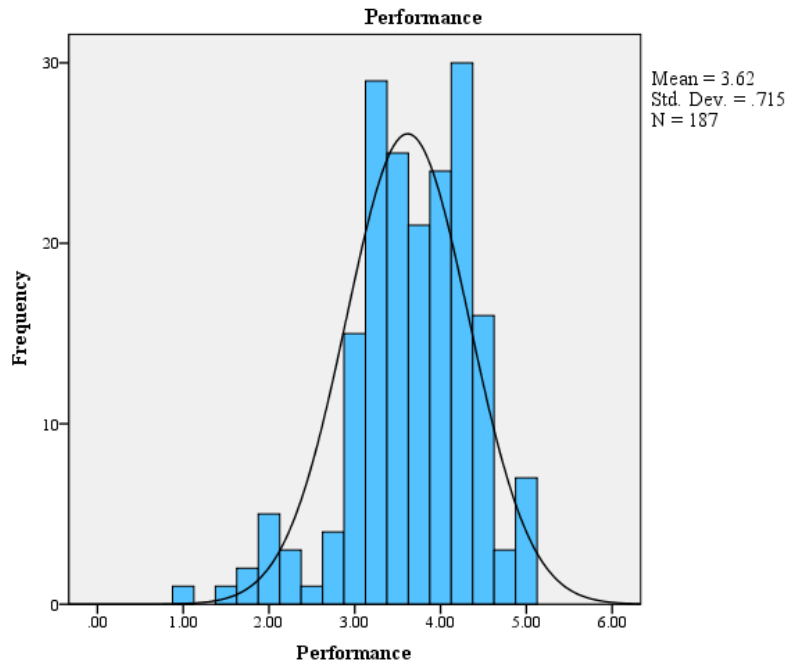


Figure 4.55 Frequency Distribution of Performance (All Project Types) - (Employee Perspective)

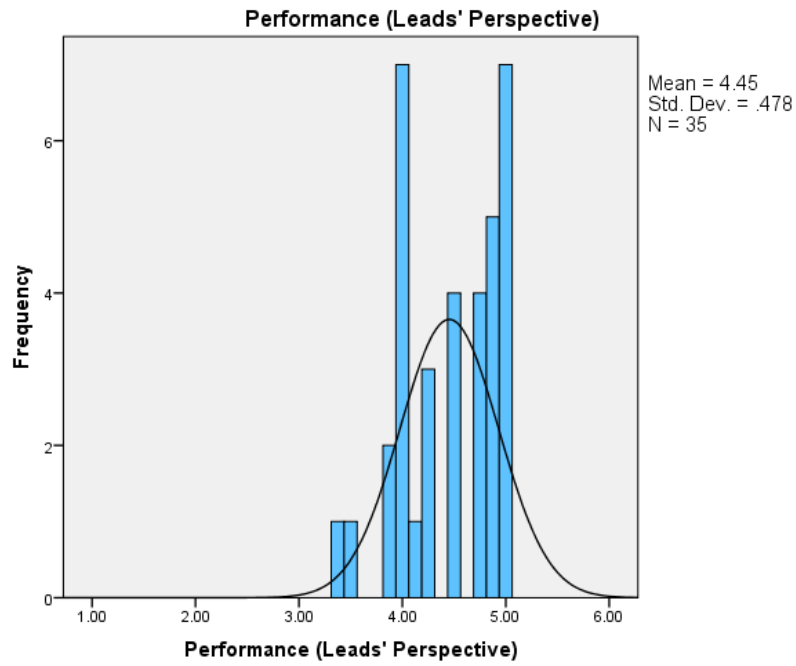


Figure 4.56 Frequency Distribution of Performance (All Project Types) - (Leads Perspective)

## For New and Unstable Project

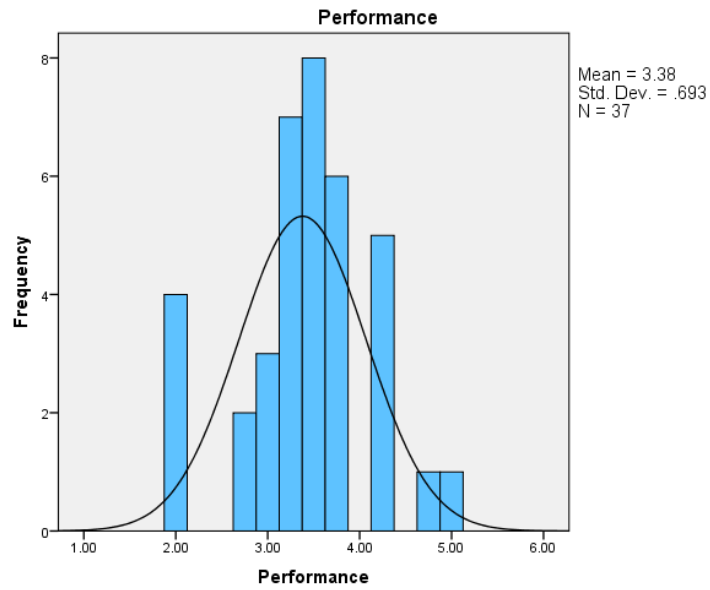


Figure 4.57 Frequency Distribution of Performance (New and Unstable Projects) - (Employee Perspective)

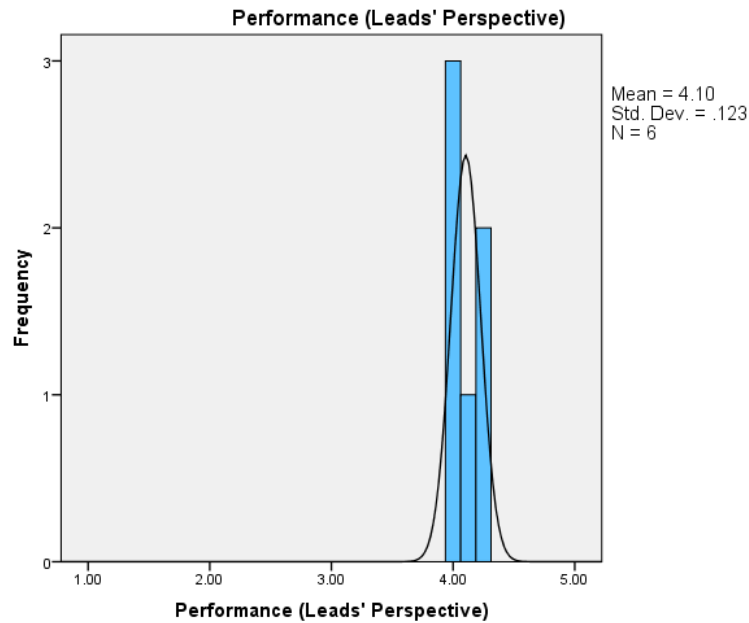


Figure 4.58 Frequency Distribution of Performance (New and Unstable Projects) - (Leads Perspective)

The mean value of the employee performance of the employees' perspective for new and unstable projects got a mean value of 3.38. This indicates that the overall performance of the respondents is 'moderate' so that they can link them to get the research outcome. In leaders' perspective, the mean value is calculated as 4.10 for new and unstable projects, and this



implies that the new and unstable projects' performance has a positive employee performance level.

### For Stable and Long Run Projects

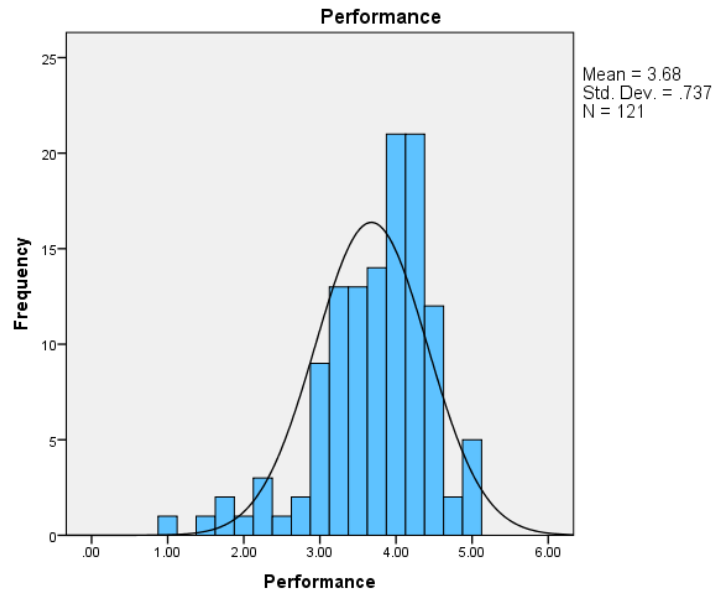


Figure 4.59 Frequency Distribution of Performance (Stable & Long Run Projects) - (Employee Perspective)

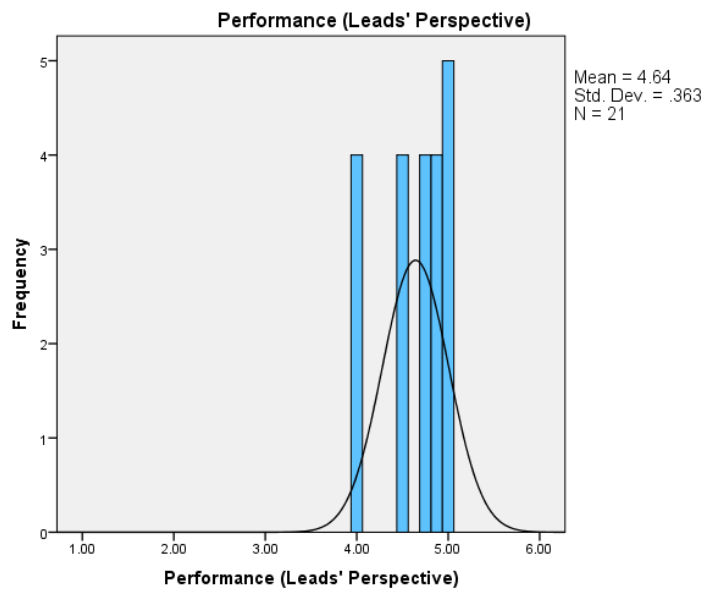


Figure 4.60 Frequency Distribution of Performance (Stable & Long Run Projects) - (Leads Perspective)

The mean value of the employee performance of the employees' perspective for stable and long run projects got a mean value of 3.68 which is greater than 3. This indicates that the overall performance of the respondents is 'positive' so that they can link them to get the research outcome. In leaders' perspective, the mean value is calculated as 4.64 for stable and long run projects, and this implies that the stable and long run projects' performance has a positive employee performance level.

### For CodeRed (Critical) Projects

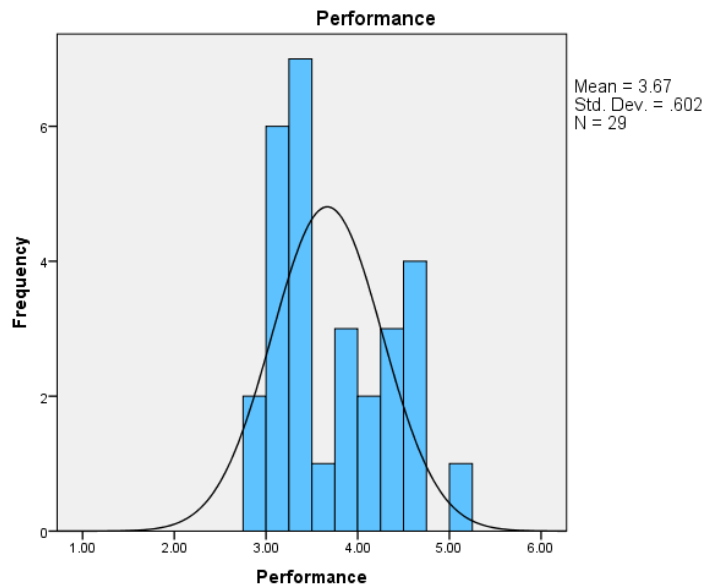


Figure 4.61 Frequency Distribution of Performance (CodeRed/ Critical Projects) - (Employee Perspective)

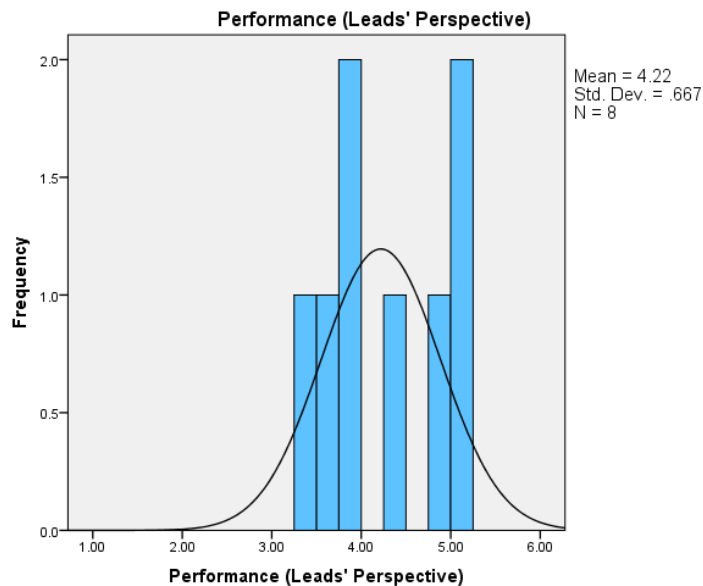


Figure 4.62 Frequency Distribution of Performance (CodeRed/ Critical Projects) - (Leads Perspective)

The mean value of the employee performance of the employees' perspective for CodeRed (critical) projects got a mean value of 3.67 which is greater than 3. This indicates that the overall performance of the respondents is 'positive' so that they can link them to get the research outcome. In leaders' perspective, the mean value is calculated as 4.22 for CodeRed (critical) projects, and this implies that the CodeRed (critical) projects' performance has a positive employee performance level.

#### 4.4.2.7 Frequency Distribution for Interaction/ Interpersonal Skills/ Team Player

##### All Three Project Types

As demonstrated in table 4.109 and figure 4.63, the mean value of the distribution of interaction, interpersonal skills and team player qualities is 3.72 for a distribution of 187 respondents. With respect to the frequency distribution rule, the mean value of  $3.72 > 3$ . It implies that the impact of interaction, interpersonal skills and team player is 'positive', through which the performances of the employees can be improved. As shown in the table 4.109 for skewness and kurtosis values, the skewness value (-.745), which is a negative value, stressing that the distribution is negative. It implies that when the tail of the distribution is pointing to the leftmost of the people agree that the personality and behavior are positive. Similarly, the positive value of kurtosis, i.e. 0.463 signifies that, the distribution is flatter than

normal.

