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EFFECTIVE APPLICATION OF PROJECT MANAGEMENT INFORMATION SYSTEM AND ITS IMPACTS ON SERVICE QUALITY IN IT BUSINESS

Sanket Bhagwate[1]* and M R Nagare[2]

*Corresponding Author: ***Sanket Bhagwate*** ✉ *Sanketbhagwate14@gmail.com*

PMIS offers challenges that can be more noticeable and responsible than the more standard exercises inside of an association. Tasks inside of associations can unite dissimilar parts through colleagues who speak to their specialism. Development and change have produced expanded association working crosswise over open segment associations. This accentuates the significance of PMIS used to deal with the complexities of these sorts of activities. While PMIS draws on nonexclusive administration aptitudes it is the flexibility of these abilities in the setting of a venture that creates the requirement for quality, vitality and duty. Going for incredibleness is the way to an effective venture. The present study on PMIS is attempted to get the viability of PMIS systems in an association. The present study is brought up with the point of examining the methodology of the IT organizations in creating, overseeing and executing of PMIS apparatuses and strategies utilized as a part of sorting out. The study is done in IT associations with the workers from distinctive offices as the respondents of the study. The staff at distinctive levels of chain of command were talked with utilizing a poll. The information gathered from the essential source and the optional sources is investigated utilizing tables and graphs. From the study, it is found that the PMIS instruments and strategies utilized as a part of the association are successful and the vast majority of the individuals dealing with diverse tasks in the association consent to it. The association ought to thusly routinely evaluate the requirement for utilizing propelled innovation, appraisal of danger and contribution of dexterous workers who might shape some piece of the undertaking and address the issues of the stakeholders included in the ventures.

Keywords: Project Management Information System, Service Quality

INTRODUCTION

A system is principally geared toward providing the management at totally different levels with info associated with the system of the organization. It helps in maintaining discipline within the system. Associate in Nursing system coping with project management tasks is that the project management system. It helps in deciding in inbound at the optimum allocation of resources. The data system relies on a information of the

[1] M.Tech Student, Veermata Jijabai Technological Institute, H. R. Mahajani Marg, Matunga Road, Mumbai, Maharashtra 400019, India.
[2] Faculty Member, Veermata Jijabai Technological Institute, H. R. Mahajani Marg, Matunga Road, Mumbai, Maharashtra 400019, India.

organization. A project management system additionally holds schedule, scope changes, risk assessment and actual results. The data is communicated to managers at totally different levels of the organization relying upon the necessity. allow us to realize however a project management system is employed by totally different stakeholders.

The four major aspects of a PMIS are

a. Providing info to the foremost stakeholders
b. Helping the team members, stakeholders, managers with the mandatory info and a outline of the data shared with the upper level managers.
c. Helping the managers in doing what if analysis,As is analysis and To be Analysis concerning project staffing, planned staffing changes and total allocation of resources.
d. Serving to structure learning by serving to the members of the organisation study project management.

Usually, the team members, and not the systems directors of the corporate, develop an honest PMIS. Organizations tend to assign such responsibility by rotation among members with a well-designed and structured information entry and analytical format.

LITERATURE REVIEW

Project Management Information System (PMIS) system tools and techniques employed in project management to deliver info. Project managers use the techniques and tools to gather, mix and distribute info through electronic and manual suggests that. It is employed by higher and lower management to speak with one another.

PMIS facilitate arrange, execute and shut project management goals throughout the design method, project managers use PMIS for budget framework like estimating prices. The Project Management system is additionally accustomed to produce a particular schedule and outline the scope baseline. At the execution of the project management goals, the project management team collects info into one information.

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b. Helping the team members, stakeholders, managers with necessary info and outline of the data shared to the upper level managers.
c. Helping the managers in doing what if analysis concerning project staffing, planned staffing changes and total allocation of resources.
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Project management system approaches:

There are several reasons why project management approaches are helpful and it will bring clear edges to organizations and also the people used within the project groups a variety of reasons are printed below among four themes:

1. PMIS attracts on information and skills already employed in the geographical point.
2. PMIS provides a 'contained' approach to development or amendment.
3. PMIS will bring further finance into the organization or service purpose.
4. PMIS approaches is used for employees development.

