

**FACTORS AFFECTING THE PERCEPTION ON  
TELECOMMUTERS' PRODUCTIVITY AND  
PERFORMANCE EVALUATION IN SRI LANKAN IT  
INDUSTRY**

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Degree of Master of Business Administration in Information Technology

Department of Computer Science and Engineering

University of Moratuwa  
Sri Lanka

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## DECLARATION

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Supervisor – Dr. Malaka J Walpola

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## ABSTRACT

Telecommuting is a work arrangement which is valued by employers as well as employees as a flexibility enabler for both parties. It facilitates flexibility in work schedule and location for the employee while allowing the employer to have the flexibility in usage of resources such as spaces and assets.

Telecommuting population in the Sri Lankan IT industry is growing rapidly, driven by the increasing number of organizations that embrace it. However, to the best of our knowledge, there is no formal study conducted on the level of acceptance of telecommuting within the Sri Lankan IT industry. This research focuses on finding the perception on telecommuting in the Sri Lankan IT industry. Specifically, it tries to answer the two ground level questions “What are the factors that influence the telecommuters’, non-telecommuters’ and their managers’ perception on telecommuter productivity?” and “What are the factors that influence the telecommuters’, non-telecommuters’ and their managers’ perception on telecommuter performance evaluation?”

The study was conducted as a qualitative research based on ‘Grounded Theory’. Perception of the telecommuters, non-telecommuters and managers (representing employers) were gathered through semi-structured interviews. The main focus was on large scale IT organizations. The interview transcripts were analyzed through ‘Open coding’, ‘Axial coding’ and ‘Selective coding’ methods to identify the major factors that affect the perception on productivity and performance evaluation of telecommuters. Six (6) major factors that influence the perception on productivity and three (3) major factors that influence the perception on performance evaluation of the telecommuters were identified through the analysis. Based on the identified factors, we propose two frameworks that model the perception on productivity and performance evaluation of telecommuters. Moreover, the findings reveal that the overall perception on telecommuters’ productivity is positive, while the performance evaluation of telecommuters is perceived to be unbiased.

**Keywords:** Telecommuting, Productivity, Performance Evaluation, Qualitative Data Analysis, Grounded Theory

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# 1 INTRODUCTION

## 1.1 Problem Background

'Men do the earnings while women manage the household' was the main role allocation until the beginning of this century. Then slowly, the involvement of women in workforce has increased. Now irrespective of the gender both males and females work shoulder to shoulder to enhance the living standards of themselves and their dependents. But with increasingly busy work life of both men and women, the stress-related health issues and negative impact on social relationships come to the fore and compelled them to re-think on life's priorities.

As such, work-life balance is not a trivial matter anymore, rather it's one of the major challenges related to employment in the 21<sup>st</sup> century. Recent changes in work and employment, and the advancements in information technology have made it possible to work from anywhere at any time (Nilles 1994; Feldman and Gainey 1997). The societal changes such as dual earner families where both husband and wife work encourage and increase the necessity of flexible working arrangements (Crane & Hill, 2009). Therefore traditional 9 to 5 work inside corporate office buildings has gradually been replaced with flexible work arrangements.

There are organizations that practice different flexible work arrangement types. According to WorldatWork survey on Workplace Flexibility (2013) the most preferable flexible work arrangement is telecommuting. Telecommuting is also known as telework and work from home practice.

Telecommuting has numerous benefits such as increasing human resource productivity and reducing cost of work spaces and assets. However, there are disadvantages and challenges in teleworking such as access to technology and the integration of telework with the company's strategy and organizational structure, as well as the teleworkers' motivation and control (Pérez, Sánchez, & de Luis, 2002).

Teleworking is a work arrangement that cannot be practiced at every industry as it is technologically mediated and demand high-degree of communication. For example, the industries that need special machine for the production, requiring high-level of supervisor monitoring or work processes that highly dependent on worker to worker

interactions, face constraints in practicing telecommuting in production environment.

But, Information Technology (IT) industry is one of the prime candidates to reap the maximum benefits of the flexible work arrangement, telecommuting.

## **1.2 Motivation**

Even though telecommuting or any other flexible work arrangements are considered productivity boosters, measuring the productivity of employees in such an environment is not an easy task, as it is relative and different organizations have different perspectives on employee productivity. The perception of employees, both the teleworkers and non-teleworkers on telecommuting also can be different.

According to Drucker (1955), 'knowledge workers' are high-level employees, who apply theoretical and analytical knowledge, acquired through formal education, to develop new products or services. The teleworkers are considered knowledge workers as they apply theoretical and analytical knowledge, acquired through formal education, to develop new products or services. The performance evaluation methodology is different from non-knowledge workers to knowledge workers. It is easier to measure the performance of non-knowledge workers as most of the criteria that are considered, are tangible. But in the case of teleworkers performance evaluation, 'Do the employers have separate criteria to measure the teleworkers?', 'Are the teleworkers satisfied with their performance evaluation methods?' were some questions arose.

## **1.3 Research Problem**

We identified that there are three categories of employees in the organizations in the perspective of the practice of telecommuting, those who practice teleworking; teleworkers and non-teleworkers and their reporting managers. The perception of the productivity of teleworkers may be different among these three categories. Here we refer direct managers (reporting managers) of teleworkers as management level employees. Perception on teleworker performance evaluation among above three categories may be different too.

There are studies conducted in several countries regarding the telecommuting productivity as well as performance evaluation of telecommuters. But there has been a study gap in identifying the perception and factors leading to that perception on telecommuter productivity and telecommuter performance evaluation.

This research is based on two ground level questions ‘What are the factors that influence the telecommuters’, non-telecommuters’ and their managers’ perception on telecommuter productivity?’ and ‘What are the factors that influence the telecommuters’, non-telecommuters’ and their managers’ perception on telecommuter performance evaluation?’.

#### **1.4 Research Objectives**

The objectives of the research are to achieve successful completion of below mentioned outcomes,

1. Identify the perception of managerial employees, telecommuters as well as non-telecommuting employees towards the productivity of telecommuting.
2. Identify the factors that influence the perception of managerial employees, telecommuters as well as non-telecommuting employees towards the productivity of telecommuting (work of telecommuters as well as the effect on the overall project work).
3. Identify the perception of employers, telecommuters as well as non-telecommuting employees on fairness of performance evaluation of the telecommuters.
4. Identify the factors that influence the perception of managerial employees, telecommuters as well as non-telecommuting employees on fairness of performance evaluation of the telecommuters.

#### **1.5 Scope**

We are focusing on the IT product development, services and consulting companies that are considered as in the ‘large’ (category) companies in Sri Lanka which have their workforce over 300 employees as per the Sri Lanka IT and BPM Sector Compensation and Benefits Study 2015 (Sri Lanka IT and BPM Sector Compensation and Benefits Study 2015, p7).

## **1.6 Significance of the Study**

We believe the findings of this research will be useful for the Sri Lankan IT industry mainly in two ways.

1. For the organizations that are currently practicing telecommuting : to decide whether they are in the correct path and if they are not, what are the main factors to be focused on to get to it.
2. For the organizations that are expecting to practice telecommuting: to decide whether they take the challenge of establishing telecommuting or not by considering the employee and employer perception in early stages.

## **1.7 Chapter Summary**

As a summary this chapter provided background information of telecommuting and overall idea of the research. In the beginning of the chapter gave a brief introduction of the research, and previous research findings that have been conducted in the same area. Then problem statement, research main objective, scope and significance of the study were given. This chapter is followed by the literature review, research methodology, data analysis and conclusion.



## **2 LITERATURE REVIEW**

### **2.1 Chapter Overview**

This chapter briefly reviews and discusses the research done so far in Telecommuting. Most of the research papers and literature sources are focused on flexible working arrangements specially telecommuting with the productivity focus. There are less number of sources found related to telecommuter evaluation. Even lesser is the number of sources that deal with the perception on telecommuter productivity or perception on telecommuter performance evaluation. This chapter will review few research papers published on telecommuting arrangements, its productivity and employee evaluation along with surveys, journals, books and web publications.

### **2.2 Flexible Work**

According to explanation on Workplaces that Work by HR Council for the Nonprofit Sector of Canada, there are two main types of flexible work arrangements; flexible work hours (flexible time) and flexible work location (Community Foundations of Canada, 2016). Flexible work time arrangements are included with part-time work and job sharing. Both the employees and employers were benefitted with the flexible work time (Community Foundations of Canada, 2016).

Employees can avoid rush-hour commute, have more control over time off, increase work life balance and schedule work during quiet times to accomplish more with flexible work arrangements. Employers have the advantages of scheduling work across longer portions of the day, recruiting and keeping valued staff members who have other life commitments or interests, making efficient use of facilities such as desks and computers, increasing continuity and staff coverage by one employee while another is away.

Flexible work location arrangements are practiced in the forms of home, satellite offices and working on the move. Employees have the benefits of saving the travel time, escaping from the disturbances in office environment, improving the balance between work life and family life. Employers are benefitted by being able to get rid

of large office spaces and parking spots, reduced absenteeism and latency to work and also increased productivity. But there are other types of flexible working arrangements such as flexibility in the scheduling of hours worked. This type is included with shifts arrangements, break schedules and compressed workweeks (Georgetown University Law Center, 2010).

There are several definitions for the flexible work arrangement types. UK Government also has defined the different types of arrangements. Cumulatively the definitions are as follows.

- Job sharing: It is an arrangement that allows two or more individuals to do same job by splitting traditional working hours (Government UK, 2016).
- Working from home or telework: Telework is conceived of as an arrangement in which employees perform at least part of their responsibilities outside their central organization's physical boundaries and using communication technology to interact with others (Gajendran & Harrison, 2007) (Thatcher & Zhu 2006) Telecommuting is no longer a place but what the employee does (Allen, Golden & Shockley, 2015).
- Part time: A work schedule that is less than full-time but is at least half of the regularly scheduled full time workweek (MIT Center for Work, 2016).
- Compressed hours: Compressed hours is a work schedule that condenses one or more standard workweeks in to fewer, longer days (MIT Center for Work, 2016).
- Flexi-time: The employee chooses the start time and end time (within agreed time limits) but employee works for certain 'core hours' (Government UK, 2016).
- Annualized hours: The employee has to work a certain number of hours over the year but they have some flexibility about when they work. There are sometimes 'core hours' which the employee regularly works each week, and they work the rest of their hours flexibly or when there's extra demand at work.
- Staggered hours: The employee has different start, finish and break times from other workers.

- Phased retirement: Default retirement age has been phased out and older workers can choose when they want to retire. This means they can reduce their hours and work part time.

All the above flexible work arrangements have their own pros and cons while they have different ways to practice. Among all the flexible work arrangements, telecommuting plays a major role. As telecommuting is no longer a place but what the employee does.

### **2.3 Telecommuting**

According to WorldatWork survey on Workplace Flexibility (2013) among the companies who have participated for their survey, the most offered flexible work arrangement is telecommuting.

Telecommuting can be explained as a both the employer and employee friendly work arrangement in which employees perform their regular work at a site other than the ordinary workplace, supported by technological connections (Fitzer, 1997). There are three main components of telecommuting; utilization of information technology (IT), link with an organization, and de-localization of work (Pinsonneault & Boisvert, 1996).

Although telecommuting is practiced by millions of employees (Hill, Ferris, & Mårtinson, 2003) all over the world, in different countries it is referred with various names. In Europe telecommuting is referred as home-working, working-at-a-distance, off-site work or remote work. In United States it is referred as teleworking.

Telework includes two concepts, i.e. virtual office and home office or work from home. Employers use telecommuting as a reward tool, to evaluate and allow dedicated and hardworking employees to work from home. It helps to build trust and loyalty between employer and employee. Trust and loyalty of the employees may increase the effectiveness and efficiency (collectively called as productivity) of their job.

Telecommuting enables the workforces to do their jobs from wherever, whenever the work is needed. Not only in developed countries but also in developing countries, the families generally consist of dual earners. In such an environment,

both parents have to take care of their children, disabled or elderly parents as well as continue with their social relationships, while working.

On the other hand, the telecommuters are less likely to work in schedules. Irrespective of whether they are paid for the overtime or not and how overtime is defined, on average, telecommuters work 5 to 7 additional hours per week. So telecommuting is not being predominately used as a substitute for conventional office hours, but as an addition to 40 hours week. As a strategy of dealing with resistance to longer work hours at the office, telecommuting appears to be successful to some extent in relocating those hours, rather than eliminating those (Noonan & Glass, 2012).

According to WorldatWork survey on Workplace Flexibility (2013) telecommuting is the most used flexible working arrangement in the world. Telework or telecommuting can be practiced by organizations in three different ways; Telework on an ad-hoc basis, regular telework monthly or weekly or full time telework (Worldatwork.org, 2016). Regular telework can be subdivided into two categories based on frequency of telecommuting; High-intensity telecommuters (i.e., those who telecommute more than 2.5 days per week) and lower-intensity telecommuters (who telecommute less than 2.5 days per week) (Fay & Kline, 2011).

### **2.3.1 Telework Community**

Research works reveal that college educated workers, managerial staff and professional occupations are more likely to telecommute relative to other categories of employees. More than 70% of the work at home (WAH) population holds management, professional, sales, and office jobs. Parents are not interested much in telecommuting while less number of mothers telecommutes compared to fathers (Noonan & Glass, 2012).

Many of the large organizations facilitate their employees to telework and well known examples are AT&T, Cigna, Eli Lilly, Hewlett Packard and Nortel. There are predictions that half of the 2000 largest global companies will move to telework in the near future (Illegems & Verbeke, 2004). There are number of IT companies and organizations which practice telecommuting in Sri Lanka. According to ‘The 2011 Workplace Employment Relations Study’ (2011), which was carried out based on

British employees in 2011, employees with caring responsibilities were more likely to use flexible working arrangements than employees without such responsibilities.

## **2.4 Employee Productivity Metrics**

There are two types of employees; blue-collar job holders and white-collar job holders, simply manual workers and knowledge workers. The major difference between these two categories is that knowledge work involves information while manual work involves materials. Therefore the teleworker can be considered as a knowledge worker.

Many literatures support the argument that measuring the performance of knowledge worker is more difficult when compared to manual worker (Ramírez & Nembhard, 2004). Literature provides less number of recommendations to measure knowledge worker performance or productivity. To improve the performance we need valuable set of performance measures.

Once the employee performance measurements are set, it will be helpful in worker monitoring, capacity planning, strategic planning (Better assignment of who should do what), employee performance simulation, establishing benchmarks (to compare performance) and achieving consistency in evaluation methods (reduce subjectivity from evaluations) (Ramírez & Nembhard, 2004). On the other hand, the knowledge workers' performance metrics should not overemphasize on the output quantity as it may lead to lowering the quality of the work. The knowledge workers' productivity can be measured effectively, if the designed measurement system provides answers to the following questions:

- What is the objective of the task?
- What are the outputs that need to be produced to accomplish the task?
- How can the outputs be counted?
- How much and what kind of resources are needed to produce the outputs?
- What is a feasible and desirable operating plan for the next time period?
- Can the measures be replicated and standardized? (Mundel, 1975)

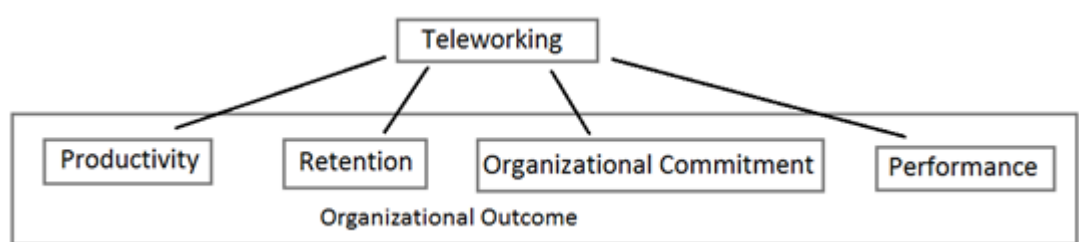
There are numerous methodologies that are used to measure employee productivity. There are some software industry specific measurements too.

- Quantity: Accounts for outputs (quantities) and outcomes (the quantification of qualitative variables like customer and worker satisfaction, etc.
- Costs and/or profitability: Accounts for profitability, costs, etc.
- Timeliness: Accounts for meeting datelines, overtime needed to complete the work and other time related issues.
- Autonomy: Accounts for independence and how many things a worker can do at once.
- Efficiency: Accounts for “doing things right”. Refers to any task, even if it is not important to the job. The task is completed meeting all the standards of time, quality, etc.
- Quality: Accounts for how good the work is.
- Effectiveness: Accounts for “doing the right things”. Refers to just the tasks that are important to the job, even if they are done without meeting standards of time, quality, etc.
- Customer satisfaction: Accounts for the fact that the product needs to add value to the customer.
- Innovation/creativity: Accounts for the ability of creating new products and ideas to improve productivity.
- Project success: Accounts for the overall result of the work, considering decision-making, team interaction, communication, predictability, crisis management, documentation, transferability of work, etc.
- Responsibility/importance of work: Accounts for the importance of performing well at critical times.
- Knowledge Workers’ perception of productivity: Accounts for possible misinterpretation of other standard factors.
- Absenteeism: Accounts for the reduce presence of the employee and get the work delayed.

Above measurements help interpret the results of average productivity measures. A high productivity in few jobs might not mean the person is very productive on the long run, and vice versa (Ramírez & Nembhard, 2004).

#### 2.4.1 Teleworkers' Productivity

There are theoretical models that explain the relationship between the telecommuting and the productivity of the employees. Following framework is one of them. This theoretical model considers telework as an independent variable, while dependent variables are outcomes of interest to organizations: productivity, retention, turnover, commitment, and performance (Harker & MacDonnell, 2012).



*Figure 2-1: Relationship between Teleworking and Organizational Outcome*

Source: Harker & MacDonnell, 2012

As per Harker & MacDonnell (2012) there is a minor but positive relationship between telework and organizational outcomes. Telework helps organizations to be more productive, strengthen organizational commitment, secure employee retention, and improve performance. Decision to practice telework is an essential step for the organizations, to retain and grow in the future business (Harker & MacDonnell, 2012).

To gain the maximum productivity, the managers must ensure teleworkers' job security, work flexibility, and satisfaction. In addition, they should address the efficient use of IT combined with user training, to be based on clear understanding of teleworkers' need, knowledge and skills (Aboelmaged & Subbaugh, 2012).

One of the other facts that impact the productivity of teleworkers is leadership style of his/her superior. Madlock (2012) found that there is a strong relationship between supervisor's task oriented leadership style and telecommuter's job satisfaction. Supervisor's leadership style is positively correlated with telecommuter's organizational commitment. Task oriented leadership is the most used and it is the

greater predictor of communication competence, communication satisfaction, job satisfaction and organizational commitment which ultimately contribute towards productivity of the teleworker (Madlock, 2012).

Telecommuting is as “an option offered by the company policies with the agreement of the immediate supervisor of the employee”.

Westfall (2004) in the paper titled “Does telecommuting really increase productivity?” proposed a formula for productivity based on the amount of work (H), intensity of work (I), work efficiency (E) and flexibility to adjust the teleworking time (A). As per the model, the output (O) is given by;

$$O = a \times H^b \times I^c \times E^d \times A^e ; \text{ where, a,b,c,d,e are constants.}$$

As per the model, by allowing employees to telecommute once a week, just one of five days working week, the company can expect 20% of productivity increase. They conclude that even a lesser (10%) productivity gain will be translated to measurable increase in profit. Although many companies offer telecommuting as an option, they do not encourage it as a favorable practice. Author’s explanation on this is telecommuting does not deliver, at least at the level of the whole organization, the productivity gains touted by consultants and vendors (Westfall, 2004).

Another measurement for teleworkers productivity is the way knowledge transfer happens among telecommuters and non- telecommuters. Level of success in knowledge sharing can be considered as a measurement for the productivity of telecommuting as any failure in knowledge transferring indirectly means the weakness of telecommuting. Knowledge transfer can impact on the job role of knowledge workers and managers who perform their work outside the conventional work place (Taskin & Bridoux, 2010).

#### **2.4.2 Employer Perception on Teleworkers’ Productivity**

The perception of the leads and the coworkers on telecommuters’ productivity is a major fact, as it has proportional effect on real productivity. The perception has a direct impact on the feedback given by the employers. Feedbacks consequently help to motivate the telecommuters therefore productivity increases. Productivity boosted through constructive feedback and hindered through disruptive feedback.



It is worthwhile studying the other stakeholders' perception on teleworkers' productivity. Perception on achieving results by the teleworkers can be measured using the assumption; supervisors are concerned about their ability to effectively manage the results of teleworkers. In the case of providing constructive feedback for the telecommuters, if the feedback given by the management is positive, it leads to motivating the employees and increasing the productivity (Caillier, 2013).

