

Behavioral Aspects of IT Employees towards Problems and Prospects of Activity Based Costing (ABC)

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ABSTRACT

Activity Based Costing (ABC) is a new variant in cost management practices emerged in 1980's, which caters to the needs of organizations in effective control and monitoring cost and better management of profitability. The success of ABC duly depends on articulation of implementation of ABC and the outcome of Activity Based Cost and Management (ABCM). Though employees experience a positive outcome, it is beyond doubt that they can support the ABC rather resisting the same. The main objective of this paper is to examine the perception of IT companies' employees' towards implementation of Activity-Based Costing(ABC). A normative list of benefits concerning the ability of ABC systems to redirect the behavior of individuals was abstracted from the interviews opinion and compared to the perceived benefits gathered from interviews with firm employees. This will permit IT Companies and provides relevant information that will enable them to make better decisions with regard to measure the successful implementation of ABC in IT Companies.

Keywords-- Activity Based Costing, Information Technology, Behavioral Aspects, Implementation, Adoption

I. INTRODUCTION

Information Technology (IT) companies seems to be functioning moderately different due to the production and services system in IT companies is divided entirely into invisible part and a lineup of visibility. The invisible component consists of such items as systems support, management support and physical support. The visible component is more or less visible to the customers or clients who usually participate in the production and services process. IT companies are not succeed to complete projects and delivering services in time because benefits of the time and costs not saved by employees. In other words, the system fails to achieve its objectives due to the failure of other components i.e., strategic cost management for this IT companies employing modern cost management systems, such as Activity Based Costing (ABC). IT Companies may be more motivated to utilize ABC as it is ascertained accurate cost of products and services through the use of different cost driver rate, if they have a high

potential for cost distortions. But, very numerous example of a significant distortion risk is if an IT companies were to exercise only one overhead base. As a result of doing this, under or over costing of products and services may take place. Cost distortions have the ability to affect many important decisions, including those related to profitability analyses. By placing ABC in IT Companies may have the ability to determine whether all of their stakeholders are profitable or else. Thus, it leads to IT companies business from unprofitable stakeholders to increase their margins.

This modest research also brings about relatively factors of IT companies success is more complex even though after using ABC system and this practice merely not be sufficient to provoke positive reactions by employees. It is also shows potential to trace more complex combination of factors and which are essential to construct IT companies' successful. Therefore, specifically try to identify such supporting features by using behavioral aspects of IT employees. Behaviors show the way to consequences, which may be positive, negative or sometimes a combination of both. The consequences may be for the single person involved, group of people, and the companies in general or administrative people. For motivational purposes, the consequences for the persons involved are most important. The rational decision making is possible to IT companies through employee's opinion regarding ABC system deployment to attain accurate cost ascertainment and ensuring considerable profits.

II. ACTIVITY BASED COSTING (ABC)

The escalating number of companies adopting this novel strategic cost management technique makes it possible to test the strength of the actual business environment in competitive scenario. ABC system attained immense disrepute as they are being adopted by United States firms to alleviate problems caused by the inaccuracy with the traditional cost accounting systems. According to Peter B.B. Turney (1990) and Jan Emblemsvag (2004), ABC was developed in the mid-nineteen eighties due to the rising of lower significance of traditional cost accounting methods. ABC is a method of measuring the cost and performance of activities, products, services, contracts, supply chain, logistics and targeted customers.

Besides, ABC allows costs to be apportioned through the actual activities based on resources consumed (Turney, 1996). As far as research carried out by King, A.M. (1991), Johnson and Mitchell (1994), and Demmy, Talbott, Robert and Silvester (1996), emphasized that the benefits and advantages for the Activity-based Costing (ABC), which was also elaborated, ABC system focusing on accurate cost ascertainment, cost reduction, performance measurement and improve the different cost objects. In the words of Everaert, P., G. Cleuren and S. Hoozee (2012) also found that the disadvantages or limitation of the new cost system such as the Activity-based costing (ABC) can be expensive to implement and maintain, both in terms of time and money.

In implement of ABC system in manufacturing or service-oriented organization the first and foremost step is to be identifying the activities, which becomes the most important point of the costing system. ABC system follows two stages for resources allocation to cost objects. As in the first-stage allocation of resources to activity cost pools or groups of activities called activity centers by using appropriate resource drivers (Blocher, E., B. Wong, C. T. Mckittrick 2002) and (Sergeant 2017). The second-stage allocation is an activity cost assignment process by which the costs of activities are assigned to cost objects through using appropriate activity drivers. However, it can discover that ABC quite differs from traditional costing systems in two ways; in first stage, cost pools are defined as activities or activity centers rather than cost centers. In addition, in the second stage, the cost drivers are used to assign activity costs to cost objects because an activity driver shows cause-effect relationships. But the traditional approach uses a single volume-based driver that often bears little or no relationship to either the resource cost or the cost object.

III. REVIEW OF LITERATURE

In recent years the researchers focused on ABC system and inferences drawn from them since, promoted to organizations as a foundation for making strategic decisions in terms of improving profit, cost management and performance of the employees. Specifically, it is found through the review of literature:

Kocalkulah, M. (2007)¹ ABC implementation opined that rapid and wide acceptance and there is significant variety of opinion regarding the efficiency of ABC. The involvement of ABC system in the organization leads to the better improvement of an organization's decisions making from bottom line to top line.

Kaplan & Cooper, (1998)² emphasized that ABC uses different cost drivers to link costs to cost objects, thereby linking costs to variety and complexity of products or services, and not follow merely product volumes.

Therefore, it leads to accurate costs ascertainment and better profit management.

Tarr, (2001a)³ has focused that ABC adds the most value to an organization when it is used as information basis of managing and improving business.

Dodd, Lavelle and Margolis, (2002)⁴ stated that ABC system provides to the companies about accurate cost information, which leads to improving profit and performance measurement of activities, products/services because it is a powerful tool over the traditional cost method.

Pineno, C. J. (2012)⁵ described about the time driven ABC system provides a means of enhancing profitability.

Rafiq and Garg, (2002a)⁶ found in their recent studies that there is a robust relationship between improved performance and implementation of ABC.

Roztocki and Needy, (1999a)⁷ have informed that ABC is a reliable cost analysis method, which is a highly effective tool for strategic decision-making.