1. PMIS attracts on information and skills already employed in the geographical point

Project management info techniques and processes draw on the broader information and skills developed from structure expertise and finding out management theory and observe. Several of the techniques employed in project management like teambuilding, deciding, money management and delivering outcomes, are used often within the management of organizations and repair delivery. Workers develop these skills through expertise, workers coaching and education. However, once applied to project things, these skills, gain associate in Nursing energy that focuses on accomplishment and delivery over a particular fundamental quantity. Also, comes ar typically a lot of visible than continual work. Some comes have a 'high profile' among associate in Nursing structure or geographical community and there's continual stress on accomplishment, success and responsibleness of the project.

1. **PMIS draws on knowledge and skills already used in the workplace:** Project management information techniques and processes draw on the wider knowledge and skills developed from organizational experience and studying management theory and practice. Many of the techniques used in project management such as teambuilding, decision making, financial management and delivering outcomes, are used regularly in the management of organizations and service delivery. Employees develop these skills through experience, staff training and education. However, when applied to project situations, these skills, gain an energy that focuses on achievement and delivery over a specific time period. Also, projects are usually more visible than continual work. Some projects have a 'high profile' within an organizational or geographical community and there is continual emphasis on achievement, success and accountability of the project.
2. **PMIS provides a 'contained' approach to development or change:** PMIS encourages periods of concentrated activity in order to achieve goals. Sometimes this is driven by physical factors such as the completion of new premises or the demolition of old buildings. However, projects can also be influenced by financial constraints in situations where money cannot be transferred into different financial periods or budgets. Having restrictions and limits that are imposed by other organizations or partners can focus resources on the tasks to be achieved in order to fulfill the project goal. In some situations, using a project management approach will be more cost efficient.

Project management approaches can also be used for longer change activities such as reclassifying resources or digitizing a special collection of resources. If extra money is available for a project over a two year period, then it needs to be completed within the time that this money is available.

An alternative approach could be to accommodate these activities within the general management of the organization, perhaps running over a period of several years. In these circumstances, it is likely that some staff would work continually on reclassifying or digitizing resources, or perhaps only occasionally when staff availability and rotas made it possible. This could imply less importance than the on-going service delivery of the library and extend the time taken to complete the tasks. Using a project management approach will provide a

management framework that highlights the importance of the tasks and places resources where they are most effective to complete the project.

3. **PMIS can bring extra finance into the organization or service point:** Funding for projects may be available from within organizations or from external organizations or partners. Sometimes, funding for projects is available when there is only limited funding for mainstream services. Perhaps extra staff can be employed specifically for a project even when there is a freeze on employing new staff on general posts across the organization.

The advantage of using project management approaches for new services is that development costs can be higher than on-going delivery costs. New equipment may need to be purchased or staff training arranged. Project funds can help to cover these higher costs enabling the organization to develop new initiatives even when finance is restricted. Sometimes the project period may serve as the pilot phase of a new service that moves to become an integrated service at the end of the project period.

4. **PMIS approaches can be used for staff and student development:** Some project management skills such as financial management of large budgets, effective communication or managing a team, are usually developed over a period of several years and through experience and career progression. However these skills can also be developed through being involved in small scale, perhaps social projects. These might include planning visits to another library that has developed an innovative approach to service delivery; arranging a celebration meal at a local restaurant; planning an 'away day' event for staff training or a series of author visits and workshops. All of these examples require careful planning, negotiation and communication, some financial management and perhaps evaluation of the event.