Telework gives the opportunity to the employees to use their time and space at home in new ways. The employers' agenda is to increase the profits by decentralization. Teleworkers adopt the slogan, "work smarter and faster" (Wellman & Haythornthwaite, 2002).

Employers or managers can belong to two categories; telework adopters and non-adopters. Both categories have similar perceptions on both positive and negative impacts of the telework most of the time. The managers believe absenteeism is reduced and working flexibility is improved due to telework facilities. As per both the categories the productivity of the employees is getting boosted when they are provided with teleworking arrangements. Although the telework adopters perceive teleworking helps to improve staff retaining, the non-adopters perceive that teleworking causes employee isolation and impacts the organizational culture negatively (Illegems & Verbeke, 2004).

There may be some internal and external factors that can influence to employer perception on telework productivity. The factors are the firm size, employee involvement in task designing, degree of innovation, export intensity, employees' training, age of the company, gender of HR manager, telework feasibility and telework diffusion (Pérez, Sánchez & de Luis, 2002). The managers' perception on telework productivity can vary based on the above factors.

#### **2.4.3 Employee Perception on Teleworkers' Productivity**

Perception on the success of teleworkers' productivity is doubtful according to employees' perspective. According to some employees work from home is a productivity boosting work arrangement while others perceive it as a negative or neutral impact. Virtual office or home office is not a significant predictor of work/life balance or personal/family success (Hill, Ferris & Mårtinson, 2003).

When the employees' perception on the teleworkers' productivity is negative and the teleworking is being practiced in the organization, employees are likely to resist the practice. In turn, it may negatively affect the organization's competences (Worldatwork, 2016).

Similar to employers, the employees also fall into two categories; namely teleworkers and non-teleworkers. Both the teleworkers and non-teleworkers interpret teleworking as a productivity booster. They believe that telework reduces the absenteeism and increases the work flexibility (Illegems & Verbeke, 2004).

Most of the teleworkers perceive 'teleworking' as an exchange where both the company and employees commit. The social implications of telework go beyond change of workplace. But it has deeper social structural impact (Wellman & Haythornthwaite, 2002). Many teleworkers feel that they produce more by working at home while the people-oriented employees see it as non-beneficial activity for the clients and not worth for the money paid for the employment. But the teleworkers are forced to account for their time and activities. Teleworkers feel empowered and company politics are removed and thus become more productive (Wellman & Haythornthwaite, 2002).

## **2.5 Employee Performance Evaluation**

Performance evaluation is the method to measure whether the performance of the employee matches with the job requirements. It precedes employee appraisal where the employer can show the gratitude for the performance of the employee. The satisfied employee is one of the best investments for the organization.

Performance evaluation is a practical tool for employee motivation and development when employees perceive their performance appraisals as accurate and fair (Ilgen, Fisher & Taylor, 1979). The appraisal process can also become a source of frustration and extreme dissatisfaction when employees perceive that the appraisal system is biased, political or irrelevant (Skarlicki & Folger, 1997).

There are numerous reasons that the organizations highly focus on performance evaluation.

- To motivate employees for better performance
- To reward and recognize great performers
- To prepare plan to manage poor performers
- To make the organization a place to learn and develop
- To make the organization and its processes perform better (Barr, n.d.)

Two categories of employees; manual workers and knowledge workers are evaluated in two different methods. We discuss here only the evaluation techniques of knowledge workers, which define an approach to find teleworkers' performance evaluation.

As per Franco-Santos, Lucianetti & Bourne (2012), there are consequences that the performance management systems have on employee behavior in the areas such as their strategic focus, cooperation, coordination, and participation, motivation and job satisfaction. The same researcher explains that the performance management systems have an impact on the organizational capabilities such as communication, management practices and cooperate control (Franco-Santos, Lucianetti & Bourne, 2012).

An effective performance management system may place emphasis on target achievement (rational goal model). However, it also needs to take care of human resources in the organization (human relations model). An effective performance management system can have strong internal processes (internal process model) but at the same time it requires flexibility in setting employee performance targets and be adaptable to changes in the work environment (open system model) (Ikramullah et al., 2016). The researchers propose following model to measure the effectiveness of performance management system.

Table 2.1: Competing Value Framework for Effective Performance Appraisal System

		Flexibility			
		Human Relations Model	Open System Model		
		Appraisee Participation Employee Development Coaching and Counseling	Flexible Performance Targets Role-Definition Purposes Stakeholders' Satisfaction		
Internal	Regular Performance Feedback Rating Form Access to Appraisal-related Information Appraisees' Voice	Planning and Setting Performance Targets Performance Monitoring Purpose Achievement	External		
		Internal Process Model	Rational Goal Model		
		Control			

Source: Ikramullah et al., 2016

There are a number of techniques that are used to measure the employees' performance. Every technique has its own applicability, advantages and disadvantages. Those techniques and methods have both the qualitative and quantitative evaluation on employees' performance.

### 2.5.1 Teleworker Performance Evaluation

The companies which are focusing on the virtual office and home office should also move away from a "face-time" business culture to a "results-oriented" business culture, and performance evaluation systems must adapt to include more specifically the measured objectives (Allen, Golden, & Shockley, 2015).

Matthews and Williams (2005) estimated the potential teleworking population of the workforce (based on 2002 BLS totals) in 2005. They determined the compatibility of jobs by considering the following criteria.

- Having an information component
- Being individual vs. group work
- Having clear parameters for evaluation

- Not requiring personal contact with customers
- Not requiring physical work that could only be done on site

They believe that a job to become compatible with telework, there should be parameters to evaluate the teleworker.

### **2.5.2 Employer Perception on Teleworker Performance Evaluation**

As per Allan & Leslie, 2010 within a study conducted through human resources specialists revealed that 65% of the management of the organizations required complete evaluations for their employees and 47% of managers consider that performance management is a human resource process and not a critical one for the company success (Allan & Leslie, 2010).

With these all the factors employee evaluation may not be a serious consideration by the employers for any employee category. But that is the occasion when employees can prove that telecommuting is a productive work arrangement.

Only 02 (two) of the 13 (thirteen) managers stated that the evaluation system is based on both quantitative indicators such as income, profit, costs and qualitative indicators such as customer satisfaction, SLA (service level agreement), KPI (key performance indicator) Remaining 11 managers analyze performance through the employees' level of implication in completing tasks, the capabilities they have, the communication skills, the attitude and relationship with colleagues and customers, as well as innovation and decision making capacity (Allan & Leslie, 2010).

### **2.5.3 Employee Perception on Teleworker Performance Evaluation**

The employees' perception on their performance evaluation is a crucial factor as it will be reflect on their performance and vice versa. The employees of Nass Construction Company interpret

- Their enthusiasm on performing the job
- Efficiency and effectiveness
- Initiative of doing work
- Attitude towards assigned tasks
- Attendance and punctuality
- Willing to work beyond the time

- Interpersonal skills
- Leadership skills
- Technical skills as some criteria that are used in their performance evaluations

According to those employees the evaluation system they are undergoing

- Doesn't give the correct value for their extra work
- Not much reliable and valid
- Lack of discussion and explanation on evaluation results
- The performance standards are not clearly explained to the employees  
(Estino, 2012)

### 3 METHODOLOGY

#### 3.1 Chapter Overview

This chapter is intended to provide an outline of the overall methodology of the study. Research process was designed to achieve the objectives of the study and how it was followed to optimize the findings. Rationale behind the selected research approach, participants and procedure details are also described in this chapter.

#### 3.2 Research Process

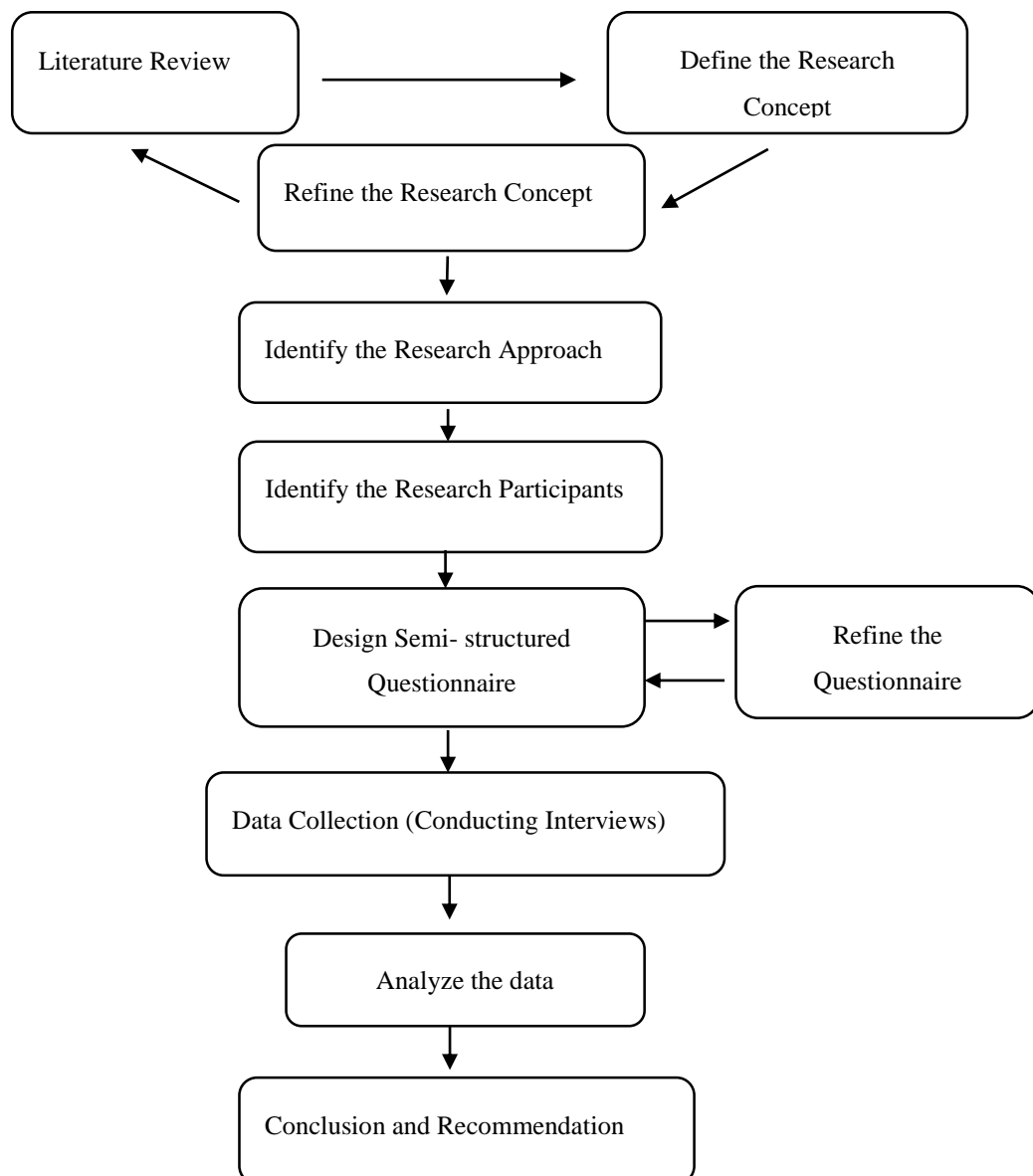


Figure 3-1: Research Process

According to the above chart the research procedure began with the reviewing literature. The relevant literature in the area of telecommuting was reviewed. Once a fair idea on telecommuting was gained the research concept was defined. It had to be refined several times to finalize the research topic and concept on “Factors Affecting the Perception on Telecommuter Productivity and Performance Evaluation in Sri Lankan IT Industry”

The research approach was decided; the research as a qualitative research, data collection method as interview based method and data analysis to be based on the ‘Grounded theory’.

- Research type - Qualitative research (There were no/ minimal research has been conducted to address the similar research problems. Therefore there was no framework or theory to address the same or relevant research problems)
- Data gathering method - Semi-structured questionnaire based interviews (Interview is one of the best methods to have deeper understanding on a particular matter. But we went with semi structured questionnaire based interviews because we needed a guideline and scope to proceed)
- Data analysis - We identified the data analysis should be happen according to Grounded theory. It’s a way to proceed with qualitative research rather than a theory.

Accordingly the research participants were identified. Then a semi- structured questionnaire was prepared and finalized after several revision cycles. This questionnaire was used for data collection, through interviews. Collected data were analyzed in order to achieve the intended objectives. Subsequently, the conclusions were drawn and based on which, certain recommendations were made.



### **3.3 Research Approach**

As this is an exploratory problem, is proven to be the most effective way to explore a problem in depth. Followings are the reasons to use a qualitative approach for this study.

- The research questions can be used to reveal the experience of the participants.
- The subject area does not consist of well-established boundaries.
- In order to identify the perceptions and the factors influencing the perceptions, they needed to be studied comprehensively. This was attained through the face to face interviews.
- Need to observe participants' perceptions, thoughts and feelings regarding telecommuter productivity and telecommuter evaluation.
- Absence of data for the factors affecting the perception on telecommuters in the context of Sri Lanka.
- Qualitative approach facilitates exploratory studies.
- The descriptive nature of the results helped to substantiate the findings.

### **3.4 Research Design**

The research data collection method was designed as semi- structured in depth interviews.

The interviews were carried out to gather information on the accompanying needy and autonomous factors:

- Telecommuters' productivity
- Telecommuters' performance evaluation

Despite the fact that there were a few weaknesses related to the information gathering process, practiced additional care to stay away from the greater part of them.

### **3.4.1 Preparation**

This is the most essential part in data gathering, on the grounds that an unplanned or badly planned data gathering method could destroy a generally all around directed overview. At this stage it is absolutely worthwhile to think ahead of time what factors and arrangements would be required for later examination. It is fitting that a spurious arrangement plan ought to have been set up ahead of time, if conceivable. This would guarantee the consideration of the data, which would be required for the interview. While setting up the interview the accompanying objectives must be focused upon keeping in mind the end goal to conquer the related issues.

- As few questions as conceivable were incorporated
- Individual questions were encircled in a straightforward and straight dialect
- Questions took after a coherent grouping
- Tried to include turn around questions to make sense of reactions that were given genuinely by the interviewee
- Highly individual inquiries were avoided, and if essential for some enquiry they were kept towards the end of the interview

By considering the above factors three separate semi-structured questionnaires were prepared for the three sets of employee, i.e.: management level employees, telecommuters and non-telecommuters. Each questionnaire included with general questions, questions regarding telecommuter productivity and questions regarding telecommuter performance evaluation (see Appendix A).

### **3.4.2 Selection of Participants**

The overview comprises of an interview that was conducted with chosen participants who were from three (03) different organizations. Two (02) management level employees, three (03) telecommuters and two non-telecommuters (02) from each organization were interviewed. Altogether the number of employees interviewed was twenty one (21)

Engaging with the management level employees except engaging with the employers was identified as a worthy decision. Because the middle level management is the employee category who actively involves in both productivity measurements and performance evaluation representing the employer. Therefore six

(06) management level employees, nine (09) telecommuters and six (06) non-telecommuters were selected.

Selection of employees was based on the following criteria;

- Management level employees: Who have both telecommuters and non-telecommuters in their teams
- Telecommuters: Who are the members of teams, which include non-telecommuters as well
- Non-telecommuters: Who are the members of teams, which include telecommuters as well

### **3.4.3 Interviewing**

Data gathering is one of the major challenges in any research. It is the procedure through which the feelings, opinions and ideas of the individuals were gathered and sorted. Talking is an information accumulation technique in which the researcher requests data verbally or in a composed manner from the respondents. Due to its proven effectiveness, interviewing was used in this research as the primary data gathering technique.

It is the most productive approach to get to individuals' discernments, definitions etc, which means circumstance and development of reality, where it includes talking about or addressing issues with individuals to gather information that is probably not going to be gotten to utilizing systems, for example, interviews or perceptions (Punch, 1998, pp.43-44). Meetings are reasonable when top to bottom data is fancied and this kind of data is required with a specific end-goal to satisfy the motivation behind this research.

### **3.4.4 Ethical Considerations**

Following approach that was meant to meet the ethical objectives was planned and executed during the study.

- Taking care to avoid the inclusion of personal questions that might hurt feelings of respondents.
- Be objective as far as possible by avoiding any questions that could be construed as invading personal space or too subjective by the respondents.

- Ensuring confidentiality - respondents were promised that their responses and identity would remain anonymous for all purposes, intentional or unintentional.
- Ensuring accuracy of responses - took much care to represent the views of respondents as accurately as possible without bias or prejudice.

#### **3.4.5 Inaccuracies**

There is a possibility of respondents' feedback and responses containing some inaccuracies. Though the degree of inaccuracy was consciously and intently reduced through diligent sifting of responses, there could still remain some shortcomings.

### **3.5 Analyzing Data**

Qualitative data analysis systems were used. While the review utilized greater measure of subjective information examination, qualitative investigation was continued when and where it was more fitting.

The theory used for analyzing collected data was the 'Grounded Theory' (Glaser & Strauss, 2009; Miles & Huberman, 1994). It was determined suitable for this research because:

- Models in productivity and performance evaluation of telecommuters available in Sri Lankan context are inadequate.
- Being an inductive method, it will support developing a theory that is grounded in the data.
- The research is to finding not only the perceptions but also the factors affecting the perceptions.

Grounded theory is used in exploratory studies to analyze the statements from interviewees then they are further analyzed through coding. Coding is the concept of categorizing the data to discover strong statements. There are different types of coding methods such as 'Open coding', 'Axial coding' and 'Selective coding' which are used sequentially. Open coding is used to identify the frequent statements made by the interviewees. Axial coding is the method of fundamental categorizing the statements identified during open coding. The fundamental codes identified through

axial coding are further analyzed and clustered into parent codes during the selective coding. In this research we followed above mentioned approach to analyze data.

### **3.6 Chapter Summary**

Methodology part described the strategies or procedures that were utilized in this research exertion. As proposed in the research, interviews were conducted with 21 participants using semi-structured interviews under quantitative method. Data analyzing was done using Grounded Theory.

The findings and recommendation will be described in the next chapter and thereafter.

## **4 ANALYSIS**

### **4.1 Chapter Overview**

In this chapter, the data gathered through semi-structured questionnaire based interview transcripts is analyzed in a qualitative manner. Qualitative content analysis and grounded theory approaches (Glaser & Strauss, 2009; Miles & Huberman, 1994) are used in this research because the phenomena studied is specified in the interview questions. The interview questions formed the basis for understanding what are the factors affecting for the perception of employees on telecommuter productivity and their performance evaluation.

### **4.2 General Analysis**

Researcher considered three (03) major companies, which are operating in Sri Lanka and are practicing telecommuting as a flexible work arrangement. General profiles of those three (03) companies are mentioned below.

‘Company A’ is a global Information Technology (IT) service company which is having a branch in Sri Lanka. They serve with technology, outsourcing services and IT consulting. They are providing high-value services which with the clients can enhance business values, reduce time-to-market and improve the productivity and customer care. The company is having multiple branches and clients in United States of America, Europe and Asia. They serve in Banking & Financial Services, Insurance, Telecommunications, Technology and Media, Information & Education business domains.

‘Company B’ is one of the world largest education enabler. They provide a huge range of education products and services to institutions, governments and direct to individual learners. They have offices and clients worldwide.

‘Company C’ is a leading innovative trading technology based company. It is a Sri Lankan information technology solutions provider, specializing in IT solutions for the financial and telecom industries and it provides information technology services.

The research was carried out by interviewing a total of twenty one (21) employees from above three (03) companies. Those twenty one (21) respondents consist of three (03) different employee categories; two (02) Management level employees,

three (03) Telecommuters and two (02) Non-telecommuters from each company. Therefore the interviewee pool consists of six (06) management level employees, nine (09) telecommuters and six (06) non-telecommuters.

The respondents' breakdown is given below.

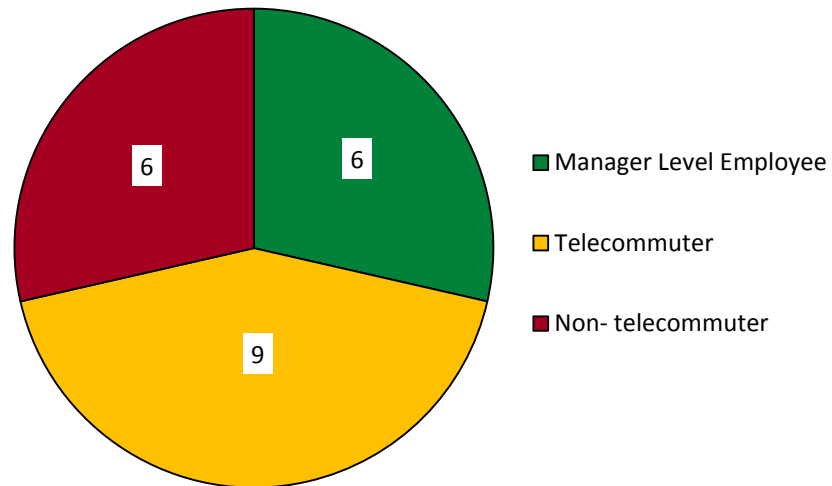


Figure 4-1: Interviewee Breakdown according to the Employee Category

Employee breakdown according to the companies as follows.

