1.1 – Introduction

In the 21st century the economic environment is very uncertain and full of leap and bounds, which are of different kind and includes financial crisis, technological advancements, rapid innovations etc. It is very difficult for a firm to survive in these circumstances until its financial performance is not good enough to support. Financial performance is actually the spine of any organization to stand and stay in the market. It is absolutely true that if the financial performance of any company is not up to the mark, it would be almost impossible for that company to manage its operations successfully.

Financial performance is the ability of a firm to use its assets from its primary mode of business and generate revenues. Generally this term is also used to gauge a firm’s overall financial health for a certain period of time. It is also useful for comparing different firms across the same industry and industries or sectors can also be compared (Investopedia, 2017).

Performance appraisal is very helpful for the employers and managers in the creation of a plan for the development of employees. It can be done by increasing the responsibilities and providing specialized training to the employees, as well as to do the Strength Weaknesses Opportunity & Threats (SWOT) analysis of the employees. It helps the companies in measuring the contribution of workers towards the growth; hence the employees can be rewarded on the performance basis. Financial performance appraisal is that part of performance appraisal which deals with the financial aspects of the organizations. It is the evaluation of the profitability and financial strength of any business unit for a certain period of time. Generally companies have a limited pool of funds for their functioning; performance appraisal helps in determining how to allocate those funds (Investopedia, 2017).

According to Keynes “Profit is the engine that drives the business enterprise”. The efficiency of a business is directly proportional to the amount of profit earned by it. The profit of a business may be measured by studying the profitability of investment in it because at the end of the day all the activities in the business have the same objective of earning more profit. Hence to evaluate the profitability and efficiency of
an organization becomes mandatory and this evaluation is being called as financial performance appraisal or financial performance analysis (Khan & Jain, 2016).

Wixon, Kell & Bedford stated that a ratio “is an expression of the quantitative relationship between two numbers”. Actually financial ratio is the mathematical expression of the relationship between two accounting figures. The analysis of ratios is worldwide accepted technique for measuring the financial performance (Gupta & Sharma, 2011).

This research is purely related to measuring the financial performance of Indian IT sector and gauges the impact of intellectual capital on the financial performance of Indian IT sector. It is also an attempt to clarify the role of intangible assets in affecting the financial performance of Indian IT sector.

The Indian IT industry is one of the most prominent knowledge driven sectors in India. The IT sector is solely dependent on its intangible assets which are not disclosed in its financial statements. It is very important to gauge the impact of intangible assets or intellectual capital on the financial performance of knowledge driven companies. Actually without having proper information about the intellectual capital, the financial performance cannot be measured properly as it is always getting affected by the intangible assets.

1.2 - Overview of Indian Information & Technology (IT) Industry

India is the one of the biggest hub of information technology (IT) industry, it holds almost 67 per cent of the market which is equivalent to USD 124-130 billion. It is providing direct employment to almost 3.7 million people whereas indirect employment to over 10 million people. Now the perception of India has been changed worldwide by leading the economic transformations with the help of IT industry. The cost competitiveness in IT services is the Unique Selling Point (USP) of India across the globe which is even 3-4 times cheaper than the US. However, India is also getting prominence in terms of intellectual capital, many worldwide accepted IT firms are planning to set up their innovation centers in India (India Brand Equity Foundation, 2017b).
The demand in the Indian education sector, especially for engineering and computer science has also been created by the IT sector. The Indian IT and ITeS industry is divided into four major segments – IT services, Business Process Management (BPM), software products and engineering services, and hardware (India Brand Equity Foundation, 2017b).

The service sector of Indian IT industry had started from Mumbai in 1967, with the establishment of a joint venture of Tata Group with Burroughs. The first software export zone, SEEPZ – the initial form of today’s IT parks – was established in Mumbai in 1973. More than 80 percent of the country's software exports were being done from SEEPZ in the 1980s (Wikipedia, 2017).

It is also correct that the companies have moved away from the industrial age to the information era but they are still trying to carve a niche for measuring the impact of their intangible assets in the financial performance. The financial statements cover only the physical assets of the companies; they don’t cover the intangible assets as it is very difficult to cover that information. This problem leads to the increasing trench between the market value and book value of the organizations. Some researchers argue that this gap is solely due to the non disclosure of intangible assets in financial accounts of the companies, while they are constantly affecting the financial performance of the companies (Gu & Lev, 2001).