Where project management is taught on academic courses, students can first be asked to think about what is needed for planning family and social events. These could be real or imaginary events such as a family celebration, a picnic with a group of friends or a short holiday. Discussing the practical and social nature of these events can help to motivate students to succeed to higher levels than a more conventional assignment. Ideas and experience can be transferred to a more challenging task such as planning conference for a group of professionals. Some reflection and analysis should be included in the assignment processes. This can be through peer discussion as well as through written evidence. Reflection on what worked well and what could be improved will help them to understand how to avoid repeating the same mistakes in the future.

Being involved in project teams in the workplace or on academic courses, provides staff and students with useful opportunities for learning about what makes project management effective and successful. It also facilitates the transfer of knowledge and skills to future projects that will be useful for all participants in their careers and possibly as future project managers and leaders.

RESEARCH METHODOLOGY

Research Design

The Method of Research Design that has been used is both Exploratory and Descriptive Study

in Nature. Exploratory Research is used for secondary data and descriptive for primary data.

Sampling Design

Sampling frame: Sample frame has taken from IT companies

Sample size: Sample size is around 100 respondents taking 20 each from among five IT Companies.

Sampling Method: The Sampling Procedure used is Area and Convenience Sampling.

Sample Units: The Project Managers and Team working on different project in IT company's forms a part of the Sampling units.

Data Collection Sources

Primary data: Under Descriptive research design primary data is collected using a well-structured questionnaire which contains questions satisfying the objective of the Study. For this study Questionnaire is prepared containing Variables on PMIS quality such as availability, reliability, relevance, accuracy, No. of projects undertaken, information overload, Project planning and Scheduling system Impact on decision making, Project Manager's satisfaction with PMIS, Impact of information, weekly status report, Project tracking through dashboards, Inspection, and other information related to PMIS.

Secondary data: Under Exploratory Research, Secondary Data is collected from Journals, Text books, Websites; Newspaper Articles will form part of the secondary data.

Data Analysis Tools

Data collected from 100 respondents is analyzed through Tables, charts and graphs using suitable measuring scales.

RESULTS

The survey of PMIS in organization in different aspects such as productivity, culture, reliability, accessibility, service with the given scale is given below as:

Among 100 respondents, 10 rate PMIS as very low on user friendly, 13 as low, 18 give neutral response, 31 respondents rate high and remaining 28 as very high.

Among 100 respondents, 9 rate PMIS as very low on Industrial Productivity, 14 as low, 28 give neutral response, 21 respondents rate high and remaining 28 as very high.

Among 100 respondents, 7 rate PMIS as very low on Service Quality, 15 as low, 19 give neutral response, 30 respondents rate high and remaining 29 as very high.

Among 100 respondents, 10 rate PMIS as very low on Management Culture, 11 as low, 28 give neutral response, 21 respondents rate high and remaining 28 as very high.

Perceptions respondents about PMIS achieving the specified project objectives with respect to the categories as: a) Strongly agree; b) agree; c) neither agree nor disagree; d) disagree; e) Strongly disagree.

From the above graph, 26 respondents agree and 16 respondents strongly agree that PMIS have to meet specified project objectives, 38 respondents neither agrees nor disagrees 14 disagree and 6 strongly disagree.

The project management Information system use has a positive effect on the organization work structure is analyzed with respect to the categories as: a) Strongly Disagree; b) Disagree; c) Neutral; d) Agree; e) Strongly Agree

From the above graph, we can observe that 33 respondents agree, 23 respondents strongly agree that PMIS had a positive effect on your organization, 22 respondents neither agree nor disagree, 13 respondents disagree and 9 strongly disagree

Different skills required in implementing PMIS in the Organization as: a) Technical skills/ knowledge training; b) Management skills/ development; c) Communication skills; d) Customer service; e) Software related/ technology related.

Among the 100 respondents 23 feel that technical skills are needed, 20 feel Management skill s are needed for PMIS, 17 think Communication skills needed, 19 think customer care needed and remaining 21 think software needed.

Satisfaction with the PMIS software being used in given company is analyzed with respect to categories as: a) Highly satisfied; b) Satisfied; c) neutral; d) dissatisfied; e) Highly dissatisfied.