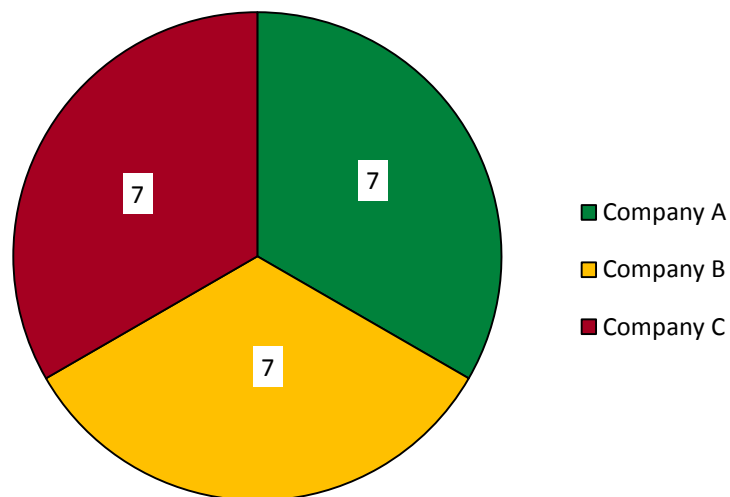
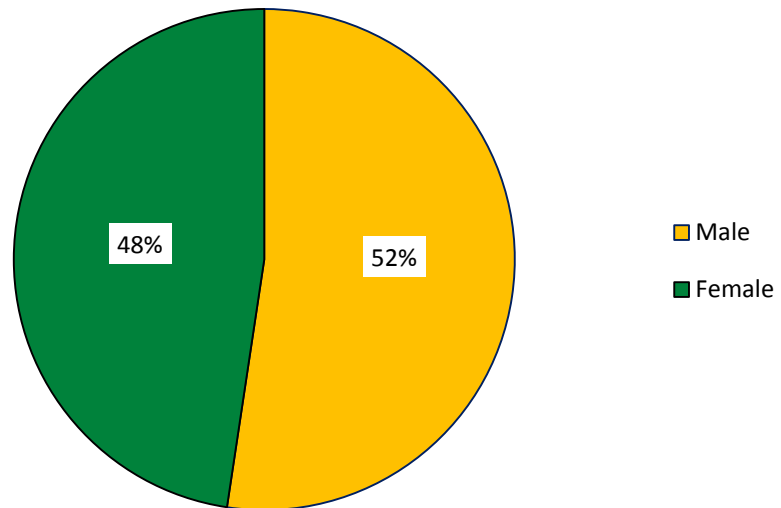


Figure 4-2: Interviewee Breakdown according to the Company

From each company seven (07) employees were interviewed; two (02) management level employees, three (03) telecommuters and two (02) non-telecommuters. There was no bias towards any company.

Gender representation of interviewees is as follows.

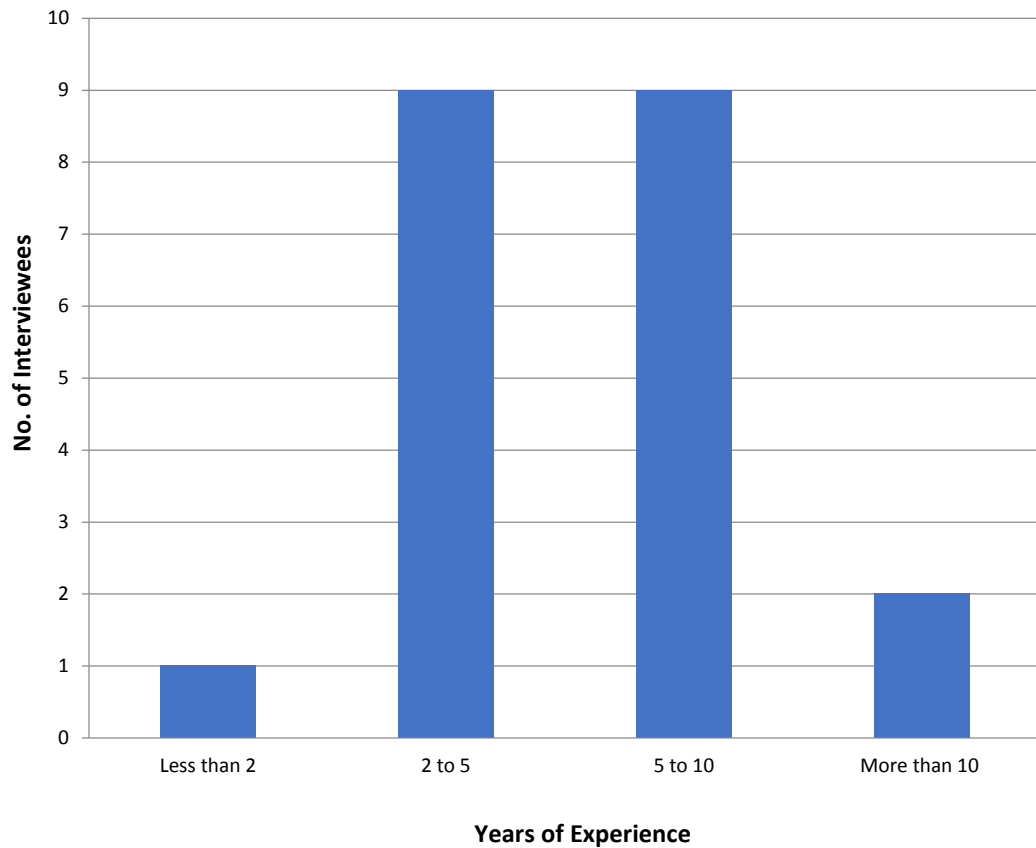


*Figure 4-3: Interviewee Breakdown according to their Gender*



Interviewee pool consists of eleven (11) Females and ten (10) males.

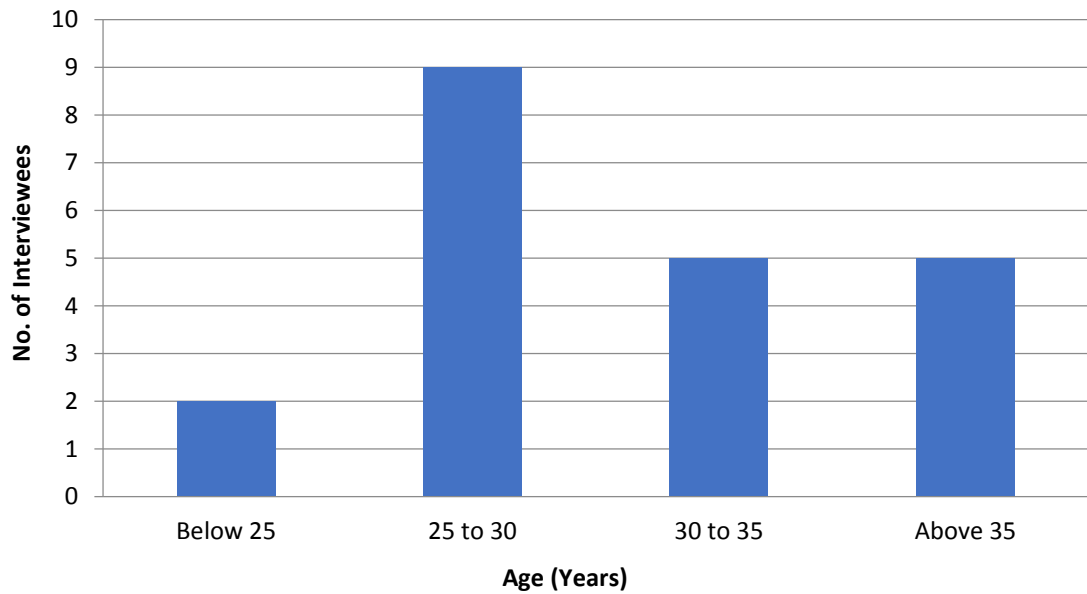
The experience level would matter in the answering pattern and the perceptions that they have.



*Figure 4-4: Interviewee Experience Distribution*

Interviewees' experience range from 1.5 years (less than 2 years) to 13 years (more than 10 years) as follows which we believe, is a fair distribution.

The age of the participants was the next factor that was considered under general characteristics of the interviewees.



*Figure 4-5: Interviewee Age Distribution*

The youngest of the interviewee pool was twenty two (22) years old and the eldest interviewee was 42 years, which constituted twenty (20) years of age distribution.

Team size distribution is a good indication for the experience distribution.

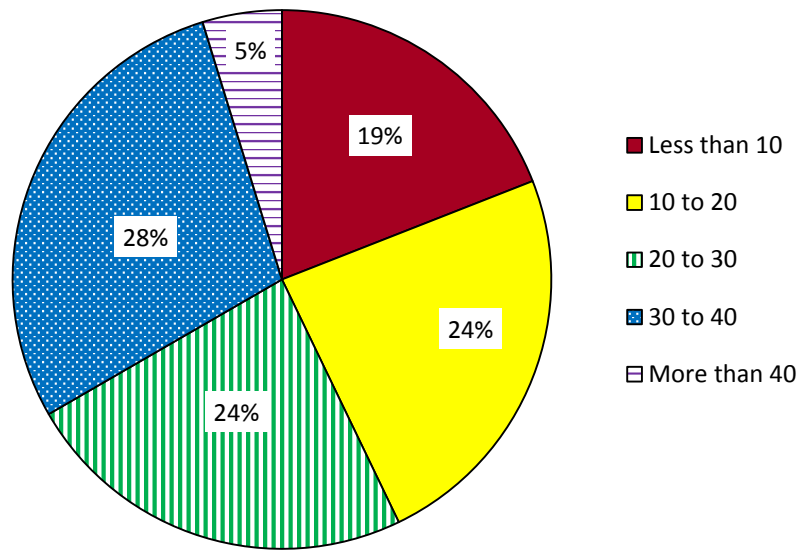


Figure 4-6: Interviewee Team Size Distribution

The smallest team consisted of six (06) members and the largest team size was forty two (42). The interviewees represented huge variety of team size.

The experience that an employee has as a telecommuter could have a positive impact on the answers in the interviews. Almost all the management level employees and obviously telecommuters had telecommuting experience. Two (02) non- telecommuter employees had never worked as telecommuters.

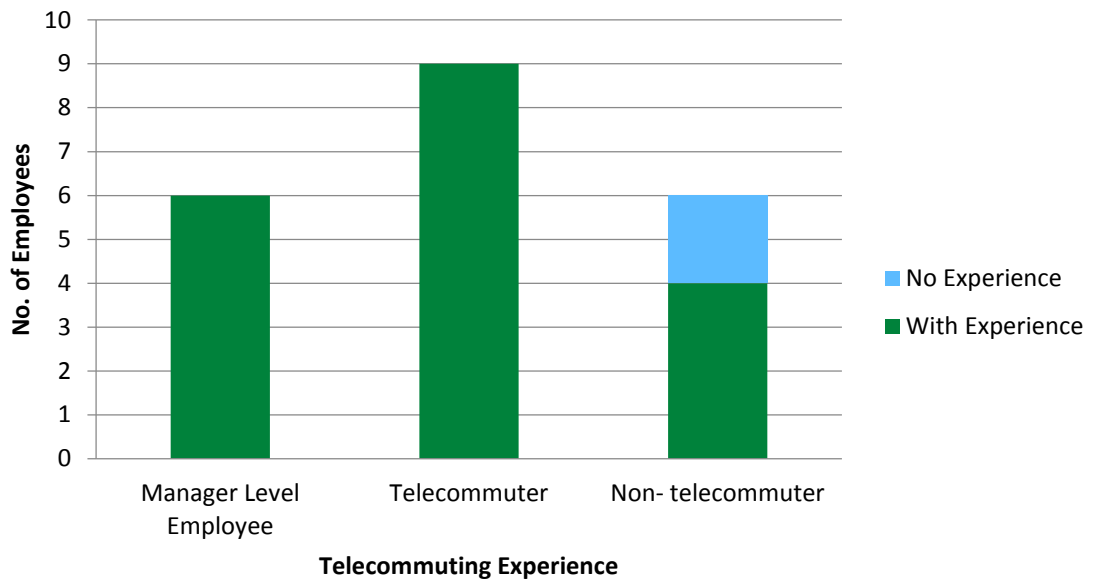


Figure 4-7: Interviewee Telecommuting Experience

All the management level/ lead level employees were the managers of different project teams who had both subordinates telecommuters and non-telecommuters (office based employees) in their teams. Telecommuters were the employees who worked at least one day a week from their home or residences and in their team also they had both the telecommuters and non- telecommuters. Non-telecommuters were the employees who were performing their job at office environment but had colleagues who worked as telecommuters in their own projects. Some of the non-telecommuters had worked as telecommuters in their previous projects. The situations where non- telecommuters having telecommuting experience in previous projects, are mentioned in employee descriptions.

In order to protect the right of interviewees' anonymity, they were each assigned with a unique code to represent the individual, as follows.

E.g.: 'Manager\_A\_1' is used to represent the 1<sup>st</sup> management level employee interviewed from company 'A'

'Telecommuter\_B\_3' is used to represent the 3<sup>rd</sup> telecommuter interviewed from company 'B'

## **Company A**

Manager\_A\_1: Management level employee who has 11 years of experience

Manager\_A\_2: Management level employee who works in two parallel projects and with 9.5 years of working experience

Telecommuter\_A\_1: Telecommuter who has worked 3.5 years as a telecommuting employee in 2 projects

Telecommuter\_A\_2: Telecommuter, who has worked for almost 5 years in the industry and 2 years as a telecommuter

Telecommuter\_A\_3: Telecommuter with 3 years of experience as both a non-telecommuter and a telecommuter

Non-Telecommuter\_A\_1: Non-telecommuter with 4 years of experience, who has never worked as a telecommuter

Non-Telecommuter\_A\_2: Non-telecommuter with 3 years of experience in the same company

## **Company B**

Manager\_B\_1: Management level employee with 13 years of industry experience

Manager\_B\_2: Management level employee with 8 years of experience with 2 years of which in the same company

Telecommuter\_B\_1: Telecommuter who has overseas experience and overall 6 years of experience

Telecommuter\_B\_2: Telecommuter, who works for 4.5 years in the same company

Telecommuter\_B\_3: Telecommuter with 1.5 years of experience

Non-Telecommuter\_B\_1: Non-telecommuter with more than 5 years of working experience

Non-Telecommuter\_B\_2: Non-telecommuter with 3 years of experience who has worked as a telecommuter in different companies

## **Company C**

Manager\_C\_1: Management level employee who has 8 years of experience in 3 different companies and currently working for 'Company C'

Manager\_C\_2: 7 year experienced management level employee

Telecommuter\_C\_1: 3 year experienced employee who has telecommuting experience of nearly 1.5 years

Telecommuter\_C\_2: Telecommuter with 6 years of telecommuting experience

Telecommuter\_C\_3: Telecommuter, who has 4 years of industry experience

Non-Telecommuter\_C\_1: Non-telecommuter, who works for 2 projects in same company and having telecommuting experience in previous project and with total of 4.5 years industry experience

Non-Telecommuter\_C\_2: Non-telecommuter who has industry experience of over 6 years

### **4.3 Analytical Strategy for Interview Transcripts**

The analytical strategy was based on grounded theory (Glaser & Strauss, 2009; Miles & Huberman, 1994). Following two steps were followed during the analysis (Miles & Huberman, 1994).

1. Data Reduction
2. Data Display and Drawing Conclusions

#### **4.3.1 Data Reduction**

In order to carry out the exploratory and inductive analysis of this study, the 21 interview transcripts were stored and analyzed. In order to reduce the data,

1. Open coding
2. Axial coding

methods were followed (Glaser & Strauss, 2009). Even though there are numerous ways to follow 'Open Coding' such as line by line, every sentence or even word by word analysis, we have followed quotations analysis which is similar as paragraph

analysis. Hundred and twenty nine (129) quotations were identified for productivity under 'Open coding'. Then we have categorized the quotations that we have already identified by following 'Axial coding'. Twenty four (24) codes that were identified based on identified hundred and twenty nine (129) quotations related to productivity. Twenty three (23) codes that were identified based on hundred and nine (109) quotations related to performance evaluation sequentially following 'Open coding' and then 'Axial Coding'. A total of Forty seven (47) code assignments were found. The reason for this disparity was the single coding that applied to multiple quotations.

Under every interviewee's profile the identified codes are listed down separately for both sections of telecommuter productivity and telecommuter performance evaluation.

Based on the collected data, the management level employees' perception towards telecommuters' productivity would be given below.



## **Managers' perception towards telecommuters' productivity and performance evaluation**

### **Data of Respondent 'Manager\_A\_1'**

#### *Respondent's profile*

Table 4.1: Profile 'Manager\_A\_1'

Name	Manager_A_1
Company	A
Position	Associate Manager
Experience	11 Years

#### *Productivity*

'Manager\_A\_1' says that the productivity of telecommuter increased by 33%, when having a quiet and supportive environment in home. According to him, work places are very diverse spaces not like home. At home, individuals don't encounter the commitments such as attending to meetings or helping team members. One of the other major factors is the increase in telecommuters' contribution to the project due to extended working hours they work. They begin work earlier, take shorter breaks and work until the end of the day. They don't have to travel. They run errands at lunch. "Working remotely" is an easy work according to some employees or managers and they say that telecommuters don't act as hard as individuals in the workplace. In any case, for the 'Manager\_A\_1' it's an incredible inverse. The argument has been made regarding the productivity increase, may be break by the point of telecommuters' commitment on the weekends and extra or extended hours. However, ultimately they are contributing to the productivity of the project and company.

Further, 'Manager\_A\_1' explains that his projects don't require all the team members to be presented at office premises constantly. Although telecommuting is not prevalent, it doesn't mean that it is something runs wild. When well managed it

helps as a booster of productivity, responsibility, work-life balance and maintenance.

### ***Performance Evaluation***

‘Manager\_A\_1’ explains about the performance evaluation, performance evaluation ought to be founded on a mix of two things: results and work conduct. Both are important, in a virtual domain, managers are frequently enticed to concentrate exclusively on results, since employees conduct can't be seen and is hard to assess. In any case, that is simply requesting inconvenience. Telecommuters or any other remote workers who work in physical disconnected environment could undoubtedly be enticed to compromise. Consequently top level management must make sense of approaches to assess both the performance evaluation system and also the conduct of their employees.

Further, ‘Manager\_A\_1’ describes that, the common propensity in the virtual working environment is to depend on different measurements to be considered about the telecommuter performance evaluation. Yet, those measurements frequently prompt to counterproductive practices. Conducting of evaluation surveys and assessments regularly come up short since individuals have a tendency to maintain a strategic distance from struggle. They simply make a cursory effort without sincerely working their brains. In a virtual workplace, that risk is more emphasized noteworthy in light of the fact that numerous telecommuters may feel that they are disengaged from the process and not properly evaluated for their work conduct at home. What they don't need is to feel considerably more withdrawn by evaluation system that makes them uninvolved members. ‘Manager\_A\_1’ can approach each telecommuter to submit recommendations for performance evaluation measurements that could be utilized to survey both the outcomes and the conduct. Acquiring their investment upfront, imaginative thoughts frequently make the performance evaluation effective. Besides, the forward and backward discussions among the evaluator and telecommuter about how to conduct performance evaluation will set the correct tone by impressing upon the telecommuter that their relationship is a ‘two-way road’. This encourages higher-degree of genuineness in future exchanges so any conflict can be settled in more positive ways.

***Summary of Respondent “Manager\_A\_1” – Productivity and Performance Evaluation***

‘Manager\_A\_1’ is positive inclination towards telecommuting by saying the productivity is higher in telecommuting when compared to traditional office based work arrangements. He believes that the telecommuters with workable and family supported home environment, productivity will be higher. On the other hand when it comes to the evaluation he focuses on two major areas, which are telecommuters’ results and telecommuters’ conduct. ‘The evaluation for telecommuters has no effect’ is his conclusion.