And the mean value of the distribution of interaction, interpersonal skills and team player is 4.5 for a distribution of 35 leads sample. According to the frequency distribution rules, created in 3.7.2, the mean value of  $4.5 > 3$ . It implies that the impact of leadership qualities is ‘positive’ so that they can link them to enhance the performances of the employees in leaders’ perspective as well.

Table 4.109 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (All Project Types)

Statistics			Statistics		
		Interaction/ Interpersonal Skills/ Team Player			Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.7237	Mean		4.5048
Median		4	Median		4.6667
Skewness		-0.745	Skewness		-0.54
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.436	Kurtosis		-0.934
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

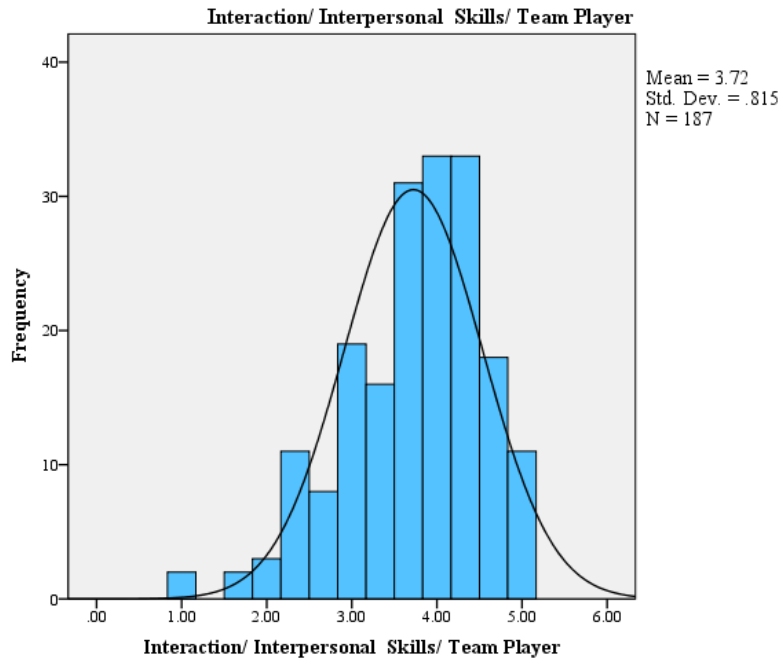


Figure 4.63 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (All Project Types) - (Employee Perspective)

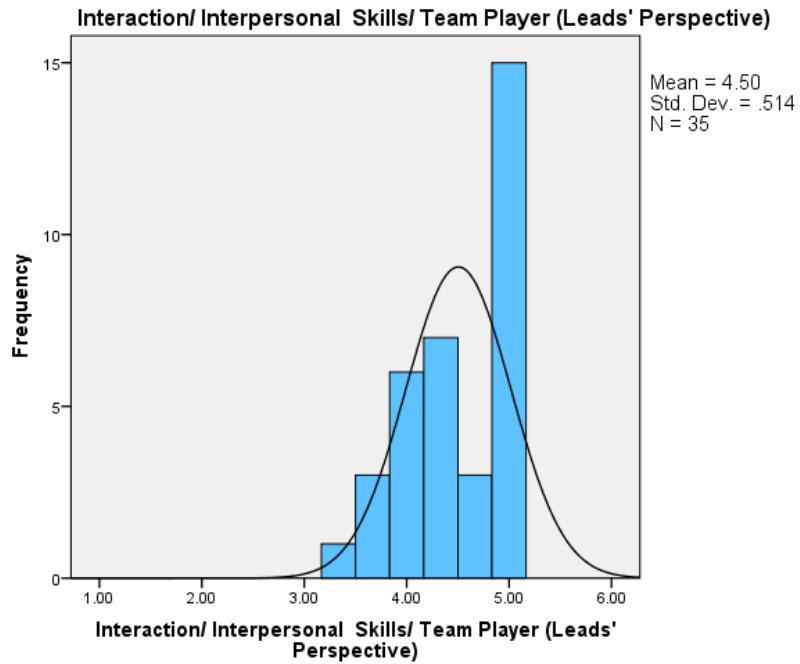


Figure 4.64 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (All Project Types) - (Leads Perspective)

## For New and Unstable Projects

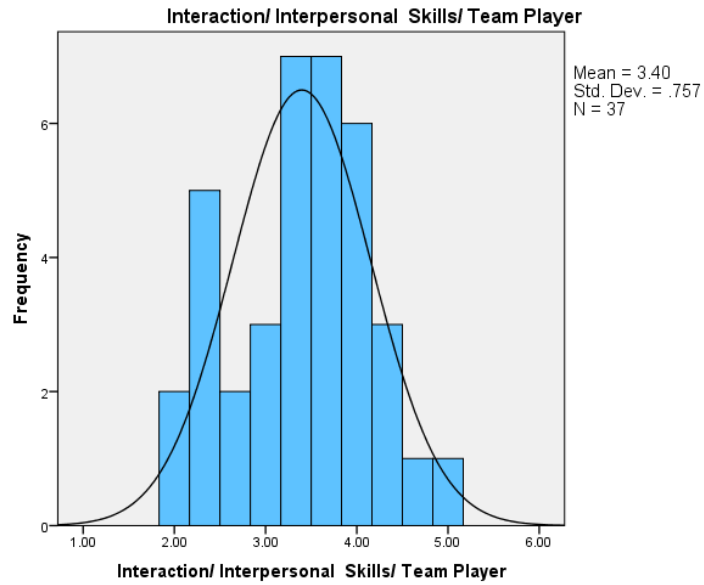


Figure 4.65 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (New and Unstable Projects) - (Employee Perspective)

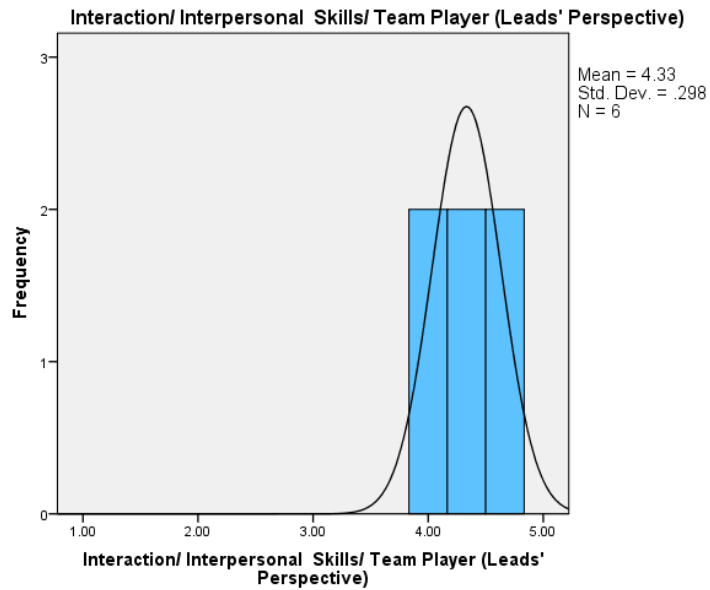


Figure 4.66 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (New and Unstable Projects) - (Leads Perspective)

**For Stable and Long Run Projects**

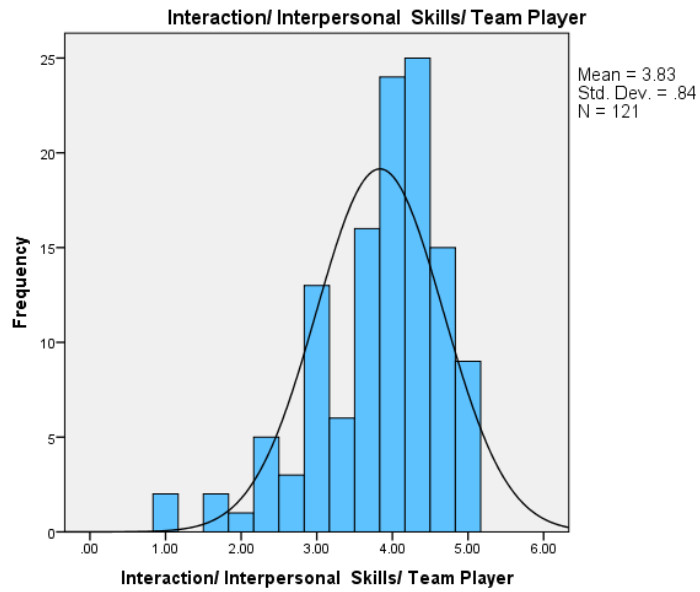


Figure 4.67 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (Stable & Long Run Projects) - (Employee Perspective)

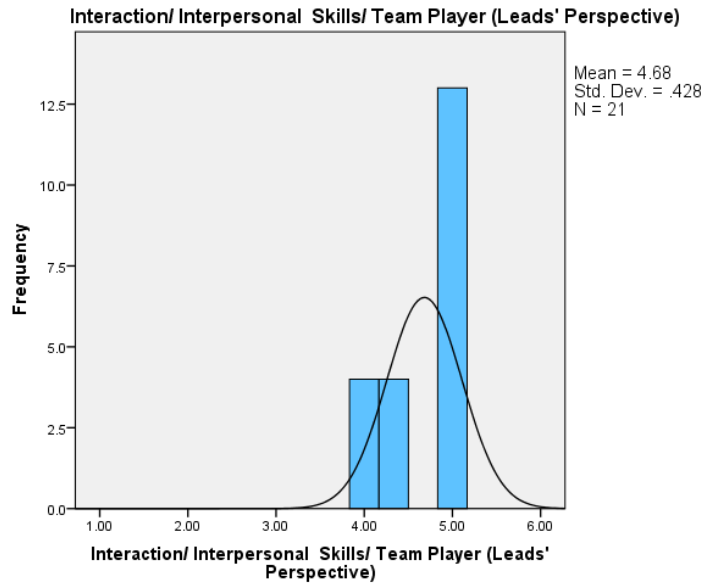


Figure 4.68 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (Stable & Long Run Projects) - (Leads Perspective)

**For CodeRed (Critical) Projects**

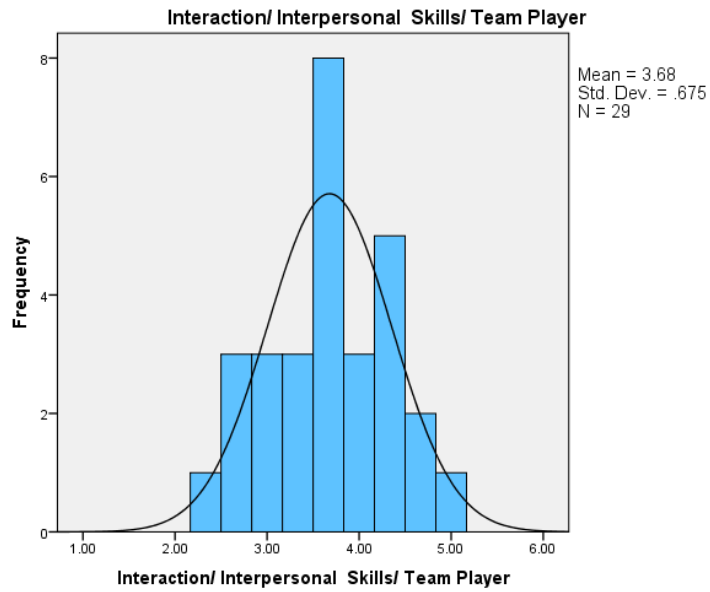


Figure 4.69 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (CodeRed/ Critical Projects) - (Employee Perspective)

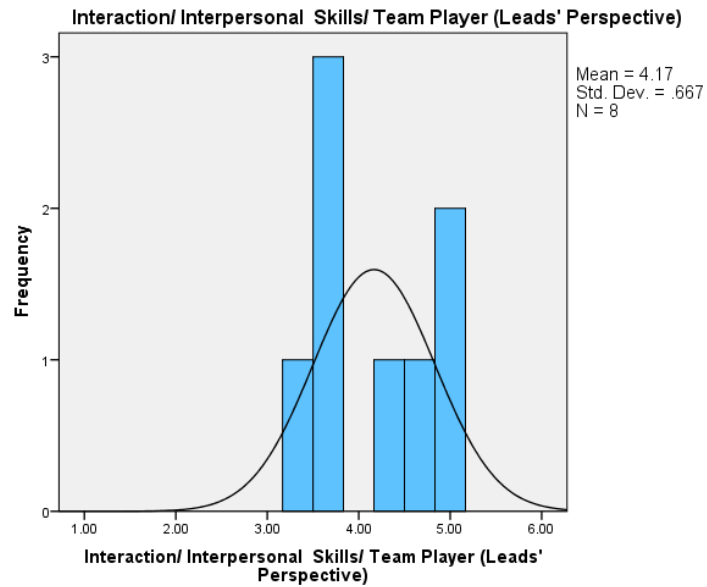


Figure 4.70 Frequency Distribution of Interaction, Interpersonal Skills and Team Player (CodeRed/ Critical Projects) - (Leads Perspective)



#### 4.4.2.8 Frequency Distribution for Communication/ Feedback

##### All Three Project Types

As demonstrated in table 4.110 and figure 4.71y, the mean value of the distribution of communication and feedback qualities is 3.55 for a distribution of 187 respondents. When comparing it with the frequency distribution rule, the mean value of  $3.55 > 3$ . It implies that the impact of communication and feedback is ‘positive’, through which the performances of the employees can be improved. As shown in the table xx for skewness and kurtosis values, the skewness value (-0.542), which is a negative value, stressing that the distribution is negative. It implies that when the tail of the distribution is pointing to the left, most of the people agree that the communication and feedback are positive. Similarly, the positive value of kurtosis, i.e. 0.53 signifies that, the distribution is flatter than normal.

And the mean value of the distribution of interaction, communication and feedback qualities is 4.42 for a distribution of 35 leads sample. According to the frequency distribution rules, created in 3.7.2, the mean value of  $4.42 > 3$ . It implies that the impact of leadership qualities is ‘positive’ so that they can link them to enhance the performances of the employees in leaders’ perspective as well.