IV. NEED FOR THE STUDY

In present competitive economic environment running the organizations in the path of an efficient manner with considerable profits is a massive challenge. Hence, the financial success of an organizations has duly depends on the understanding, role play and involvement of employees in the business strategies, particularly, cost management strategies. Therefore, a dire need is there to focus on new and innovative cost management strategies for betterment with understanding and perception of employees. As per as its success concerned, because, without involvement of employees and the intelligence towards cost management the concerned cannot work appropriately.

This study has done based on the employee's perception of top most five IT companies operating in India as well branches situated in Hyderabad also. ABC is an instrumental to better understanding of the relationship between cost and activities of an organization. Obviously, the present study attempts to analyses the behavioral aspects of select IT companies employee's through perceptual analysis.

V. OBJECTIVES OF THE STUDY

The main objective of this study is to determine how Activity Based Costing is employed in the IT companies and the perception of employees towards the success and impact of ABC on their organization profitability. Hence, the study consist the specific objectives as follows:

1. To study the perceptions of IT companies employee’s awareness with regard to implementation of ABC in their organizations.
2. To study the perception of select IT companies’ employee’s towards impact of ABC on financial performance of their companies.
3. To study the perception of employees of select IT companies towards decision action changed by ABC.
4. To study the perception of employees of select IT companies towards problems and prospects of ABC method.

VI. HYPOTHESES OF THE STUDY

In order to ascertain the objectives, the study formulated and examined following Hypotheses:

Ho 1: There is no significant difference in the perception of employees of IT Companies towards impact of ABC on financial performance of their companies.

Ho 2: There is no significant difference in the perception of employees towards results of decision action changed by ABC.

VII. DATA SOURCES AND RESEARCH METHODOLOGY

The present study is exploratory and descriptive study, and conducted among top five IT companies as market capitalization selection criteria. The main source of data is of primary in nature that has been collected through qualitative questionnaire administered to select IT

companies’ employees to determine the state of Activity Based Costing practice in IT companies. This research was taken around six months and validity of the data collected from the October 2015 to March 2016 years at Hyderabad, Telangana State-India because, Hyderabad location is one of the utmost focal point for Information Technology in the entire world. The analysis of data is presented through the tabulations, percentages, and pie-diagrams, on the other hand authenticity of findings were examined through ANOVA (One-way). The discussions involved numerous questions both closed ended and open-ended. The main strength of these types of questions is that they allowed to the respondent(s) freedom in answering questions and the chance to provide their in-depth responses.

VIII. SAMPLESIZE AND SELECTION PROCEDURE

Initially, five top IT companies based on market capitalization have been selected as sample companies. Further, to analyses the behavioral aspects of IT employees over the role and impact of ABC in IT Companies, from each and every selected company 20 employees, all together, 100 employees are taken as sample through convenience sampling method. The reason of selection is due to the fact that they are in contact with a cross-section of the company's members and can provide the necessary technical and organizational detail regarding the implementation of ABC in IT companies. Hence, sample units and sample size of the study have given are as follows:

| S.NO | NAME OF THE COMPANY | SAMPLE SIZE |
|------|---------------------------------|-------------|
| 1 | Tata Consultancy Services (TCS) | 20 |
| 2 | Wipro IT Company | 20 |
| 3 | Infosys Technologies | 20 |
| 4 | Tech Mahindra | 20 |
| 5 | HCL Technologies | 20 |

IX. SUMMERY OF ANALYSES, DISCUSSIONS AND FINDINGS

9.1. Gender Profile

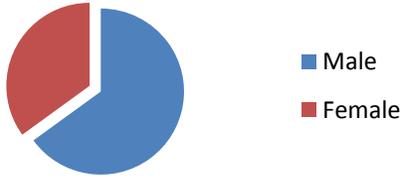
The information regarding to gender of the IT companies employee’s respondents is presented in the following table 1. In the Indian IT companies’ perspective,

the research found that the major work force is comprised of more men than women. Though selected IT companies promote gender equality and women to achieve senior position of authority, the number remain skewed. This study shows that 65 per cent of the workforces are men and the remains 35 per cent female.

Table-1 Gender Profile& Figure

| Gender | No of Respondents | Percentage of Respondents | Cumulative Percentage |
|--------|-------------------|---------------------------|-----------------------|
| Male | 65 | 65 | 65 |
| Female | 35 | 35 | 100 |
| Total | 100 | 100 | |

Percentage of Respondents



■ Male
■ Female

Source: Primary Data

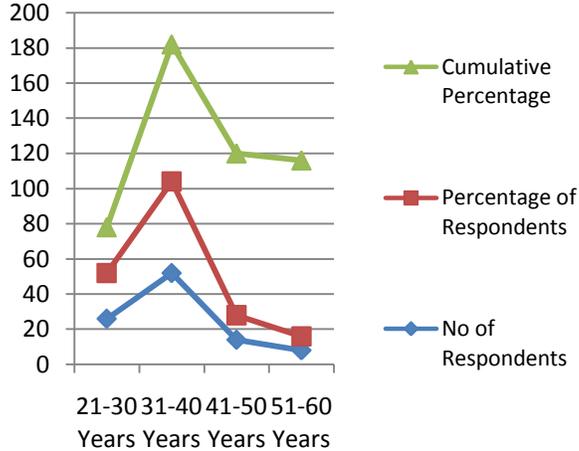
9.2. Age Profile of IT Employees

The information related to age of the sample respondents presented in the following table 2.26 per cent of the sample respondents are in the age group of 21-30 years, and the result of this study showing that a majority of the workforce 52 per cent belonging to the age group of 31-

40 years, followed by 14 per cent and 8 per cent of employee’s respondents related to age group of 41-50 and 51-60 years respectively. Moreover no one of the respondent’s age group of 61 years above because IT companies are not encouraging over the age of 60 years.

Table-2 Age Profile& Figure

| Age(Years) | No of Respondents | Percentage of Respondents | Cumulative Percentage |
|-------------|-------------------|---------------------------|-----------------------|
| 21-30 Years | 26 | 26 | 26 |
| 31-40 Years | 52 | 52 | 78 |
| 41-50 Years | 14 | 14 | 92 |
| 51-60 Years | 08 | 08 | 100 |
| 61 & above | -- | -- | |
| Total | 100 | 100 | |



Source: Primary Data

9.3. Education Profile of IT Companies Employees

The respondents were asked to state their level of Education. The responses are presented in the following table 3. Through the research found on the education front, 48 per cent of employees completed their post- graduation, 25 per cent have completed their professional courses such

as CA/CMA & CS Inter/Executive level, 24 per cent of employees related graduation level and 3 per cent employees completed their CA/CMA & CS and finally 2 per cent of the employees completed their Doctor of Philosophy.