Table 4.2: Summary of interview with ‘Manager\_A\_1’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Extra hours of working</li> <li>• Supportive home set-up</li> <li>• Reduced Absenteeism</li> <li>• Saving travel time</li> <li>• Feeling of empowerment</li> <li>• Increased work-life balance</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Considering both conduct and result</li> <li>• Continued Progression</li> <li>• Responsibility given</li> <li>• Strong feedback</li> <li>• Transparency of the process</li> </ul>

## Data of Respondent ‘Manager\_A\_2’

### *Respondent’s profile*

Table 4.3: Profile ‘Manager\_A\_2’

Name	Manager_A_2
Company	A
Position	Project Lead
Experience	9.5 Years

### *Productivity*

Project lead ‘Manager\_A\_2’ explains that telecommuters can keep away from surge hour drive, have more control after some time off, improvement in work life balance and plan work in calmer environment to do more. Businesses have the benefits of booking work crosswise over longer segments of the day, enrolling and keeping valued employees who have other life responsibilities or interests, making more effective utilization of offices, work areas, infrastructure. Telecommuting expands coherence and staff scope by one employee while another is away.

### *Performance Evaluation*

Further, ‘Manager\_A\_2’ points out that, performance evaluation assessment is a down to earth apparatus for employee inspiration and improvement when they see their performance evaluation system and criteria as precise and reasonable. Meanwhile the evaluation procedure can be turn into a wellspring of disappointment and extreme disappointment when employees see that their evaluation is one-sided, politically stained or superfluous. There are various reasons that the associations profoundly concentrate on performance evaluation assessment. To subject employees for better performance evaluation, to compensate and perceive outstanding performers to get ready arrangement, to oversee poor performers to make the association a place for learning and advancement, to make the association

and its procedures run better. Two classes of employees; manual specialists and learning laborers are assessed in two distinct techniques.

***Summary of Respondent “Manager\_A\_2” – Productivity and Performance Evaluation***

She is also positive towards telecommuting and she says the productivity is much higher in the telecommuting. She believes that absence of need to travel during peak traffic hours helps telecommuters to work more peacefully and hence the increase in productivity. On the other hand, when it comes to the evaluation, she believes in one major area, which is continued progression for telecommuters.

Table 4.4: Summary of interview with ‘Manager\_A\_2’

Perception on Productivity - Positive	<ul style="list-style-type: none"> <li>• Saving travel time</li> <li>• Saving company resources</li> <li>• Enhanced adaptability</li> <li>• Best Usage of home resources</li> <li>• Reduced Absenteeism</li> </ul>
Perception on Performance Evaluation – No Effect	<ul style="list-style-type: none"> <li>• Continued Progression</li> <li>• Manager perceived good performance</li> <li>• Considering both conduct and result</li> <li>• Trustworthy common evaluation framework</li> <li>• Satisfied with the feedback</li> <li>• Responsibility given</li> <li>• Transparency of the process</li> </ul>

**Data of Respondent ‘Manager\_B\_1’**

***Respondent’s profile***

Table 4.5: Profile ‘Manager\_B\_1’

Name	Manager_B_1
Company	B
Position	Manager
Experience	13 Years

### ***Productivity***

‘Manager\_B\_1’ says that, telecommuters have the advantages of being spared the need to travel to and from office, escape from the interruptions in office environment and enhanced the harmony between work life and family life. Work is sometime disturbed at office due to numerous meetings and helping peers. When the employee is at home no such disturbances happen. When need to attend to any family work, the employee can attend to it but before and after such work employee is totally committed to work. Organizations have the benefits of selecting and retaining high-value employees who have other life duties or interests as telecommuters. Flexible work place/arrangements are win-win situations for both employer and employee.

### ***Performance Evaluation***

According to ‘Manager\_B\_1’ there are positive results that the organization can have with satisfied employees who are correctly evaluated through their performance evaluation systems. Employee collaboration on the work and non-office work related organizational events and practices is one of those results. The telecommuters are happy with their evaluations and the benefits that they receive through correct evaluation, therefore they collaborate well in organizational practices. ‘Manager\_B\_1’ explains further on the fairness of the telecommuter evaluation by telling that as a result , the turnover rate is less in the telecommuters as they are provided with a facility called ‘working from home’ arrangement to manage their lives.

### ***Summary of Respondent “Manager\_B\_1” – Productivity and Performance Evaluation***

He is also positive towards telecommuting and he believes that the balance between family life and work life of telecommuter is one of the reasons for the productivity improvement. The other reason according to ‘Manager\_B\_1’ is, that telecommuters are not mandated to attend meetings at office. On the other hand, when it comes to the evaluation, he believes that ratings and evaluations have no effect, as telecommuters generally tend to collaborate on organizational practices and the telecommuters’ turnover rate is relatively less.

Table 4.6: Summary of interview with 'Manager\_B\_1'

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Increased work-life balance</li> <li>• Less disturbance from office environment</li> <li>• Reduced Absenteeism</li> <li>• Saving travel time</li> <li>• Supportive family members</li> <li>• Enhanced adaptability</li> <li>• Task completion is considered</li> <li>• Feeling of empowerment</li> <li>• Supportive home set-up</li> </ul>
<p>Perception on Performance Evaluation - Fair</p>	<ul style="list-style-type: none"> <li>• Collaboration of the telecommuter</li> <li>• Less Turn over</li> <li>• Trustworthy common evaluation framework</li> <li>• Manager perceived good performance</li> <li>• Continued Progression</li> <li>• Transparency of the process</li> <li>• Considering both conduct and result</li> <li>• Satisfied with the feedback</li> <li>• Strong feedback</li> </ul>



## Data of Respondent ‘Manager\_B\_2’

### *Respondent’s profile*

Table 4.7: Profile ‘Manager\_B\_2’

Name	Manager_B_2
Company	B
Position	Associate Lead
Experience	8 Years

### *Productivity*

Associate lead ‘Manager\_B\_2’ argues that, managers are gainful with the disposing of extensive office spaces and parking spaces, decreased truancy and inertness to work and more over expanded productivity. Be that as it may, there are different sorts of adaptable working courses of action, for example, adaptability in the planning of hours worked.

This sort is incorporated with movement’s courses of action, break plans and compacted work filled weeks. Even though the employee’s contribution is increased and the savings in the perspective of employer is getting high the telecommuters are sometime struggle in their own battle to balance their family lives while committing to office work. If the work arrangement is not balanced in correct way telecommuting may be an extra burden to the telecommuter. Cumulative value for the company may be positive but without ensuring the welfare of the employees, companies can’t consider it as a productivity gain.

### *Performance Evaluation*

On the other hand, ‘Manager\_B\_2’ says that the perception of the leads and the coworkers on telecommuters’ productivity is a major fact, as it is proportionally affected on real productivity. The perception is directly impact on the feedback given by the employers. Feedbacks circularly help to motivate the telecommuters therefore productivity increases. Productivity boosts through constructive feedback

and hinders through disruptive feedback. It is worthwhile to study on the other stake holders' perception on teleworkers' productivity. Perception on achieving results by the teleworkers can be measured using the assumption; supervisors are concerned about their ability to effectively manage the results of teleworkers. In the case of providing constructive feedback for the telecommuters, if the feedback given by the management is positive, it leads to motivate the employees and increase the productivity.

***Summary of Respondent “Manager\_B\_2” – Productivity and Performance Evaluation***

His perception regarding the telecommuter productivity is neutral. He has two points; one is strengthen the productivity boosting through telecommuting and the other one is weaken the argument. He believes resource saving increase the productivity gain. But on the other hand, if the work doesn't manage well, telecommuting will be an extra burden on employees. In the telecommuter evaluation perspective, he believes that it is a fair process as the telecommuters are receiving constructive feedback like any other employees.

Table 4.8: Summary of interview with ‘Manager\_B\_2’

Perception on Productivity - Neutral	<ul style="list-style-type: none"> <li>• Saving company resources</li> <li>• Improper work arrangement</li> <li>• Increased work-life balance</li> <li>• Reduced Absenteeism</li> <li>• Supportive home set-up</li> </ul>
Perception on Performance Evaluation – No Effect	<ul style="list-style-type: none"> <li>• Strong feedback</li> <li>• Considering both conduct and result</li> <li>• Satisfied with the feedback</li> <li>• Continued Progression</li> </ul>

**Data of Respondent ‘Manager\_C\_1’**

***Respondent’s profile***

Table 4.9: Profile ‘Manager\_C\_1’

Name	Manager_C_1
Company	C
Position	Project Lead
Experience	8 Years

### ***Productivity***

The project lead 'Manager\_C\_1' explains that, it is beneficial to contemplate on the other team members' recognition on telecommuters' productivity. When the telecommuters are acknowledged that team members believe on their productivity, they commit to work in more productive ways.

Further, 'Manager\_C\_1' points out that, telecommuting gives the chance to the employees to utilize their time and space of home in new ways. The businesses' motivation is to expand the benefits by decentralization. It can be easily achieved through telecommuting. Telecommuters embrace the trademark, 'work more intelligent and quicker'.

The managers can have a place with two classes; telecommuting adopters and non-adopters. Both classes have comparative observation on the both positive and negative effects of the telecommuting more often than not. She trusts truancy is diminished and working adaptability is enhanced because of telecommuting.

### ***Performance Evaluation***

According to project lead 'Manager\_C\_1' the evaluation is a turning point that the employer makes whether the employee is a satisfied employee or unsatisfied. Correct and appropriate evaluation system and ratings can lead to a satisfied employee while incorrect and inappropriate ratings lead to dissatisfaction. The answer is not only a fair rating but also a fair and justified evaluation framework. When the employees trust on their evaluation framework, they work hard to achieve their goals as they believe that they are going to have a proper rating through well-established evaluation frame work.

### ***Summary of Respondent "Manager\_C\_1" – Productivity and Performance Evaluation***

'Manager\_C\_1' is positive towards telecommuting and she says that the productivity is higher in the telecommuting. To prove her idea she presents decentralization, absenteeism reduction, adaptability enhancement and better usage of time. According to 'Manager\_C\_1' having a proper framework leads to have fair employee evaluation with no effect for being a telecommuter.

Table 4.10: Summary of interview with ‘Manager\_C\_1’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Feeling of empowerment</li> <li>• Reduced Absenteeism</li> <li>• Enhanced adaptability</li> <li>• Best Usage of time</li> <li>• Best Usage of home resources</li> <li>• Increased work-life balance</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Transparency of the process</li> <li>• Satisfied with the feedback</li> <li>• Trustworthy common evaluation framework</li> <li>• Continued Progression</li> </ul>

**Data of Respondent ‘Manager\_C\_2’**

*Respondent’s profile*

Table 4.11: Profile ‘Manager\_C\_2’

Name	Manager_C_2
Company	C
Position	Associate Lead
Experience	7 Years

### ***Productivity***

Associate lead 'Manager\_C\_2' says that, telecommuters have the benefits of saving the time of travelling in rush office hours, escaping from the disturbances in office environment, improving the congruity between work life and family life. Companies, who have the telecommuting practices, have the benefits of having extra hour workers while keeping them with the satisfied feeling that they are in a win-win situation. Because the interpretation of employees on telecommuting is that they are provided an extra facility may be as a reward. Making more fruitful utilization of work environments, work ranges and infrastructure, developing responsibility and the working scope of one specialist while another is away are some of the benefits for the company. The impact of the absenteeism got lesser impact among telecommuters as they can work from their home when they have family commitments.

### ***Performance Evaluation***

According to 'Manager\_C\_2' the connection between the evaluator and employee makes the evaluation system stronger irrespective of whether the employee is a telecommuter or not. The improved behavior of the employee gives the hint that their evaluations are in good condition. In the evaluation discussions the employees can give the reverse feedback on their evaluation method and ratings. Less number of telecommuters complains about their ratings when compared to non-telecommuters. Further the telecommuters have mentioned that the life is balanced due to telecommuting and that they want to continue it. Telecommuters are performing in a good manner and they have a continuous and observable progress. When a non-telecommuter is given the opportunity to work from home most of them has accepted it as an opportunity. But few employees have rejected it saying telecommuting is a challenge that they may not be able to handle cleverly. Normally after appraisal period the turnover rate gets high. The employees who resign from their jobs just after the evaluation cycle may be having bad impression or experience on their ratings. Among them the number of telecommuters is relatively lesser.

***Summary of Respondent “Manager\_C\_2” – Productivity and Performance Evaluation***

Associate lead ‘Manager\_C\_2’ explains that telecommuting helps to save time of travelling, no disturbance from office environment, improving the balance between work life and family life are the reasons to increase the telecommuters’ productivity. She perceives the performance evaluation fairness is in a considerable status because mainly the common evaluation system is followed for all the employees.

Table 4.12: Summary of interview with ‘Manager\_C\_2’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Saving travel time</li> <li>• Less disturbance from office environment</li> <li>• Increased work-life balance</li> <li>• Feeling of empowerment</li> <li>• Reduced Absenteeism</li> <li>• Enhanced adaptability</li> </ul>
<p>Perception on Performance Evaluation - Advantageous</p>	<ul style="list-style-type: none"> <li>• Common Evaluation system</li> <li>• Lesser complains</li> <li>• Continued Progression</li> <li>• Less Turn over</li> </ul>

## **Telecommuters’ perception towards telecommuters’ productivity and performance evaluation**

### **Data of Respondent ‘Telecommuter\_A\_1’**

#### *Respondent’s profile*

Table 4.13: Profile ‘Telecommuter\_A\_1’

Name	Telecommuter_A_1
Company	A
Position	Software Engineer
Experience	3.5 Years

#### *Productivity*

Senior software engineer ‘Telecommuter\_A\_1’ points out that ability to perform the job role is no longer, only inside the office premises. A portion of the most astute individuals who live huge number of miles away from the office can be provided with facility, telecommuting. Working from home permits telecommuters to work with top ability, paying little heed to where they are or what time zone they are in. Offering, working from home choice is additionally an awesome approach to hold beat ability by giving them more adaptability.

Senior software engineer ‘Telecommuter\_A\_1’ is positive towards telecommuting; according to him productivity is high when he works as a telecommuter. He is delighted as he can attend personal commitments while he is at home. Therefore if there is any urgent situation he works on holidays or long hours. Regardless of the work venue they need to cover assigned tasks. Once completed the assigned or agreed tasks for the day, no need to waste time on traveling.

#### *Performance Evaluation*

‘Telecommuter\_A\_1’ mentions that, some of the managers are reluctant to give the telecommuting benefits to their employees. Managers regularly refer to worries



about overseeing telecommuters because of an apparent loss of control over proficient business operations. They are usual to conveying eye to eye. Overseeing telecommuters includes obligation supervisors and their performance evaluation administration aptitudes. Keeping up performance evaluation levels and meeting change objectives in a telecommuting domain requires outstanding supervisory aptitudes for planning the work, setting desires, monitoring performance evaluation, recognizing telecommuters for their performance evaluation.

When it comes to employee evaluation, it is unfair towards telecommuters. Telecommuters do their best to achieve the project goals and work extra hours when compared to office based employees. When they are assigned special, urgent tasks sometime they work on holidays. But most probably non-telecommuters work in the office hours only. The commitment is higher in the telecommuters. But they receive same ratings like non-telecommuters do. When the managers are not smarter enough to plan the work correctly and they are more stick to monitor their subordinates, telecommuters getting low rates.

#### ***Summary of Respondent “Telecommuter\_A\_1” – Productivity and Performance Evaluation***

According to senior software engineer ‘Telecommuter\_A\_1’, telecommuting is productive work arrangement but when consider the performance evaluation, it’s disadvantageous for telecommuters.

Table 4.14: Summary of interview with ‘Telecommuter\_A\_1’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Increased work-life balance</li> <li>• Enhanced adaptability</li> <li>• Less disturbance from office environment</li> <li>• Feeling of empowerment</li> <li>• Best Usage of time</li> <li>• Supportive home set-up</li> </ul>
<p>Perception on Performance Evaluation - Disadvantageous</p>	<ul style="list-style-type: none"> <li>• High commitment of telecommuters</li> <li>• Rating is same for both telecommuters and non-telecommuters</li> <li>• Manager prefers physical presence</li> <li>• Saving travel time</li> </ul>

**Data of Respondent ‘Telecommuter\_A\_2’**

***Respondent’s profile***

Table 4.15: Profile ‘Telecommuter\_A\_2’

<p>Name</p>	<p>Telecommuter_A_2</p>
<p>Company</p>	<p>A</p>
<p>Position</p>	<p>Senior Quality Assurance Engineer</p>
<p>Experience</p>	<p>5 Years</p>

### ***Productivity***

‘Telecommuter\_A\_2’; a quality assurance engineer explains that, it is imperative to ensure that supervisors know how to convey and work together with telecommuter or any other virtual representative and the other way around. This implies understanding the delicate abilities as well as seeing how to utilize the correct advances to encourage the fancied collaboration. Virtual workers additionally need to get their own kind of preparation. Part-time telecommuting can be a smart decision. If staying at home one day saves costs for both employer and employee, then staying at home six to eight days is several times beneficial. If telecommuter’s job is done primarily via e-mail and telephone, telecommuters should have the exact same tools at home to work with. A worry about remote employees is, not being able to keep sufficient informal communications open with their coworkers. With the tools like instant messaging at their fingertips, some telecommuters are actually more a part of the team than those who are trapped in cubicles all day.

‘Telecommuter\_A\_2’ is positive towards telecommuting. She believes that there is more productivity when compared to traditional office based working arrangement. She believes that smart decisions of telecommuter will further increase the productivity. Her personal experience on reduction of absenteeism, improvement in coworker collaboration and ability to focus on the assigned tasks are the evidence for her argument on the boosting productivity.

### ***Performance Evaluation***

In any work circumstance, arranging work is the initial step to overseeing performance evaluation. Managers and telecommuters ought to simply decide what the telecommuter needs to be finished at end of the teleworking day. Obviously, telecommuters’ assignments should be able to adjust and bolster hierarchical objectives. Anticipating fruitful outcomes obliges the managers to first decide work unit objectives and destinations, and then decide, with their team members. Managers can utilize telecommuter performance evaluation process as the devices to build up required achievements.

The telecommuter has a positive feeling on the ratings that she has received so far. She interprets the ratings that she receives are fair enough by having a benefit such

as telecommuting. She has continued with the same evaluation system when she was a non-telecommuter and when she became a telecommuter.

***Summary of Respondent “Telecommuter\_A\_2” – Productivity and Performance Evaluation***

Telecommuter, senior quality assurance engineer ‘Telecommuter\_A\_2’ highlights her positive perception on telecommuter productivity based on her personal experience as a telecommuter. She emphasizes her point on fairness of telecommuter performance evaluation and judgment of no effect for evaluation as a telecommuter too.

Table 4.16: Summary of interview with ‘Telecommuter\_A\_2’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Reduced Absenteeism</li> <li>• Increased collaboration</li> <li>• Supportive home set-up</li> <li>• Increased work-life balance</li> <li>• Saving travel time</li> <li>• Less disturbance from office environment</li> <li>• Supportive family members</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Interpretation as a benefit to telecommuter</li> <li>• Trustworthy common evaluation framework</li> <li>• Responsibility given</li> <li>• Considering both conduct and result</li> <li>• Common Evaluation system</li> <li>• Continued Progression</li> </ul>

## Data of Respondent ‘Telecommuter\_A\_3’

### *Respondent’s profile*

Table 4.17: Profile ‘Telecommuter\_A\_3’

Name	Telecommuter_A_3
Company	A
Position	Software Engineer
Experience	3 Years

### *Productivity*

The telecommuter ‘Telecommuter\_A\_3’ who is a software engineer said, the main advantage that they can have through telecommuting is get rid of the managers who always try to stress the subordinates. There are managers who ask to complete tasks urgently irrespective of the estimations allocated for the tasks. Telecommuters should be available and accessible by the manager or colleagues during the core business hours. They should provide with the facilities that can be efficiently used for their communication as well as improve the effectiveness of the work. ‘Telecommuter\_A\_3’ has experience on the telecommuting as a productivity booster because he could complete more tasks when he is at home. The calm environment at home encourages achieving more. The family members that who are not disturbing at any circumstances, is a blessing according to ‘Telecommuter\_A\_3’. When there is a well-defined process, the telecommuting is one of the best work arrangements that both the telecommuter and the employer can be beneficial.

### *Performance Evaluation*

Every employee is informed and agrees what he or she should do during a given time frame. Objective setting is the phase of the evaluation cycle where use to inform the employees the expectations that they need to meet. Managers communicate performance evaluation norms. The managers or the supervisors utilize the models written in employee performance evaluation arrangements to

convey desires, yet they additionally used to fortify and clarify objectives by imparting verbally and regularly. In the event that the employees are comprehend what they should do, and how well they should do the employees' responsibility is not only achieving the targets that set at the beginning of the year or beginning of the evaluation cycle but they need to ensure that the targets are achieved effectively and efficiently. Then the manager sets the phase for effective performance evaluation - whether the employee works inside or outside the workplace. The evaluation process is transparent and anyone can question it at any point.