Among the 100 respondents, 26 were highly satisfied with PMIS, 31 satisfied PMIS, 29 were dissatisfied, 13 were dissatisfied and the remaining wee highly dissatisfied.

SUMMARY AND DISCUSSION

I. Carefully assessing the needs, objectives, Scope and the resources to be used in the Construction Companies.

II. Determine the skills, knowledge, and attitudes that participants need to develop when working on the Projects.

Figure 1: PMIS in the Organization: User Friendly

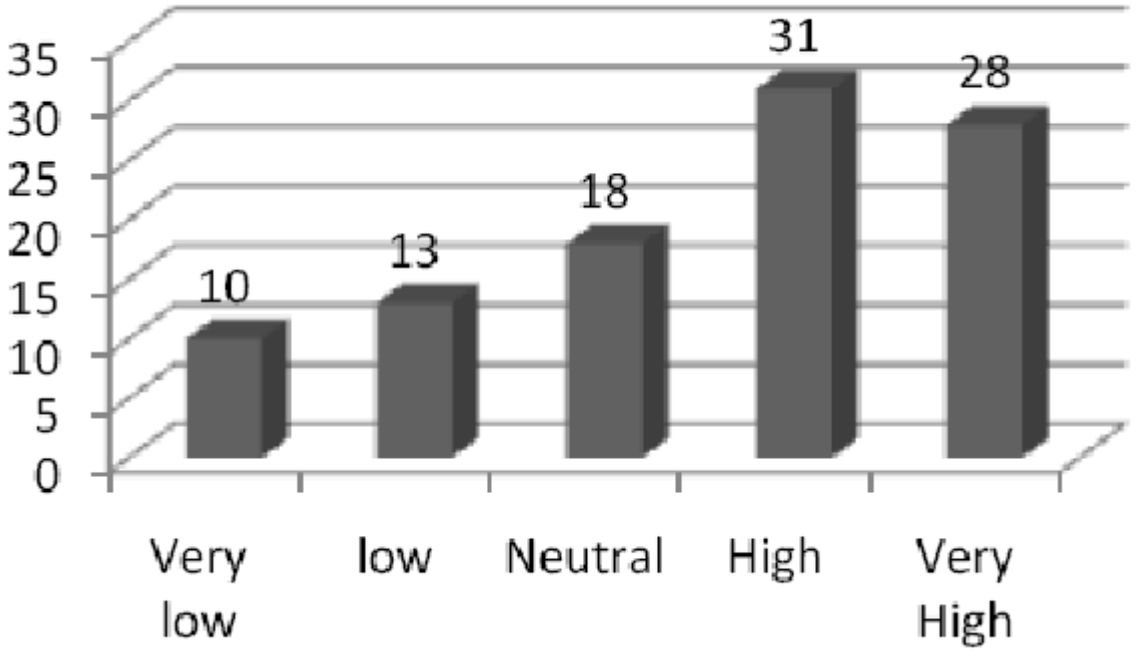


Figure 2: PMIS in the Organization: Industrial Productivity

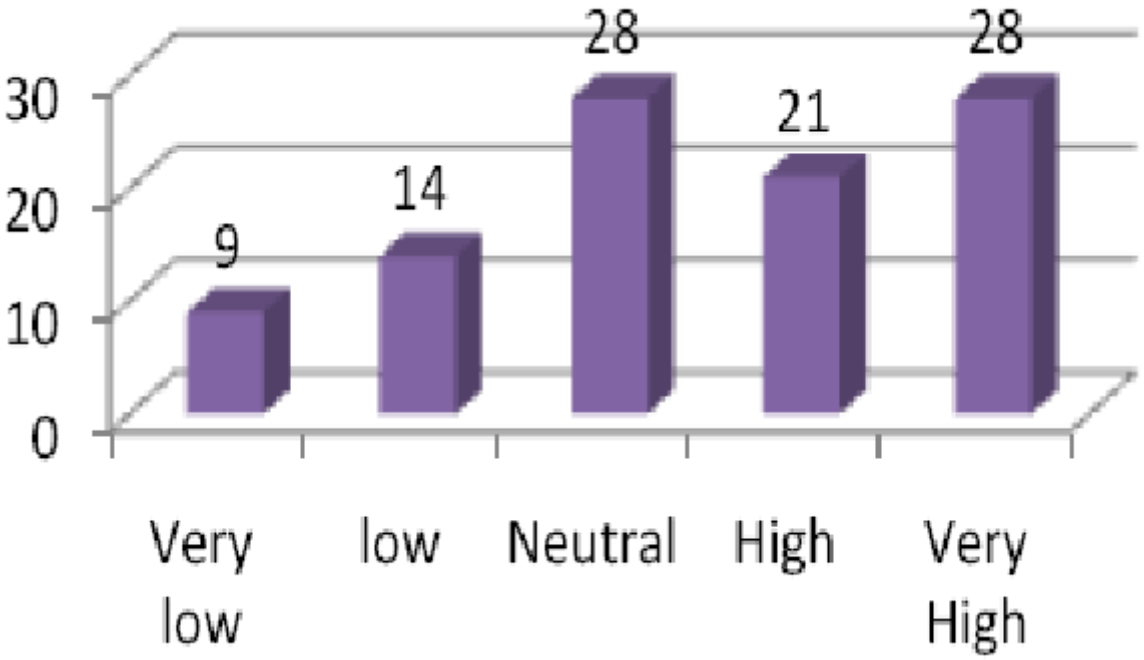
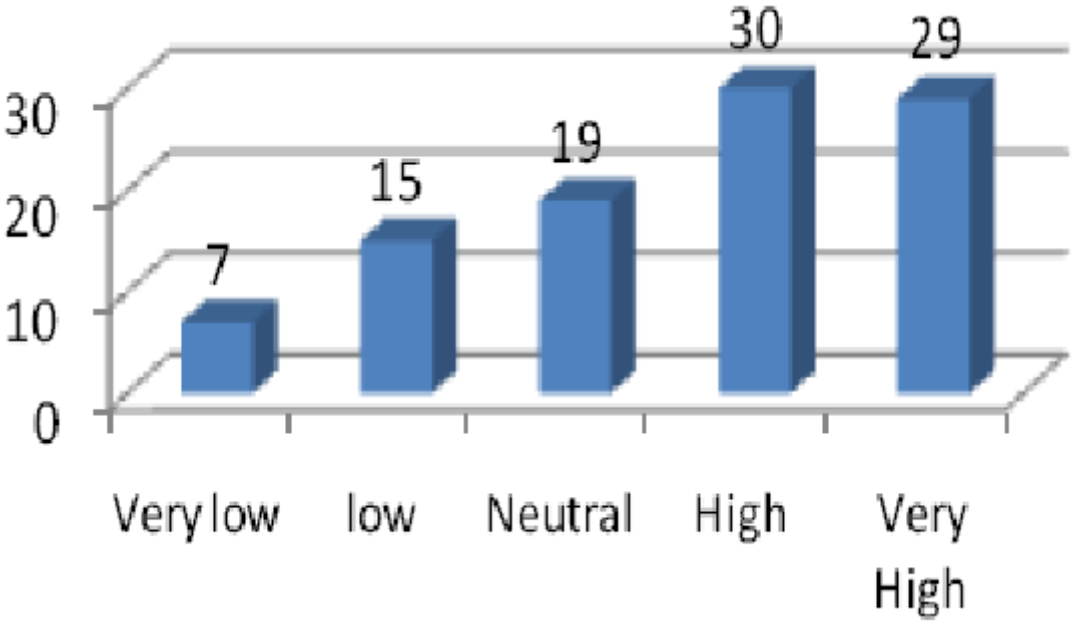


