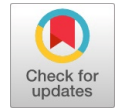# A Research on Skills of Project Managers and Success of Projects in Information Technology (IT) Companies in Bengaluru City

B. Murali, S. Venkatesh

ABSTRACT--- Projects need accurate planning and are highly challenging to employees and project managers in comparison with their regular works. Since, project is a central part of Information Technology (IT) companies, they search skilled and talented project managers and employees in order to achieve higher level of success in their projects. Team management, domain knowledge, professionalism and project management are important skills of project managers in IT companies. Significant difference is prevailing among profile of project managers and their skills in IT companies. Domain knowledge, professionalism, project management and team management skills of project managers have significant and positive influence on success of projects in IT companies. In order to improve skills of project managers and success of projects in IT companies, they should give some kind of authority to their team members and they must have complete knowledge on outcome.

Key Words - IT Companies, Project Managers, Skills, Success

1. INTRODUCTION

Success of project is very important for all type of companies for their very existence and sustainable operations in a highly competitive business atmosphere. Project success is highly depending upon skills, knowledge and experience of project managers and employees of companies. Project is an exclusive process comprising of a set of synchronized and managed actions within specific time period, budget and resources carrying out to meet the objectives with specific requirements. At the same time, projects need accurate planning and are highly challenging to employees and project managers in comparison with their regular works. Since, project is a central part of Information Technology (IT) companies, they search skilled and talented project managers and employees in order to achieve higher level of success in their projects.

Further, project managers in IT companies have to develop new and improve existing skills which assist them to lead their team members in the most challenging and vibrant IT project environments. Project managers not only

having skills and knowledge, but they have abilities to maximize performance of their team members.

2. REVIEW OF LITERATURE

Hwang and Ng (2012) concluded that communication, teamwork, interpersonal, decision making and problem solving skills of project managers had positive and significant impact on level of success of projects.

Buganza et al (2013) revealed that hard and soft skills of employees were positively and significantly influencing success of projects. They indicated that interpersonal, communication, teamwork, and problem solving skills had positive and significant influence on project success.

Liikamaa (2015) showed that problem solving, leadership, analytical and decision making skills of project managers were positively affecting success of projects and their skills were improved through proper and adequate trainings. They found that leadership and communication skills of manager had significant and positive association with success rate of projects.

Al-Khawaldah and Sharabati (2017) concluded that working experience, cost and time management skills and community and leadership skills of project manages were influencing rate of projects. They revealed that professionalism, team management and commitment, domain knowledge, project management, people skills, time management, communication and personal features of project managers were most important skills of project managers that affected success of the projects.

3. OBJECTIVES OF THE STUDY

1. To study skills of project managers in IT companies.
2. To scrutinize difference among profile of project managers and their skills in IT companies.
3. To analyze the influence of skills of project managers on success of projects in IT companies.

4. HYPOTHESES OF THE STUDY

1. There is no significant difference among profile of project managers and their skills in IT companies.
2. There is no significant influence of skills of project managers on success of projects in IT companies.

B. MURALI, MBA., Ph.D., (Part-Time) Research Scholar, PRIST School of Business, PRIST University, Vallam, Thanjavur. Pin Code – 613 403, Tamil Nadu State.
Dr. S. VENKATESH, MBA., M.Phil., Ph.D., Associate Professor & Research Supervisor, PRIST School of Business, PRIST University, Vallam, Thanjavur. Pin Code - 613 403, Tamil Nadu State.

428

5. METHODOLOGY

The present study is carried out in Bengaluru city. Project managers in IT companies are chosen by using simple random sampling method and questionnaire method is used to gather data from 250 project managers in IT companies. Percentages are computed for understating profile of project managers and mean and standard deviation are worked out to know skills of project managers. t-test and F-test are used to scrutinize difference among profile of project managers and their skills in IT companies.