***Summary of Respondent “Telecommuter\_A\_3” – Productivity and Performance Evaluation***

Software engineer ‘Telecommuter\_A\_3’ is positive towards the productivity of the telecommuter. According to her, performance evaluation is also fair as it is basically a common evaluation system.

Table 4.18: Summary of interview with ‘Telecommuter\_A\_3’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Less disturbance from office environment</li> <li>• Supportive home set-up</li> <li>• Supportive family members</li> <li>• Saving travel time</li> <li>• Reduced Absenteeism</li> <li>• Increased work-life balance</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Considering both conduct and result</li> <li>• Satisfied with the feedback</li> <li>• Collaboration of the telecommuter</li> <li>• Common Evaluation system</li> <li>• Responsibility given</li> <li>• Trustworthy common evaluation framework</li> <li>• Transparency of the process</li> </ul>

## Data of Respondent ‘Telecommuter\_B\_1’

### *Respondent’s profile*

Table 4.19: Profile ‘Telecommuter\_B\_1’

Name	Telecommuter_B_1
Company	B
Position	Senior business analyst
Experience	6 Years

### *Productivity*

This telecommuter ‘Telecommuter\_A\_3’ says, a superior workplace enhances innovativeness. Some managers doubt that the telecommuters will lose imagination by working at home. Some reasons behind the doubt are the telecommuters are occupied by awkward seating, trimmed in by small desk areas, and hindered by espresso breaking colleagues, the more whether the telecommuters really have the capacity to concentrate on their work. Frequently this kind of protest, however, is only an approach to state "I don't think telecommuters will work in case I'm not watching them". That is the place where the telecommuters can come in with an arrangement for really measuring their yield – and a readiness to concur that the telecommuters will alter or suspend the trial if their efficiency drops. In the process of trial the senior business analyst has succeeded.

She has working experience in some work arrangements such as shift base and work-sharing. According to her, telecommuting is the best option which increases the productivity and creativity. There is no barrier to work with different time zones when the employee is a telecommuter. No safety or time wasting issues that occurred due to demand of unusual working hours in international projects which has connectivity with the teams work in different time zones. According to her telecommuting is a productivity booster.

### ***Performance Evaluation***

Observing performance evaluation incorporates measuring performance evaluation and giving feedback. In a telecommuting circumstance as in any other work circumstance, evaluation, constructive feedback and rewards empowers the employees. She has experienced a fair evaluation, ratings and rewards as a telecommuter. Amount, quality, and cost-adequacy are the three general measures for managers to evaluate. When managers or supervisors and employees set up performance evaluation measurements and focuses in performance evaluation gauges, conveying progress on meeting those measures and targets become to achievable and realistic level. Face to face feedback is also required for telecommuters on their performance evaluation with a specific end goal to keep up great performance evaluation and to enhance. The telecommuters need to keep managers educated about work advance. Great correspondence among managers and telecommuters is basic for effectively completing work and is particularly vital in a teleworking domain.

### ***Summary of Respondent “Telecommuter\_B\_1” – Productivity and Performance Evaluation***

The senior business analyst ‘Telecommuter\_B\_1’ accentuated that telecommuting has a positive impact on employee productivity; it is a work arrangement to increase the productivity. Moreover she explained the fairness of performance evaluation for telecommuter.



Table 4.20: Summary of interview with ‘Telecommuter\_B\_1’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Enhanced adaptability</li> <li>• Saving travel time</li> <li>• Less disturbance from office environment</li> <li>• Supportive home set-up</li> <li>• Feeling of empowerment</li> <li>• Evidence from trial</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Strong feedback</li> <li>• Satisfied with the feedback</li> <li>• Manager perceived good performance</li> <li>• Responsibility given</li> <li>• Considering both conduct and result</li> <li>• Transparency of the process</li> </ul>

**Data of Respondent ‘Telecommuter\_B\_2’**

***Respondent’s profile***

Table 4.21: Profile ‘Telecommuter\_B\_2’

Name	Telecommuter_B_2
Company	B
Position	Senior Software Engineer
Experience	4.5 Years

### ***Productivity***

Telecommuter 'Telecommuter\_B\_2' explains, with the correct devices and tools, telecommuting can make coordinated effort less demanding. There are numerous ways of communicating such as video conferencing and speedy Instant Messaging. There are a lot of approaches to keep the bond between the team members, regardless of the place they work. To keep the productivity up and running the telecommuters are provided with a company paid internet connection, access to all the systems, laptops and sometime mobile phones. The team members who are working at traditional office based environment help to telecommuters at the circumstances such as inaccessibility to the systems. When the telecommuters are at the office, they help their colleagues in return which makes a highly collaborative environment.

The telecommuters work with and work for the tasks that they are agreed to deliver. The quantity and quality is achieved every time within a lesser time than the estimated time. No disruption from the home environment. According to 'Telecommuter\_B\_2' there are situations that the employees have tiny family commitments. They can work from home but cannot make to office due to time spending on home to office. Telecommuting is the best option. It reduces the absenteeism and increase the loyalty of the employee to the company. Therefore productivity gets increased due to telecommuting.

### ***Performance Evaluation***

Especially in circumstances where employees work from home, supervisors try extra endeavors so the telecommuters feel they are a piece of the workplace and a part of the work group. Keeping up the great correspondences is one critical approach. Another route is to guarantee that the managers perceive the great performance of the telecommuters; managers don't allow telecommuters feel as though their performance evaluation doesn't make a difference or that nobody ever sees their accomplishments. All telecommuters need to feel that their work is valued. Acknowledgment is dependably being a piece of the supervisors' performance evaluation administration device pack.

‘Telecommuter\_B\_2’ has experienced great recognition during his evaluation cycle and never felt alone or neglected at the evaluation.

***Summary of Respondent “Telecommuter\_B\_2” – Productivity and Performance Evaluation***

According to the senior software engineer ‘Telecommuter\_B\_2’ there are several factors that affect to the positive perception on telecommuter productivity. Telecommuter performance evaluation is also fair as per the view of ‘Telecommuter\_B\_2’

Table 4.22: Summary of interview with ‘Telecommuter\_B\_2’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Balanced coordinated effort</li> <li>• Supportive home set-up</li> <li>• Reduced Absenteeism</li> <li>• Feeling of empowerment</li> <li>• Less disturbance from office environment</li> <li>• Supportive family members</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Manager perceived good performance</li> <li>• Considering both conduct and result</li> <li>• Recognition</li> <li>• Trustworthy common evaluation framework</li> <li>• Responsibility given</li> <li>• Satisfied with the feedback</li> </ul>

## Data of Respondent ‘Telecommuter\_B\_3’

### *Respondent’s profile*

Table 4.23: Profile ‘Telecommuter\_B\_3’

Name	Telecommuter_B_3
Company	B
Position	Associate Software Engineer
Experience	1.5 Years

### *Productivity*

According to the associate software engineer ‘Telecommuter\_B\_3’ telecommuters can complete their assignments. In the case of the employees who are despising telecommuting, they don't see the way that the telecommuters are working. Telecommuters should be set up to take measures of their work, and their accessibility, consummately self-evident. A culture of communicating is one simple approach to guarantee this; being over the city and being a few doors down are the same in case, telecommuters are only an Instant Message away.

When the employee loses his or her motivation to work in the office environment, there are colleagues to encourage, supervisors to monitor. But in home environment the telecommuter has to encourage him or herself. ‘Telecommuter\_B\_3’ mentions that he is not a good self-motivator which is not an appropriate characteristic for a telecommuter. As per the associate software engineer ‘Telecommuter\_B\_3’ telecommuting is not a productivity booster.

### *Performance Evaluation*

The managers expect the assignments to be done by the telecommuters according to their objectives. But it is not easy like working in an already well organized office arrangement. The telecommuter has to arrange the home set up. Telecommuter has to focus on the office work while other family members are involving in their daily

routine. The supervisors and the office colleagues don't see the dark and hard side of the telecommuting. Telecommuters are only evaluated for the work they have done not for the struggle that they have gone through. Sometime the telecommuting is not a choice of the employee; it is offered for the employee because the management needs to get rid of the responsibility of extra working hours or weekend work at office.

The telecommuter has to keep the clear records on the assignment that has been done. The managers are asking for the evidence at the feedback discussions.

***Summary of Respondent “Telecommuter\_B\_3” – Productivity and Performance Evaluation***

According to the associate software engineer ‘Telecommuter\_B\_3’, employees don't improve their productivity by working as telecommuters. Telecommuter performance evaluation is disadvantageous in the view point of ‘Telecommuter\_B\_3’

Table 4.24: Summary of interview with ‘Telecommuter\_B\_3’

Perception on Productivity - Negative	<ul style="list-style-type: none"> <li>• Keeping track</li> <li>• Non-telecommuters are getting discouraged</li> <li>• Failure for the less self-motivators</li> <li>• Work hours exceeding</li> <li>• Facility Issues</li> </ul>
Perception on Performance Evaluation - Disadvantageous	<ul style="list-style-type: none"> <li>• Effort is not recognized</li> <li>• Hard to prove the effort</li> </ul>

## Data of Respondent ‘Telecommuter\_C\_1’

### *Respondent’s profile*

Table 4.25: Profile ‘Telecommuter\_C\_1’

Name	Telecommuter_C_1
Company	C
Position	Quality Assurance Engineer
Experience	3 Years

### *Productivity*

The quality assurance engineer ‘Telecommuter\_C\_1’ says, that the telecommuting is a preferable, flexible working arrangement where both parties; employer and employee have benefits. In the telecommuters side he/ she doesn’t need to come to the office if they have any personal commitments, but end of the day the work need to be done. The telecommuters can define their own time frame which includes the core business hours. There is no expectation to cover 9 hours; once agreed assignments for the day are completed the telecommuter can attend their own family commitments. As the home environment is the most calm and quite place to work the telecommuter can achieve their tasks more efficiently. Not like in the office, in home environment the employee has the hot meal, freedom to access social media network if they are stressed.

Further, ‘Telecommuter\_C\_1’ explains that there is no disturbance from the colleagues which happens in the office environment. The employee doesn’t need to attend several meetings or unnecessary office events. The telecommuter has the thought of completing the assignments in acceptable quality because they think that telecommuting is an arrangement that is given only to trustworthy employees.

### ***Performance Evaluation***

Not solely do employees need to perceive what they should do, they need to know how well they should do it. Supervisors must give performance evaluation standards clearly. They should talk to employees time to time with the purpose of giving feedback and encouraging the employees. Irrespective of the place where the employees work in 'Company C', the process happens smoothly and regularly. The managers have face to face meetings with the employees and give the constructive feedback. When there are instances that the telecommuter needs to be improved they also guide with a systematic plan.

According to 'Telecommuter\_C\_1', non- telecommuters are helpful and they never complain about the rewards that the telecommuters achieve towards telecommuting. On the other hand, the telecommuters don't have high expectations in monetary terms as they are provided with the advantage of the working at home luxury.

### ***Summary of Respondent "Telecommuter\_C\_1" – Productivity and Performance Evaluation***

Quality assurance engineer 'Telecommuter\_C\_1' perceives telecommuting as a good influencer to increase productivity. Telecommuter performance evaluation is also fair and it doesn't have any effect for being a Telecommuter as per the view of 'Telecommuter\_C\_1'.

Table 4.26: Summary of interview with ‘Telecommuter\_C\_1’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Increased work-life balance</li> <li>• Supportive family members</li> <li>• Task completion is considered</li> <li>• Less disturbance from office environment</li> <li>• Feeling of empowerment</li> <li>• Supportive home set-up</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Common Evaluation system</li> <li>• Responsibility given</li> <li>• Continued Progression</li> <li>• Manager perceived good performance</li> <li>• Collaboration of the telecommuter</li> <li>• Trustworthy common evaluation framework</li> <li>• Less expectation</li> </ul>

**Data of Respondent ‘Telecommuter\_C\_2’**

*Respondent’s profile*

Table 4.27: Profile ‘Telecommuter\_C\_2’

Name	Telecommuter_C_2
Company	C
Position	Senior support engineer
Experience	6 Years



### ***Productivity***

Senior support engineer 'Telecommuter\_C\_2' explains that the telecommuting is a remedy for the problems such as time taking travelling in rushed traffic hours, imbalance between the work life and family life, unnecessary attendance to the office occurred based on urgent situations like system failures. Telecommuting may not be the best answer but telecommuting is a suitable and cost effective answer. Telecommuter should be provided with all the peripheral devices and speedy network access. Less disruptive home environment increases the attention to the work. Finally, it contributes to the employee productivity.

It may lead to lack of face to face interaction among the employees and between managers and employees. It can be eliminated by having a strong communication media. Some employees' interaction with the colleagues becomes frequent and strong when they are telecommuting.

### ***Performance Evaluation***

Telecommuting effort is not less than the office based employees' effort. The manager's expectation is to get the job done with the maximum quality and minimum time. Acknowledging the work engaged by the telecommuter, is his or her responsibility. According to the explanation by 'Telecommuter\_C\_2', as far as the managers are correctly updated on the status the telecommuters are not in a risk of receiving less rating or unfair evaluation. The managers are always trying to follow the same criteria for the same category employees. Therefore work venue has a less impact on the employee evaluation.

### ***Summary of Respondent "Telecommuter\_C\_2" – Productivity and Performance Evaluation***

According to the senior support engineer 'Telecommuter\_C\_2' there are several factors that affect to the positive perception on telecommuter productivity. Telecommuter performance evaluation is also fair as per the view of 'Telecommuter\_C\_2'.

Table 4.28: Summary of interview with ‘Telecommuter\_C\_2’

Perception on Productivity - Positive	<ul style="list-style-type: none"> <li>• Saving travel time</li> <li>• Increased work-life balance</li> <li>• Safety</li> <li>• Supportive home set-up</li> <li>• Less disturbance from office environment</li> <li>• Feeling of empowerment</li> </ul>
Perception on Performance Evaluation – No Effect	<ul style="list-style-type: none"> <li>• Responsibility given</li> <li>• Strong feedback</li> <li>• Transparency of the process</li> <li>• Managers' effort</li> <li>• Manager perceived good performance</li> </ul>

**Data of Respondent ‘Telecommuter\_C\_3’**

***Respondent’s profile***

Table 4.29: Profile ‘Telecommuter\_C\_3’

Name	Telecommuter_C_3
Company	C
Position	Software Engineer
Experience	4 Years

### ***Productivity***

Telecommuting is another arrangement of work. The employee needs to perform the same work load and quality of the work when he/she is at the home. The telecommuter may face communication issues, system accessibility issues occurred due to Internet issues, lack of the peripherals available compared to in the office are the major drawbacks of telecommuting.

On the other hand telecommuting gives the advantages of save the traveling time and eliminating of unsafe travel in the early morning and ability to attend personal commitment once finish the assigned tasks. Telecommuting becomes much more effective when the companies run according to well defined process.

### ***Performance Evaluation***

Employee evaluation is something that needs to pay more attention. It determines whether the employee is satisfied or not, ultimately whether the company is successful or unsuccessful in their business. Fair evaluation system determined the employee satisfaction and their commitment and contribution in return.

As telecommuters are invisible to their supervisors; they need to be evaluated in a way where they feel that they are same as other employees. If any difference happens in evaluation an employee who has work experience as both the telecommuter and non-telecommuter can identify easily and can be fed-up.

### ***Summary of Respondent “Telecommuter\_C\_3” – Productivity and Performance Evaluation***

The telecommuter, software engineer ‘Telecommuter\_C\_3’ is in a neutral feeling on telecommuters’ productivity meanwhile he believes that telecommuter performance evaluation has no effect because of being a telecommuter.

Table 4.30: Summary of interview with ‘Telecommuter\_C\_3’

Perception on Productivity - Neutral	<ul style="list-style-type: none"> <li>• Saving travel time</li> <li>• Safety</li> <li>• Task completion is considered</li> <li>• Facility Issues</li> <li>• Collaboration issues</li> </ul>
Perception on Performance Evaluation – No Effect	<ul style="list-style-type: none"> <li>• Trustworthy common evaluation framework</li> <li>• Continued Progression</li> <li>• Manager perceived good performance</li> <li>• Responsibility given</li> <li>• Strong evaluation system</li> </ul>

**Non-telecommuters’ perception towards telecommuters’ productivity and performance evaluation**

**Data of Respondent ‘Non-Telecommuter\_A\_1’**

***Respondent’s profile***

Table 4.31: Profile ‘Non-Telecommuter\_A\_1’

Name	Non-Telecommuter_A_1
Company	A
Position	Senior UI Engineer
Experience	4 Years

### ***Productivity***

According to senior UI engineer ‘Non-Telecommuter\_A\_1’, telecommuting is not a productivity enhancing work arrangement. Home environment is not properly set up as office arrangement. There are a lot of facility issues such as not having extra monitors and air conditioning, power failures. The telecommuters don’t keep proper track on the assigned work, the level they complete or the number of hours that they work are some of the other issues. The telecommuters don’t properly collaborate with the office based employees. When they are at the office they talk to their colleagues and get the work done. Normally telecommuters used to exceed their work hours. As they are at their comfort zone they don’t bother about the number of hours they work which is not a good sign of productivity. Sometime office based employees perceive that the telecommuting as a benefit for selected employees. It may demotivate office based employees too.

### ***Performance Evaluation***

Senior UI engineer ‘Non-Telecommuter\_A\_1’ explained that assessing under a common employee evaluation system is an advantage that the telecommuters have. The telecommuters don’t complain as much as non-telecommuters do. The telecommuter’s carrier progression is clearly visible.

### ***Summary of Respondent “Non-Telecommuter\_A\_1” – Productivity and Performance Evaluation***

‘Non-Telecommuter\_A\_1’ discussed on telecommuters productivity in a negative perception while perceiving performance evaluation as advantageous for the telecommuters.

Table 4.32: Summary of interview with 'Non-Telecommuter\_A\_1'

Perception on Productivity - Negative	<ul style="list-style-type: none"> <li>• Collaboration issues</li> <li>• Keeping track</li> <li>• Facility Issues</li> <li>• Work hours exceeding</li> <li>• Non-telecommuters are getting discouraged</li> <li>• Improper work arrangement</li> </ul>
Perception on Performance Evaluation - Advantageous	<ul style="list-style-type: none"> <li>• Common Evaluation system</li> <li>• Continued Progression</li> <li>• Lesser complains</li> </ul>

**Data of Respondent 'Non-Telecommuter\_A\_2'**

***Respondent's profile***

Table 4.33: Profile 'Non-Telecommuter\_A\_2'

Name	Non-Telecommuter_A_2
Company	A
Position	Quality Assurance Engineer
Experience	3 Years

***Productivity***

Quality assurance engineer 'Non-Telecommuter\_A\_2' perceives that the telecommuting has no special impact on employee productivity. Telecommuting is productive as same as office-based work. To prove the argument 'Non-Telecommuter\_A\_2' came up with the points having the supportive family members, saving the travel time in rush hours, having no or less disturbance in home

environment when compared to office environment. To confute the point of productivity she highlighted the factors of facility issues, corroboration issues in home environment and exceeding normal working hours.

***Performance Evaluation***

According to the non-telecommuter 'Non-Telecommuter\_A\_2', the telecommuters have some disadvantages in employee evaluation such as some managers prefer to see that their subordinates' physical presence in office set-up. Even though the telecommuters committed a lot towards their tasks, it's not encountered correctly. There is no clear difference in telecommuter ratings and non-telecommuter ratings.

***Summary of Respondent 'Non-Telecommuter\_A\_2' – Productivity and Performance Evaluation***

The quality assurance engineer 'Non-Telecommuter\_A\_2' argued that there is no much difference in the telecommuters' productivity and non-telecommuters' productivity. But 'Non-Telecommuter\_A\_2' thinks performance evaluation happens in disadvantageous way for telecommuters.