Table 4.110 Frequency Distribution of Communication and Feedback (All Project Types)

Statistics			Statistics		
		Communication/ Feedback			Communication/ Feedback (Leads' Perspective)
N	Valid	187	N	Valid	35
	Missing	0		Missing	0
Mean		3.5519	Mean		4.4229
Median		3.6	Median		4.6
Skewness		-0.542	Skewness		-0.442
Std. Error of Skewness		0.178	Std. Error of Skewness		0.398
Kurtosis		0.53	Kurtosis		-0.958
Std. Error of Kurtosis		0.354	Std. Error of Kurtosis		0.778

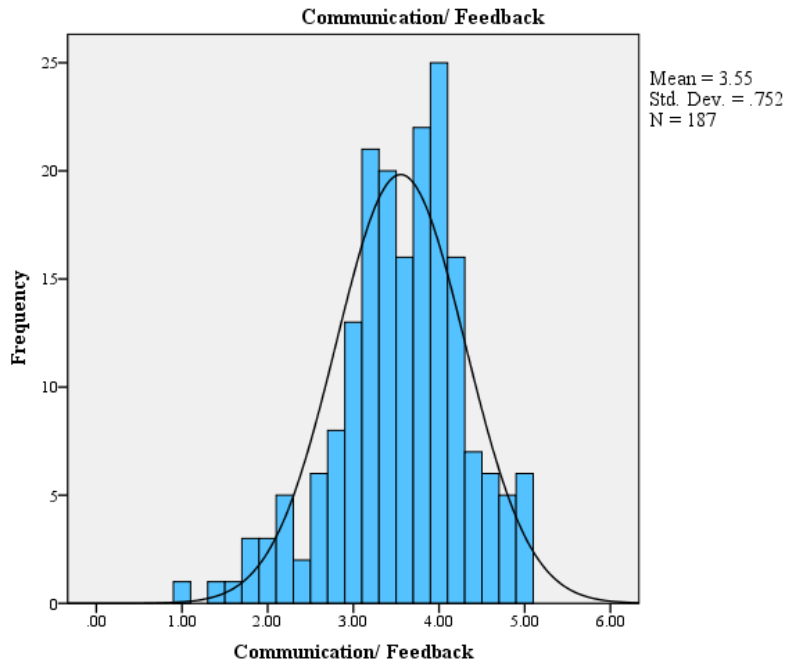


Figure 4.71 Frequency Distribution of Communication and Feedback (All Project Types) - (Employee Perspective)

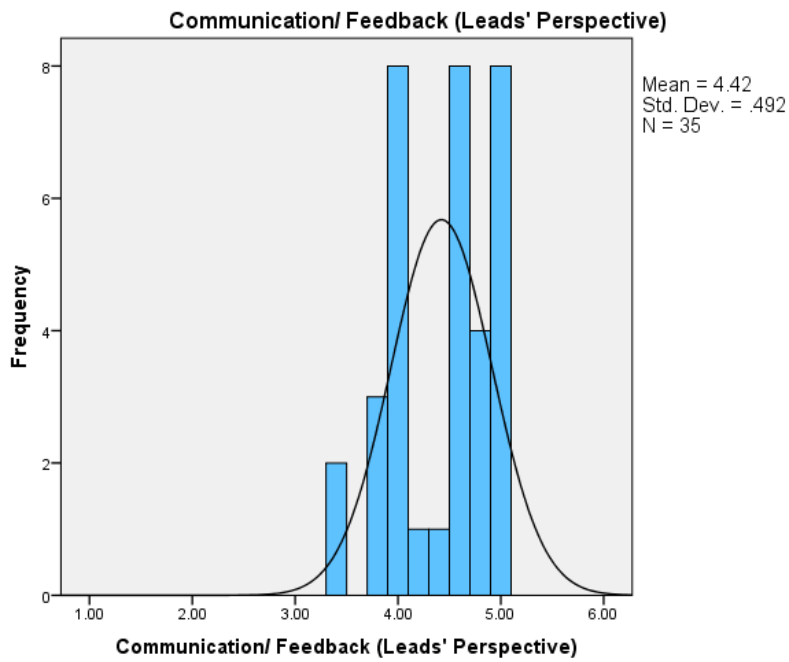


Figure 4.72 Frequency Distribution of Communication and Feedback (All Project Types) - (Leads Perspective)

## For New and Unstable Projects

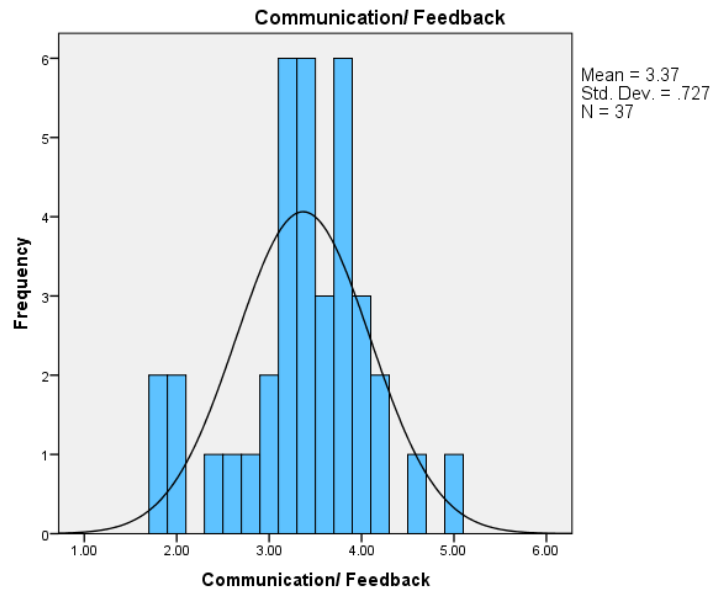


Figure 4.73 Frequency Distribution of Communication and Feedback (New and Unstable Projects) - (Employee Perspective)

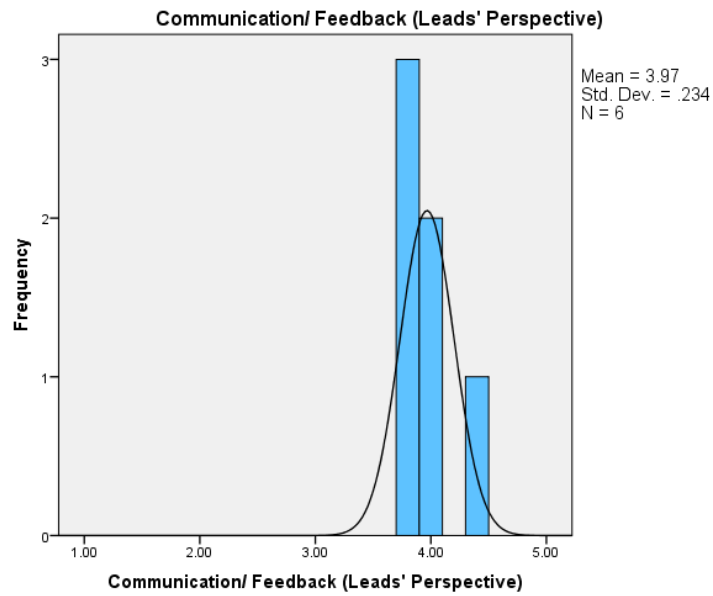


Figure 4.74 Frequency Distribution of Communication and Feedback (New and Unstable Projects) - (Leads Perspective)

## For Stable and Long Run Projects

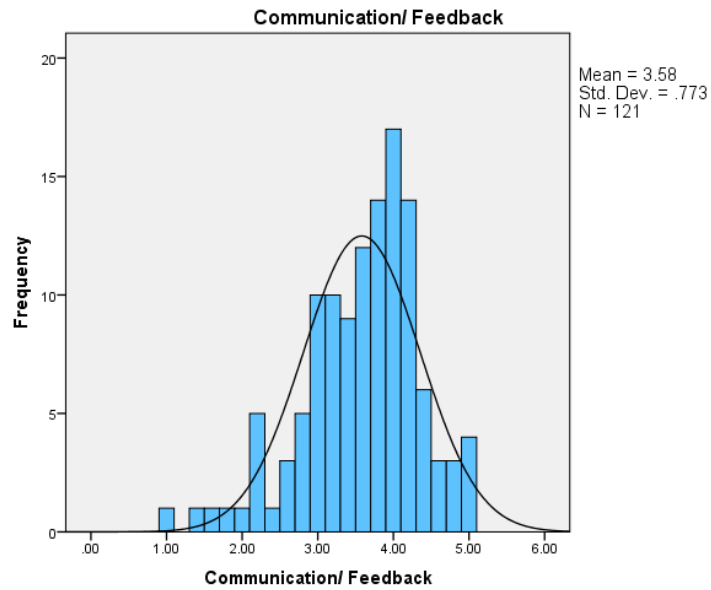


Figure 4.75 Frequency Distribution of Communication and Feedback (Stable & Long Run Projects) - (Employee Perspective)

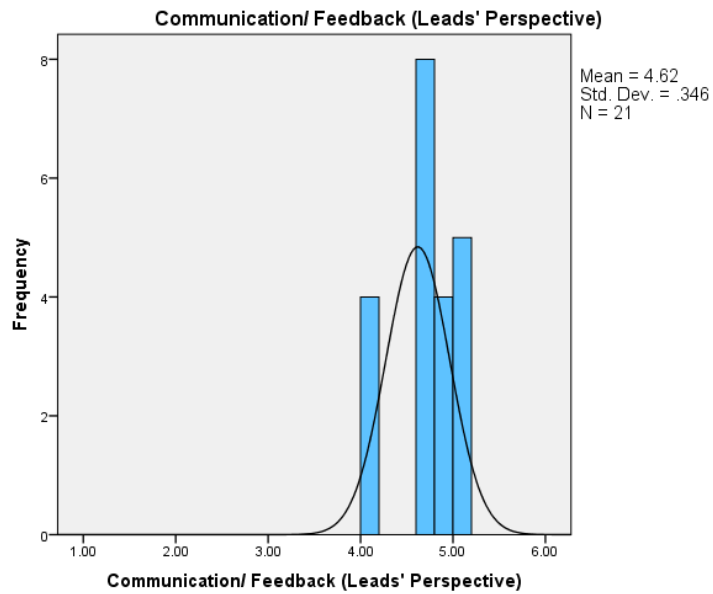


Figure 4.76 Frequency Distribution of Communication and Feedback (Stable & Long Run Projects) - (Leads Perspective)

## For CodeRed (Critical) Projects

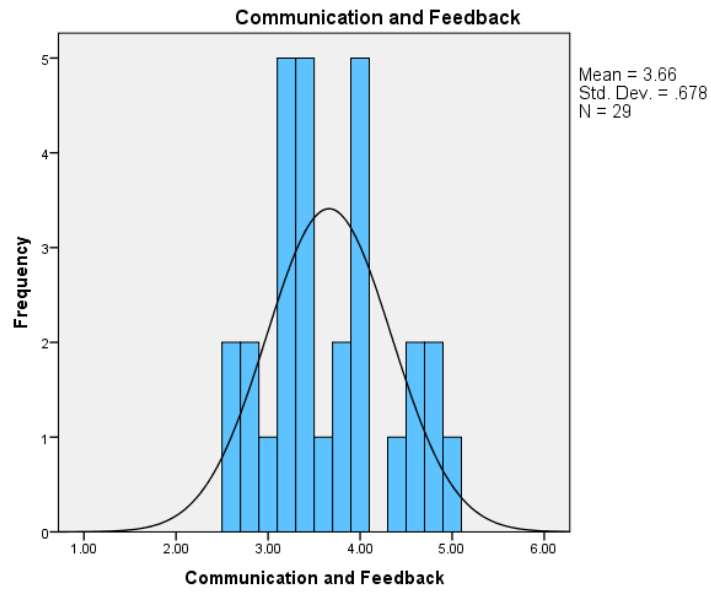


Figure 4.77 Frequency Distribution of Communication and Feedback (CodeRed/ Critical Projects) - (Employee Perspective)

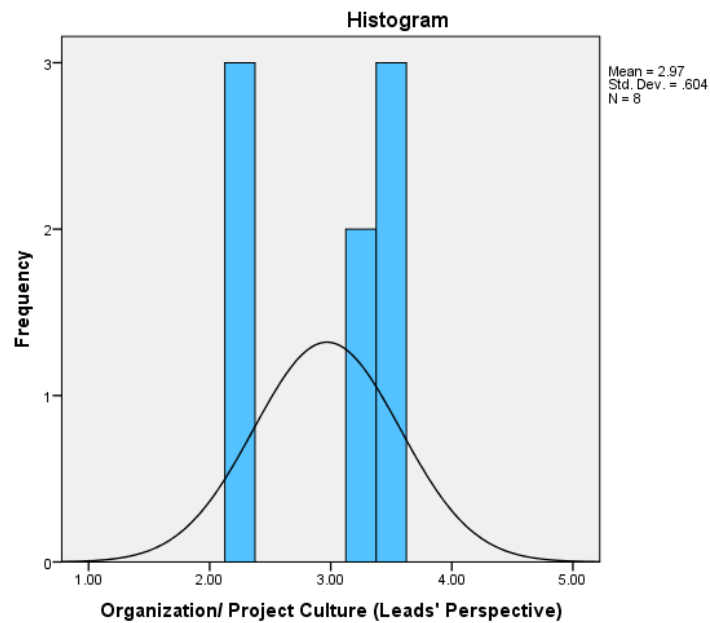


Figure 4.78 Frequency Distribution of Communication and Feedback (CodeRed/ Critical Projects) - (Leads Perspective)

As a summary, frequency distribution for all the above discussed variables were analyzed and it was revealed that the variables are distributed in a positive way, by which positive impacts can be made to enhance the performance of employees.

### 4.4.3 Correlation Analysis

The correlation coefficient of Pearson was calculated to measure the relationship/s among selected variables in this study. Interpreting values for correlation coefficient, initially it is accepted that when the coefficient becomes positive, the relationship is considered as positive; and vice versa. Similarly, when the coefficient value is close to 1, the relationship is considered as strongly correlated and when it is close to 0, the relationship becomes weakly correlated.

However, before applying the correlation statistics, the researcher summarized a number of possible leaders qualities which included, personality and behavior, power & influence, situation, inter action & interpersonal skills, maturity & experience, culture, Proactive rather than reactive, radical rather than conservation, creative/ innovative, active contribution / commitment, Nature of task, employee job satisfaction, Job Performance, turnover, Empowering Leadership, Team Player, Communication feedback, coaching and guidance, staffing, professional development, Change Oriented, rewarding, trust, expertise/ competency and coordination. All these leadership qualities were evaluated through a ranking system in consistent with relevant theories; to ensure which qualities, make direct influence on individual and company performance, while relating to the IT sector. Through that, four main leadership qualities were selected for conducting this study as independent variables,

1. Personality and Behavior
2. Situations/ Nature of Task
3. Organization and Project Culture
4. Experience/ Expertise/ Competency

On the other hand, dependent variable becomes the performance of the employees that finally affect the performance of overall project as well as the company.

1. Interaction/ Interpersonal Skills/ Team Player
2. Communication/ Feedback

And above two variables are considered as sub dependent variables to support performance measurements of the research.