Figure 3: PMIS in the Organization: Service Quality



III. The project needs to be defined and the expertise that should be utilized should be included.

IV. Projects should be evaluated in an efficient manner by team of IT staff working on a particular project.

V. The project details must be shared with the members of the project management team by the project coordinator

VI. The role and responsibilities related to the project must be clearly defined.

VII. Discipline regarding cost, time and quality is necessary while working on a particular project.

Figure 4: PMIS in the Organization: Management Culture

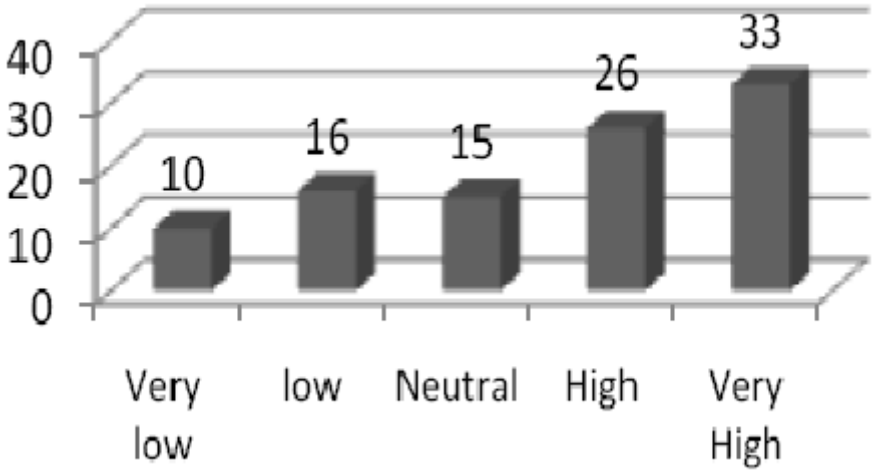


Figure 5: PMIS in the Organization: Achieving Specified Goals

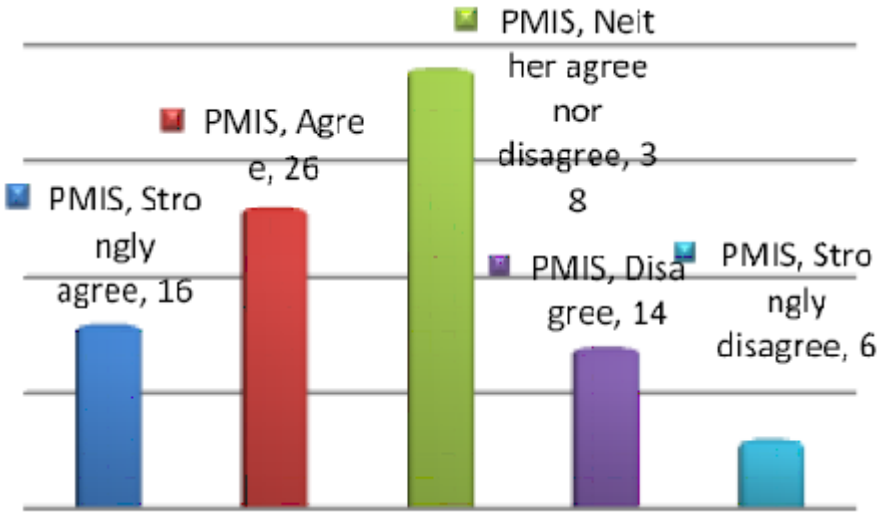


Table 1: Liker Scale	
Liker Scale	No of Respondents
Strongly agree	16
Agree	26
Neutral	25
Disagree	38
Strongly disagree	14
Total	100

Table 2: Impact of PMIS	
Impact of PMIS	No of Respondents
Strongly agree	23
Agree	33
Neutral	22
Disagree	13
Strongly disagree	09
Total	100