Table 4.34: Summary of interview with 'Non-Telecommuter\_A\_2'

<p>Perception on Productivity - Average</p>	<ul style="list-style-type: none"> <li>• Supportive family members</li> <li>• Saving travel time</li> <li>• Task completion is considered</li> <li>• Less disturbance from office environment</li> <li>• Facility Issues</li> <li>• Work hours exceeding</li> <li>• Collaboration issues</li> </ul>
<p>Perception on Performance Evaluation - Disadvantages</p>	<ul style="list-style-type: none"> <li>• High commitment of telecommuters</li> <li>• Rating is same for both telecommuters and non-telecommuters</li> <li>• Manager prefers physical presence</li> </ul>

## Data of Respondent 'Non-Telecommuter\_B\_1'

### *Respondent's profile*

Table 4.35: Profile 'Non-Telecommuter\_B\_1'

Name	Non-Telecommuter_B_1
Company	B
Position	Senior Quality Assurance Engineer
Experience	5 Years

### *Productivity*

There are several factors that affect for the perception on telecommuters productivity, according to the senior quality assurance engineer ' Non-Telecommuter\_B\_1', when the home set up is in an office looking order, it will feel like the office. Using bed room as the office room is not a good choice. But the working at home keep the casual office disturbances out including waste of time on the road. The telecommuters feel that they are given a responsibility through empowerment called telecommuting. As the telecommuters can work more, when they have tiny personal commitment they do not take day-offs.

### *Performance Evaluation*

Performance evaluation for the telecommuter is fair according to 'Non-Telecommuter\_B\_1'. Both telecommuters and non-telecommuters are evaluated under the same evaluation system. The telecommuters have less expectation on high ratings as they already facilitated with working from home choice. The recognition they have in the project, the way they work is also encountered and telecommuters grow every time are some of the supporting points that ' ' revealed.



***Summary of Respondent “M” – Productivity and Performance Evaluation***

‘Non-Telecommuter\_B\_1’, senior quality assurance engineer has a positive perception towards telecommuter productivity. He believes that telecommuters receive fair evaluation as non-telecommuters do.

Table 4.36: Summary of interview with ‘Non-Telecommuter\_B\_1’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Supportive home set-up</li> <li>• Less disturbance from office environment</li> <li>• Feeling of empowerment</li> <li>• Increased work-life balance</li> <li>• Supportive family members</li> <li>• Saving travel time</li> <li>• Reduced Absenteeism</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Common Evaluation system</li> <li>• Less expectation</li> <li>• Considering both conduct and result</li> <li>• Recognition</li> <li>• Trustworthy evaluation framework</li> <li>• Continued Progression</li> <li>• Effort is not recognized</li> <li>• Responsibility given</li> </ul>

## Data of Respondent ‘Non-Telecommuter\_B\_2’

### *Respondent’s profile*

Table 4.37: Profile ‘Non-Telecommuter\_B\_2’

Name	Non-Telecommuter_B_2
Company	B
Position	Software Engineer
Experience	3 Years

### *Productivity*

The employees who are productive as telecommuters have supportive family members and workable home environment. They have enhanced their adaptability; they feel they are empowered and their work life balance is increased.

### *Performance Evaluation*

According to ‘Non-Telecommuter\_B\_2’, the telecommuters have a common, transparent evaluation system, through that they receive strong feedback. The telecommuters are satisfied with the feedback that they receive.

### *Summary of Respondent “Non-Telecommuter\_B\_2” – Productivity and Performance Evaluation*

Non-telecommuter ‘Non-Telecommuter\_B\_2’, a software engineer is positive towards telecommuter productivity and he backed up his argument with several factors. His perception on telecommuter performance evaluation is that they are received a fair evaluation which has no impact or effect by being a telecommuter.

Table 4.38: Summary of interview with ‘Non-Telecommuter\_B\_2’

Perception on Productivity - Positive	<ul style="list-style-type: none"> <li>• Supportive family members</li> <li>• Enhanced adaptability</li> <li>• Feeling of empowerment</li> <li>• Supportive home set-up</li> <li>• Increased work-life balance</li> </ul>
Perception on Performance Evaluation – No Effect	<ul style="list-style-type: none"> <li>• Common Evaluation system</li> <li>• Transparency of the process</li> <li>• Strong feedback</li> <li>• Satisfied with the feedback</li> </ul>

**Data of Respondent ‘Non-Telecommuter\_C\_1’**

***Respondent’s profile***

Table 4.39: Profile ‘Non-Telecommuter\_C\_1’

Name	Non-Telecommuter_C_1
Company	C
Position	Senior Software Engineer
Experience	4.5 Years

***Productivity***

According to senior software engineer ‘Non-Telecommuter\_C\_1’, the telecommuters can save their time as they don’t need to travel. But they normally exceed their working hours by engaging with much work which is not a good sign of productivity. The telecommuters rarely take leaves as they can attend parallel to

their personal commitment while work at home. Therefore their effort is balanced and coordinated. Still there are collaboration issues with colleagues.

***Performance Evaluation***

‘Non-Telecommuter\_C\_1’ perceives that the telecommuters’ performance evaluation is disadvantageous as their effort is not properly recognized and it is hard to prove to the management or leadership. The telecommuters have to commit more than non-telecommuters as they are in a different environment than the office environment and they are not physically visible to managers. Even though the telecommuters are receiving same ratings as non- telecommuters do.

***Summary of Respondent “Non-Telecommuter\_C\_1” – Productivity and Performance Evaluation***

‘Non-Telecommuter\_C\_1’, non-telecommuter explains that there is no much impact on productivity when the employees work as telecommuters. Evaluations for telecommuters are disadvantageous relative to office based employees.

Table 4.40: Summary of interview with ‘Non-Telecommuter\_C\_1’

<p>Perception on Productivity - Neutral</p>	<ul style="list-style-type: none"> <li>• Saving travel time</li> <li>• Reduced Absenteeism</li> <li>• Balanced coordinated effort</li> <li>• Collaboration issues</li> <li>• Work hours exceeding</li> </ul>
<p>Perception on Performance Evaluation - Disadvantageous</p>	<ul style="list-style-type: none"> <li>• Effort is not recognized</li> <li>• Hard to prove the effort</li> <li>• High commitment of telecommuters</li> <li>• Rating is same for both telecommuters and non-telecommuters</li> </ul>

## Data of Respondent ‘Non-Telecommuter\_C\_2’

### *Respondent’s profile*

Table 4.41: Profile ‘Non-Telecommuter\_C\_2’

Name	Non-Telecommuter_C_2
Company	C
Position	Business Analyst
Experience	6 Years

### *Productivity*

Business Analyst ‘Non-Telecommuter\_C\_2’ describes that the employees feel empowered when they are given the facility of work from home. They save their time, increase the balance between work and life. They work more hours than non-telecommuters work. They can increase their productivity as they have supportive home environment with less disturbances. The percentage of telecommuters who are absent to office is relatively less than the non-telecommuters.

### *Performance Evaluation*

The telecommuters continuously exhibit a progress because they are evaluated under a trustworthy evaluation system. They receive strong feedbacks with the facts to back up them. ‘Non-Telecommuter\_C\_2’ believes that the telecommuters receive a fair evaluation as the telecommuters’ turnover is less. They are evaluated through and against both the result and the way they achieve the result. Telecommuters willingly help their colleagues.

### *Summary of Respondent “Non-Telecommuter\_C\_2” – Productivity and Performance Evaluation*

Business analyst ‘Non-Telecommuter\_C\_2’, perceives that telecommuting as a productivity booster and their performance evaluations happen in fair way.

Table 4.42: Summary of interview with ‘Non-Telecommuter\_C\_2’

<p>Perception on Productivity - Positive</p>	<ul style="list-style-type: none"> <li>• Saving travel time</li> <li>• Feeling of empowerment</li> <li>• Increased work-life balance</li> <li>• Extra hours of working</li> <li>• Supportive home set-up</li> <li>• Reduced Absenteeism</li> </ul>
<p>Perception on Performance Evaluation – No Effect</p>	<ul style="list-style-type: none"> <li>• Considering both conduct and result</li> <li>• Continued Progression</li> <li>• Collaboration of the telecommuter</li> <li>• Less Turn over</li> <li>• Strong feedback</li> <li>• Trustworthy evaluation framework</li> </ul>

### 4.3.2 Data Display and Drawing Conclusions

After identifying the perceptions on the telecommuter productivity and performance evaluation, as the final step of the data analysis we have followed ‘Selective coding’ where the identified sub categories or codes through ‘Open coding’ and ‘Axial coding’ were finalized under main categories/ parent codes.

#### 4.3.2.1 Perception on the telecommuter productivity

##### *Overall Analysis*

Majority of all the three employee categories believe that telecommuting is a productivity booster. Perception of fifteen (15) employees is positive towards telecommuter productivity. Four (04) employees including management level employees, telecommuters and non-telecommuters interpret telecommuting has no special impact on employees’ productivity. Two (02) employees believe that

telecommuting is productivity eradicator. The interpretations are independent from the company, team size or gender or age.

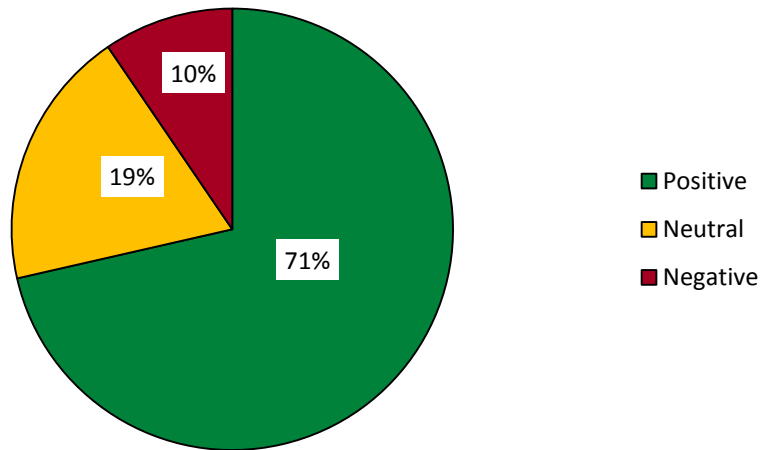


Figure 4-8: Overall Perception on Productivity

#### ***Analysis of Management Level Employees Perception***

No management level employee thinks that telecommuting as a productivity killer. One (01) manager believes that telecommuting has average impact on the productivity while other five (05) explains it in a positive attitude.

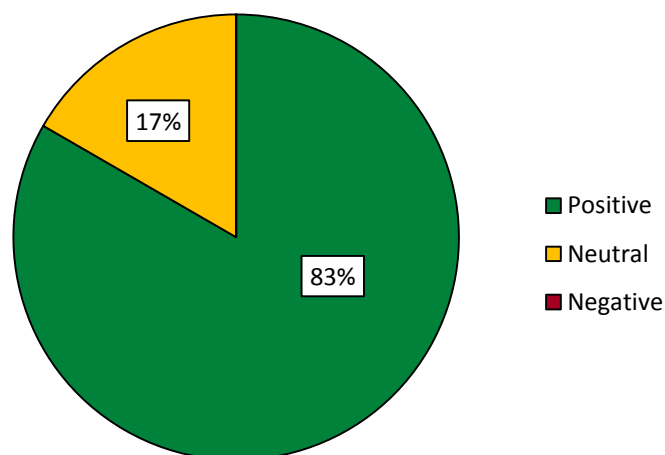
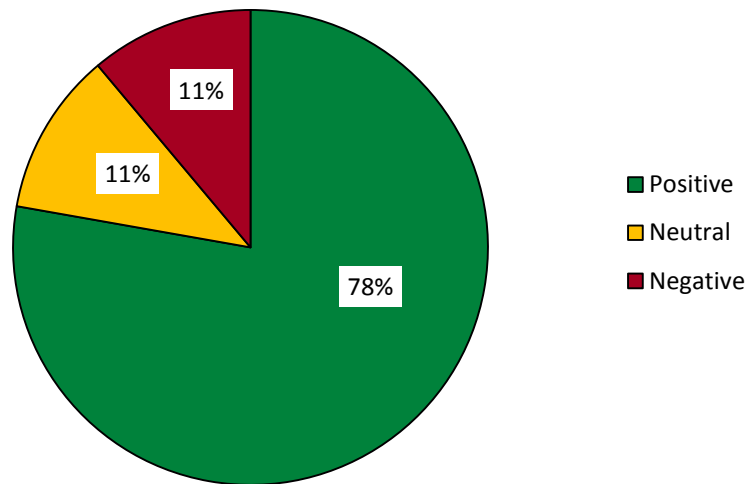


Figure 4-9: Manager Level Employees' Perception on Productivity

### *Analysis of Telecommuters' Perception*

Seven (07) telecommuters out of nine (09) telecommuters who were interviewed are positive towards telecommuters' productivity. One (01) telecommuter explains that it has a negative impact while another one (01) telecommuter explains that it has no change in productivity. The telecommuter whose perception on telecommuter productivity is negative is an associate software engineer. She has less experience (1.5 years, the minimum experience level from interviewee pool) in the industry.

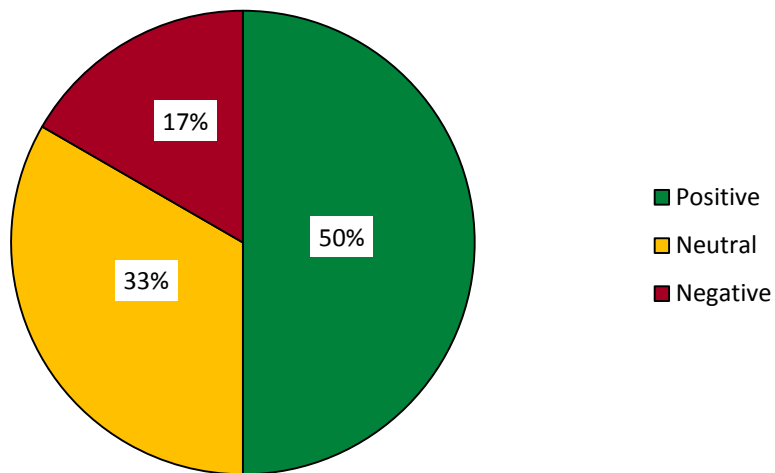


*Figure 4-10: Telecommuters' Perception on Productivity*

### *Analysis of Non-telecommuters' Perception*

Three (03) non-telecommuters interpret telecommuting as a work arrangement that increases productivity. Two (02) non-telecommuters believe that telecommuting is neither a productivity enhancer nor a productivity destroyer. One (01) employee explains that telecommuting has a negative impact on telecommuters' productivity. The person who is in a negative attitude about telecommuting productivity has never worked as a telecommuter.





*Figure 4-11: Non-telecommuters' Perception on Productivity*

#### ***4.3.2.2 Perception on the performance evaluation***

##### ***Overall Analysis***

Fifteen (15) employees among all twenty-one (21) employees believe that the telecommuters' performance evaluation is fair. Four (04) employees believe that being a telecommuter is disadvantageous for performance evaluation. Two (02) employees perception on telecommuting is that telecommuters get advantages in performance evaluation. Their perceptions are independence from their age, gender and team size. But there is a visible relationship in their experience level to the perception on telecommuter performance evaluation.

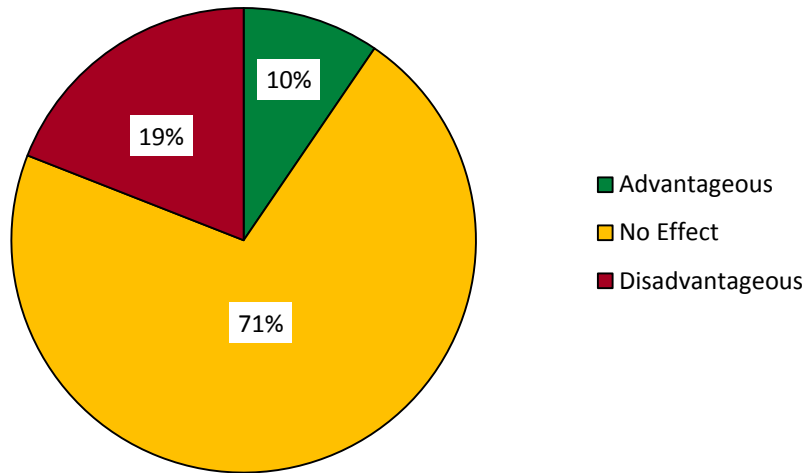


Figure 4-12: Overall Perception on Performance Evaluation

***Analysis of Management Level Employees Perception***

No manager perceives that the telecommuters' performance evaluation is disadvantageous when it compared with non-telecommuters. Five (05) management level employees believe that telecommuters receive a fair evaluation while one (01) management level employee explains it is advantageous.

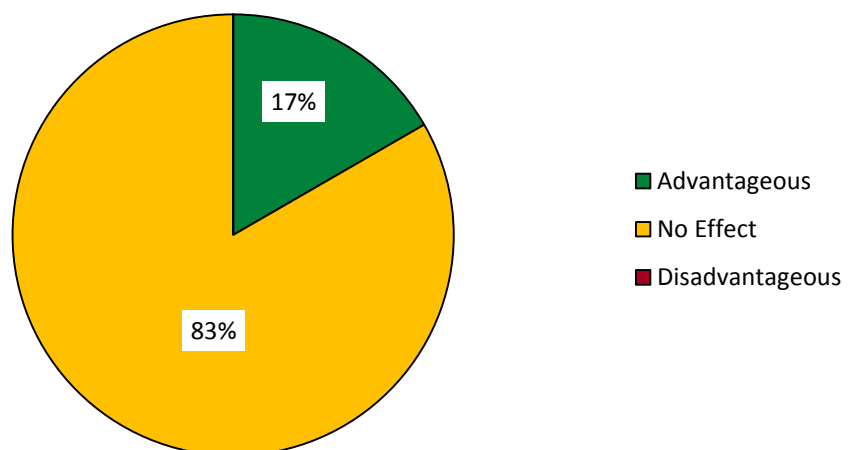
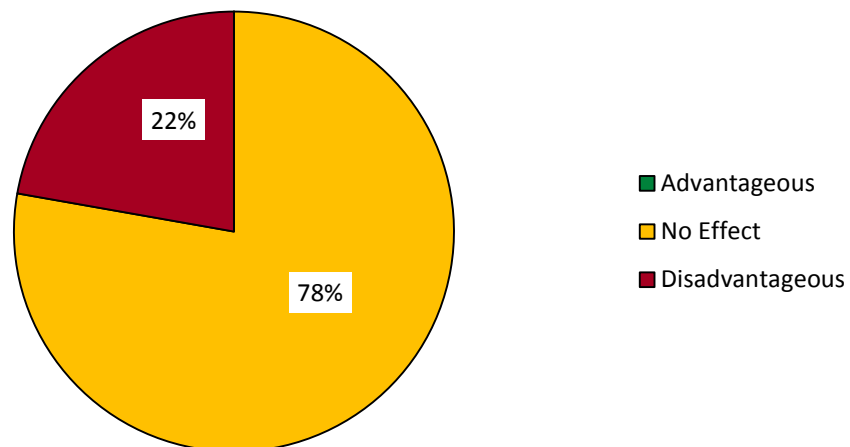


Figure 4-13: Manager Level Employees' Perception on Performance Evaluation

### ***Analysis of Telecommuters' Perception***

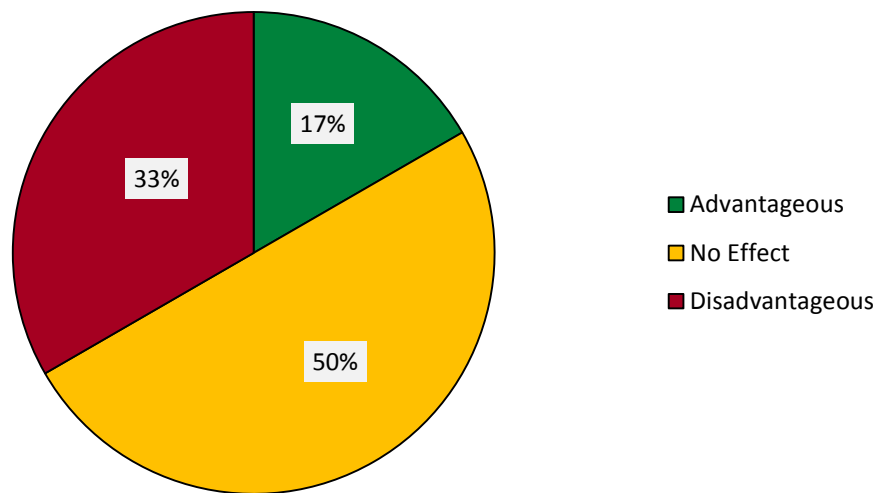
No telecommuter explains telecommuter performance evaluation as an advantageous or favorable practice. But seven (07) telecommuters accept that they are receiving a fair performance evaluation. Two (02) telecommuters describes that they have unfair performance evaluation by being telecommuters. The telecommuters who came up with the perception of disadvantageous performance evaluation system have less than five (05) years of experience (1.5 years and 3.5 years).