Table-3 Education Profile& Figure

| Education | No of Respondents | Percentage of Respondents | Cumulative Percentage |
|-------------------------------------|-------------------|---------------------------|-----------------------|
| Graduation (B.com/BBA/BBM) | 22 | 22 | 22 |
| Post Graduation (M.com/MBA) | 48 | 48 | 70 |
| CA/CMA & CS (Inter/Executive Level) | 25 | 25 | 95 |
| CA/CMA & CS | 3 | 3 | 98 |
| Ph.D | 2 | 2 | 100 |
| Total | 100 | 100 | |

Source: Primary Data

9.4. Designation Profile of IT Companies Employees

The respondents were asked to state their designation. Their responses are presented in the table 4 below. First and foremost, over the designation front, 56 per cent respondents were Executives; followed by 31 per cent were Team leaders, 9 per cent found as Managers and finally 4 per cent employees are Senior Managers.

However, finally this study concluded that majority of the IT companies’ respondents are Executives. Employees from all levels of the management hierarchy are required to participate in ABC practice and implimitation. Managers or senior Managers were comprising a small percentage of the aggregate.

Table-4 Designation Profile& Figure

| Designation | No of Respondents | Percentage of Respondents | Cumulative Percentage |
|-----------------|-------------------|---------------------------|-----------------------|
| Executive | 56 | 56 | 56 |
| Team Leader | 31 | 31 | 87 |
| Managers | 9 | 9 | 96 |
| Senior Managers | 4 | 4 | 100 |
| Total | 100 | 100 | |

Source: Primary Data

9.5. Experience Profile of IT Companies Employees

The respondents are inquired about their experience. Employees who participated in the survey varied in experience from less than 1year to more than 10 years. The details of the responses are presented in the following table 5. It is clearly showing that 42 per cent of respondents have

5-10 Years’ experience, followed by 33 per cent employees consist of 1-5 Years’ experience, Less than 1 Year of 14 per cent and More than 10 years’ experience by 11 per cent of employees. It is found through the analysis that more than 5 years employees are deployed in ABC implimitation in the IT companies.

Table-5 Experience Profile & Figure

| Experience | No of Respondents | Percentage of Respondents | Cumulative Percentage |
|--------------------|-------------------|---------------------------|-----------------------|
| Less than 1 Year | 14 | 14 | 14 |
| 1-5 Years | 33 | 33 | 47 |
| 5-10 Years | 42 | 42 | 89 |
| More than 10 Years | 11 | 11 | 100 |
| Total | 100 | 100 | |

Source: Primary Data

9.6. Adopting ABC System

ABC method and its adaptation will differ from one company to another company as the nature and size of such company differs particularly this is so high in IT sector. Data collected in this regard from respondents is analyzed and the information related to adopting ABC

system of the IT companies is presented through table 6. It is evident shows from the table that 72 per cent of the sample respondents stated that their companies adopted ABC system. Whereas 28 per cent of respondents opined that their companies are still not in such awareness about adopting ABC system for IT products and services.

Table-6 Adopting ABC system & Figure

| Responses | No of Respondents | Percentage of Responses |
|-----------|-------------------|-------------------------|
| Yes | 72 | 72 |
| No | 28 | 28 |
| Total | 100 | 100 |

Source: Primary Data

9.7. Management Style of the Organization in Implementing ABC

Management style of the select IT companies in implementing ABC differs from one company to another as per the company policies. In this regard the data collected from the employees is analyzed and presented through table

7. It is found that 49 per cent of the employees of the select IT companies revealed that the management style of their organization in implementing ABC is Democratic, whereas 16 per cent respondents opened that they can find Dictatorial and Liaise Fare style. On the other hand 19 per cent of respondents said that they find Autocratic style.

Table-7 Management Style of the Organization in implementing ABC & Figure

| Management Style of the Organization | No of Respondents | Cumulative Percentage |
|--------------------------------------|-------------------|-----------------------|
| Dictatorial | 16 | 16 |
| Autocratic | 19 | 35 |
| Democratic | 49 | 84 |
| Liaise Fare | 16 | 100 |
| Total | 100 | |

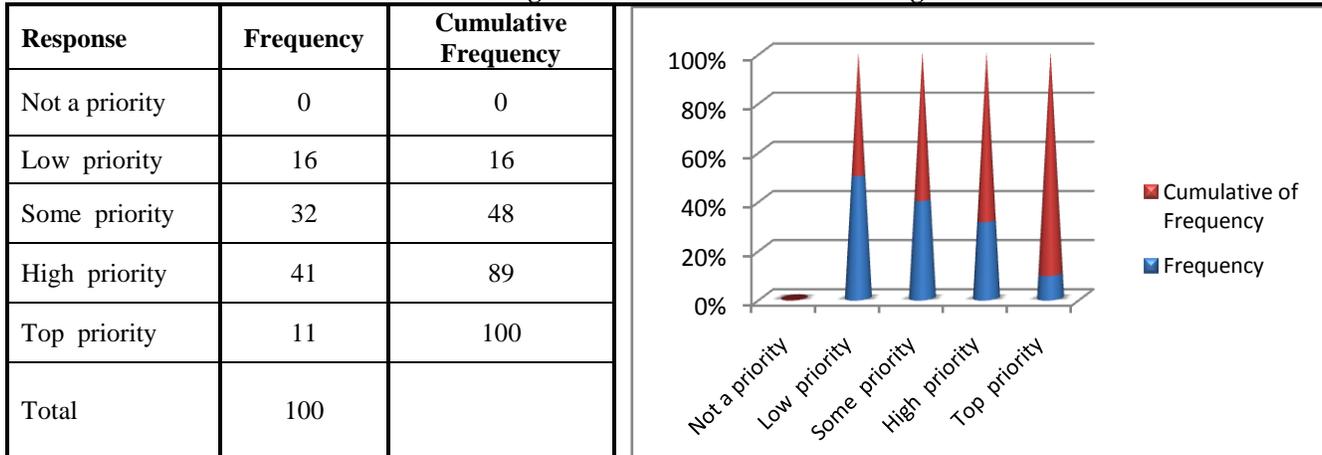
Source: Primary Data

9.8. Management Commitment to ABC

The information covered from employees regard to how the companies are giving priority to applying ABC system and their opinion presented through the table 8. Perception of the respondents on the management

commitment to ABC is found as 41 per cent by high priority, 32 per cent of respondents felt as some priority, 16 per cent respondents felt as Low priority, and 11 per cent of respondents felt as Top priority hence, finally no body responded to the opinion of not priority.

