CHAPTER 1 INTRODUCTION

The increasing prevalence of outsourcing has led to it being considered central to the strategic development of many organizations. Outsourcing involves sourcing of goods or services previously produced internally within the sourcing organization from external suppliers, McIvor (2005). Outsourcing has been around for decades and companies have been outsourcing non-core services for getting cost advantage as well as focusing more on the core processes of the business. Almost every sector in the industry such as Banking, Finance, Security, and Insurance (BFSI), Fast moving consumer goods (FMCG) companies, Health care providers, Pharmaceuticals, Educational institutions, and several others are outsourcing processes.

During Y2K crises, organizations were concerned about the potential disturbance in operations at the turn of the calendar from year 2000 to 2001. This was due to computer programs written in COBOL which were running on most of the mainframe computers and managing various operations across industry sectors. Several companies sourced resources from India to manage these programs to avoid this potential disaster. This provided a unique leverage to Indian IT companies in the 90’s. Indian public sector banks adopted UNIX as the choice of operating system in the 80’s for all the banking operations. UNIX later in the 90’s was accepted as the most preferred operating system for networks which also provided additional leverage to Indian IT companies in the global markets (Mathur, 2006). Over the past few years Indian companies have capitalized on these opportunities and have successfully built strong business relations with number of companies globally.

Savings in operational cost and capital expenses have been the key drivers in the past. Clients continue to outsource for achieving flexibility in managing projects; sharing risk and rewards, getting access to resource possessing niche skills, ability to ramp up and ramp down resources, sharing investments and revenue, getting access to innovations, and expanding business in new geographies. While outsourcing industry is expanding and growing, there are cost escalations, missed deadlines for delivery, hidden cost over a period of execution of the contract, lack of innovations, poor quality output, and social, legal, and political problems in offshore locations of vendors. Key factors driving the provider switching activity include
disappointment with service delivery, the desire to unbundle IT services, and the anticipation of next generation technology needs that current outsourcers may not be able to provide (Overby and Stephanie, 2013). Success of an outsourced contract depends on following a systematic process as discussed in Appendix 3.

Earlier outsourcing contracts were for the duration of 5-10 years and sourced from a single vendor. This has changed to shorter term contracts of the duration between 3-5 years and sourcing from multiple vendors. Each vendor is selected for the knowledge and expertise of parts of the end to end process. This has created healthy competition among vendors at the same time it has created insecurity among them. Collaborative working is expected from all the vendors in a multisourced environment. Increased competition in the market and a mounting client’s experience base has afforded clients the leverage to negotiate more favourable and flexible deals (Lacity and Wilcox, 2004).

**Research Background**

There are number of core and non-core functions carried out in every organization. For example, in a product company research and development, product design and development, testing, system testing, and solution engineering are core functions while finance, human resource management, marketing, customer support are considered as support functions. Although these are support functions, their strategic importance could not be undermined as these functions are equally important for the overall success of the product and the company.
A term often used in the context of outsourcing is vertical integration. All the activities in an organization could be partitioned in two parts as backward and forward integration. Forward integration involves all those activities that involve getting final product or services to customers or end users while backward integration involves all the in-house activities (McIvor, 2005).

Vertical integration is similar to the outsourcing concept in that it is concerned with the decision on whether to perform an activity internally or source it from an external supplier. Another term that is often used is ‘make or buy’ when certain goods or services are to be sourced. This term seems to be more in line with the strategic thinking that has gone behind the decision of outsourcing.

Outsourcing by companies is done primarily either to improve competitive position or gain competitive advantage. Many companies who decide to outsource certain activities initially focus only on gaining cost advantage which provides competitive advantage. Saunders et. al (1997) noted that many companies outsourced for gaining technological and strategic advantage and not just for cost reduction. Companies are adopting this strategy as outsourcing is creating a level plain field among companies. Some of the key reasons for
outsourcing for gaining competitive advantage are operational agility, adopting new technologies faster, shrinking design cycles, and be innovative.

Global spend on the telecom infrastructure in the year 2013 was $5.1 trillion dollars. During the 2014-2017 period, the overall U.S. telecom infrastructure (both wireless and landline) spending is likely to reach approximately $323 billion. The services percentage is about 15% compared to infrastructure spend hence services opportunity is about US$ 45 billion dollars offered by telecom operators in the US alone. Globally this is in hundreds of billions of dollars (Zacks.com, 2014).

In India, Airtel took the lead and outsourced core and non-core functions aggressively to various companies. Airtel vendors include consulting companies, infrastructure providers, solutions providers, content providers; content aggregators, financial institutions, and IT service providers. Over the years this model has been replicated by most other telecom operators in India. Airtel, Vodafone, and Idea who compete aggressively with each other but came together and created a separate company for managing entire tower infrastructure for all of them. A new company, Indus Tower, was created who provides towers to all three partners and also operators globally. Indus Tower is one of the largest tower management companies in the world (Gulati et al., 2010).