#### 4.4.3.1 Correlation between Independent and Dependent Variable

##### All Three Project Types

Accordingly, table 4.111 demonstrates the calculated correlation between the ‘leadership qualities’ and ‘employee performance’. The correlation test made in aligning to the 2 – tailed significant level test (were significant at 0.01).

##### Employee Perspective

Table 4.111 Correlation Independent & Dependent (All Project Types) – (Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication / Feedback
Leadership	Pearson Correlation	.791**	.677**	.764**
	Sig. (2-tailed)	.000	.000	.000
	N	187	187	187
Personality and Behavior	Pearson Correlation	.690**	.630**	.641**
	Sig. (2-tailed)	.000	.000	.000
	N	187	187	187
Situations/ Nature of Task	Pearson Correlation	.729**	.574**	.736**
	Sig. (2-tailed)	.000	.000	.000
	N	187	187	187
Experience/ Expertise/ Competency	Pearson Correlation	.731**	.577**	.737**
	Sig. (2-tailed)	.000	.000	.000
	N	187	187	187
Organization/ Project Culture	Pearson Correlation	-.118	-.040	-.154*
	Sig. (2-tailed)	.107	.584	.035
	N	187	187	187

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.112 Correlation Independent & Dependent (All Project Types) – (Leads Perspective)

		<b>Correlations</b>		
		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.743** .000 35	.590** .000 35	.785** .000 35
Personality and Behavior (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.755** .000 35	.687** .000 35	.742** .000 35
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.838** .000 35	.691** .000 35	.868** .000 35
Experience/ Expertise/ Competency (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.859** .000 35	.785** .000 35	.843** .000 35
Organization/ Project Culture (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	-.632** .000 35	-.639** .000 35	-.582** .000 35

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Thus, it is apparent that there is a positive correlated relationship between leadership qualities and employee and project performance which is 0.791 (at significant level 0.01) in employee perspective and 0.743 in leads perspective, where coefficient value is a positive value that is closer to one as indicates in table 4.112.



## For New and Unstable Projects

### Employee Perspective

Table 4.113 Correlation Independent & Dependent (New and Unstable Projects) –  
(Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication/ Feedback
Leadership	Pearson Correlation	.764**	.719**	.716**
	Sig. (2-tailed)	.000	.000	.000
	N	37	37	37
Personality and Behavior	Pearson Correlation	.586**	.661**	.481**
	Sig. (2-tailed)	.000	.000	.003
	N	37	37	37
Situations/ Nature of Task	Pearson Correlation	.784**	.656**	.786**
	Sig. (2-tailed)	.000	.000	.000
	N	37	37	37
Experience/ Expertise/ Competency	Pearson Correlation	.577**	.497**	.570**
	Sig. (2-tailed)	.000	.002	.000
	N	37	37	37
Organization/ Project Culture	Pearson Correlation	.169	.153	0.16191211
	Sig. (2-tailed)	.318	.366	.338
	N	37	37	37

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## Leads' Perspective

Table 4.114 Correlation Independent & Dependent (New and Unstable Projects) – (Leads Perspective)

### Correlations

		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	0.126920187 .811 6	-.889* .018 6	0.787226671 .063 6
Personality and Behavior (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	- 0.314115405 .544 6	-.853* .031 6	0.388496753 .447 6
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	- 0.079254312 .881 6	-.821* .045 6	0.561802857 .246 6
Experience/ Expertise/ Competency (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	0.131306433 .804 6	0.433012702 .391 6	-0.220863052 .674 6
Organization/ Project Culture (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.485 .330 6	.000 1.000 6	0.407590204 .422 6

\*. Correlation is significant at the 0.05 level (2-tailed).

## For Stable and Long Run Projects

### Employee Perspective

Table 4.115 Correlation Independent & Dependent (Stable & Long Run Projects) –  
(Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication/ Feedback
Leadership	Pearson Correlation	.827**	.711**	.797**
	Sig. (2-tailed)	.000	.000	.000
	N	121	121	121
Personality and Behavior	Pearson Correlation	.768**	.716**	.705**
	Sig. (2-tailed)	.000	.000	.000
	N	121	121	121
Situations/ Nature of Task	Pearson Correlation	.726**	.580**	.729**
	Sig. (2-tailed)	.000	.000	.000
	N	121	121	121
Experience/ Expertise/ Competency	Pearson Correlation	.783**	.591**	.809**
	Sig. (2-tailed)	.000	.000	.000
	N	121	121	121
Organization/ Project Culture	Pearson Correlation	-.111	-.017	-.158
	Sig. (2-tailed)	.226	.853	.083
	N	121	121	121

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.116 Correlation Independent & Dependent (Stable & Long Run Projects) – (Leads Perspective)

### Correlations

		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.779** .000 21	.764** .000 21	.740** .000 21
Personality and Behavior (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.971** .000 21	.988** .000 21	.897** .000 21
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.972** .000 21	.950** .000 21	.926** .000 21
Experience/ Expertise/ Competency (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.951** .000 21	.892** .000 21	.934** .000 21
Organization/ Project Culture (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	-.665** .001 21	-.693** .000 21	-.602** .004 21

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## For CodeRed (Critical) Projects

### Employee Perspective

Table 4.117 Correlation Independent & Dependent (CodeRed/ Critical Projects) – (Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication and Feedback
Leadership	Pearson Correlation	.593**	0.349623752	.632**
	Sig. (2-tailed)	.001	.063	.000
	N	29	29	29
Personality and Behavior	Pearson Correlation	.548**	0.299415928	.599**
	Sig. (2-tailed)	.002	.115	.001
	N	29	29	29
Situations/ Nature of Task	Pearson Correlation	.616**	0.313561934	.687**
	Sig. (2-tailed)	.000	.098	.000
	N	29	29	29
Experience/ Expertise/ Competency	Pearson Correlation	.573**	.434*	.553**
	Sig. (2-tailed)	.001	.019	.002
	N	29	29	29
Organization/ Project Culture	Pearson Correlation	-.363	-.211	-.388*
	Sig. (2-tailed)	.053	.272	.037
	N	29	29	29

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.118 Correlation Independent & Dependent (CodeRed/ Critical Projects) – (Leads Perspective)

		<b>Correlations</b>		
		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.740* .036 8	0.697602226 .054 8	.750* .032 8
Personality and Behavior (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	0.576309942 .135 8	0.539207258 .168 8	0.585622255 .127 8
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.905** .002 8	.903** .002 8	.887** .003 8
Experience/ Expertise/ Competency (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.988** .000 8	.987** .000 8	.966** .000 8
Organization/ Project Culture (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	-.924** .001 8	-.930** .001 8	-.901** .002 8

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.4.3.2 Inter Correlation between Sub and Main Independent Variables

#### All Three Project Types

According to table 4.119, it is apparent that all the sub variables that have selected by the researchers for the study highly correlate with the main independent variable as well as with each other, while only 'organization and project' variable demonstrates a lower correlation, since its coefficient values are closer to 0 and greater than 1, but still shows a positive relationship.

## Employee Perspective

Table 4.119 Correlation Independent & Sub Independent (All Project Types) – (Employee Perspective)

		<b>Correlations</b>				
		Leadership	Personality and Behavior	Situations / Nature of Task	Experience/ Expertise/ Competency	Organization / Project Culture
Leadership	Pearson Correlation	1	.800**	.883**	.851**	.070
	Sig. (2-tailed)		.000	.000	.000	.340
	N	187	187	187	187	187
Personality and Behavior	Pearson Correlation	.800**	1	.662**	.644**	-.213**
	Sig. (2-tailed)	.000		.000	.000	.003
	N	187	187	187	187	187
Situations/ Nature of Task	Pearson Correlation	.883**	.662**	1	.720**	-.122
	Sig. (2-tailed)	.000	.000		.000	.097
	N	187	187	187	187	187
Experience/ Expertise/ Competency	Pearson Correlation	.851**	.644**	.720**	1	-.178*
	Sig. (2-tailed)	.000	.000	.000		.015
	N	187	187	187	187	187
Organization / Project Culture	Pearson Correlation	.070	-.213**	-.122	-.178*	1
	Sig. (2-tailed)	.340	.003	.097	.015	
	N	187	187	187	187	187

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.120 Correlation Independent & Sub Independent (All Project Types) – (Leads Perspective)

		<b>Correlations</b>				
		Leadership (Leads' Perspective)	Personality and Behavior (Leads' Perspective)	Situations / Nature of Task (Leads' Perspective)	Experience/ Expertise/ Competency (Leads' Perspective)	Organization/ Project Culture (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlation Sig. (2- tailed) N	1  35	.852**  .000 35	.872**  .000 35	.686**  .000 35	-.259  .132 35
Personality and Behavior (Leads' Perspective)	Pearson Correlation Sig. (2- tailed) N	.852**  .000 35	1  .000 35	.787**  .000 35	.603**  .000 35	-.413*  .014 35
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlation Sig. (2- tailed) N	.872**  .000 35	.787**  .000 35	1  .000 35	.823**  .000 35	-.621**  .000 35
Experience / Expertise/ Competency (Leads' Perspective)	Pearson Correlation Sig. (2- tailed) N	.686**  .000 35	.603**  .000 35	.823**  .000 35	1  .000 35	-.753**  .000 35
Organization/ Project Culture (Leads' Perspective)	Pearson Correlation Sig. (2- tailed) N	-.259  .132 35	-.413*  .014 35	-.621**  .000 35	-.753**  .000 35	1  .000 35

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



## For New and Unstable Projects

### Employee Perspective

Table 4.121 Correlation Independent & Sub Independent (New and Unstable Projects) – (Employee Perspective)

		<b>Correlations</b>				
		Leadership	Personality and Behavior	Situations / Nature of Task	Experience/ Expertise/ Competency	Organization / Project Culture
Leadership	Pearson Correlation	1	.813**	.923**	.851**	.195
	Sig. (2-tailed)		.000	.000	.000	.248
	N	37	37	37	37	37
Personality and Behavior	Pearson Correlation	.813**	1	.694**	.577**	.009
	Sig. (2-tailed)	.000		.000	.000	.959
	N	37	37	37	37	37
Situations/ Nature of Task	Pearson Correlation	.923**	.694**	1	.739**	.191
	Sig. (2-tailed)	.000	.000		.000	.258
	N	37	37	37	37	37
Experience/ Expertise/ Competency	Pearson Correlation	.851**	.577**	.739**	1	-.113
	Sig. (2-tailed)	.000	.000	.000		.505
	N	37	37	37	37	37
Organization / Project Culture	Pearson Correlation	.195	.009	.191	-.113	1
	Sig. (2-tailed)	.248	.959	.258	.505	
	N	37	37	37	37	37

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## Leads' Perspective

Table 4.122 Correlation Independent & Sub Independent (New and Unstable Projects) – (Leads Perspective)

		<b>Correlations</b>				
		Leadership (Leads' Perspective )	Personality and Behavior (Leads' Perspective )	Situations/ Nature of Task (Leads' Perspective )	Experience/ Expertise/ Competenc y (Leads' Perspective )	Organizatio n/ Project Culture (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	1  6	.850*  .032 6	.714  .111 6	-.574  .234 6	.329  .525 6
Personality and Behavior (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.850*  .032 6	1  .097 6	.734  .097 6	-.704  .119 6	-.014  .979 6
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.714  .111 6	.734  .097 6	1  1 6	-.474  .342 6	-.394  .440 6
Experience/ Expertise/ Competency (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	-.574  .234 6	-.704  .119 6	-.474  .342 6	1  1 6	-.097  .855 6
Organizatio n/ Project Culture (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.329  .525 6	-.014  .979 6	-.394  .440 6	-.097  .855 6	1  1 6

\*. Correlation is significant at the 0.05 level (2-tailed).

## For Stable and Long Run Projects

### Employee Perspective

Table 4.123 Correlation Independent & Sub Independent (Stable & Long Run Projects) – (Employee Perspective)

		<b>Correlations</b>				
		Leadership	Personality and Behavior	Situations / Nature of Task	Experience/ Expertise/ Competency	Organization / Project Culture
Leadership	Pearson Correlation	1	.813**	.878**	.866**	.094
	Sig. (2-tailed)		.000	.000	.000	.305
	N	121	121	121	121	121
Personality and Behavior	Pearson Correlation	.813**	1	.688**	.703**	-.215*
	Sig. (2-tailed)	.000		.000	.000	.018
	N	121	121	121	121	121
Situations/ Nature of Task	Pearson Correlation	.878**	.688**	1	.706**	-.123
	Sig. (2-tailed)	.000	.000		.000	.179
	N	121	121	121	121	121
Experience/ Expertise/ Competency	Pearson Correlation	.866**	.703**	.706**	1	-.121
	Sig. (2-tailed)	.000	.000	.000		.187
	N	121	121	121	121	121
Organization / Project Culture	Pearson Correlation	.094	-.215*	-.123	-.121	1
	Sig. (2-tailed)	.305	.018	.179	.187	
	N	121	121	121	121	121

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.124 Correlation Independent & Sub Independent (Stable & Long Run Projects) – (Leads Perspective)

		<b>Correlations</b>				
		Leadership (Leads' Perspective )	Personality and Behavior (Leads' Perspective )	Situations/ Nature of Task (Leads' Perspective )	Experience/ Expertise/ Competenc y (Leads' Perspective )	Organizatio n/ Project Culture (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	1  21	.787**  .000 21	.834**  .000 21	.697**  .000 21	-.164  .477 21
Personality and Behavior (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.787**  .000 21	1  .000 21	.944**  .000 21	.881**  .000 21	-.628**  .002 21
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.834**  .000 21	.944**  .000 21	1  .000 21	.969**  .000 21	-.672**  .001 21
Experience/ Expertise/ Competency (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.697**  .000 21	.881**  .000 21	.969**  .000 21	1  .000 21	-.787**  .000 21
Organizatio n/ Project Culture (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	-.164  .477 21	-.628**  .002 21	-.672**  .001 21	-.787**  .000 21	1  21

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## For CodeRed (Critical) Projects

### Employee Perspective

Table 4.125 Correlation Independent & Sub Independent (CodeRed/ Critical Projects) – (Employee Perspective)