Table-8 Management commitment to ABC & Figure



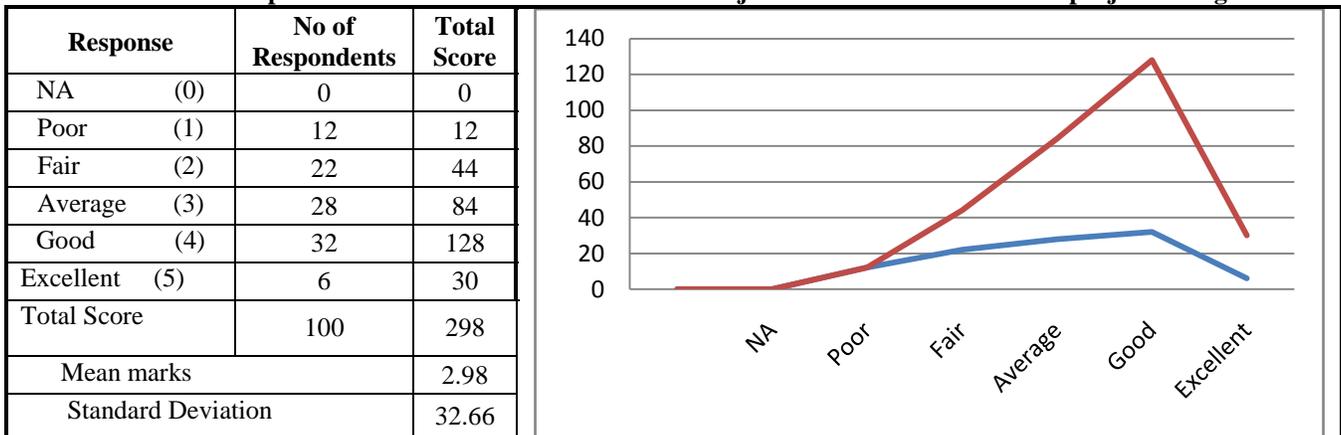
Source: Primary Data

9.9. ABC Implementation on Communication of the Objectives and Rationale for the Projects

In order to examine the responses about ABC implementation on communication of the objectives and rationale for the projects the data has been analyzed and presented in the following table 9. It is ascertained that 32

per cent of responses on ABC implementation on communication of the objectives and rationale for the projects as Good, 28 per cent of respondents felt as average; 22 per cent of respondents felt as Fair, hence, 12 per cent of respondents opined as Poor and followed by 6 per cent of respondents felt as Excellent.

Table-9 ABC implementation on communication of the objectives and rationale for the projects & Figure



Source: Primary Data

*NA = 0, P=1, F=2, A=3, G=4, E=5

9.10 ABC Implementation Commitment of Senior Executives

ABC system implementation commitment of senior executives in IT companies responses presented in the table 10. It is found that 32 per cent of respondents on

the ABC implementation commitment of senior executives felt as Average. Whereas 23 per cent of respondent opined as fair, 20 per cent of respondent felt as Good. On the other hand 15 per cent of respondents opined as Poor, hence, finally 10 per cent of respondents felt as Excellent.

Table-10 ABC implementation commitment of senior executives& Figure

| Responses | No of Respondents | Total Score |
|--------------------|-------------------|-------------|
| NA (0) | 0 | 0 |
| Poor (1) | 15 | 15 |
| Fair (2) | 23 | 46 |
| Average (3) | 32 | 96 |
| Good (4) | 20 | 80 |
| Excellent (5) | 10 | 50 |
| Total Score | 100 | 287 |
| Mean marks | | 2.87 |
| Standard Deviation | | 33.43 |

Source: Primary Data

*NA = 0, P=1, F=2, A=3, G=4, E=5

9.11. ABC Implementation on Cross-Functional Representation on Project Team

The respondent’s information about the ABC implementation on Cross-functional representation on project team presented through the table 11. Through the table 32 per cent of respondents on the ABC

implementation on Cross-functional representation on project felt as Average, and subsequent 26 per cent of respondents found as Good. Whereas 21 per cent of respondents felt as Fair and followed by 12 per cent of respondents found as Poor, hence, finally 9 per cent of respondents Excellent.

Table-11 ABC implementation on Cross-functional representation on project team& Figure

| Responses | No of Respondents | Total Score |
|--------------------|-------------------|-------------|
| NA (0) | 0 | 0 |
| Poor (1) | 12 | 12 |
| Fair (2) | 21 | 42 |
| Average (3) | 32 | 96 |
| Good (4) | 26 | 104 |
| Excellent (5) | 9 | 45 |
| Total Score | 100 | 299 |
| Mean marks | | 2.99 |
| Standard Deviation | | 42.578 |