6. RESULTS AND DISCUSSION

6.1. PROFILE OF PROJECT MANAGERS IN IT COMPANIES

The profile of project managers in IT companies is given in Table-1. The findings clarify that 56.40 per cent of project managers are males, while, 43.60 per cent of them are females and 31.20 per cent of them are falling under age category of 36 – 40 years, while, 12.80 per cent of them are falling under age category of less than 30 years.

The findings disclose that 28.40 per cent of project managers are B.E. holders, while, 14.00 per cent of them are M.Tech holders and 34.40 per cent of them are bearing 9 – 12 years of working experience, while, 16.40 per cent of them are bearing less than four years of working experience and 38.00 per cent of them are earning monthly income of Rs.50,001 – Rs.70,000 and 13.60 per cent of them earning monthly income of below Rs.50,000.

Table-1. Profile of Project Managers in IT Companies

Profile	Number of Project Managers	Percentage
Gender		
Male	141	56.40
Female	109	43.60
Age Category		
Less than 30 Years	32	12.80
31 – 35 Years	45	18.00
36 – 40 Years	78	31.20
41 – 45 Years	52	20.80
More than 45 Years	43	17.20
Education		
B.E.	71	28.40
M.E.	44	17.60
B.Tech.	51	20.40
M.Tech	35	14.00
M.C.A.	49	19.60
Working Experience		
Less than 4 Years	41	16.40
5 – 8 Years	77	30.80
9 – 12 Years	86	34.40
More than 12 Years	46	18.40
Monthly Income		
Below Rs.50,000	34	13.60
Rs.50,001 – Rs.70,000	95	38.00
Rs.70,001 – Rs.90,000	73	29.20
Above Rs.90,000	48	19.20

6.2. SKILLS OF PROJECT MANAGERS IN IT COMPANIES

The skills of project managers in IT companies are studied and the results are given as below.

6.2.1. Team Management

The team management of project managers in IT companies is studied and the results are given in Table-2.

Table-2. Team Management of Project Managers in IT Companies

Team Management	Mean	Standard Deviation
I motivate my team members effectively	3.90	1.03
I have good understanding with my team members	3.86	1.05
I share information with my team members efficiently	3.82	1.04
I always give authority to my team members	3.34	1.06
I give feedback to my team members regularly	3.84	1.01

Source: Primary Data

The project managers in IT companies are agreed with they motivate their team members effectively, they have good understanding with their team members, they share information with their team members efficiently and they give feedback to their team members regularly, while, they are neutral with they always give authority to their team members.

6.2.2. Domain Knowledge

The domain knowledge of project managers in IT companies is studied and the results are given in Table-3.

Table-3. Domain Knowledge of Project Managers in IT Companies

Domain Knowledge	Mean	Standard Deviation
I clearly understand requirements of business domain	3.88	0.98
I have capability to categorize stakeholders	3.78	1.02
I have capacity to engage end users	3.75	1.07
I have complete knowledge on outcome	3.30	1.03
I document business processes preciously	3.80	1.01

Source: Primary Data

The project managers in IT companies are agreed with they clearly understand requirements of business domain, they have capability to categorize stakeholders, they have capacity to engage end users and they document business processes preciously, while, they are neutral with they have complete knowledge on outcome.

6.2.3. Professionalism

The professionalism of project managers in IT companies is studied and the results are given in Table-4.

Table-4. Professionalism of Project Managers in IT Companies

Professionalism	Mean	Standard Deviation
I have accountability for project activities	3.92	0.95
I show high degree of ethics for project	3.87	1.02
I involve and contribute to the project	3.83	1.04
I interact with professionals to learn project related tasks	3.39	1.05
I am committed to the project	3.79	1.06

Source: Primary Data

The project managers in IT companies are agreed with they have accountability for project activities, they show high degree of ethics for project, they involve and contribute to the project and they are committed to the project, while, they are neutral with they interact with professionals to learn project related tasks.

6.2.4. Project Management

The project management of project managers in IT companies is studied and the results are given in Table-5.