*Figure 4-14: Telecommuters' Perception on Performance Evaluation*

### ***Analysis of Non-telecommuters' Perception***

Three (03) non-telecommuters have the perception 'Telecommuters' performance evaluation is fair'. Two (02) telecommuters believe that it is disadvantageous to be a telecommuter when it comes to performance evaluation while one (01) non-telecommuter believes it's beneficial. The employees who interpret telecommuting as advantageous or disadvantageous have less experience than 5 years.



*Figure 4-15: Non-telecommuters' Perception on Performance Evaluation*

‘Selective coding’ is the step that we followed as the final stage of the data analysis. During ‘Selective coding’, categories previously identified through ‘Axial coding’ were further defined, refined and developed as parent codes. Seven (07) parent codes related to productivity and five (05) parent codes related to performance evaluation have been developed.

The codes related to productivity of telecommuters, have been categorized under parent codes as follows. Negative factors that mentioned by the interviewees are indicated with minus (-) mark.

Table 4.43:Parent Code Map for Telecommuters' Productivity

Parent Code	Sub Category
Time related factors	Extra hours of working
	Saving travel time
	Best Usage of time
	(-) Work hours exceeding
Home related factors	Supportive home set-up
	Best Usage of home resources
	Supportive family members
Work-life balance	Increased work-life balance
Office related factors	Saving company resources
	Less disturbance from office environment
Managerial factors	(-) Improper work arrangement
	Reduced Absenteeism
	Enhanced adaptability
	Increased collaboration
	Evidence from trial
	(-) Keeping tracks
	(-) Facility issues
	Balanced coordinated effort
	Task completion is considered
Emotional factors	Feeling empowerment
	(-) Collaboration issues
	(-) Non-telecommuters are getting discouraged
Personal factors	Safety
	(-) Failure for the less self-motivators

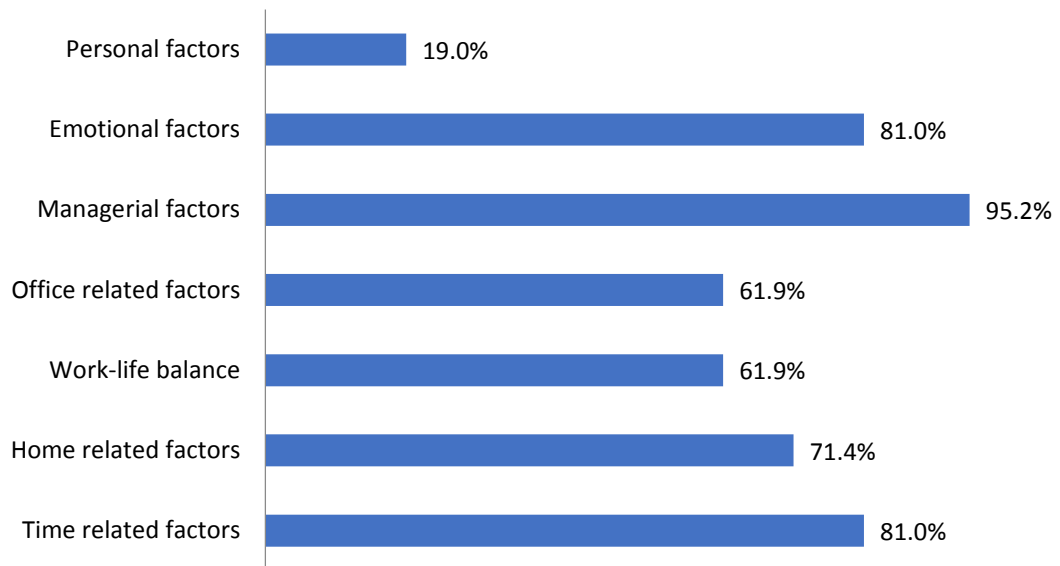
The codes related to performance evaluation of telecommuters have been categorized under parent codes as follows. Disadvantageous factors that mentioned by the interviewees are presented with minus (-) mark while advantageous factors indicated with plus mark (+)

Table 4.44: Parent Code Map for Telecommuters' Performance Evaluation

Parent Code	Sub Category
Evaluation system related factors	Considering both conduct and result
	Trustworthy common evaluation framework
	(+) Common Evaluation system
	Effort is not recognized
	(-) Effort is not considered as a good measure
Telecommuter related factors	Continued Progression
	Collaboration of the telecommuter
	(+) Lesser complains
	(+) Continued Progression
	(-) High commitment of telecommuters
	Satisfied with the feedback
	Less expectation
	Responsibility given
Management related factors	Strong feedback
	(-) Rating is same for both telecommuters and non-telecommuters
	(-) Manager prefers physical presence
	Transparency of the process
	Manager perceived good performance
	(-) Hard to prove the effort
	Managers' effort
Company success related factors	(+) Less Turnover
Emotional factors	Interpretation as a benefit to telecommute
	Recognition

***Parent Code Analysis for Perception on Telecommuters' Productivity***

Among seven (07) parent factors, 'Managerial factors' become the prominent. According to the interviewees, both 'Time related factors' and 'Emotional factors' are the next leading factors affect the perception on telecommuters' productivity. 'Home related factors' have the next priority on the list. Personal factors are negligible meanwhile 'Office related factors' and 'Work life balance' have a considerable effect on the perception of employees.



*Figure 4-16: Parent Code Analysis for Perception on Telecommuters' Productivity*

#### ***Ground Level Code Analysis for Perception on Telecommuters' Productivity***

Following are the major codes (ground level factors) that determined the parent factors. We include the factors that mentioned at least by 25% of the interviewees. 'Saving travel time' is the most mentioned ground level factor which categorized under parent code 'Time related factors'. Interviewees worry about the time that they spend on traveling in surge hours daily. Normally the employees reach to office at starting time (around 9.00 a.m), leave office (around 6.00 p.m.) and reach home. As they are the normal office hours in any company and most of the IT companies are based on Colombo it is a total waste of time according to the interviewees. Telecommuting enables employees with the facility of working at home. They don't feel tired when they are at home. On the other hand they can involve in personal commitment or more office commitment when they are at home.

Next prominent interviewees' explanation on telecommuter productivity depends on the codes 'Supportive home set-up' and 'Increased work-life balance'. When the employees have a calm and quit environment with less or no disturbances the productivity gets increased. The supportive home set up includes the comfortable, office looking seating arrangement. The interviewees interpret that telecommuting helps to increase the work-life balance therefore their perception on productivity is

positive. The employees use their spare time and energy for the personal life more. It leads the employees feel happy and they commit more to the office work too.

‘Reduced absenteeism’ and ‘Feeling empowerment’ are the next factors that effect on employee perception on telecommuter productivity. When employees are provided with the flexible work arrangement of telecommuting the absenteeism get reduced. When there are personal or family commitments that the employee need to attend they used to apply for leaves. But telecommuters don’t need to apply for day-off. If the commitment takes less time (i.e.: less than 3 hours) telecommuters can attend for the commitment and then complete their assignment for the day. ‘Feeling empowered’ is the next important factor that comes under ‘Emotional factors’. When the telecommuters feel that they are given the authority and power for their work assignment they feel more energetic. It impacts on the productivity of the employees according to the interviewees.

‘Less disturbance from office environment’ is the major code that impact on the parent code ‘Office related factors’. When the employee is out of the office that he/she doesn’t need to attend each and every meeting, no distraction happens from the colleagues or managers. Therefore it increases the time and focus of the employee, and then increases the productivity.

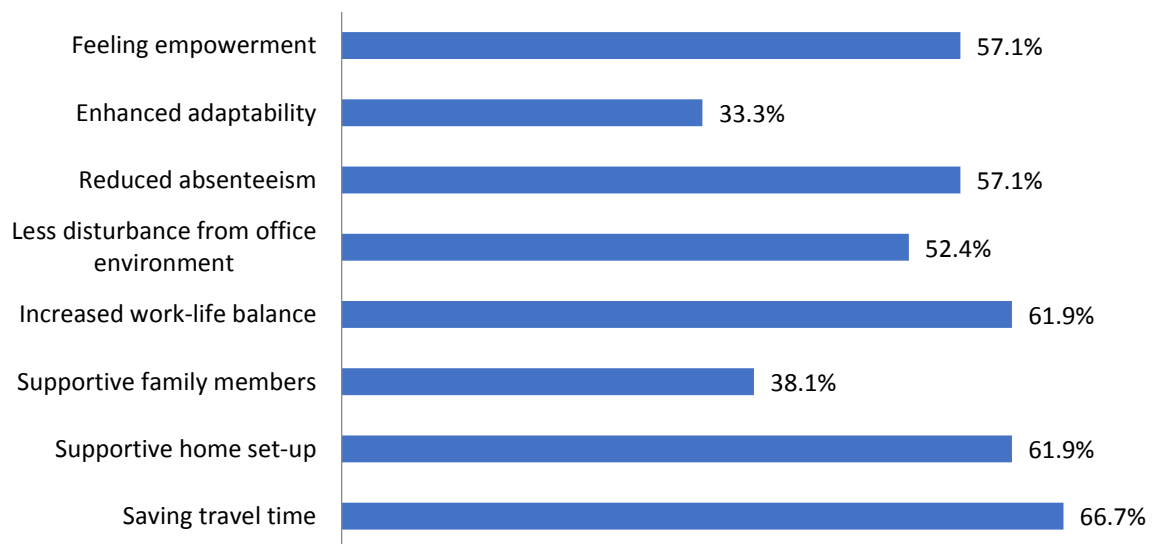
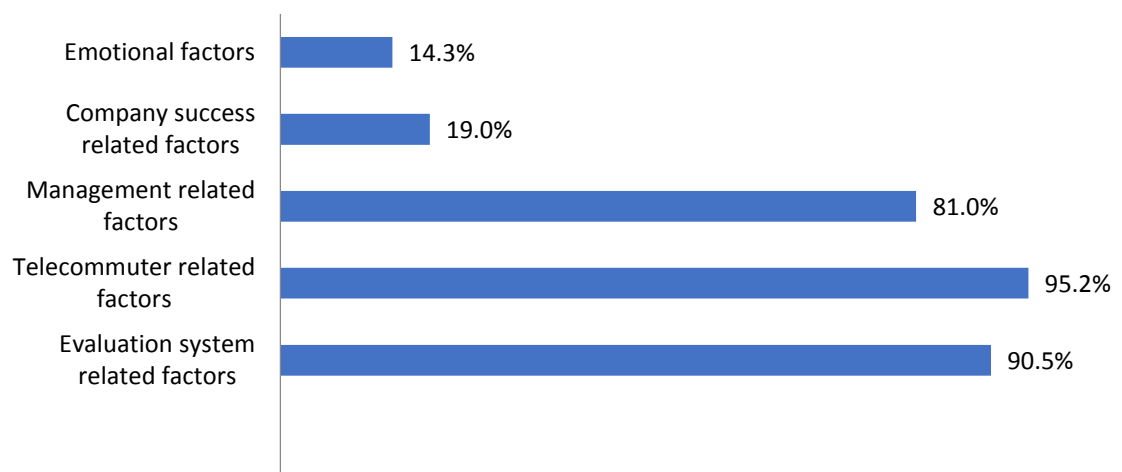


Figure 4-17: Ground Level Code Analysis for Perception on Telecommuters' Productivity



### *Parent Code Analysis for Perception on Telecommuters' Performance Evaluation*

'Telecommuter related factors' becomes the protuberant parent factor among five (05) parent factors. 'Evaluation related factors' is the next critical parent factor that affect the perception on telecommuter performance evaluation. The next priority is 'Management related factors'. 'Emotional factors' and 'Company success related factors' are negligible as less than 5 interviewees have mentioned about those factors.



*Figure 4-18: Parent Code Analysis for Perception on Telecommuters' Performance Evaluation*

For every individual parent factor there are relevant ground level factors too. We rarely found really strong factors (codes) that effect on the perception of the telecommuter performance evaluation.

Among the identified codes there are two prominent factors both of them are categorized under the parent factor 'Evaluation related factors'. 'Trustworthy common evaluation framework', 'Considering both the result and conduct' became the major two factors that have the same priority. All the employee categories believe that they have a trustworthy evaluation system. The performance evaluation framework is common for the both telecommuters and non-telecommuters. The telecommuters are assigned the task to be completed at the end of the day.

Irrespective of the work place what the management expects from the employees is the work to be done in the best possible quality.

The result is always considered for evaluation. Results are the reflection of the hard work. Only evaluating the employees against the results that they have achieved is not sufficient. Therefore evaluating in the terms of conduct, the way that the result is achieved is also essential. According to the interviewees their evaluation systems and processes include with the assessing the conduct, which make them feel the telecommuters have fair evaluation.

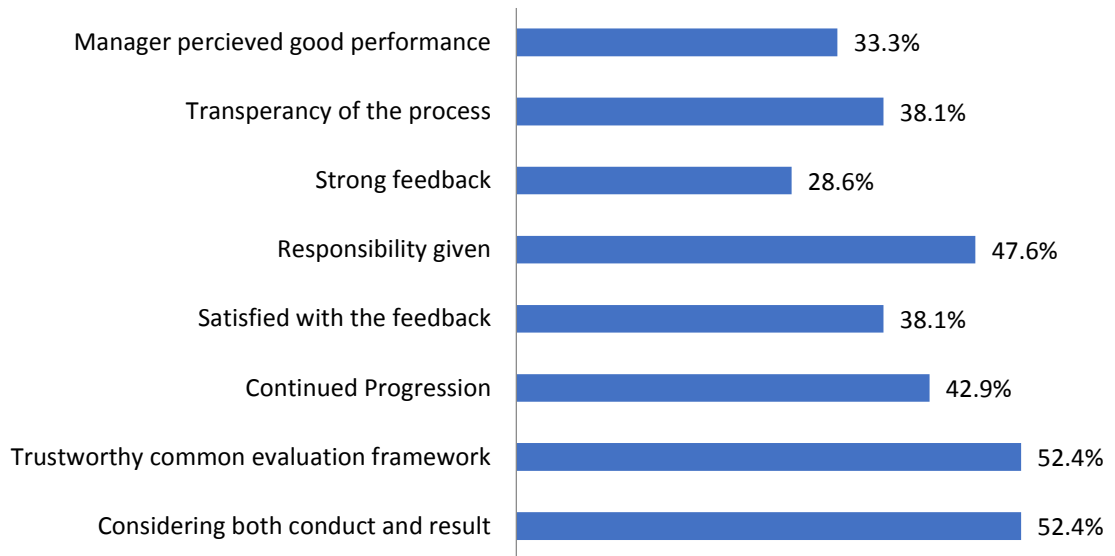
There are some codes that categorized under 'Telecommuter related factors'. 'Responsibility given' is one of them. The interviewees' point of view on telecommuting is that employees are provided with the recognition when they telecommute. Telecommuting is interpreted as a responsibility. Responsibility to work when there is no one to physically monitor or remind. Therefore the telecommuters are dedicated to fulfill the responsibility. For their dedication they receive a fair evaluation.

The other factor under parent code 'Telecommuter related factors' is 'Continued progression'. According to the interviewees, the telecommuters are exhibited a continuous progress in the work and the way they work. For an employee to improve step by step there should be a proper and fair evaluation system which measures correct and which reflects the result correct.

According to the interviewees the telecommuters are satisfied with the evaluation and rating that they receive. Because of the satisfaction the telecommuters demonstrate after their appraisal cycles. Hence the interviewees explained the telecommuters' performance evaluation is fair.

'Transparency of the process' and 'Manager perceived good performance' are some of the other factors that come under the parent factor 'Management related factors'. When the employees can see not only the input and output but also what's happened inside the system, they starts to believe that the system is fair. Managers perceived the telecommuters' performance is good. Therefore the telecommuters receive a fair evaluation as same the non-telecommuters receive.

Strong and valid feedback that the telecommuters receive from the managers or colleagues reveal the fact that telecommuters' performance evaluation is fair.



*Figure 4-19: Ground Level Code Analysis for Perception on Telecommuters' Performance Evaluation*

#### **4.4 Chapter Summary**

This study has contributed to identification of the perception and the factors affecting for the particular perceptions on telecommuter productivity and their performance evaluation. Theoretical propositions were developed to address the following research questions in this study:

1. What is the perception of managerial employees, telecommuters as well as non-telecommuting employees towards the productivity of the telecommuting?
2. What are the factors influencing the perception of managerial employees, telecommuters as well as non-telecommuting employees towards the productivity of the telecommuting (work of telecommuters as well as the effect on the overall project)?
3. What is the perception of employers, telecommuters as well as non-telecommuting employees on fairness of performance evaluation of the telecommuters?

4. What are the factors influencing the perception of managerial employees, telecommuters as well as non-telecommuting employees on fairness of performance evaluation of the telecommuters?

In the next chapter, an overview of the results, limitations, and suggestions for future research is presented.

## **5 CONCLUSION**

### **5.1 Chapter Overview**

In this chapter, an overview of the findings is presented. Then, the recommendations and limitations of the study are explained. The findings of the study give insights into the perception of both telecommuters' productivity and telecommuters' performance evaluation. In addition, important directions for further research works are presented in the last section of the chapter.

### **5.2 Research Results**

The research was focused on identifying the factors that affect the perception on telecommuters' productivity and telecommuters' performance evaluation in Sri Lankan IT industry. The findings are led by the answers to the questions "what is the perception on telecommuters' productivity?" and "what is the perception on telecommuters' performance evaluation?"

Among 21 interviewees from 3 major IT companies, 19 interviewees believe that the telecommuters' productivity is average or positive. Meanwhile 15 believe that the telecommuters' performance evaluation is fair. In addition, the results reveal following interesting findings.

1. No management level employee believes that telecommuting has a negative impact on employee productivity. The impact is positive or average.
2. The majority of the telecommuters believe that the telecommuting is a productive work practice.
3. Only 50% of the non-telecommuters believe that productivity increase due to telecommuting.

The non-telecommuters who are not positive about telecommuters' productivity have either less or no experience in telecommuting.

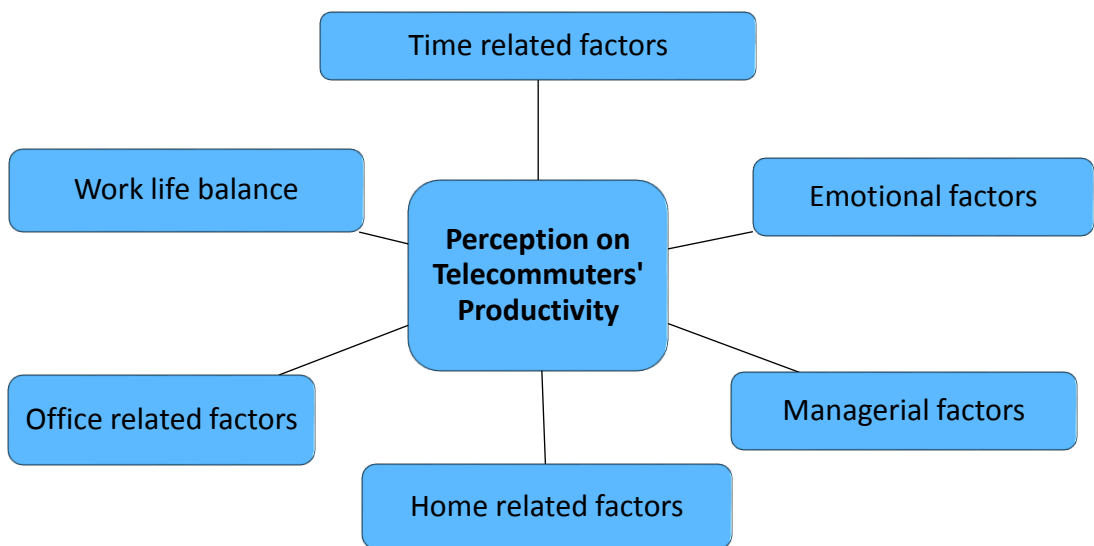
Interviewee's perception on telecommuters' performance evaluation is as follows.

1. No management level employee believes that telecommuters' performance evaluation is disadvantageous. They all think that telecommuters' performance evaluation is fair or advantageous.

2. No telecommuter explains telecommuters' performance evaluation as advantageous.
3. Only 50% of the non-telecommuters believe that telecommuters' performance evaluation is fair.