Source: Primary Data

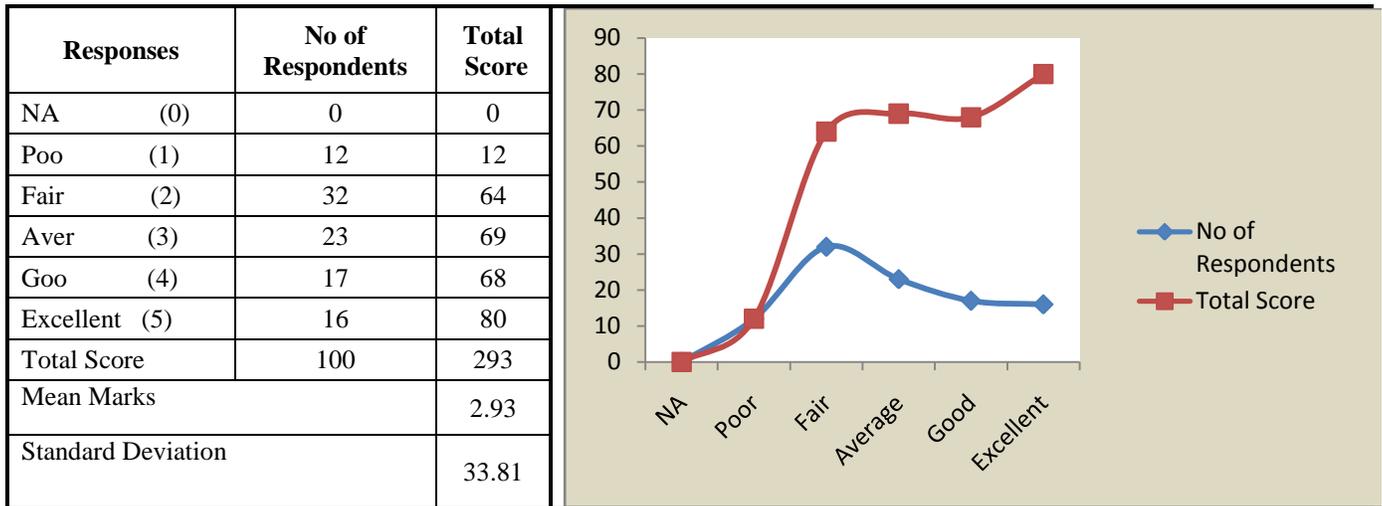
*NA = 0, P=1, F=2, A=3, G=4, E=5

9.12. ABC Implementation on Analysis Performed by Team of Activity and Product Cost

The responses are relevant to ABC implementation on Analysis performed by team of activity and product costs displayed in the following table 12. From the table 32 per cent of respondent on ABC implementation

on analysis performed team of activity and product cost found as Fair, whereas 23 per cent of respondent felt as Average, 17 per cent of respondent report as Good. On the other hand, 16 per cent of respondent felt as Excellent, hence, finally 12 per cent of respondent felt as Poor.

Table 12 ABC implementation on Analysis performed by team of activity and product costs & Figure



Source: Primary Data

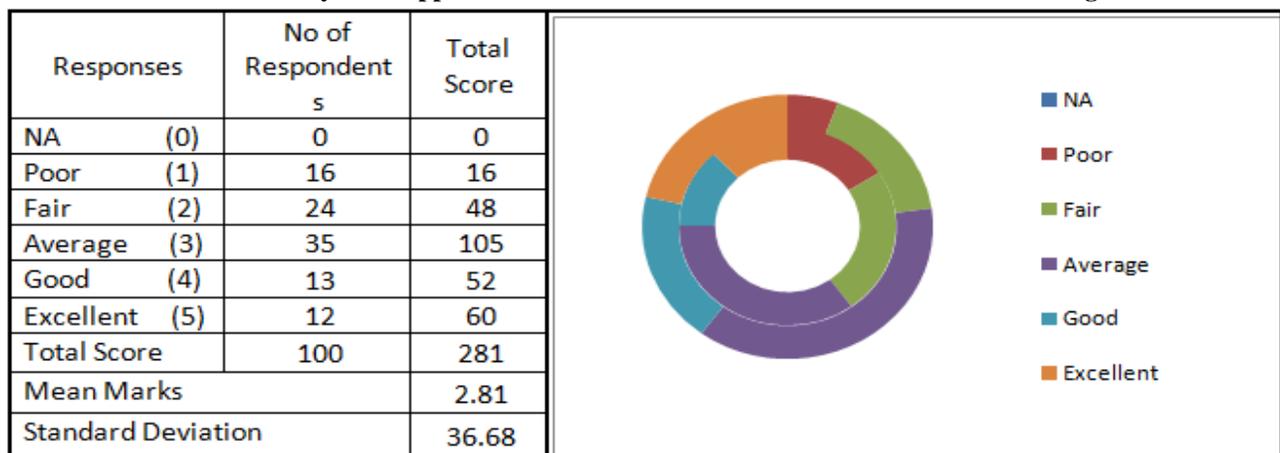
*NA = 0, P=1, F=2, A=3, G=4, E=5

9.13. ABC System Support Overall Business Needs and Its Cross- Functional

The information regarding in IT companies current ABC system support overall business needs and its cross-functional verification between the departments presented in the table 13 below. From the table it is found that on ABC system supports overall Business needs and its Cross-Functional is responded by 35 employee’s average.

Whereas as 24 per cent of employees respondent as Fair, and 16 per cent of respondent felt as Poor, 13 per cent of respondent felt as Good. On the other hand 12 per cent of respondent felt as Excellent, hence, finally nobody respond for Not Available. It is inference that the ABC support the business needs including its cross functional issues considerably.

Table-13 ABC system support overall Business needs and its Cross- Functional & Figure



Source: Primary Data*NA = 0, P=1, F=2, A=3, G=4, E=5

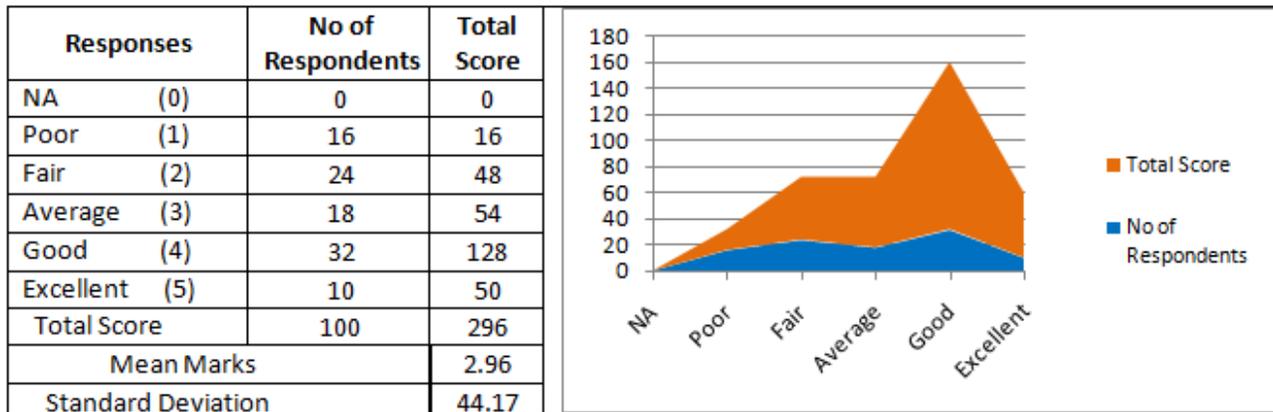
9.14. ABC Implementation on Understanding and Acceptance by Participants of the Key Activities

The respondents are inquired about their responses, whether ABC implementation on understanding and acceptance by participants of the key Activities recorded in following table 14. According to analysis

provided in the above mentioned table 14, respondent’s information reported that 32 per cent of employees strongly agree.ABC implementation on understanding and acceptance by participants of the key Activities, 24 per cent of respondent with Fair, 18 per cent of has Average, 16 per

cent of respondents Poor, and 10 percent of Excellent and on the other hand nobody respondent for Not Available.