Table-5. Project Management of Project Managers in IT Companies

Project Management	Mean	Standard Deviation
I manage scope of the project very well	3.94	0.93
I carry out the project according to plan	3.91	0.95
I have better control on cost of the project	3.85	0.97
I complete the project within time limit	3.81	0.99
I eliminate potential risks in the project	3.37	1.04

Source: Primary Data

The project managers in IT companies are agreed with they manage scope of the project very well, they carry out the project according to plan, they have better control on cost of the project and they complete the project within time limit, while, they are neutral with they eliminate potential risks in the project.

6.3. PROFILE OF PROJECT MANAGERS AND THEIR SKILLS IN IT COMPANIES

To scrutinize difference among profile of project managers and their skills in IT companies, t-test and ANOVA (Analysis of Variance) test are done and the results are given inTable-6.

Table-6. Difference among Profile of Project Managers and Their Skills in IT Companies

Particulars	t-Value / F-Value	Sig.
Gender and Skills	5.248** (t-value)	.000
Age Category and Skills	4.630**	.000
Education and Skills	5.874**	.000
Working Experience and Skills	4.950**	.000
Monthly Income and Skills	5.765**	.000

** Significant at 1 % level

The t-value and F-values are elucidating significant difference exits among profile of project managers and their skills in IT companies. As a result, the null hypothesis is not accepted.

6.4. INFLUENCE OF SKILLS OF PROJECT MANAGERS ON SUCCESS OF PROJECTS IN IT COMPANIES

To analyze the influence of skills of project managers on success of projects in IT companies, multiple regression analysis is used and the results are given inTable-7. R^2 and adjusted R^2 are 0.55 and 0.53 and these values explain the regression model has good fit and it displays 53 per cent of variation in dependent variable is contributed by independent variables. The F-value of 19.730 is illustrating the model is significant at one per cent level.

Table-7. Influence of Skills of Project Managers on Success of Projects in IT Companies

Skills of Project Managers	Regression Co-efficients	t-Value	Sig.
Intercept	1.014**	12.436	.000
Team Management (X_1)	.370**	5.108	.000
Domain Knowledge (X_2)	.502**	7.724	.000
Professionalism (X_3)	.456**	6.580	.000
Project Management (X_4)	.415**	5.852	.000
R^2	0.55	-	-
Adjusted R^2	0.53	-	-
F	19.730	-	.000

** Significant at 1 % level

The findings demonstrate that domain knowledge, professionalism, project management and team management skills of project managers are positively and significantly influencing success of projects in IT companies at one per cent level. Accordingly, the null hypothesis is not accepted.

7. CONCLUSION

The findings of this study demonstrate that team management, domain knowledge, professionalism and project management are important skills of project managers in IT companies. Significant difference is prevailing among profile of project managers and their skills in IT companies. Domain knowledge, professionalism, project management and team management skills of project managers have significant and positive influence on success of projects in IT companies. In order to improve skills of project managers and success of projects in IT companies, they should give some kind of authority to their team members and they must have complete knowledge on outcome. In addition, project managers must interact with professionals to learn project related tasks and they should reduce or eliminate potential risks associated with the projects.

REFERENCES:

1. Buganza, Tommaso, Kalchschmidt, Matteo, Bartezzaghi, Emilio, & Amabile, Davide. (2013). Measuring the impact of a major project management educational program: The PMP case in Finmeccanica, *International Journal of Project Management,* 31, 285-298.
2. Hwang, B.G., & Ng, W.J.. (2012). Project management knowledge and skills for green construction: overcoming challenges. *International Journal of Project Management*, 31(2), 272-284.
3. Kirsi Liikamaa. (2015). Developing a project manager's competencies: A collective view of the most important competencies. *Procedia Manufacturing*, 3, 681-687.
4. Suhaib Ahmad Al-Khawaldah, & Abdel-Aziz Ahmad Sharabati. (2017). *The impact of project managers' competencies on project's success*. Unpublished Master Thesis, Middle East University, Malaysia.

431