		<b>Correlations</b>				
		Leadership	Personality and Behavior	Situations / Nature of Task	Experience/ Expertise/ Competency	Organization / Project Culture
Leadership	Pearson Correlation	1	.794**	.834**	.758**	-.188
	Sig. (2-tailed)		.000	.000	.000	.330
	N	29	29	29	29	29
Personality and Behavior	Pearson Correlation	.794**	1	.550**	.594**	-.468*
	Sig. (2-tailed)	.000		.002	.001	.011
	N	29	29	29	29	29
Situations/ Nature of Task	Pearson Correlation	.834**	.550**	1	.804**	-.418*
	Sig. (2-tailed)	.000	.002		.000	.024
	N	29	29	29	29	29
Experience/ Expertise/ Competency	Pearson Correlation	.758**	.594**	.804**	1	-.588**
	Sig. (2-tailed)	.000	.001	.000		.001
	N	29	29	29	29	29
Organization / Project Culture	Pearson Correlation	-.188	-.468*	-.418*	-.588**	1
	Sig. (2-tailed)	.330	.011	.024	.001	
	N	29	29	29	29	29

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.126 Correlation Independent & Sub Independent (CodeRed/ Critical Projects) – (Leads Perspective)

		<b>Correlations</b>				
		Leadership (Leads' Perspective )	Personality and Behavior (Leads' Perspective )	Situations/ Nature of Task (Leads' Perspective )	Experience/ Expertise/ Competenc y (Leads' Perspective )	Organizatio n/ Project Culture (Leads' Perspective)
Leadership (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	1  8	0.67691002 9  .065 8	.777*  .023 8	.733*  .039 8	-.514  .193 8
Personality and Behavior (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	0.67691002 9  .065 8	1  8	0.30334597 3  .465 8	0.51280213 7  .194 8	- 0.26388018 1  .528 8
Situations/ Nature of Task (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.777*  .023 8	0.30334597 3  .465 8	1  8	.938**  .001 8	-.900**  .002 8
Experience/ Expertise/ Competenc y (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	.733*  .039 8	0.51280213 7  .194 8	.938**  .001 8	1  8	-.950**  .000 8
Organizatio n/ Project Culture (Leads' Perspective)	Pearson Correlatio n Sig. (2- tailed) N	-.514  .193 8	- 0.26388018 1  .528 8	-.900**  .002 8	-.950**  .000 8	1  8

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.4.3.3 Inter Correlation between Sub and Main Dependent Variables

#### All Three Project Types

#### Employee Perspective

Table 4.127 Correlation Dependent & Sub Dependent (All Project Types) – (Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication/ Feedback
Performance	Pearson Correlation	1	.878**	.950**
	Sig. (2-tailed)		.000	.000
	N	187	187	187
Interaction/ Interpersonal Skills/ Team Player	Pearson Correlation	.878**	1	.686**
	Sig. (2-tailed)	.000		.000
	N	187	187	187
Communication/ Feedback	Pearson Correlation	.950**	.686**	1
	Sig. (2-tailed)	.000	.000	
	N	187	187	187

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Leads' Perspective

Table 4.128 Correlation Dependent & Sub Dependent (All Project Types) – (Leads Perspective)

		<b>Correlations</b>		
		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Performance (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	1  35	.928**  35	.972**  35
Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.928**  35	1  35	.815**  35
Communication/ Feedback (Leads' Perspective)	Pearson Correlation Sig. (2-tailed) N	.972**  35	.815**  35	1  35

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



**For New and Unstable Projects**

**Employee Perspective**

Table 4.129 Correlation Dependent & Sub Dependent (New and Unstable Projects) – (Employee Perspective)

**Correlations**

		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication/ Feedback
Performance	Pearson Correlation Sig. (2-tailed) N	1  37	.902**  37	.963**  37
Interaction/ Interpersonal Skills/ Team Player	Pearson Correlation Sig. (2-tailed) N	.902**  37	1  37	.751**  37
Communication/ Feedback	Pearson Correlation Sig. (2-tailed) N	.963**  37	.751**  37	1  37

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## Leads' Perspective

Table 4.130 Correlation Dependent & Sub Dependent (New and Unstable Projects) – (Leads Perspective)

		<b>Correlations</b>		
		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Performance (Leads' Perspective)	Pearson Correlation	1	.227	.667
	Sig. (2-tailed)		.665	.148
	N	6	6	6
Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Pearson Correlation	.227	1	-.574
	Sig. (2-tailed)	.665		.234
	N	6	6	6
Communication/ Feedback (Leads' Perspective)	Pearson Correlation	.667	-.574	1
	Sig. (2-tailed)	.148	.234	
	N	6	6	6

\*. Correlation is significant at the 0.05 level (2-tailed).

## For Stable and Long Run Projects

### Employee Perspective

Table 4.131 Correlation Dependent & Sub Dependent (Stable & Long Run Projects) – (Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication/ Feedback
Performance	Pearson Correlation	1	.881**	.951**
	Sig. (2-tailed)		.000	.000
	N	121	121	121
Interaction/ Interpersonal Skills/ Team Player	Pearson Correlation	.881**	1	.691**
	Sig. (2-tailed)	.000		.000
	N	121	121	121

Communication/ Feedback	Pearson Correlation	.951**	.691**	1
	Sig. (2-tailed)	.000	.000	
	N	121	121	121

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### Leads' Perspective

Table 4.132 Correlation Dependent & Sub Dependent (Stable & Long Run Projects) –  
(Leads Perspective)

#### Correlations

		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Performance (Leads' Perspective)	Pearson Correlation	1	.951**	.973**
	Sig. (2-tailed)		.000	.000
	N	21	21	21
Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Pearson Correlation	.951**	1	.854**
	Sig. (2-tailed)	.000		.000
	N	21	21	21
Communication/ Feedback (Leads' Perspective)	Pearson Correlation	.973**	.854**	1
	Sig. (2-tailed)	.000	.000	
	N	21	21	21

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## For CodeRed (Critical) Projects

### Employee Perspective

Table 4.133 Correlation Dependent & Sub Dependent (CodeRed/ Critical Projects) – (Employee Perspective)

		<b>Correlations</b>		
		Performance	Interaction/ Interpersonal Skills/ Team Player	Communication and Feedback
Performance	Pearson Correlation	1	.808**	.936**
	Sig. (2-tailed)		.000	.000
	N	29	29	29
Interaction/ Interpersonal Skills/ Team Player	Pearson Correlation	.808**	1	.549**
	Sig. (2-tailed)	.000		.002
	N	29	29	29
Communication and Feedback	Pearson Correlation	.936**	.549**	1
	Sig. (2-tailed)	.000	.002	
	N	29	29	29

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### Leads' Perspective

Table 4.134 Correlation Dependent & Sub Dependent (CodeRed/ Critical Projects) – (Leads Perspective)

		<b>Correlations</b>		
		Performance (Leads' Perspective)	Interaction/ Interpersonal Skills/ Team Player (Leads' Perspective)	Communication/ Feedback (Leads' Perspective)
Performance (Leads' Perspective)	Pearson Correlation	1	.977**	.992**
	Sig. (2-tailed)		.000	.000
	N	8	8	8
Interaction/ Interpersonal Skills/ Team	Pearson Correlation	.977**	1	.942**
	Sig. (2-tailed)	.000		.000
	N	8	8	8

Player (Leads' Perspective)				
Communication/ Feedback (Leads' Perspective)	Pearson Correlation	.992**	.942**	1
	Sig. (2-tailed)	.000	.000	
	N	8	8	8

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### 4.4.4 Regression Analysis

##### 4.4.4.1 Linear Regression Analysis

#### All Three Project Types

##### Employee Perspective

Table 4.135 Model Summary (All Project Types) - Employee Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.791 <sup>a</sup>	.626	.624	.43847	.626	310.116	1	185	.000

a. Predictors: (Constant), Leadership

b. Dependent Variable: Performance

Table 4.136 Anova (All Project Types) - Employee Perspective

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.622	1	59.622	310.116	.000 <sup>b</sup>
	Residual	35.567	185	.192		
	Total	95.189	186			

a. Dependent Variable: Performance

b. Predictors: (Constant), Leadership

Table 4.137 Coefficients (All Project Types) - Employee Perspective

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.171	.198		.863	.389
	Leadership	1.031	.059	.791	17.610	.000

a. Dependent Variable: Performance

### Leads Perspective

Table 4.138 Model Summary (All Project Types) - Leads Perspective

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.743 <sup>a</sup>	.552	.539	.32431	.552	40.711	1	33	.000

a. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.139 Anova (All Project Types) - Leads Perspective

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.282	1	4.282	40.711	.000 <sup>b</sup>
	Residual	3.471	33	.105		
	Total	7.753	34			

a. Dependent Variable: Performance (Leads' Perspective)

b. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.140 Coefficients (All Project Types) - Leads Perspective

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.985	.854		-1.153	.257
	Leadership (Leads' Perspective)	1.381	.216	.743	6.381	.000

a. Dependent Variable: Performance (Leads' Perspective)

## New and Unstable Project Types

### Employee Perspective

Table 4.141 Model Summary (New & Unstable Projects) - Employee Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.764 <sup>a</sup>	.584	.572	.45367	.584	49.040	1	35	.000

a. Predictors: (Constant), Leadership

Table 4.142 Anova (New & Unstable Projects) - Employee Perspective

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.093	1	10.093	49.040	.000 <sup>b</sup>
	Residual	7.203	35	.206		
	Total	17.296	36			

a. Dependent Variable: Performance

b. Predictors: (Constant), Leadership

Table 4.143 Coefficient (New & Unstable Projects) - Employee Perspective

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.126	.470		.268	.791
	Leadership	.997	.142	.764	7.003	.000

a. Dependent Variable: Performance

## Leads Perspective

Table 4.144 Model Summary (New & Unstable Projects) - Leads Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.127 <sup>a</sup>	.016	-.230	.13629	.016	.065	1	4	.811

a. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.145 Anova (New & Unstable Projects) - Leads Perspective

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	.065	.811 <sup>b</sup>
	Residual	.074	4	.019		
	Total	.076	5			

a. Dependent Variable: Performance (Leads' Perspective)

b. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.146 Coefficient (New & Unstable Projects) - Leads Perspective

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.865	.938		4.119	.015
	Leadership (Leads' Perspective)	.066	.257	.127	.256	.811

a. Dependent Variable: Performance (Leads' Perspective)



## Stable and Long Run Project Types

### Employee Perspective

Table 4.147 Model Summary (Stable & Long Run Projects) - Employee Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.827 <sup>a</sup>	.683	.681	.41635	.683	256.818	1	119	.000

a. Predictors: (Constant), Leadership

Table 4.148 Anova (Stable & Long Run Projects) - Employee Perspective

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.518	1	44.518	256.818	.000 <sup>b</sup>
	Residual	20.628	119	.173		
	Total	65.146	120			

a. Dependent Variable: Performance

b. Predictors: (Constant), Leadership

Table 4.149 Coefficient (Stable & Long Run Projects) - Employee Perspective

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.198	.220		.898	.371
	Leadership	1.035	.065	.827	16.026	.000

a. Dependent Variable: Performance

## Leads Perspective

Table 4.150 Model Summary (Stable & Long Run Projects) - Leads Perspective

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.779 <sup>a</sup>	.606	.585	.23367	.606	29.237	1	19	.000

a. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.151 Anova (Stable & Long Run Projects) - Leads Perspective

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.596	1	1.596	29.237	.000 <sup>b</sup>
	Residual	1.037	19	.055		
	Total	2.634	20			

a. Dependent Variable: Performance (Leads' Perspective)

b. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.152 Coefficients (Stable & Long Run Projects) - Leads Perspective

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.384	1.116		-1.240	.230
	Leadership (Leads' Perspective)	1.490	.276	.779	5.407	.000

a. Dependent Variable: Performance (Leads' Perspective)

## CodeRed (Critical) Project Types

### Employee Perspective

Table 4.153 Model Summary (Critical Projects) - Employee Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.593 <sup>a</sup>	.351	.327	.49336	.351	14.633	1	27	.001

a. Predictors: (Constant), Leadership

Table 4.154 Anova (Critical Projects) - Employee Perspective

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.562	1	3.562	14.633	.001 <sup>b</sup>
	Residual	6.572	27	.243		
	Total	10.134	28			

a. Dependent Variable: Performance

b. Predictors: (Constant), Leadership

Table 4.155 Coefficient (Critical Projects) - Employee Perspective

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.518	.828		.626	.537
	Leadership	.939	.245	.593	3.825	.001

a. Dependent Variable: Performance

## Leads Perspective

Table 4.156 Model Summary (Critical Projects) - Leads Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.740 <sup>a</sup>	.548	.473	.48442	.548	7.283	1	6	.036

a. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.157 Anova (Critical Projects) - Leads Perspective

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.709	1	1.709	7.283	.036 <sup>b</sup>
	Residual	1.408	6	.235		
	Total	3.117	7			

a. Dependent Variable: Performance (Leads' Perspective)

b. Predictors: (Constant), Leadership (Leads' Perspective)

Table 4.158 Coefficient (Critical Projects) - Leads Perspective

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8.159	4.590		-1.778	.126
	Leadership (Leads' Perspective)	3.217	1.192	.740	2.699	.036

a. Dependent Variable: Performance (Leads' Perspective)