Mahindra British Telecom (MBT) in India was created by British Telecom (BT) as an offshore centre of supporting internal projects hence 70% of BT projects were outsourced to MBT. Over the years, this has changed and BT has adopted a multisourcing strategy so that all the service providers remain competitive and BT gets the most cost saving. BT is sourcing services from number of Indian IT companies including Tech Mahindra (formerly Mahindra British Telecom). BT’s share of projects sourced from TechM is around 30%.

Telecom operators globally had adopted a working model that was called as ‘walled garden’. Operators thought that they would not need to partner with anyone for providing products/services required by end users and operator teams could design, develop, and deliver everything. As the telecom industry evolved and new services provided to end users needed new eco systems, several new stakeholders such as banks, device manufactures, application developers, and applications aggregators emerged. Hence ‘walled garden’ model turned out to be not sustainable and impractical. New revenue sharing models are emerging.
The outsourcing industry is recording healthy compounded annual growth rate (CAGR) year on year. This growth has created new working models and relationships among various companies as clients and service providers. Companies are using outsourced supply chain to gain competitive advantage hence this research is focused on investigating if these new working models are delivering what is expected by clients.

As companies are outsourcing core and non-core functions and processes it has become business imperative for companies to stay competitive. Companies cannot remain competitive simply by reducing cost of operation or by reducing investments. Only way companies can remain competitive is by being innovative, agile, and responsive to end users. This research also investigates if new working models and outsourcing are creating large number of innovations in outsourced functions and processes so that sourcing companies can stay ahead of the curve.

1.1 Indian Outsourcing Industry

Indian outsourcing industry in the past 20 years has provided sound growth in creation of good paying jobs and consistent contribution to the GDP of the country. There are number of companies in countries such as China, Philippines, Israel, Ireland, Indonesia, and Vietnam who are competing with Indian companies in the global outsourcing market. Indian companies offer well educated talent pool, sound banking and judicial system, political stability, currency stability, and one of the largest English speaking populations. These factors have helped Indian companies to grow year on year which has created millions of jobs in the country. Employees have gathered valuable experience of working on products/services for global companies. This has helped companies to move up the value chain and offer value added services to global clients. National Association of Software and Services Companies (NASSCOM) is an apex body in the country which monitors growth of the software and services industry in India and also helps companies in case if business related or legal advice is needed.
In the year 2009, total revenue was US$ 68 billion dollars. This combines revenue from IT and BPM outsourcing services. Almost 60% of this revenue is for export and remaining is for the domestic market. The share of the domestic market also continues to grow as there is increasing level of automation of processes in the public sector and government organizations. The global spend on ICT in the year 2012 was about US$ 1.7 trillion which has passed US$ 2.0 trillion mark in year 2014 (NASSCOM, 2014). IT Industry body, the National Association of Software and Service Companies (NASSCOM) estimated that the software exports will grow by 12-14% in the upcoming fiscal (2015-2016). The industry has clocked $146bn while exports segment is likely to touch $98bn this fiscal recording a growth of 13.1 %. (The new Indian Express).
It is estimated that share of Indian IT companies is hardly 2% of the global opportunity available in services. This suggests that there is a large potential opportunity for Indian IT companies to grow and capture larger share in the global markets. While there is an opportunity for industry to grow, expand and create more jobs there are few alarming signs as well. Increasing number of clients are not happy with the actual cost savings as it turns out to be much lower than expected. There is increasing pressure from professional and political organizations in the country of origin of sourcing companies to bring back jobs which have been outsourced. Almost 60% of outsourced contracts to Indian companies are from the companies based in the US while 20% come from European Union.

Western companies in the past couple of decades have outsourced as many functions and processes as they could, hence related jobs have also moved to India. Hackett, a Florida-based firm that advises companies on outsourcing, estimates that over the period from 2002 to 2016 offshoring is likely to claim a total of 2.1 million business-services jobs (including IT, human resources, procurement and finance) at big American and European companies (The Economist Report, 2013).

It is expected that this will slow down substantially in coming years as the kind of jobs are retained in the sourcing organizations need special skills which employees in Indian companies do not possess. Hence those functions and jobs will not be outsourced.

1.2 Research Objectives and Aim

This study investigates impact of various key drivers in outsourcing and emerging working models. It is noticed in the published research that savings in operational cost was the key driver in outsourcing but this has changed over the years. New set of drivers have emerged as the relationships are matured between client and vendors. Expectations of clients have also changed in this new environment.

The objective of this research is to:

1. Investigate what are clients and vendors doing to extract maximum benefits from the process of outsourcing.
2. Investigate why researchers have not discussed at length innovations or lack of innovations in outsourced functions and processes.
3. Investigate involvement of middle management in the entire process. This is critical considering middle level managers are the glue between senior management and operational staff for execution and implementation of contracts.
4. Investigate relations among various key factors in senior, middle, and operational level staff.
5. Propose a framework to enhance level of innovation in outsourced projects.