Table-14 ABC implementation on understanding and acceptance by participants of the key Activities& Figure



Source: Primary Data*NA =0, P=1, F=2, A=3, G=4, E=5

9.15. ABC and Decision Making

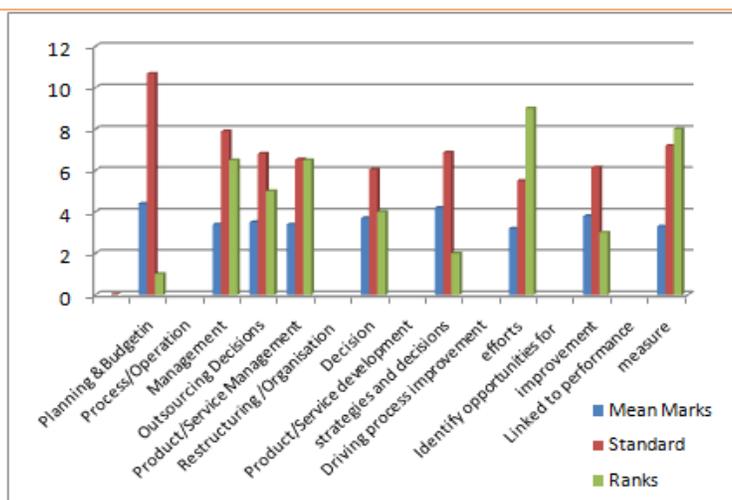
Consumers of products and service in IT companies are increasingly demanding accelerated delivery times and lower prices. Meanwhile Information Technology companies decision making play vital role because the technology and clients requirements change very frequently hence, IT companies considering clients requirement while making decision. Therefore the information collected from employees about what area decision making uses ABC information presented through the Mean marks Standard Deviation and Ranks in the table, it is found that majority of the decision making areas use ABC information. Ranks were allocated from highest mean marks to lowest mean marks; in this regard majority of the respondents with Planning

&Budgeting the mean marks is 4.4 got assigned 1st rank. On the other hand, respondents information reported for Product/Service development strategies and decisions got mean mark of 4.2 and took 2nd rank, Identify opportunities for improvement got 3.8 marks and taken 3rd rank, Restructuring/ Organization decision got 3.7 mean mark got assigned 4th rank, Outsourcing Decisions got mean mark 3.5 and got assigned 5th rank. The respondents were responded for Process / Operation Management and Product/Service Management were tied with equal mean marks 3.4 got assigned rank 6.5, Linked to performance measure decision got mean marks 3.3 and got assigned rank 8th, Finally the decision area regarding Driving Process improvement effort got 3.2 mean marks took 9th place.

Table-15 Decision making area uses ABC information& Figure

| Decision Making area | Mean Marks | Standard Deviation | Ranks |
|--|------------|--------------------|-------|
| Planning & Budgeting | 4.4 | 10.68 | 1 |
| Process/Operation Management | 3.4 | 7.89 | 6.5 |
| Outsourcing Decisions | 3.5 | 6.82 | 5 |
| Product/Service Management | 3.4 | 6.53 | 6.5 |
| Restructuring /Organization Decision | 3.7 | 6.04 | 4 |
| Product/Service development strategies and decisions | 4.2 | 6.87 | 2 |
| Driving process improvement efforts | 3.2 | 5.49 | 9 |
| Identify opportunities for improvement | 3.8 | 6.15 | 3 |
| Linked to performance measure | 3.3 | 7.19 | 8 |

Source: Primary Data



9.16. Level of Personnel were Involved in the ABC Site Implementation

The respondents are inquired about their responses, what level of personnel were involved in the ABC site implementation to determine the those personnel were involved very effectively applying ABC to providing services to their clients with low cost of services and cost controlling of the IT companies. The details of the responses are given in the following table. Table 16

describes Mean marks and Standard deviation for level of personnel involved in the ABC site implementation. Managers on average agreed that their business units emphasize the strategies of on-time delivery of services, dependable delivery and high-quality products and services. The mean marks are 2.84, 2.71, 2.55, 2.60, 2.47, and 2.39 respectively in the involved levels of personnel on the ABC site implementation. The involvement of personal in ABC is very considerable.

Table-16 Level of personnel were involved in the ABC site Implementation & Figure

| Level of personnel involved | Mean Marks | Standard Deviation | Ranks |
|-----------------------------|------------|--------------------|-------|
| Senior management | 2.84 | 40.76 | 1 |
| Senior finance personnel | 2.71 | 30.75 | 2 |
| Operations Managers | 2.55 | 28.32 | 4 |
| Function Groups managers | 2.6 | 29.75 | 3 |
| Supervisors /team leaders | 2.47 | 26.43 | 5 |
| Line personnel | 2.39 | 30.90 | 6 |

Source: Primary Data* Scale NA=0, NI=1, SI=2, Mod I= 3, VI=4 EI=5,

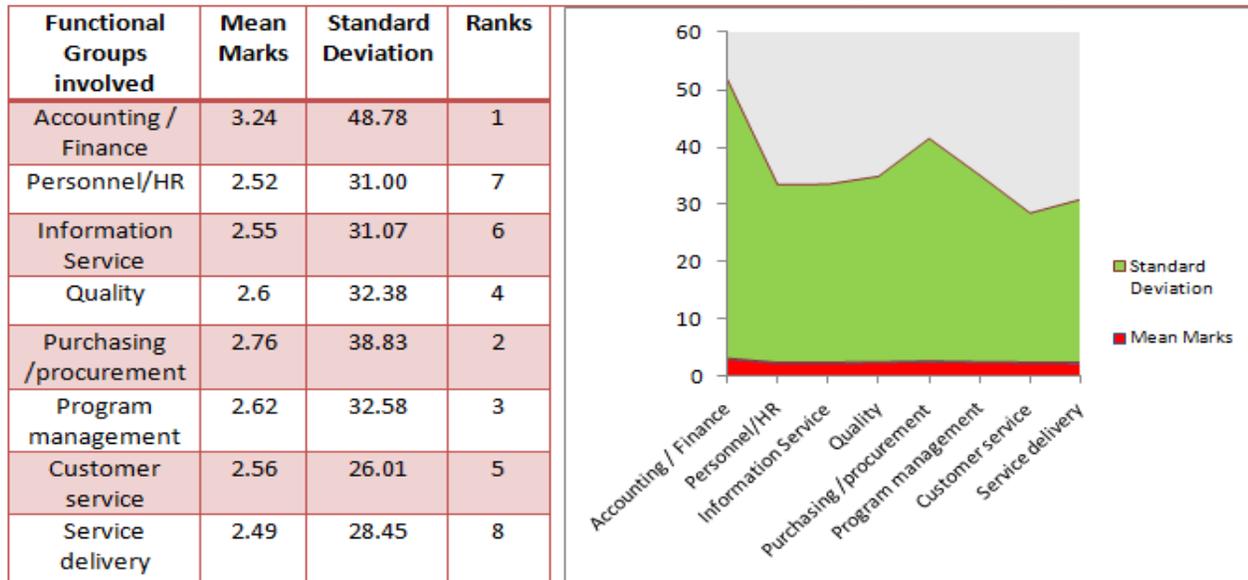
**NA= Not Applicable, NI=Not Involved, SI= Somewhat Involved, Mod I = Moderately Involved, Very Involved, Extremely Involved.

