
Time and cost management on project development in it sector

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Abstract: The main purpose to conduct this study is to know how to implement time management and cost reduction while doing a project. Also to understand the perception of employees in the IT industry about cost reduction and time management practises. This is an empirical study. Descriptive research methodology is used in the study as the research design and sampling method used is convenience sampling. The size of the sample collected in this study is 77 and primary data is used. The responses are collected from IT employees. The software supported to interpret and analyse the data is IBM SPSS software which is widely used for finding many quantitative solutions. The tools used for the study are frequency analysis, mean analysis and ANOVA to analyse the data. The results of this research were found to be cost management helps to eliminate unnecessary cost elements.

Keywords: Time Management, Cost Management, Project Management, Innovation, Cost techniques

INTRODUCTION

Time management is very important to complete the task and achieve the goal. Time management is nothing but managing the time spent on tasks, activities on a project. To be an expert in time management in project management it has some steps: the first step is planning, the second step is scheduling, the third step is monitoring and the final step is controlling all project activities. For everybody time is very important. Whether they give you money for your time or not time is very important. If you have poor time management skills it can cause you unhappiness, stress, health complications and lack of sleep. If there is only little time to complete the work it will make people feel stressed. To improve the time management there are many ways. Time management is important as it improves your self-discipline, by managing time there will be less stress and because of less stress the quality of your work will improve. If you manage time you will get a lot of time through that you will get new opportunities and it will improve your career and good time management creates a positive cycle. There are certain constraints for time management which can be proper planning, formulation of objectives, goals and deadlines and also includes diversification and concentrating on activities and spending the right time on right activity. The tools used for time management are proworkflow, office timeline, top tracker, click time and hours. The disadvantages of time management are unclear targets, bad management, I cannot say "no", obstacles and inactivity.

The process of project cost management is estimating, budgeting, controlling costs in the project life cycle. The objective of project cost management is to keep the expenditures within the approved budget. By delivering the requirements that are needed will lead to a successful project. The cost techniques can be estimated by analogous estimating, three-point estimating, giving judgement by an expert, parametric estimating, vendor bid analysis and bottom-up estimating. The goodwill of cost management helps in finding the upcoming expenses and costs. Our research idea is based on the rich knowledge acquired by our peer teams across the university. (A.C.Gomathi, S.R.Xavier Rajarathinam, A.Mohammed Sadiqc, Rajeshkumar, 2020; Danda et al., 2009; Danda and Ravi, 2011; Dua et al., 2019; Ezhilarasan et al., 2019; Krishnan and Chary, 2015; Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018; Narayanan et al., 2012, 2009; Neelakantan et al., 2013, 2011; Neelakantan and Sharma, 2015; Panchal et al., 2019; Prasanna et al., 2011; Priya S et al., 2009; Rajeshkumar et al., 2019; Ramadurai et al., 2019; Ramakrishnan et al., 2019; Ramesh et al., 2016; Venugopalan et al., 2014)

REVIEW OF LITERATURE

(Sanchez et al., 2017) focused on practices of project management. Organizations can develop the time and cost project management victory of Information system (IS) development works through this practice. The research methodology used in this are dependent variable, Independent and control variables.