1.3 Research Question

This thesis addresses the following key question:

What should be the framework that will enhance the level of innovations in outsourced products/services?

To address this question, the study investigates existing drivers for outsourcing and working relationship models. The study conducts an empirical study by presenting qualitative and quantitative results. Indian telecom operators, infrastructure providing companies, and IT services provider companies are approached for seeking inputs in the existing scenario of outsourcing and also inputs about working relationship.

The detailed framework is designed that will provide enhancements in the existing outsourcing arrangements between clients and vendors. This framework will be multidimensional as there are number of factors that affect creation of innovations. These factors affect independently as well as they have strong correlation among them. Hypotheses will be tested based on the quantitative analysis of the data which is the success criterion for the framework.

1.4 Scope of the study

The research topic under investigation in this study is global in nature. Outsourcing is a global phenomenon and companies are adopting outsourcing strategies by working with service providers across the continents. The focus in this study is limited to outsourcing strategies adopted by telecom operators in India and investigate both sides of the spectrum, that is, clients and vendors. Proposed framework for enhancing level of innovation in outsourced products/services will be adoptable by telecom operators in India and outside as
most of the findings in outsourcing by telecom operators in India and outside have strong correlation.

Since telecom operators work with number of companies as part of their outsourcing strategy, companies providing network hardware and software and companies providing network management and IT services are also considered for primary data collection and for conducting one on one interview. Professionals at senior, middle, operational level are interviewed in these companies to get their perspectives on various issues related to outsourcing and their experience so far. This information is presented in the form of case studies.

1.5 Problem Complexity

Outsourcing process has been adopted globally by most companies and organizations over the years and it continues to expand year on year. Most published research discusses pre outsourcing issues that companies have addressed by sourcing services from vendors but not much discussion is published about challenges and issues faced post outsourcing. Although there have been several research studies conducted by researchers, not many researchers have addressed operational issues. Similarly it seems that even professionals at senior or middle level management are very reluctant to discuss tangible and intangible gains from outsourcing. This has been one of the primary factors in this research as well.

Outsourcing is truly global in nature as clients and service providers work together across continents and time zones. Even if the focus is limited to only the telecom industry and telecom operators in particular, the scope is too vast to be covered in this study. This study focuses on investigating the level of innovations in outsourced products/services but creating innovations is dependent upon number of factors, not simply the contract formulation. This study has made an attempt to address some of these issues but due to the global nature of the outsourcing process, the study has limited scope since it is focused only on telecom industry in India.

Due to the global nature of engagements models, additional factors that need to be taken into consideration are working through time zones, working across cultures, differences in communication and interpretation of various phrases in the local context, differences in working environment, impact of political and social factors, and availability and adoption of
latest technology for managing teams and projects on a global basis. All of these factors also have impact on the level of innovations created in outsourced contracts. Hence it is obvious that it is much more complex problem to investigate but recommendations from this study would be adoptable locally by the telecom operators in India and also globally with certain level of customization.

1.6 Research Approach

This research follows the approach which has following steps:

1. Extensive literature survey
2. Problem definition
3. Conducting a survey of senior, middle level managers, and operational staff in selected companies
4. Performing qualitative and quantitative analysis
5. Proposing a framework for addressing the problem under investigation

The detailed research design is presented in Chapter 3.

1.7 Thesis Structure

This thesis has five chapters. The individual chapters are structured as follows:

Chapter 1: Introduction – The chapter 1 introduces the topic, the research aim, the research approach, and the research objectives of this study.

Chapter 2: Literature review – The chapter 2 on literature review illustrates current literature on the topic, classifies the literature using concept centric approach, and identifies research gaps.

Chapter 3: Research Design – The chapter 3 on research design details the conceptual framework and defines research hypotheses. Part of the discussion in this chapter is on the qualitative and quantitative research approach adopted in this study. Under the qualitative approach six case studies are presented hence the process of interview and interviewee selection is presented. In the case of quantitative research approach, formulation of the questionnaire, pretesting of the questionnaire, and data collection is discussed.
**Chapter 4: Interpretation** – The chapter 4 on interpretation that contains six detailed case studies followed by the perspective of senior, middle, and operational level staff in select companies. This information is based on the survey results and is presented in graphical format along with discussion. Entire primary data analysis is conducted using SPSS software and results are presented. Initially sample adequacy tests results using Kaiser-Meyer-Olkin (KMO) measure is presented followed by Non-response bias test and Cronbach Alpha reliability tests outcomes. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) results are presented confirming the validity of selected parameters. Regression analysis is presented for establishing relationship between dependent and independent variables. Hypotheses are verified in the last section for their validity.

**Chapter 5: Conclusions** – The chapter 5 on Conclusions presents contributions by the researcher in this study. A framework is proposed based on the findings from the interviews and data analysis of the responses from the professionals. Finally, limitations of this research are discussed along with the scope for further research.