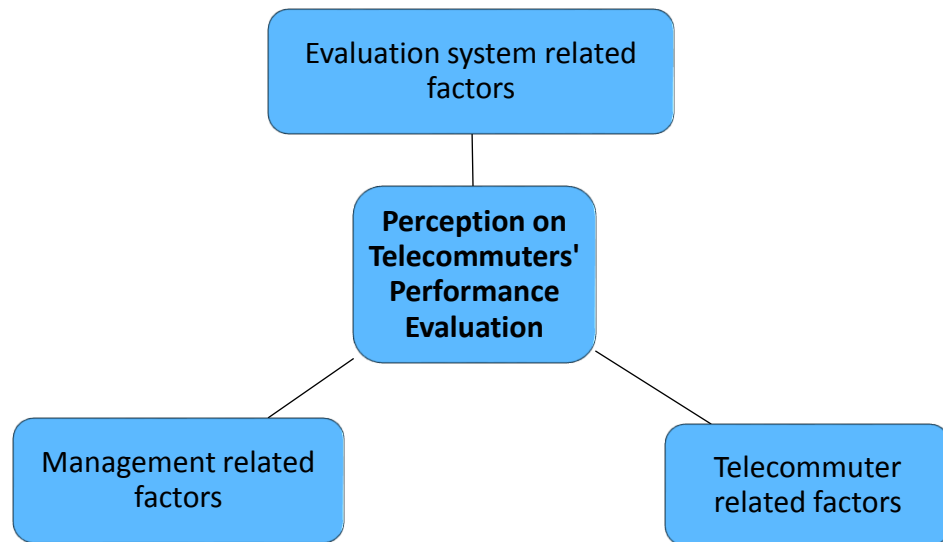
The same non-telecommuters who have non-positive perception on telecommuters' productivity believe that their performance evaluation is not fair. (Advantageous or disadvantageous)

The answers for the research question "What are the factors influencing the perception on telecommuters' productivity?" are categorized under prominent parent codes as follows. (The parent codes that were highlighted from more than 60% of the interviewees)



*Figure 5-1: Factors effect on the perception on telecommuters' productivity*

The prominent parent codes that have been identified for the research question “What are the factors influencing the perception on telecommuters’ performance evaluation?” are as follows. . (The parent codes that were highlighted from more than 60% of the interviewees)



*Figure 5-2:* Factors effect on the perception on telecommuters' performance evaluation

Based on further analysis, the following framework was developed. The parent factors are the codes that were highlighted from more than 60% of the interviewees. The ground level factors are the noticeable sub categories highlighted from more than 30% of the interviewees, related to above prominent parent factors.

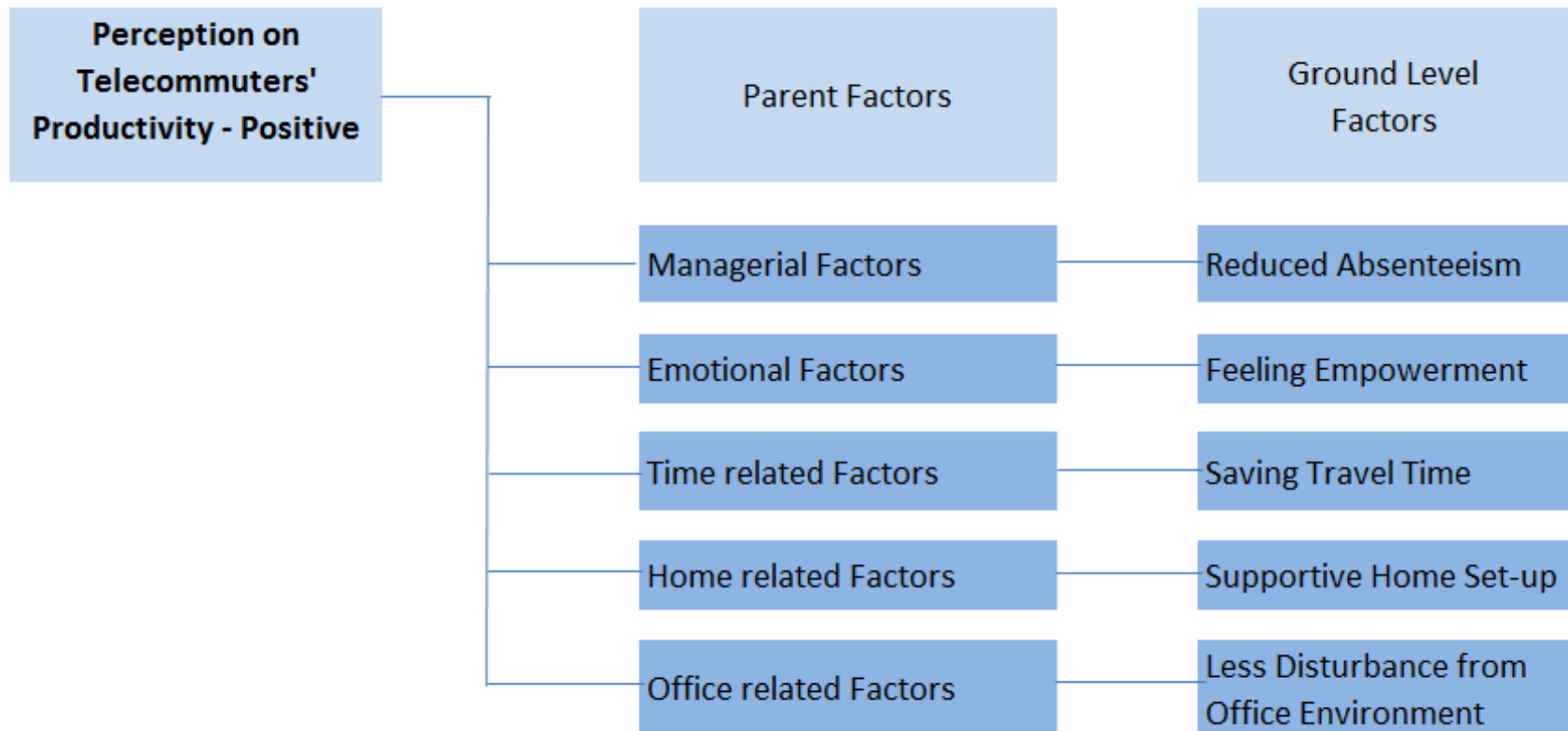


Figure 5-3: Framework for Perception on Telecommuters' Productivity



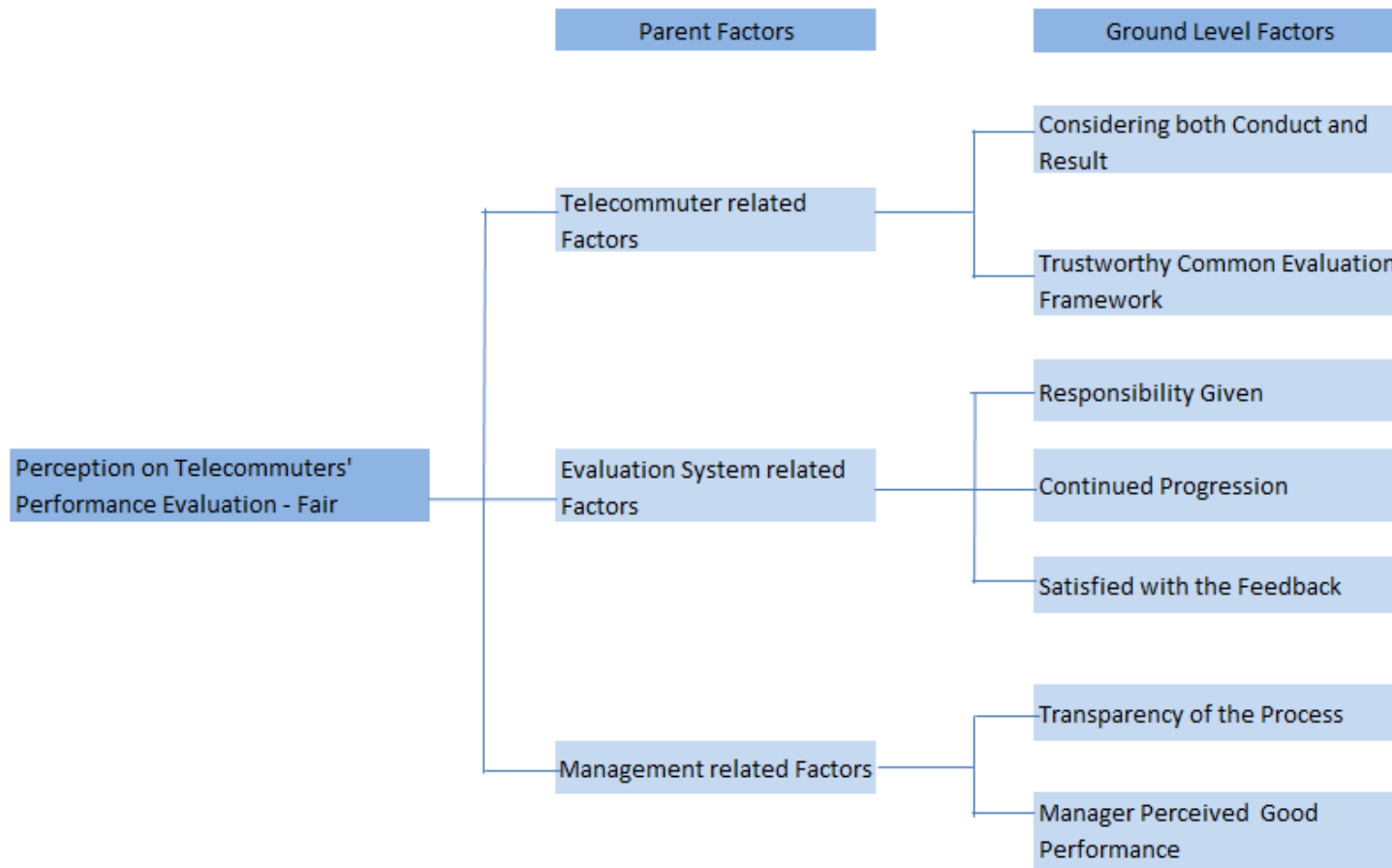


Figure 5-4: Framework for Perception on Telecommuters' Performance Evaluation

### 5.3 Recommendations

Majority of the interviewees (71%) from identified three companies agreed that “Telecommuting is a productivity booster”. In addition, 19% of the employees believe that telecommuters’ productivity is average. Therefore 90% agreed as telecommuters’ productivity is not negative. Even though there were some employees that deviated from the above belief, analyzing the peculiar answers gives a different perspective for the research findings.

‘Telecommuter\_B\_3’ Associate Software Engineer and ‘Non-Telecommuter\_A\_1’ Senior UI Engineer are the interviewees brought up the negative perception on telecommuters’ productivity. ‘Telecommuter\_B\_3’ has only 1.5 years of experience and ‘Non-Telecommuter\_A\_1’ has 4 years of experience. There are same experience level employees that have the perception as telecommuters’ productivity is positive. The employees with less experience have the tendency to have negative or average perception on telecommuting. Even though ‘Non-Telecommuter\_A\_1’ has four (04) years of experience in the industry, he has never worked as a telecommuter.

Based on the findings related to the perception on telecommuter productivity, following recommendations can be made.

- A company that wishes to initiate and implement telecommuting as a flexible work arrangement, should identify and analyze the overall employees’ experience level and their perception on both telecommuters’ productivity and their performance evaluation. If the perception on productivity is negative and perception on performance evaluation is not fair, either can eradicate or take corrective actions before introduce telecommuting.
- Using the same survey on the perceptions, the management can decides that whom to be used as telecommuters and whom to be kept as non-telecommuters.

Without good initial perception on telecommuters’ productivity, the employer can’t expect a productive telecommuter from the employee.

- The companies that currently practice telecommuting should take an idea on their telecommuters’ experience level. If they have relatively less experience,

it is worth to talk to them to identify their perception and if it is necessary, take any corrective actions.

- Before recruit a telecommuter or convert non-telecommuter to a telecommuter should analyze their perception. Based on their believes that they have, management can decide whether to take them or not.

When there are corrective actions to be taken, the framework that identified in this research is useful. The management can pay more attention on highlighted factors in the framework.

Telecommuters 'Telecommuter\_B\_1' and 'Telecommuter\_C\_3', females presented one of the reasons behind their perception on telecommuting productivity is 'Safety'. When they work at the project requirements they exceed their working hours. When they work as telecommuters, they don't need to travel in anomalous time to office or to home. Because of the feeling of safety they think the positively on productivity.

- When there are requirements for late work hours, it's better to offer telecommuting work arrangement especially for ladies.
- According to telecommuters who were in the average or negative perception on telecommuters' productivity, it's better to offer the telecommuting practice to the employees after discuss and agreeing with employees.
- If a company is in promoting telecommuting work practice, one of the factors that need to be highlighted as a benefit is 'Safety'.

When considering the telecommuters' performance evaluation, no company is using separate evaluation system for telecommuters. The interviewees feel that it is fair when the company has a common, trustworthy, transparent evaluation system and process.

- The companies that are planning to practice telecommuting should try to use the same evaluation system for performance evaluation of both telecommuters and non-telecommuters.
- The result should be evaluated but with the conduct. Both the telecommuters and non-telecommuters feel comfortable and satisfied when the

telecommuter evaluation happens towards not only the result, but also the conduct.

The employees, who believe that telecommuters' performance evaluation is disadvantageous, are the employees who have less experience in industry or no experience as a telecommuter.

- It is not needed to convenience the management about the fairness of telecommuters' performance evaluation but need to educate the less experience employees before assigning them as telecommuters or when they are in the same team with telecommuters.

This study revealed the perception and the factors affect for the perception on both telecommuter productivity, telecommuter performance evaluation. The majority accepts "Telecommuting is a productivity booster" and "Telecommuters' performance evaluation as fair". Therefore, the interested companies can proceed with implementing telecommuting. The companies that are currently practice telecommuting should continue and possibly expand the telecommuting practice.

#### **5.4 Research Limitations**

The study encountered the following limitations with regard to literature and to the study.

- There are literature sources that reveal the details about employee performance evaluation. However, data sources for perception on telecommuter performance evaluation were limited. Therefore, the researchers had to derive concepts from literature on employee evaluation to come up with the interview questions for perception on telecommuters' performance evaluation.
- Due to the time constraints, the researcher interviewed only 21 respondents for the research. The small sample size is a major limitation of the research.
- Interviewees were reluctant to answer the questions related to telecommuters' performance evaluation compared to questions related to telecommuters' productivity.

## **5.5 Future Research**

We recommend further research relevant to challenges that the telecommuters face while they work in their home. The interviewees brought up the idea that they have supportive home environment and supportive family members to work. It will be worthwhile to identify what are the other challenges that can exist. Identifying the challenges and prior planning for those challenges may mitigate the risk of failures.

Even though the literature revealed that telecommuters' productivity is affected by the facts related to 'knowledge transfer' and 'managers' leadership style', none of the interviewees mentioned about knowledge transition/transfer or leadership style of the managers will affect the productivity of the telecommuters. It can be justified with the statement that 'Telecommuters in Sri Lanka are not full-time telecommuters. They only telecommute less than 10 days for a month. In most of the projects the telecommuters' rate is less than non-telecommuters' rate. Therefore it won't have a much impact on knowledge transition or leadership styles'. However, it is important to find out what is the impact of knowledge transition and leadership style of the managers when a company has high percentage of employees who are telecommuters.

The research was conducted only based on (03) three large sized companies that have over 300 employees in each. The findings will be more interesting if the research extends to medium and small companies that have their workforce less than 300.

As this research followed a qualitative research methodology to build up a framework, it is valuable to conduct a research to prove the reliability and appropriateness of the framework.

## **5.6 Chapter Summary**

This study has contributed to identify the perception on telecommuters' productivity and perception on telecommuter's performance evaluation. It is followed by the factors affected for above two perceptions. In this chapter various findings were identified. Finally recommendations for the industry and future research were presented.

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## **Appendices**

### **Appendix A: Questionnaires**

#### **Questions for Lead level/ Manager level employees**

1. How many subordinates do you have in your team?
2. What are the flexible working arrangements that your company has?
3. Do you have subordinates that work from the same physical location where you work?
4. Do you have direct subordinates who work in virtual places such as different offices or work from home?
5. What is the approximate rate of those employee categories in your project?
6. What is the average frequency that the telecommuter works from home?
7. What are the normal office hours in your project/company?
8. What is the number of hours that telecommuters work per a day?
9. If you are assigning the same task to those both categories what is your experience? Is there any difference that you can notice? If yes please explain.
10. What could be the possible reasons for the difference?
11. From managerial perspective what are the challenges that you have faced when working with telecommuters?
12. How those challenges differ from the challenges in traditional office work arrangements?
13. Have you ever worked from home as a telecommuter? In which situations?
14. If yes, what are the challenges that you have faced as a telecommuter?
15. What is your perception on the working from home arrangement?
16. What are the personal experience or values contributed to your perception?
17. Do you take part in employee evaluations to evaluate your subordinates?
18. Do you have any separate/ specific criteria to evaluate a telecommuter?
19. What is your perception on having separate criteria for telecommuter evaluation?
20. Is there any dependency or barrier to measure telecommuter performance?

21. What is your perception on the fairness of evaluation of telecommuters? Do you feel it is biased towards one party?
22. What is your perception on the fairness of telecommuter ratings?
23. Do you feel that only certain type of employees (for example tech leads and above/ senior employees/ employees with higher ratings/ employees above 35 years, employees with some characteristics or qualities, etc.) should be allowed to telecommute? If yes, what are the reasons for your suggestion?

**Common Questions for Team Members (for Telecommuters and Non-telecommuters)**

1. How many colleagues do you have in your team?
2. What are the flexible working arrangements that your company/project has?
3. Do you have colleagues that work from the same physical location where you work?
4. Do you have colleagues who work in virtual places such as different offices or work from home?
5. What is the approximate breakdown of employees in those both categories?
6. To which category do you belong to in your current working place?

## Questions for Telecommuters

1. Were you a telecommuter from the being in your current working place?
2. If no, what is the time period you worked as an employee who works at office and now how long you have completed as a telecommuter?
3. What are the normal office hours in your project/company?
4. What is the average frequency that you work from home?
5. What is the number of hours that you work from home per a day?
6. If you are assigned with the same task when you telecommute and when you work at your office, have you ever noticed any difference?
7. If yes, where you work more comfortably and productively?
8. Do you adhere to work in core business hours when you telecommute?
9. If not, what is the normal time you start working at home?
10. How do you communicate with your colleagues when you work from home?
11. As a telecommuter what are the challenges that you have faced when working from home (telecommuting)?
12. How those challenges are differ from the challenges in traditional office work arrangements?
13. What is your perception on the working from home arrangement (telecommuting)?
14. What are the personal experience or values contributed to your perception?
15. What are the benefits that you have and what are the disadvantages of working from home?
16. Do you have a procedural employee evaluation system in your company?
17. As per your knowledge do you have any separate criteria to evaluate a working from home employees? Are you evaluated under separate criteria as a telecommuter?
18. If yes what are those criteria?
19. Do you feel is there any dependency or barrier to measure telecommuter performance?
20. Do you believe that the telecommuters are having a fair evaluation method?
21. What is your perception on the fairness of evaluation of telecommuters?

22. Have you ever felt it is biased towards one party?
23. What is your perception on the fairness of telecommuter ratings?
24. What are the reasons behind your statement?
25. If you have an opportunity to being either a telecommuter or an employee who works only at traditional office what would be your choice? And why?
26. If you pick telecommuting, would you do anything differently when you perform tasks?

## Questions for Non-telecommuters

1. Were you ever being a telecommuter in your previous working places/ previous projects in the same company?
2. If yes, what is the time period you worked as a telecommuter?
3. How long you work in current work place as a non- telecommuter?
4. What are the normal office hours in your project/company?
5. As per your understanding how many hours that the telecommuters in your project work per a day when they are at home?
6. Have you ever notice any difference in their work effectiveness and efficiency, depending on the based venue that they work?
7. How do you communicate with your colleagues when they work from home?
8. As an employee who is based on the office, what are the challenges that you have faced when your colleagues are telecommuting?
9. How those challenges are differ from the challenges when they work at office?
10. What is your perception on the productivity of working from home arrangement (telecommuting)?
11. What are the personal experience or values contributed to your perception?
12. As per your understanding what are the benefits that telecommuter have and what are the disadvantages of working from home for them?
13. What are the benefits that the project/ team members have when some team members are telecommuting?
14. What are the disadvantages of telecommuting for project/ other team members?
15. Do you have a procedural employee evaluation system in your company?
16. As per your knowledge do you have any separate/ specific criteria to evaluate a working from home employee?
17. Do you feel is there any dependency or barrier to measure telecommuter performance?
18. What is your perception on the fairness of evaluation of telecommuters?
19. Have you ever felt it is biased towards one party?



20. If you have an opportunity to being either a telecommuter or an employee who works only at traditional office what would be your choice? And why?
21. Have you ever been denied the chance to telecommute? If yes, what are the reasons as you feel?
22. Have you ever rejected a chance offered to you to telecommute? If yes why?