In the present situation, the Indian IT companies need to be more careful about their intellectual capital as compared to their physical capital. Because they entirely dependent on the competence of their human capital and structural capital. The employees who are working in Indian IT companies must have to be the most competent in the market. And the IT companies also need to have the most updated software. The analysis of financial performance which has been using as an acceptable measure to gauge the financial conditions of a firm for a certain period of time also get affected by the intellectual capital.
Figure 1.1: Indian IT Industry

Source: NASSCOM, D & B Industry Research Service
Figure 1.2: Indian IT Sector

Source: India Brand Equity Foundation, 2017
1.3 – Statement of Problem

Traditionally the business performance was being measured with the help of physical capital while in modern days it has been shifted to knowledge. Earlier the production was the dominant activity and revenue used to be the most important criteria for a company’s size while labor and material costs were also highly significant. Now the scenario has changed completely and the significance of all production costs is marginal, all those resources which were being considered very significant at some point of time now become less important. The main challenge before firms is to
develop a completely different method for evaluating the value which has been added in an organization and not confined to cost control only (Pulic, 2000).

Ante Pulic (2000) found that the problems - created by the gap between the modern approach of value creation and traditional evaluating methods, were being faced by most of the companies. In present scenario it is very important to introduce the concept of knowledge and gauge the value being created by the companies. Due to these changes traditional evaluating models become inappropriate and new indicators are required for taking business decisions accurately.

Basically the introductions of knowledge in product, labor and capital structure are those essential elements which are responsible for the difference in business activity. In contrast to earlier situations where the quantity used to be the most dominating factor, in the current scenario the quality has become the most important factor which also causes a fall in prices with increased information content. The introduction of knowledge in products, leads to change in the position of labor also. It is completely different from the earlier times where a given amount of routine work produced more or less the same quantities of a product, now the same quantity of labor produce completely different output.

Knowledge is one of the main assets of a company because it promotes competitive advantage which forms the basis of value creation (Edvinsson & Malone, 1997). It also consists of some major components such as human capital which is related to the competency of a human brain, structural capital which is related to the working environment of an organization and relation capital which is related to the external relationships of an organization.

In traditional companies the production cost used to be almost 80% of total costs but in contemporary business it has become insignificant which is same as the position of production which has become insignificant in the total activity of a company.

Organizational resources are classified in two categories: tangible assets and intangible assets. They are considered to have a diverse nature and play a very important role in the strategy formulation and to increase productivity (Grant, 1996). According to Itami (1991) the management of intangible assets (like reputation, know-how, efficiency etc.) is the central element of strategy formulation. Wiig (1997)
identifies understanding as the foundation of growth in the 21st century. Pike, Fernström, & Roos (2005) said that the value which has been created by employing the stocks of knowledge gets degraded when the knowledge remains unused. There is a major difference between knowledge asset and the conventional assets. A knowledge asset is one which doesn’t get consumed while resolving organizational problems whereas the conventional assets must get depreciated or replaced (Spender, 2006).

It is often observed that market value of stocks of many companies is higher than the replacement cost of their tangible assets (Dumay, 2009; Guthrie, 2001; Sveiby, 1997). A reasonable explanation for it is the presence of a different category of assets which are not present in the accounting books of firms, these resources are called Intellectual Capital (Brennan & Connell, 2000). In the pertinent literature, terms such as intellectual capital, intangible assets, and invisible resources have been interchangeably used by scholars. For almost two decades now, intangible assets have been trying to occupy a prominent position in economic wealth creation of firms. Hence, it is relevant for organizations to recognize, measure and manage their Intellectual Capital for competitive advantage (Bhartesh & Bandopadhyay, 2005). Moreover, organizations need to plan and budget for IC and its components which further necessitate its assessment. While Intellectual Capital embodies the future growth potential of a firm, the success of that firm will require continuous renewal and efficient use of this asset (Wiig, 1997).

In the present situation, the knowledge driven companies must have to be more careful about their intellectual capital as compared to their physical capital. The financial performance which has been using as an acceptable measure to gauge the financial conditions of a firm must get affected by the intellectual capital also. It is very important for knowledge driven companies to mention their intangible assets in financial statements because the financial performance by and large gauged by the data available in financial statements. If the information about the intangible assets is not present in the financial statements, their impact on the financial performance will always be ignored.

The present study is a humble attempt to measure the financial performance of Indian IT sector and gauge the impact of intellectual capital on the financial performance of
Indian IT sector. It is also an attempt to clarify the role of intangible assets in affecting the financial performance of Indian IT sector. Although it is not the sheer objective of the study to measure the intellectual capital or intangible assets, it is very difficult to get the true financial position without measuring the impact of intangible assets on it.

These are some reasons for choosing the Indian IT industry for measuring the impact of its intangible assets on the financial performance.