## 4.5 Further Analysis based on Demographic Variables

### 4.5.1 Age Vise Analysis

#### Employee Perspective

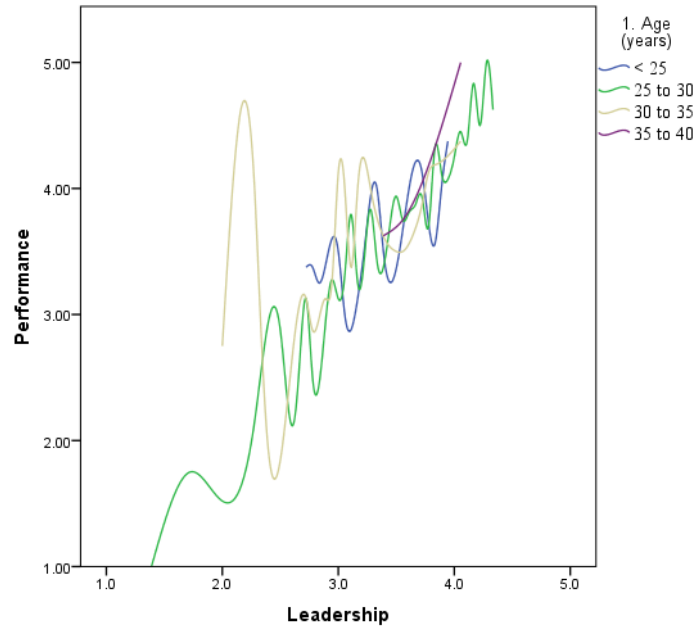


Figure 4.79 Age Analysis – Employee

#### Leads Perspective

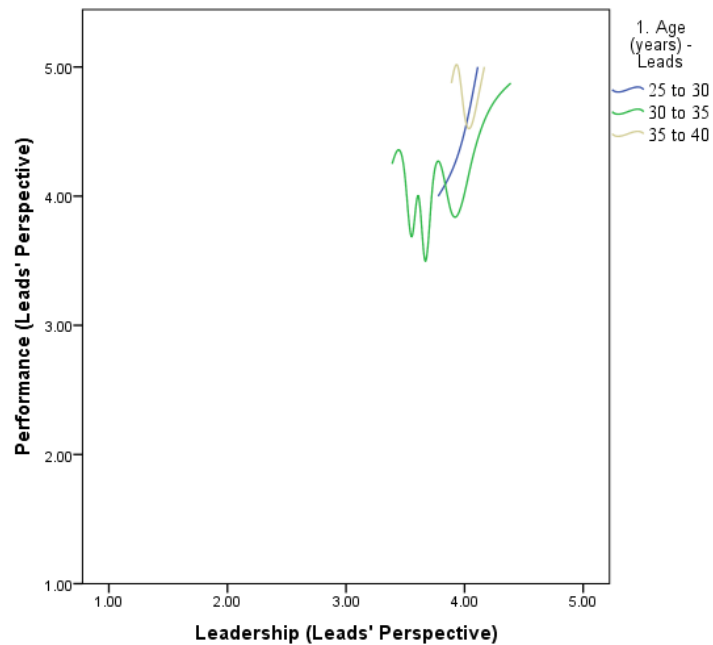


Figure 4.80 Age Analysis – Leads

## 4.5.2 Gender Vise Analysis

### Employee Perspective

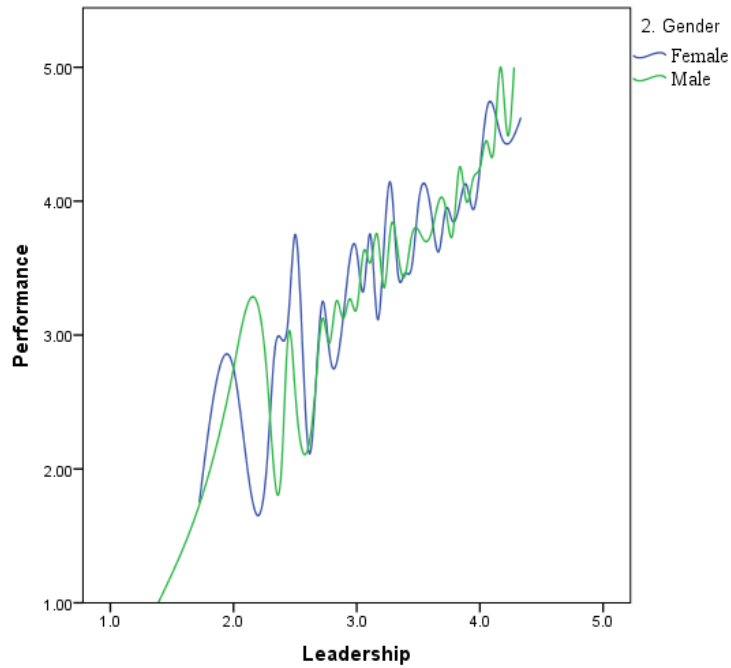


Figure 4.81 Gender Analysis - Employees

### Leads Perspective

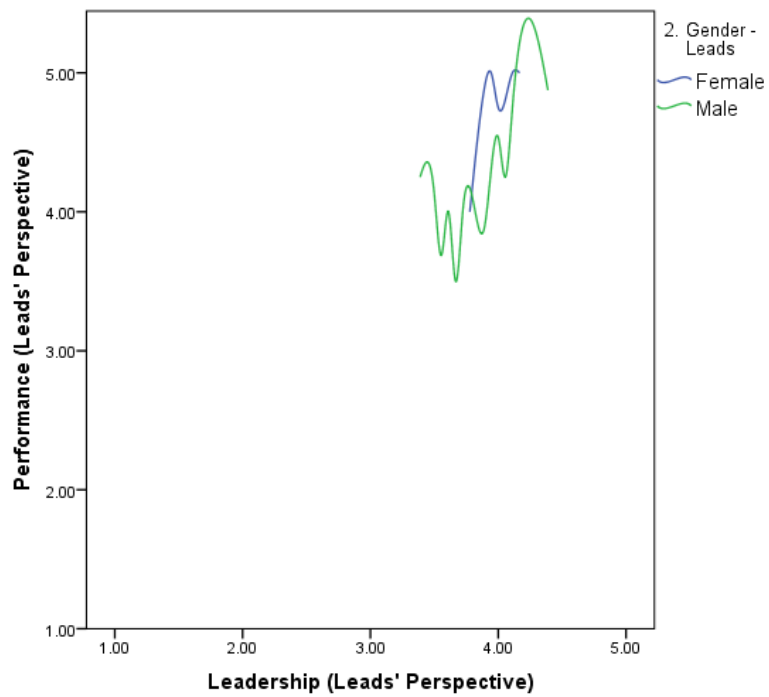


Figure 4.82 Gender Analysis – Leads

### 4.5.3 Designation Wise Analysis

#### Employee Perspective

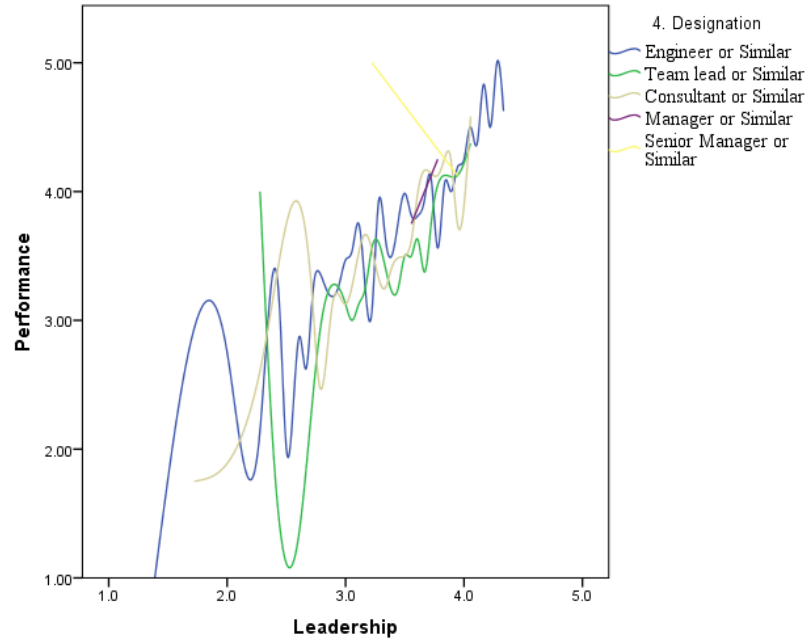


Figure 4.83 Designation Analysis –Employees

#### Leads Perspective

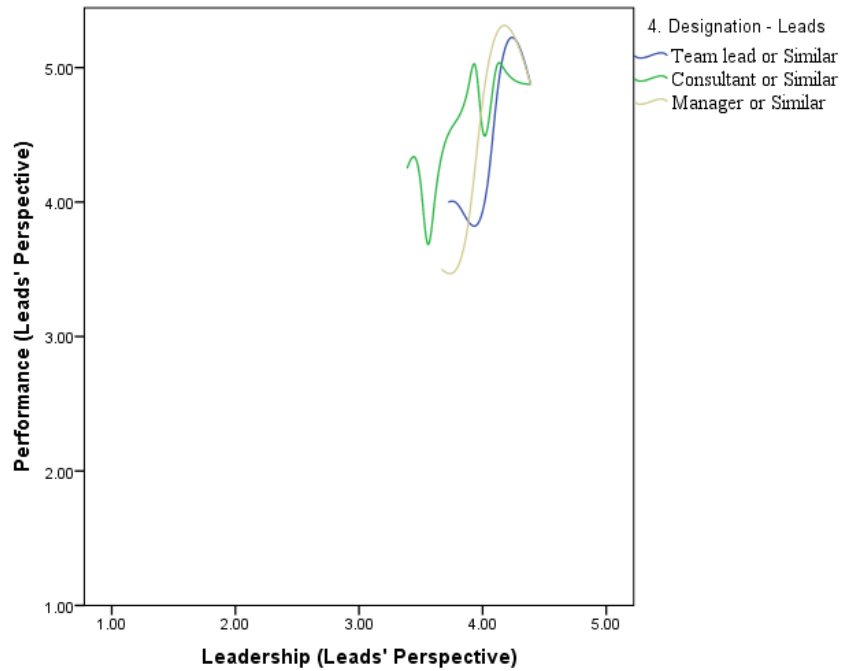


Figure 4.84 Designation Analysis – Leads

### 4.5.4 Industry Experience Wise Analysis

## Employee Perspective

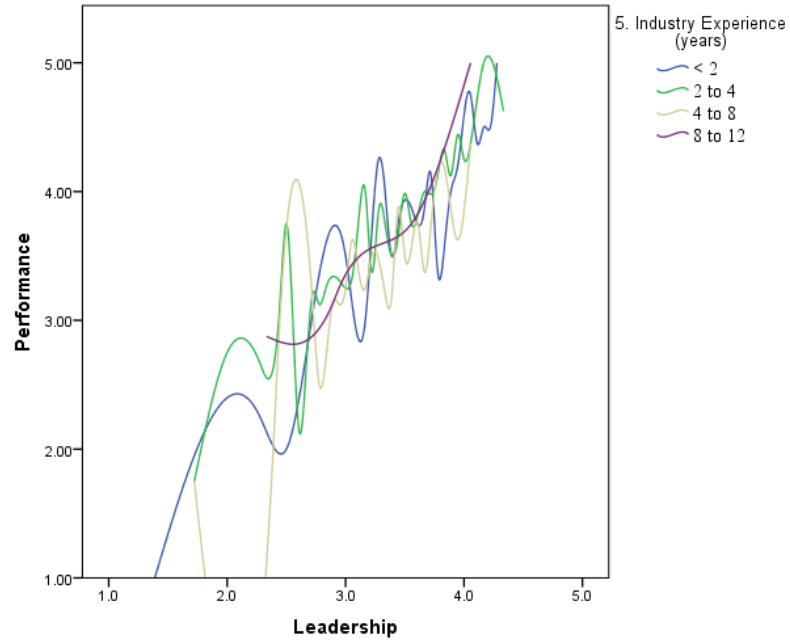


Figure 4.85 Industry Experience Analysis - Employee

## Leads Perspective

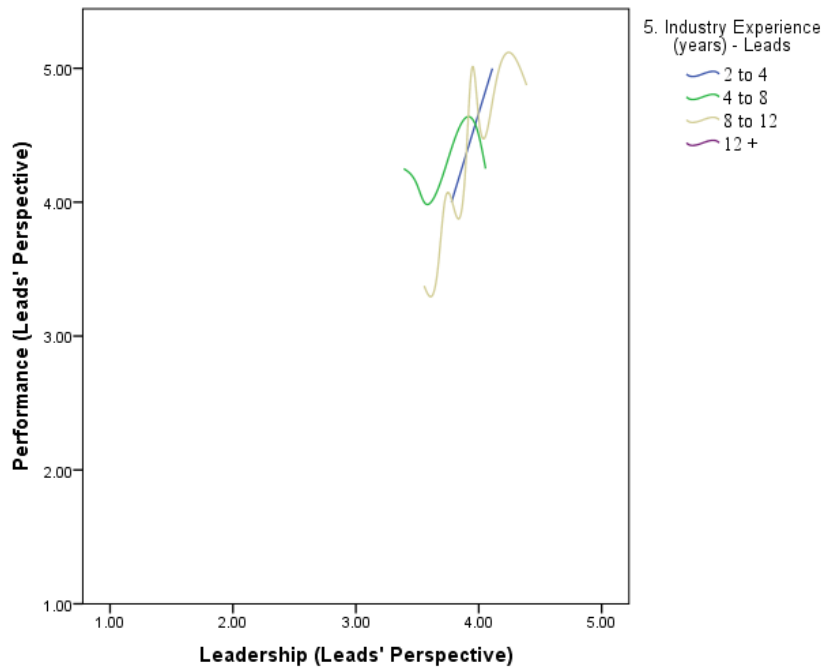


Figure 4.86 Industry Experience Analysis – Leads



## 4.5.5 Recent Project Experience Vise Analysis

### Employee Perspective

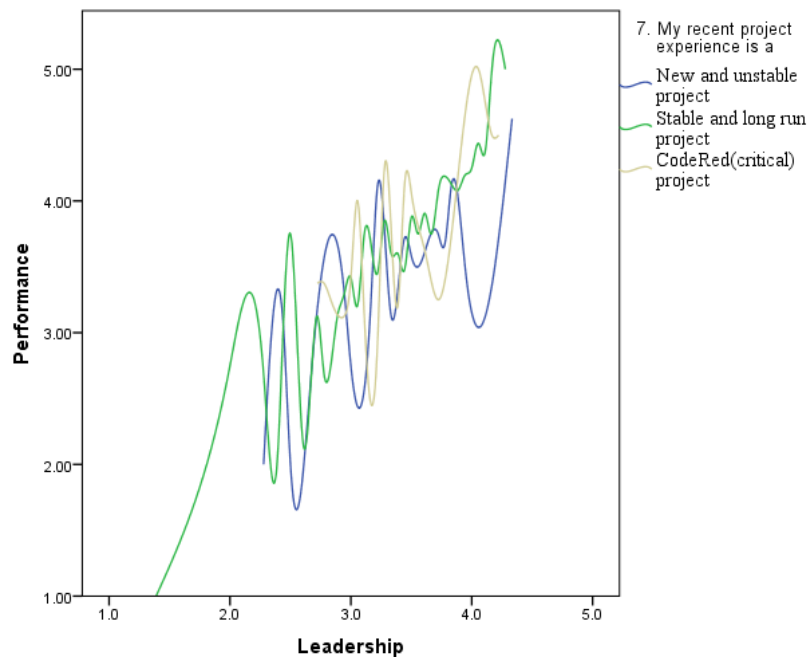


Figure 4.87 Recent Project Experience Analysis - Employee

### Leads Perspective

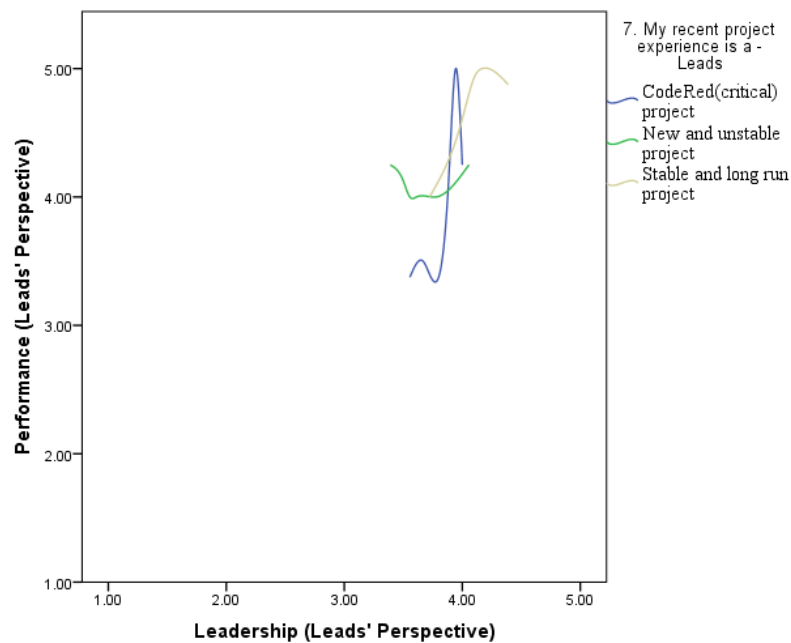


Figure 4.88 Recent Project Experience Analysis – Leads

There's no significant difference to be identified in the perception of leaders and employees on leadership impact on employee performance based on the demographic variables; i.e. age

(figure 4.79 and figure 4.80), gender (figure 4.81 and figure 4.82), designation (figure 4.83 and figure 4.84), industry experience (figure 4.85 and figure 4.86) and recent project experience (figure 4.87 and figure 4.88). Small fluctuation of the patterns can be seen, thus a sleep can gradual growth can also be seen in the figures that indicate that both the leaders and employees have the same perception of leadership impact on employee performance.