9.17. Functional Groups were Involved in the ABC Site Implementation

ABC applications in the select IT Companies are the main subjects in which ABC information is used to aid decision making. Extending the use of ABC applications leads to a large number of decision actions. However, ABC functions refer to those departments that have access to the ABC system. The more managers use ABC information, whether indifferent applications or different functions, the greater the number of expected actions. The information collected from the employees that how effectively involved in different functional departments while implementing ABC, the responses regarding various functional departments were involved in the ABC site implementation and analyzed and presented through table 17. It is observed from the table, that Accounting and Finance departmental

group were involved in front by mean score of 3.24 and obtained first rank on the ABC site implement, Purchasing /procurement department group got mean score of 2.76, and it is getting by second rank. Program management group getting mean score of 2.62 and secured third rank, Quality department groups were involved in ABC site implementation by mean marks of 2.6 and got fourth rank. Customer service department involved in ABC site implementation by mean score of 2.56 and got fifth rank, Information Services got 2.55 mean score and this department involved in ABC site implementation at sixth rank, Personnel/HR department involved by 2.52 mean score with seventh rank, finally Service delivery department reported mean score of 2.49 attain eighth rank with 28.45 standard deviation.

Table-17 Functional Groups were involved in the ABC site implementation& Figure



Source: Primary Data* Scale NA=0, NI=1, SI=2, Mod I= 3, VI=4 EI=5,

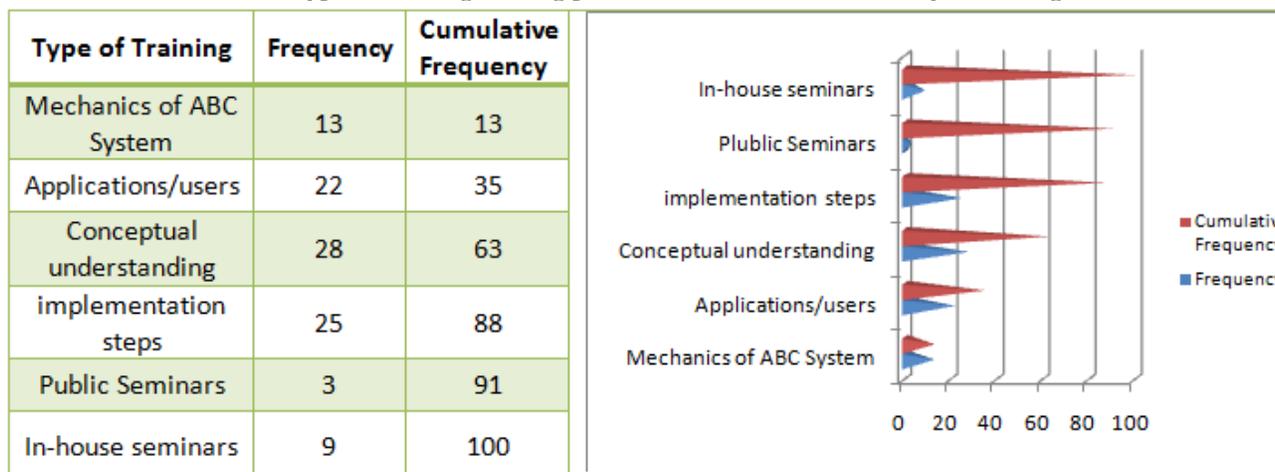
**NA= Not Applicable, NI=Not Involved, SI= Somewhat Involved, Mod I = Moderately Involved, Very Involved, Extremely Involved.

9.18. Type of Training for Users of the ABC System

Training is an important factor driving ABC success in IT companies in the application of the ABC system. Without training, problems are expected during the design, implementation and usage of ABC systems. Information collected from employees about the selected IT companies type of training is being provided for users of the ABC system is analyzed and presented through table 18. Table reveals that majority of the employee’s responses

regarding type of training is being provided for users of the ABC system. 28 per cent respondents were having only conceptual understanding, 25 per cent of employees were at implementation steps, 22 per cent of respondents for Applications/users, 13 per cent were for Mechanics of ABC System, 9 and 3 per cent of respondents were responded that In-house seminars and Public Seminar respectively are very essential in the training.

Table-18 Type of training is being provided for users of the ABC system& Figure



Source: Primary Data

X. HYPOTHESIS TESTING

Ho₁: There is no significant difference in the perception of employees of select IT Companies' towards impact of ABC over financial status of their companies.

The discussion about the any significant difference in the perception of employees of select IT companies towards impact of ABC over financial status of their companies, the ANOVA (one-way) was employed to test the results. From the employees data collected and processed in mean marks over the Overhead, Service efficiency, Customer satisfaction, Program/Service design and Program /Service delivery presented in the table 19.

Table-19 Perception of employees of IT companies towards impact of ABC over financial status of their companies.

| | TCS | Wipro Ltd | Infosys Ltd | Tech Mahindra | HCL | |
|---------------------------|------|-----------|-------------|---------------|------|------|
| Overhead Support | 3.2 | 3.5 | 3.35 | 3.45 | 3.45 | |
| Service efficiency | 3.15 | 3.55 | 3.25 | 3.2 | 3.65 | |
| Customer Satisfaction | 3.25 | 3.2 | 3.05 | 3.35 | 3.15 | |
| Program/Service design | 3.1 | 3.4 | 3.05 | 3.4 | 3.4 | |
| Program /Service delivery | 3.3 | 3.45 | 3.05 | 3.35 | 3.45 | |
| Total | 16 | 17.1 | 15.75 | 16.75 | 17.1 | |
| \bar{x}_j | — | 3.2 | 3.42 | 3.15 | 3.35 | 3.42 |

Source: Primary Data

*Scale NI=1, MI=2, Mod I=3, EI=4, SI=5

**NI= No Improvement, MI= Minor Improvement, Mod I = Moderate improvement, EI=Extensive improvement, SI= Significant improvement.