(Bowen et al., 2002) have studied the concept of cost, time and quality management on building projects. This study focuses on how conscious project teams are on building projects about cost, time and quality management. The research methodology used here is a survey that was conducted through a mail questionnaire in South Africa. From the survey the findings of this study are that the participants from the project team have given the opinion that they have a relationship among time, cost and quality management to achieve the goals of client objectives. (Attarzadeh and Ow, 2008) discussed that software managers should simultaneously record and direct many projects. By following this sometimes the projects are successful and sometimes they are not successful and not completed on the right time. The reasons for project failure are absence of planning; shortage of resources, shortage of requirements, absence of user involvement and there is no proper cost estimation. There are some techniques for project planning and scheduling for success of a project but sometimes it is not suitable for some specific projects thus the project fails. The findings of this study is the main reason for failure of the project is because of poor planning and poor scheduling of the project. The other reasons are lack of team spirits among team members and lack of quality of team members. The reasons for the success of the project are good planning, good estimation of the project, user involvement, good leadership and good technical skills of team members. (Mansor et al., 2013) The project failure is because of poor cost management because of this project causes over budget and the project becomes a failure. The methodology used here is an online questionnaire. To analyze the result the paper used the Rasch Measurement Model. (Smith, 2014) has studied Project Cost Management. The paper examines cost management of a project, their challenges and global issues faced by them. The methodology used here is they conducted meetings and discussions in the period of 2010 to 2013. The findings of this study is for the global development of the profession there should be collaboration between various project cost management associations around the world. (Radujković and Sjekavica, 2017) showed the difference between project management and project success. Success is the most esteemed word for any project practitioner. When talking about projects there are two main concepts they are project success and project management success. There are some similarities and there are some differences between them. By evaluating overall project goals and achievement we can evaluate project success. By traditional measurement of time, cost and quality we can evaluate project management success. But finding the difference between them is hard because of their relationship. The methodologies used in project development are ICB. (Hirman et al., 2019) have studied the analysis of risk factor with the implementation of industrial revolution 4.0 happening in project management. The article depicts the implementation of industrial revolution 4.0. (Jørgensen and Åsgård, 2019) have studied about the control and trust of the project management. The author explains about the inter-organizational collaboration project control and trust of norwegian petroleum industry. (Lee et al., 2017) have studied the Project management model. For constructing a renewable energy plant project management model is used. Using (PERT) Program evaluation and review technique total duration time and total duration cost can be evaluated. (Ciric et al., 2019) have studied Agile VS Traditional Approach in Project Management. By breaking a project into several stages a team can manage a project using Agile methodology. The focus of Agile is elasticity and adequacy of change. (Smith, 2016) has studied the cost of project management; it also explains the practical issues in project management. The objective or aim of the report is to identify whether the procedure or strategy or practices followed by industries are successful. (Maravas and Pantouvakis, 2013) have studied about the program and project management cost and uncertainty. Then realized that project and program management has a lack of certainty and completion. (Qiu and Xiao, 2020) explained about the problems that cross-system is not able to collect data automatically, the report for cost analysis is fixed and cost accounting is not on time. Using (RPA) Robot Process Automation we can make best use of cost management, and improvement can be made in cross-system data, comprehensive multidimensional cost analysis, and “cloud purchasing platform” construction. (Keshk et al., 2018) Under project management there are several managements they are cost management, quality management and time management, etc. To avoid many losses we should have more interest and should focus on risk management. (Karbakhsh Ravari et al., 2020) aimed is to estimate the benefit of one time training for nurses on job stress who work in emergency departments.

RESEARCH METHODOLOGY

Descriptive research design was used for this research. Data was collected by using questionnaire constructed with five-point Likert's scale. The questionnaire is circulated to 77 employees. The collected data is analysed by frequency, mean and ANOVA. The demographics are displayed in pie charts.

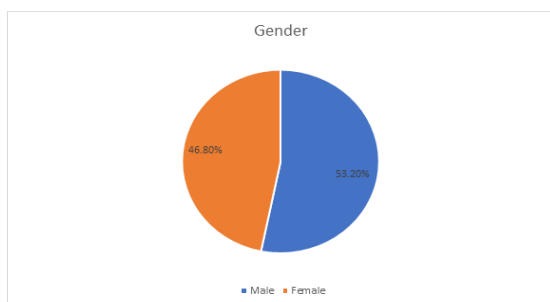


Fig.1: shows the frequency analysis of gender. From the figure it is clear that 53.20 % of the respondents are male followed by female (46.80%).