## **Chapter 5**

### **5 Discussion and Conclusion**

#### **5.1 Introduction**

The aim of this study was to identify and prioritize the leadership qualities according to the project status that enables and keep the management at ease when selecting the best leadership match for the project. After gathering all required data for the study, Pearson's Correlation and Regression Analyses were applied in analyzing and interpreting collected data, which is recorded in chapter four. This chapter has utilized the information derived from chapter four to make conclusions and to provide suggestions for both academic context and to business context.

#### **5.2 Discussion of Research Findings**

##### **5.2.1 Evaluating and Measuring the Link between Leadership and Employee Performance in Sri Lankan IT Sector**

According to secondary data collected through previous academic papers, leadership is vital for monitoring, guiding and controlling IT projects towards high performances (Krisch, 2000) and correspondingly, skills of project leaders are essential for the effectiveness and superior performances of the project team (Taylor & Woelfer, 2011).

Data collection for the research has been done throughout a 3 months' period for both the questionnaires aimed for employees and leads. Altogether 222 responses were collected where 187 responses were from employees while 35 responses were from leads. The expected sample data set to be collected was 383 for the ICT employee (section 3.4), but with the limited period and the poor response rate with the time the research findings were build up with total of 222 responses from both the employees and leads. There are no proper surveys done in the Sri Lankan IT sector to identify the number of employees who are playing a role as a lead and managing employees that we can consider as the population of leads who are affecting to the employee performance. And, the exact number of employees who are reporting to a reporting manager is not in the records, since we could not get the exact count on that as well. Still there are self-employed or employees with no reporting manager where company hierarchy is not established properly.

Checking validity and reliability of an instrument before using it for data collection is a must

to ensure the accuracy of the data and the accuracy of the collection process as well. Thus, validity and reliability of the instrument of this study measured by applying the Cronbach's Alpha value in SPSS; and according to the set standards of Cronbach's Alpha, the value should be greater than 0.7 to ensure that the instrument (i.e. the questionnaire in this study) is appropriate for using as a data collection tool (Goforth, 2015, online). Accordingly, the research analysis (section 4.3) illustrate the validity and reliability of the questionnaire respectively, which used for measuring and identifying leadership qualities in enhancing the performance of IT projects in Sri Lanka.

According to the results found in the data analysis (section 4.3), the validity of the instrument is 100%, which implies that all 222 respondents in both the samples (187 Employees and 35 Leaders) have properly provided responses for all question items in the instrument. Thus, it can be mentioned that the instrument was user friendly, which made it convenient for the respondents to understand and to provide answers. Table 5.1 summarized the reliability analysis of the identified variables. The question number 13(My lead is having relationship-building competencies, and help new team members to easily get along with the team) is identified as an item that is impacting negatively to Cronbach's Alpha value. It is identified that the question is not directly pointed to an exact answer since it appears to the reader as 2 different questions.

Table 5.1 Reliability Analysis Summary

		Cronbach's Alpha (Employee)	Cronbach's Alpha (Leads)
Personality and Behavior	All 3 Project Types	0.801	0.818
	New and Unstable Projects	0.817	0.643
	Stable and Long Run Projects	0.82	0.918
	CodeRed(Critical) Projects	0.741	0.107
Situations/ Nature of Task	All 3 Project Types	0.857	0.907
	New and Unstable Projects	0.842	0.827
	Stable and Long Run Projects	0.879	0.921
	CodeRed(Critical) Projects	0.677	0.828
Experience/ Expertise/ Competency	All 3 Project Types	0.846	0.863
	New and Unstable Projects	0.838	N/A
	Stable and Long Run Projects	0.858	0.916
	CodeRed(Critical) Projects	0.696	0.816
Organization/ Project Culture	All 3 Project Types	0.46	0.687
	New and Unstable Projects	0.276	0.606
	Stable and Long Run Projects	0.555	0.714
	CodeRed(Critical) Projects	0.518	0.757
Interaction/ Interpersonal Skills/ Team Player	All 3 Project Types	0.717	0.739
	New and Unstable Projects	0.707	0.195
	Stable and Long Run Projects	0.713	0.902
	CodeRed(Critical) Projects	0.457	0.804
Communication/ Feedback	All 3 Project Types	0.839	0.859
	New and Unstable Projects	0.854	0.182
	Stable and Long Run Projects	0.844	0.828
	CodeRed(Critical) Projects	0.79	0.92

The frequency distribution summary table 5.2 indicate that leadership qualities having a positive impact in both leaders' perspective and employee perspective.

Mean value of the variable (VAR)

If  $4 < VAR < 5$ ; then the impact of leadership qualities is positive

If  $2 < VAR < 4$ ; then the impact of leadership qualities is moderate

If  $1 < VAR < 2$ ; then the impact of leadership qualities is negative

Table 5.2 Frequency (Mean) Summary

Variable		Mean (Employee)	Mean (Leads)	
<b>Leadership</b>	<b>Leadership (Overall)</b>	All 3 Project Types	3.341	3.9381
		New and Unstable Projects	3.94	3.26
		Stable and Long Run Projects	3.36	4.04
		CodeRed(Critical) Projects	3.35	3.85
	Personality and Behavior	All 3 Project Types	3.6176	4.4429
		New and Unstable Projects	3.69	4.04
		Stable and Long Run Projects	3.59	4.71
		CodeRed(Critical) Projects	3.64	4.03
	Situations/ Nature of Task	All 3 Project Types	3.4856	4.2971
		New and Unstable Projects	3.3	3.57
		Stable and Long Run Projects	3.53	4.54
		CodeRed(Critical) Projects	3.55	4.2
	Experience/ Expertise/ Competency	All 3 Project Types	3.2727	4.25
		New and Unstable Projects	2.99	3.83
		Stable and Long Run Projects	3.38	4.37
		CodeRed(Critical) Projects	3.2	4.34
Organization/ Project Culture	All 3 Project Types	2.9537	2.6952	
	New and Unstable Projects	3.09	3.06	
	Stable and Long Run Projects	2.9	2.63	
	CodeRed(Critical) Projects	3	2.58	
<b>Performance</b>	<b>Performance (Overall)</b>	All 3 Project Types	3.6163	4.4536
		New and Unstable Projects	3.38	4.1
		Stable and Long Run Projects	3.68	4.64
		CodeRed(Critical) Projects	3.67	4.22
	Interaction/ Interpersonal Skills/ Team Player	All 3 Project Types	3.7237	4.5048
		New and Unstable Projects	3.4	4.33
		Stable and Long Run Projects	3.83	4.68
		CodeRed(Critical) Projects	3.68	4.17
	Communication/ Feedback	All 3 Project Types	3.5519	4.4229
		New and Unstable Projects	3.37	3.97
		Stable and Long Run Projects	3.58	4.62
		CodeRed(Critical) Projects	3.66	2.97

The research findings indicate that all the identified variables support the identified frequency rules positively or moderate.

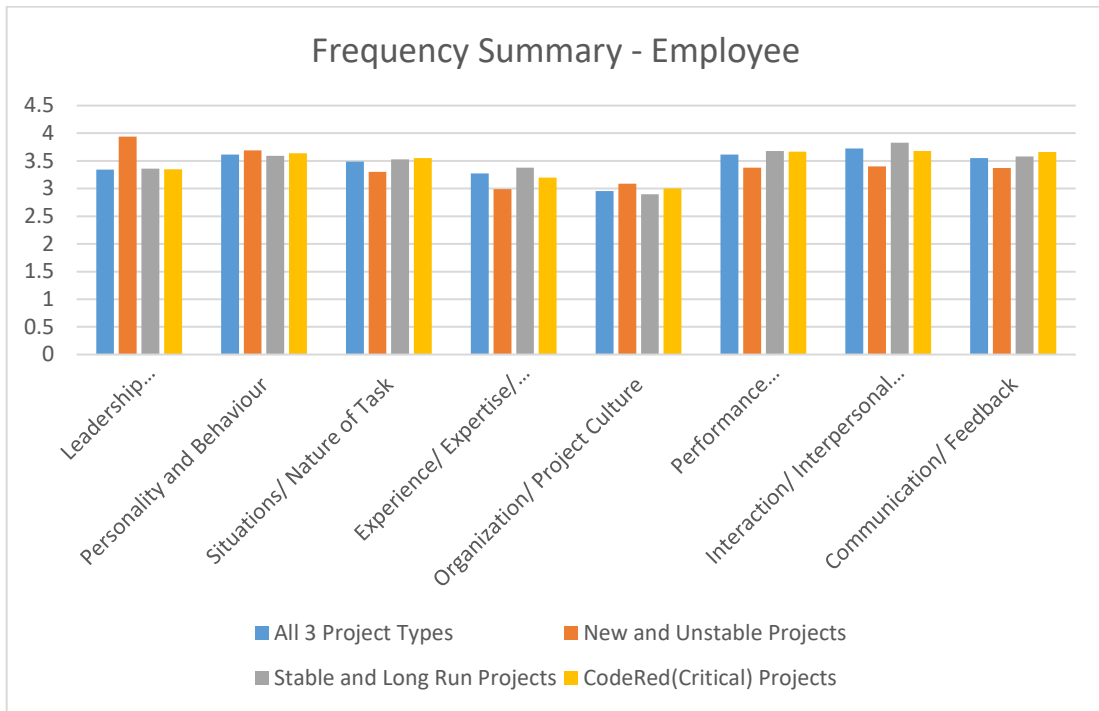


Figure 5.1 Frequency Summary – Employee Perspective

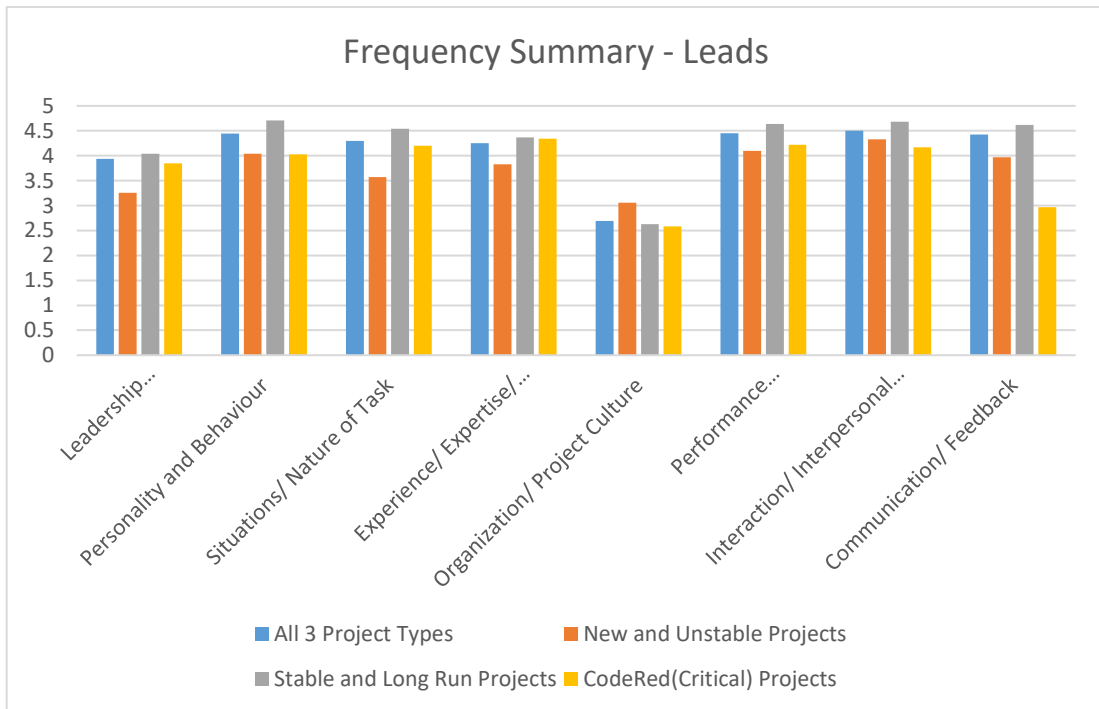


Figure 5.2 Frequency Summary – Leads Perspective

	Overall (General) Projects				New & Unstable Projects				Stable & Long Run Projects				CodeRed (Critical) Projects			
	Null Hypothesis		Alternative Hypothesis		Null Hypothesis		Alternative Hypothesis		Null Hypothesis		Alternative Hypothesis		Null Hypothesis		Alternative Hypothesis	
	Emp	Lead	Emp	Lead	Emp	Lead	Emp	Lead	Emp	Lead	Emp	Lead	Emp	Lead	Emp	Lead
Hypothesis 1 Leadership Qualities			★	★			★	★			★	★			★	★
Hypothesis 1.1 Personality & Behavior			★	★		★					★	★			★	★
Hypothesis 1.2 Situations/ Nature of Task			★	★		★					★	★			★	★
Hypothesis 1.3 Experience/ Expertise/ Competency			★	★			★	★			★	★			★	★
Hypothesis 1.4 Organization/ Project Culture	★	★					★	★	★	★			★	★		
Hypothesis 1.5 Interaction/ Interpersonal Skills/ Team Player			★	★			★	★			★	★			★	★
Hypothesis 1.6 Communication/ Feedback			★	★			★	★			★	★			★	★