- The IT industry is purely a knowledge based industry and its major assets are human capital and structural capital.
- The India IT industry doesn’t disclose any information regarding its intangible assets.
- It is very important to analyze the financial performance of Indian IT industry in respect with the value created by its intangible resources.

1.4 – Scope of the Study

Now it is evident from the above discussion that the scenario has been changed completely. In the present situation the knowledge driven companies must have to be more careful about their intellectual capital as compared to their physical capital. The financial performance which has been using as an acceptable measure to gauge the financial conditions of a firm for a certain period of time must get affected by the intellectual capital also.

The financial performance appraisal can be done in many ways. Ratio analysis, Economic Value Added (EVA) & Market Value Added (MVA) all these techniques are being used for measuring the financial performance. Financial performance of different companies can be analyzed and compared within an industry or one company can be compared with itself during different years.

In this study the impact of intangible assets/intellectual capital has been measured on the financial performance of Indian IT sector. As IT sector is among the most prominent knowledge driven sectors in India and only a few studies have been conducted in lieu of this dimension. The sample has been drawn from Indian
Information & Technology sector for which the sectoral index of BSE namely BSE IT was selected. In all 51 companies of Information Technology (IT) sector for financial years ranging from 2006 to 2016 have been taken.

1.5 – Objectives

The following are the main objectives of this study:

- To measure the financial performance of Indian IT sector from 2006 to 2016.
- To gauge the intellectual capital or intangible assets of the Indian IT sector from 2006 to 2016.
- To measure the impact of intellectual capital on financial performance of Indian IT industry.
- To find out the most significant component of intellectual capital in terms of financial performance.

1.6 - Significance

Only a few studies have been conducted for analyzing the relationship of financial performance with the intangible assets of Indian companies. IT sector should be one of the most prominent sectors for analyzing the relationship of intangibility and financial performance, as it is purely dependent on the knowledge. The main purpose of the study is to analyze the financial performance of Indian IT sector along with the impact of intangible assets on it. The present study contributes to the literature in the following ways.

- It employed the updated data up to 2016, which has not been used so far.
- Information & Technology sector which is among the most promising sector in terms of growth, contribution in GDP, employment and providing primary services.
- The sample selection is based on the indices of BSE which has not been taken earlier.
- This study rejects the arguments of many authors regarding calculation of HC & SC in VAIC™ which causes multicollinearity between HCE & SCE and the

1.7 – Limitations

Like many other studies, present study is also not free from limitations. The main limitations of this study are as follows:

- The measurement of financial performance with the help of some other techniques.
- The criticisms of VAIC™ model because it uses the data from the financial statements only.
- The absence of relational capital in the VAIC™ model, as it is one of the important component of intellectual capital.
- Time duration of the study, as it is very long and liable for structural changes.

1.8 – Directions for future research

There are many other dimensions to conduct the research on the same concept. In near future the research may be conducted in the following ways:

- Duration of the study should be for a shorter period of time, as it does not get affected by the structural changes.
- Measuring the financial performance by using some other techniques other than the ratio analysis. Balanced Scorecard, Index Analysis & Leverage Analysis are some other techniques.
- The human capital should not be measured by the data extracting from financial statements.
- The data for all the components of intellectual can be collected through the questionnaire.
- The disclosure of intellectual capital can also be taken as a dimension for conducting future researches.
1.9 – Chapter Scheme

This thesis has been divided into seven chapters. The structure of this thesis is in the following order:

Chapter – 1

This chapter consists of brief introduction of the thesis; it includes the statement of problem, objectives of the study, the methodology which has been used to conduct the study, limitations of the research and directions for future research.

Chapter – 2

This chapter is the overview of Indian IT industry, it includes the history of IT industry, it clearly demarcates the different segments of IT industry in India, and it throws some light on the present market scenario and about the future opportunities for IT sector in India.

Chapter – 3

This chapter describes the financial performance appraisal; it includes its historical background and the process for conducting the financial performance appraisal, it consists the different methods and techniques of analyzing the financial statements. It explains the ratio analysis along with its benefits. It contains the trend analysis of financial performance of Indian IT industry. It also includes the description of intellectual capital.

Chapter – 4

This chapter consists of many different studies which have been conducted in various parts of the globe.

Chapter – 5

This chapter is about the framework of the research, it describes the research gap, objectives of the study, developing the hypothesis, sample of the study, regression models and the method of conducting the research.
Chapter – 6

This chapter contains all the analysis part of data, it includes descriptive statistics, correlation analysis and regression analysis. It also contains all the tables related to data analysis and their explanations.

Chapter – 7

This chapter covers the conclusion of the study. It includes the overview of the research, the findings of the study and implications of the research; it also contains the limitations of the study and directions for future research.