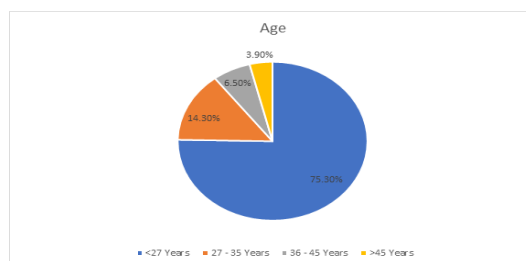


Fig.2: shows the frequency analysis of age group of the respondents. From the figure it is clear that the age group of < 27 Years is 75.30% followed by the age group 27 - 35 Years (14.30%), 36 - 45 Years (6.50%) and > 45 Years (3.90%).

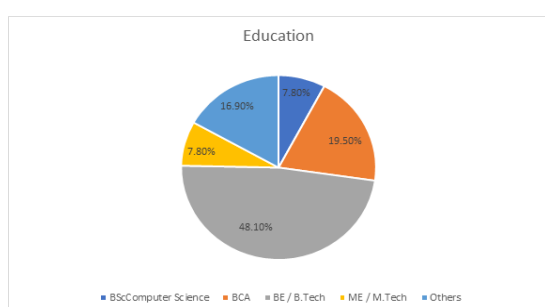


Fig.3: shows the frequency analysis of respondents education qualification. It is clear from the figure that respondents hold a BE / B.Tech are 48.10% followed by BCA (19.50%), Others (16.90%), BSc Computer Science (7.80%) and ME / M.Tech (7.80%).

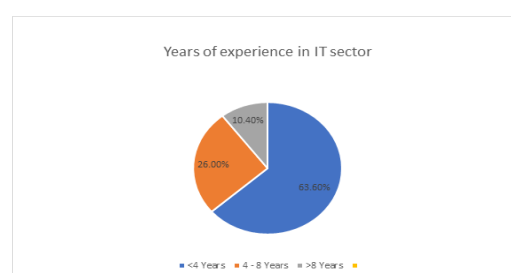


Fig.4: shows the frequency analysis of years of experience in the IT sector of the respondents. From the figure it is clear that respondents with < 4 years of experience in IT sector are 63.60 % followed by 4 - 8 years of experience in the IT sector (26.00%) and > 8 Years of experience in the IT sector (10.40%).

Table 1: Time management and cost management practices

S. No	Time management and cost management practices	Mean	Rank
1	Time can be managed by creating policies and procedures	3.16	11
2	The most vital part in time management is finding and recording the sequence of work	3.33	9
3	Management of time helps to complete each activity with estimated resources	3.48	3
4	Resources, Timeline and Duration should be analyzed for an activity	3.46	5
5	For tracking the project, planned schedule and actual progress will be compared	3.42	7
6	Estimation of aggregate cost is essential in cost management practices	3.48	3
7	Cost management includes in the estimation of higher quality of cost	3.42	7
8	Variable and fixed cost should be compared	3.27	10
9	Cost estimation helps to estimate from lowest-to-the highest-level work package	3.57	2
10	Cost management helps to eliminate unnecessary cost elements	3.75	1
11	Estimation of cost assists in fixing the selling price	3.46	5

Table 2 shows the mean analysis of time and cost management practices on project development in the IT industry. It is clear from the table that cost management helps to eliminate unnecessary cost elements has the highest mean value of 3.75 followed by cost estimation helps to estimate from lowest-to-the highest-level work package mean value of 3.57. The statement “time can be managed by creating policies and procedures” has the lowest mean value of 3.16.

Table 2: Demographic Details Vs Perception

Age	F	Significant
Perception	1.749	.164
Education Qualification	F	Significant

Perception	3.745	.008
Years of experience	F	Significant
Perception	1.520	.225

Table 2 shows the results of one-way analysis of demographic details versus perception. It is seen from the table that significant value for age vs perception and years of experience vs perception is greater than 0.05, it indicates that there is no significant difference between age and perception & years of experience and perception.

CONCLUSION

Effective time management reduces stress, it will increase the standard of the work, help to balance the work life and help to require better decisions. By having good time management you can finish the project soon and you can look for new projects. Effective cost management is responsible for business leadership. If cost management is not done the project cost will increase. Cost management is not just cutting the cost it is using the resources effectively. By doing this you can increase the profit and revenue.

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