★ Alternative Hypothesis is Rejected

★ Alternative Hypothesis is Proved

Figure 5.3 Prove Hypothesis - Summary



Table 5.3 Rank the Project Types According to the Leadership Qualities

Variable		Employee	Leads
<b>Leadership</b>	<b>Leadership (Overall)</b>	New and Unstable Projects	Stable and Long Run Projects
		Stable and Long Run Projects	All 3 Project Types
		CodeRed(Critical) Projects	CodeRed(Critical) Projects
		All 3 Project Types	New and Unstable Projects
	Personality and Behavior	New and Unstable Projects	Stable and Long Run Projects
		CodeRed(Critical) Projects	All 3 Project Types
		All 3 Project Types	CodeRed(Critical) Projects
		CodeRed(Critical) Projects	New and Unstable Projects
	Situations/ Nature of Task	CodeRed(Critical) Projects	Stable and Long Run Projects
		Stable and Long Run Projects	All 3 Project Types
		All 3 Project Types	CodeRed(Critical) Projects
		New and Unstable Projects	New and Unstable Projects
	Experience/ Expertise/ Competency	Stable and Long Run Projects	Stable and Long Run Projects
		All 3 Project Types	CodeRed(Critical) Projects
		CodeRed(Critical) Projects	All 3 Project Types
		New and Unstable Projects	New and Unstable Projects
	Organization/ Project Culture	New and Unstable Projects	New and Unstable Projects
		All 3 Project Types	All 3 Project Types
		CodeRed(Critical) Projects	Stable and Long Run Projects
		Stable and Long Run Projects	CodeRed(Critical) Projects

Table 5.4 Rank Leadership Quality Impact for Performance (All Projects)

All 3 Project Types (Common)		
	Employee	Leads
1	Personality and Behavior	Personality and Behavior
2	Situations/ Nature of Task	Situations/ Nature of Task
3	Leadership (Overall)	Experience/ Expertise/ Competency
4	Experience/ Expertise/ Competency	Leadership (Overall)
5	Organization/ Project Culture	Organization/ Project Culture

Table 5.5 Rank Leadership Quality Impact for Performance (New & Unstable Projects)

<b>New and Unstable Projects</b>		
	<b>Employee</b>	<b>Leads</b>
1	Leadership (Overall)	Personality and Behavior
2	Personality and Behavior	Experience/ Expertise/ Competency
3	Situations/ Nature of Task	Situations/ Nature of Task
4	Organization/ Project Culture	Leadership (Overall)
5	Experience/ Expertise/ Competency	Organization/ Project Culture

Table 5.6 Rank Leadership Quality Impact for Performance (Stable & Long Run Projects)

<b>Stable and Long Run Projects</b>		
	<b>Employee</b>	<b>Leads</b>
1	Personality and Behavior	Personality and Behavior
2	Situations/ Nature of Task	Situations/ Nature of Task
3	Experience/ Expertise/ Competency	Experience/ Expertise/ Competency
4	Leadership (Overall)	Leadership (Overall)
5	Organization/ Project Culture	Organization/ Project Culture

Table 5.7 Rank Leadership Quality Impact for Performance (CodeRed Projects)

<b>CodeRed(Critical) Projects</b>		
	<b>Employee</b>	<b>Leads</b>
1	Personality and Behavior	Experience/ Expertise/ Competency
2	Situations/ Nature of Task	Situations/ Nature of Task
3	Leadership (Overall)	Personality and Behavior
4	Experience/ Expertise/ Competency	Leadership (Overall)
5	Organization/ Project Culture	Organization/ Project Culture

### 5.3 Research Findings and Recommendations

Apart from ranking the leadership qualities that would benefit the IT sector of the country and categorizing the leadership qualities in accordance with several project statuses (as shown in table 5.4, table 5.5, table .5.6 and table 5.7), this study attempted to,

- Evaluate and measure the link between leadership and performances in IT projects in Sri Lanka. This result is shown in table 4.111 and table 4.112
- Identify leadership qualities for IT companies in Sri Lanka that impact on employee performance. This result is shown in table 3.1, table 5.1, table 5.2, figure 5.1, figure 5.2 and, figure 5.3
- Categorize and prioritize the project types to identify which leadership qualities should apply with several projects according to the project statuses. This result is shown in table 5.3

The results can be used to support the project leadership to identify and select appropriate professionals with suitable leadership qualities for the projects according to the situation. Different predefined standards can be used to identify the leadership qualities of potential lead candidates for the projects.

This study presented a model of leadership qualities which are appropriate to enhance the

employee performance of IT project sector in Sri Lanka. The identified key qualities, i.e. Personalities and Behaviors, Situations/ Nature of Task, Organization/ Project Culture and Experience/ Expertise/ Competency are not only related with the IT project based industry, the product based industry or private sector, but can apply for the government offices as well. Though, the nature of working environments might be differed but the nature of talent does not differ in private or government based contexts; there will be no dilemmas in practical scenarios.

In addition, these leadership styles can be easily applied for other professionals as well including engineers, doctors, accountants and management trainees who face the similar kind of performance issues along with their professional background.

The results of the study revealed that there is a high significant correlation between the leadership qualities and performances of employees in Sri Lankan IT sector. The core of these findings exposes that there is a high dependency in IT sector professionals on their leaders. The reasons can be highly dynamic nature of the technology which creates uncertainty within professionals regarding their future steps or decisions.

This dependent nature of employees can be used in improving the performances drastically. Basically, leaders can be appointed in accordance with the type of the project, for instances, new and unstable projects, leaders can be appointed as mentors to guide the from initial stage to the last stage to ensure the proper functioning of the project; and for stable and long-term projects, leaders can be appointed as change agents to guide the team into a new vision with more initiatives etc. Further, for new comers of the project teams need to guide carefully from the initial step, to drag out their optimum potentiality for enhancing the project and company performances at the end. It will be more beneficial if the company can establish a separate business unit or a project team for making aware the new comers and for training them for a period, and later they can be absorbed to the required operational project team.

Regardless of the type of the project, leadership qualities and behaviors must be carefully determined, since the subordinates show a high propensity to follow the leaders in the IT industry. It is vital for almost all the IT companies to cautiously decide their leaders, since they can make treacherous impacts if the appropriate persons are not selected as leaders. To aiding the leaders' selection process, companies can implement proper promotions and performance evaluation functions, through will the best persons will filter and select as the leaders to guide the teams.

In addition, the leaders of the IT organizations are mostly the technical personnel, who have lesser knowledge on general administration and human resource management functions. Therefore, those who are promoted as leaders from technical cultures should be offered with adequate training programs to ensure that they perform well for the betterment of the organization and the projects, while maintaining ethical aspects and harmonious aspects at the workplace, at the same time by ensuring high performances of the subordinates.

In a different perspective, it is vital to study the reasons for high dependency of the professionals on their leaders, even being the experts of the fields. It can be monitored from the interview evaluation and the selection process to study their experiences throughout the operational process to determine the reasons behind dependency and this study should be followed by a chain of special training and development programs for individuals to improve their mind empowerment and to unfasten their true hidden potentials. Thus, it is recommended for future studies to the study this dependent nature, not only in the IT industry, but also in many other industries in Sri Lanka.

#### **5.4 Research Limitation**

Among several numbers of limitations that the researcher faced during the study, one key limitation can be identified as the difficulty in determining the most appropriate leadership qualities by referring to the previous literature. In addition, there were minimum number academic or business reports regarding this study areas (i.e., in the IT sector in Sri Lanka), due to which the researcher had to spent lot of hours in developing the conceptual framework with the support of required literature, where period was however an apparent limitation.

Even though, this study collected data from almost all the IT project related companies in Sri Lanka, the number of participants to the sample representing each company was not adequate, which made some hindrances when generalizing the conclusions to the actual targeted settings. Moreover, some difficulties were there in measuring the performances of individual employees owing to the leadership qualities of their leader, due to which perfect conclusions could not made.

Most importantly, the representation from all the IT companies is not equal for the sample, due to which the results generated can contain biases for the company with major sample representation. Accordingly, all the conclusions cannot be taken as they are for all the companies, and they ought to be revised by reviewing the company situation.

Data reliability is another major issue, since the research is aimed and research questionnaire is more into sensitive data of the professional life some professionals are reluctant to expose the ideas openly. And the number of responders may not represent the actual industry participation of the project types, and there are no survey records to identify the actual population.

### **5.5 Future Research**

- Consider more leadership theories and extend the research
- A study can be conducted separately for different jobs within the Industry, since the performance evaluation criteria may differ from one to another
- A study can be conducted impact of leadership impact for employee performance considering different project leadership layers

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**Annexure 01**

**Survey Questionnaire**

**Leadership Qualities on Employee Performance**

**Part A - Personal Information**

The information will be used for this research purpose only. Please be assured that your personal information will be treated as strictly CONFIDENTIAL.

Please circle the best suitable response.

<b>Company Name</b>							
<b>Gender</b>		<b>Age Group</b>					
Male	Female	<25	26-30	31-35	36-40	41-45	>45

<b>Gender</b>		<b>Experience</b>				
Male	Female	<1yrs	2-3yrs	4-6yrs	7-9yrs	10+yrs

<b>Number of Employees</b>	
Less than 20	
21 -50	
51 - 100	
101 - 300	
Above 300	

<b>Job Level</b>	
Engineer or Similar	
Team Lead or Similar	
Consultant of Similar	
Senior Manager or Similar	
Doctorate	

<b>My Recent Project Exp.,</b>			<b>My Recent Project Exp., # of Years</b>
Code Red	Stable/Long Run	New / Unstable	

**Part B**

Please indicate your degree of agreement to the following statements. Put (X) in the relevant cage. Please do not remain any question answered.

SA	- Strongly Agree	A	- Agree
N	- Neither Agree nor Disagree	D	- Disagree
SD	-Strongly Disagree		

**Section A: Personalities & Behaviors**

**Questions for Subordinates**

Ref	Statement	SA	A	N	D	SD
1	My lead gave the opportunity to the team members to take personal responsibility for the effectiveness of the team					
2	My lead behaved in a manner that is thoughtful for my personal					
3	My lead behaved in a manner that is thoughtful for my professional needs					
4	My lead motivated team members to frequently go beyond what is required and take initiatives					
5	My lead is having relationship-building competencies, and help new team members to easily get along with the team					

**Questions for Leaders**

Ref	Statement	SA	A	N	D	SD
1	I have given the opportunity to the team members to take personal responsibility for the effectiveness of the team					
2	I am considering my team/ subordinates' personal needs					
3	I am considering my team/ subordinates' professional needs					
4	I motivate team members to frequently go beyond what is required and take initiatives					
5	I am confidence in relationship-building competencies, and I help new team members to easily get along with the team					

**Section B: Interaction/ Interpersonal Skills/ Team Player**

**Questions for Subordinates**

Ref	Statement	SA	A	N	D	SD
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8	My lead always work on developing team attitude and spirit of the team					
9	Myself and my team were rewarded for being team players					
10	We were collaborating with other teams (Dev/ QA/ BA/ PM etc.) to reach the project goal					

### Questions for Leaders

Ref	Statement	SA	A	N	D	SD
8	I always consider and work on developing team attitude and spirit of the team					
9	My team is always rewarded for being team players					
10	I initiate the relationship with other teams and we are collaborating with other teams (Dev/ QA/ BA/ PM etc.) to reach the project goal					

### Section C: Communication/ Feedback

#### Questions for Subordinates

Ref	Statement	SA	A	N	D	SD
11	Our team meetings were very productive and address to the points					
12	My lead let the team members seek and give each other constructive feedback					
13	We reviewed the completed tasks and even the mistakes, as they are opportunities for learning and growth.					
14	My lead frequently acknowledged my good performance					
15	I got my performance appraisal feedbacks without any delay					

#### Questions for Leaders

Ref	Statement	SA	A	N	D	SD
11	I make sure that our team meetings are very productive and address to the points					
12	I am giving each team member constructive feedback and motivate them to seek feedback from the other team members					
13	I encourage and lead the team to review the completed tasks and even the mistakes, as they are opportunities for learning and growth.					

14	I frequently acknowledge my team members' good performance					
15	I am giving my team's performance appraisal feedbacks without any delay					

## Section D: Situations

### Questions for Subordinates

Ref	Statement	SA	A	N	D	SD
16	My lead implemented specific plans to help the team assume their new responsibilities when the roles change					
17	My lead make sure that overlapping or shared tasks and responsibilities do not create problems for team members					
18	My lead trusted me to make the appropriate decisions in my job					
19	My lead gave me special recognition when my work is very good					
20	We celebrated even a simple achievement of the team member(s)					

### Questions for Leaders

Ref	Statement	SA	A	N	D	SD
16	I am implementing specific plans to help the team assume their new responsibilities when the roles change					
17	I am looking over and coordinate the overlapping or shared tasks and responsibilities, in order to avoid problems for team members.					
18	I have identified individuals and trust them, and let them to make the appropriate decisions in their job role					
19	I am giving a special recognition when an individual exceed the expectation in their task					
20	I motivate the team and we are celebrating even a simple achievement of the team member(s)					

## Section E: Experience/ Expertise/ Competency

### Questions for Subordinates

Ref	Statement	SA	A	N	D	SD
21	My lead has ideas that have forced me to rethink some of my own ideas I have never questioned before					
22	My lead has stimulated me to think about old problems in new ways					
23	My lead conducts/ make arrangements for essential training and development programs when required					

24	My lead keeps track on skill gap analysis of every team member					
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### Questions for Leaders

Ref	Statement	SA	A	N	D	SD
21	I am giving the opportunities and motivate the team to come up with their ideas on the given tasks in different perspectives					
22	I have stimulated situations when appropriate with the individuals and let them to look at the old problems in new ways					
23	I conduct/ make arrangements for essential training and development programs when required					
24	I am keeping track on skill gap analysis of every team member					

### Section F: Organization/ Project Culture

#### Questions for Subordinates

Ref	Statement	SA	A	N	D	SD
25	My company is having HR policies to cope with Employees' Grievances and any related problems of employees					
26	My organization practically implemented open door policies and I can reach any level of leadership of the company for my concerns					
27	I have a positive experience of getting my problem resolved after having discussions with lead					
28	I had to escalate my skip level manages/ company managers to get my problems resolved					

#### Questions for Leaders

Ref	Statement	SA	A	N	D	SD
25	My company is having HR policies to cope with Employees' Grievances and Employees related any problem					
26	My organization practically implemented open door policies and I motivate my team to reach any level of leadership of the company for their concerns					
27	I have a positive experience of getting my subordinates problem resolved after having discussions with lead/ skip level leads/ company management					