Figure 6: PMIS in the Organization: Positive Effect

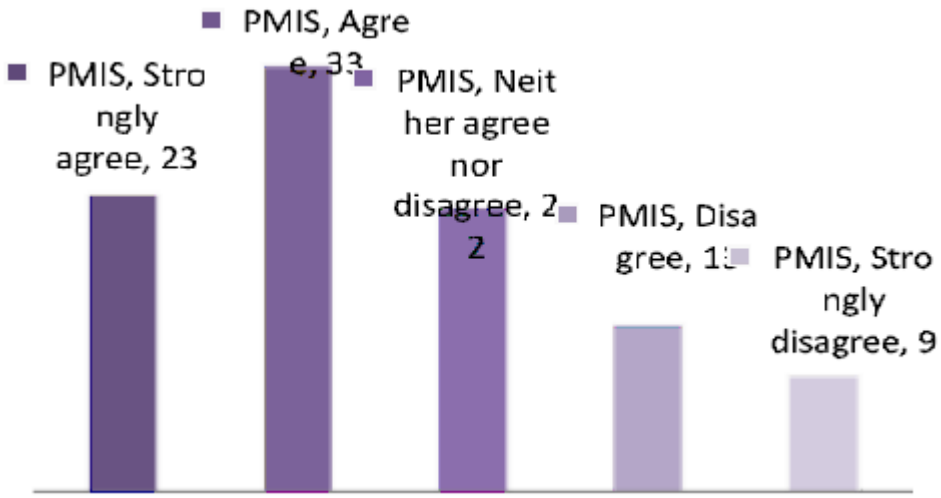


Figure 7: PMIS implementation with different skills

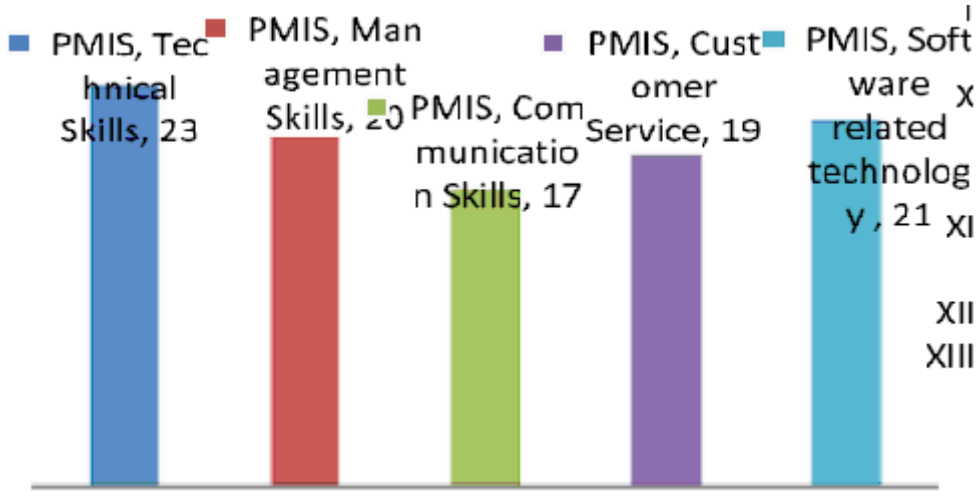
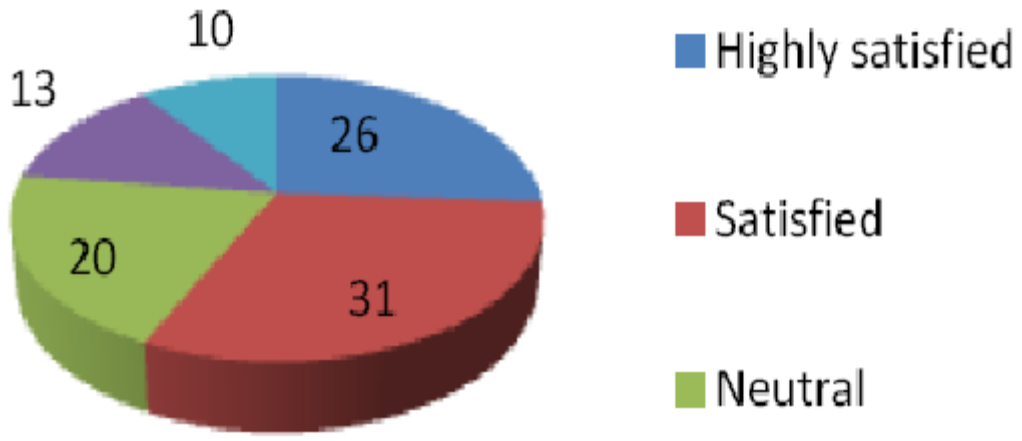


Figure 8: PMIS Satisfaction in the Organization



VIII. Contingency plans should be prepared in advance to handle unexpected crises and deviations from the original plans.