10.1 Results of Anova: Single Factor

SUMMARY

| Groups | Count | Sum | Average | Variance |
|--------|-------|-------|---------|-------------|
| 3.2 | 4 | 12.8 | 3.2 | 0.008333333 |
| 3.5 | 4 | 13.6 | 3.4 | 0.021666667 |
| 3.35 | 4 | 12.4 | 3.1 | 0.01 |
| 3.45 | 4 | 13.3 | 3.325 | 0.0075 |
| 3.45 | 4 | 13.65 | 3.4125 | 0.042291667 |

ANOVA

| Source of Variation | SS | df | MS | F | P-value | F crit |
|---------------------|----------|----|----------|------------|-------------|-------------|
| Between Groups | 0.29 | 4 | 0.0725 | 4.03712297 | 0.020373319 | 3.055568276 |
| Within Groups | 0.269375 | 15 | 0.017958 | | | |
| Total | 0.559375 | 19 | | | | |

Source: Computed in Excel v 2007

Computed F-test value is compared to critical value in order to determine whether to accept or reject the

hypothesis. The F-table gives the critical values. The distribution of F- values at 5 % risk level, across the table

19. The critical F - value for perception of employees of select IT companies towards impact of ABC over financial status of their companies is found in column 4 and row 20. Thus,

$$F_{0.05}(4, 24) = 4.03712297$$

The hypothesis of perception of employees of select IT companies towards impact of ABC over financial status of their companies, states that the computed F- value is 4.03712297, which is higher than the critical value of $F=3.055568276$. So the hypothesis is rejected. The conclusion is that the perception of employees of select IT companies towards impact of ABC over financial status of their companies is significantly differing.

XI. HYPOTHESIS TESTING

Ho₂: There is no significant difference in the perception of employees towards results of decision action changed by ABC information.

In order to understand whether there is any significant difference in the perception of employees towards results of decision action changed by ABC information, the ANOVA (one-way) test was employed. The data collected from the opinions of the employees is analyzed in terms of mean marks to test the hypothesis.

Table-20 Perception of employees towards results of decision action changed by ABC information

| Types of Decision | TCS | Wipro Ltd | Infosys Ltd | Tech Mahindra | HCL |
|--|-------|-----------|-------------|---------------|------|
| Changed pricing and cost recovery strategies | 3.4 | 3.25 | 3.15 | 3.65 | 3.6 |
| Changed custom support or services | 3.1 | 3.75 | 3.15 | 3.9 | 3.35 |
| Changed process | 2.95 | 3.15 | 3.35 | 4.05 | 3.2 |
| Outsourcing activities or processes | 3.25 | 3 | 3.4 | 3.65 | 3.15 |
| Changed program delivery channel | 3.1 | 3 | 3.7 | 3.35 | 2.95 |
| Changed strategies focus | 3.2 | 3.2 | 3.2 | 3.25 | 3.3 |
| Reorganized/restructure | 3.45 | 3.4 | 3.2 | 3.45 | 3.15 |
| Total | 22.45 | 22.75 | 23.15 | 25.3 | 22.7 |
| \bar{x}_j | 3.20 | 3.25 | 3.307 | 3.61 | 3.24 |

Source: Primary Data

*Scale NC=1, MC=2, Mod C=3, SC=4, VSC=5

**NI= No Changes, MI= Minor Changes, Mod C = Moderate Changes, SI= Significant Changes, VSC=Very Significant Changes

11.1 Results of Anova: Single Factor

SUMMARY

| Groups | Count | Sum | Average | Variance |
|--------|-------|-------|-------------|-------------|
| 3.4 | 6 | 19.05 | 3.175 | 0.02875 |
| 3.25 | 6 | 19.5 | 3.25 | 0.082 |
| 3.15 | 6 | 20 | 3.333333333 | 0.041666667 |
| 3.65 | 6 | 21.65 | 3.608333333 | 0.100416667 |
| 3.6 | 6 | 19.1 | 3.183333333 | 0.019666667 |

ANOVA

| Source of Variation | SS | df | MS | F | P-value | F crit |
|---------------------|--------|----|----------|-------------|----------|------------|
| Between Groups | 0.7645 | 4 | 0.191125 | 3.506880734 | 0.020985 | 2.75871047 |

| | | | |
|---------------|--------|----|--------|
| Within Groups | 1.3625 | 25 | 0.0545 |
| Total | 2.127 | 29 | |

Source: Computed in Excel v 2007

Computed F-test value is compared to critical value in order to determine whether to accept or reject the hypothesis. The F-table gives the critical values. The distribution of F- values at the 5 % risk level, across the table 20. The critical F - value for perception of employees towards results of decision action changed by ABC information of their companies is found in column 4 and row 30. Thus,

$$F_{0.05}(4, 30) = 2.75871047$$

The Hypothesis of perception of employees towards results of decision action changed by using ABC information is tested through 'F' and found the computed F- value 3.506880734, which is higher than the critical value of $F=2.75871047$. So the hypothesis is rejected. The conclusion is that the perception of employees towards results of decision action changed by using ABC information of their companies is differing a lot.

XII. CONCLUSIONS AND SUGGESTIONS

The study reports on the behavioral implications of the new cost management systems in general with a focus on ABC to the possible extent by employee's perception. Also, the study enlighten in a comprehensive manner. The understanding of the behavioral consequences of IT companies' employees towards ABC systems and it can facilitate implementation and future research regarding implementation and estimation of possibility to the extent of non - implemented areas of ABC. The present study provides information for the development and refinement of ABC as cost instrument and strategy.

ABC implementation process in IT companies is lacking by awareness among the employees as it is a strategic cost accounting method. Moreover, IT companies failed to create awareness about ABC in determining the cost and price of the products and services. So the companies should make the employees are the involved in ABC process in IT companies. ABC method can support the management in decision making area, whereas, IT companies comprehensively utilized ABC method in the case of Planning and Budgeting only. There is a need to apply ABC in other business areas also for better cost management with the employee participation.

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