IX. The Project manager must monitor the progress of the project from time to time.

X. The post project review is necessary to know the problems faced by the stakeholders connected with the project and suitable action must be taken.

XI. The Modern tools and techniques must be used in Managing the Project.

XII. Understanding and applying the project life cycle.

XIII. Suggestions of all the stake holders must be taken before starting the new project by the Companies.

CONCLUSION

Project management information techniques and processes draw on the wider knowledge and skills developed from organizational experience and studying management theory and practice. Many of the techniques used in project management such as teambuilding, decision making, financial management and delivering outcomes, are used regularly in the management of organizations and service delivery. Employees develop these skills through experience, staff training and education. However, when applied to project situations, these skills gain an energy that focuses on achievement and delivery over a specific time period. Project management offers challenges that can be more visible and accountable than the more mainstream activities within an organization. The study on PMIS was undertaken to get knowledge of the effectiveness of PMIS strategies in an organization. The present study is taken up with the aim of studying the approach of the IT companies in developing managing and executing of project management tools and techniques, the policies and methods of training, the challenges faced in the training execution and impact of the training programs on the employees and their productivity levels.

REFERENCES

1. Liberatore M J and Pollack-Johnson B (2003), "Factors influencing the usage and selection of project management software", *IEEE Trans Eng Manage,* Vol. 50, No. 2, pp. 164–74.
2. Scotsman.com. Athens counting cost of the Olympics. The Scotsman 2005, August 4 , <http://news.scotsman.com/topics.cfm?tid=1137&id=1726242005>.
3. CTV.ca News Staff. Conservatives move to disarm long-run registry, June 19, 2006, 11:51PM ET, <http://www.ctv.ca>.
4. Wikipedia.CostOverrun, <http://en.wikipedia.org/wiki/Cost_Overrun>;accessed 23.02.2007..
5. White D, Fortune J (2001), "Current practice in project management – an empirical study", *Int J Project Manage,* Vol. 20, pp. 1–11.
6. Light M, Rosser B and Hayward S (2005), "Realizing the benefits of projects and portfolio management", Gartner, Research ID G00125673, 4 January, pp. 1–31.
7. Peters T and Waterman D L (1982), *In search of excellence*, New York: Warners Books, p. 6.
8. Cleland D J and King W R (1983), *Systems analysis and project management*, New York: McGraw-Hill.
9. Raymond L (1987), "Information systems design for project management: a data modeling approach", *Project Manage J,* Vol. 18, No. 4, pp. 94–9.
10. Winter M, Smith C and Morris P (2006), "Directions for future research in project management: the main findings of a UK government-funded research network", *Int J Project Manage*, Vol. 24, pp. 638–49.
11. Amami M, Beghini G and La Manna M (1993), "Use of project management information system for planning information systems development projects", *Int J Project Manage*, Vol. 11, No. 1, pp. 21–8.
12. Brackett S W and Isbell A M (1989), "PMIS – an integrated approach for the management and distribution of project information", *Project Manage J.,* Vol. 20, No. 3, pp. 5-10.
13. Jaafari A, *Time and priority allocation scheduling technique for projects. Int*; Vol. 14, No. 5, pp. 289–99.
14. Herroelen W (2005), "Project scheduling – theory and practice", *Prod Oper Manage,* Vol. 14, No. 4, pp. 413–32.

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E-mail: editorijmrbs@gmail.com or editor@ijmrbs.com
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