

## **SITProMP: A Simplistic Approach towards Managing IT Projects<sup>1</sup>**

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### **Abstract**

Simplistic IT Project Management Practice (SITProMP) is a generic framework towards IT Project Management or ITPM. ITPM is somewhat different than Project Management in other fields. There exists several principles, methodologies and approaches for managing projects. SITProMP considers existing approaches towards PM and presents a simplistic principle-based framework for ITPM. SITProMP offers agility and proposes to manage IT projects through any suitable methodology, tools or approaches towards PM that may fit in. SITProMP complements all existing approaches and principles for ITPM; and can encapsulate all existing tools and technologies for ITPM. Though primary focus of SITProMP is on IT projects, it can be adapted to projects in any other fields, and thus customizable. The foundation for SITProMP is the existing knowledge bases in PM.

**Keywords:** IT Project, IT Project Management, Project Management, Project Management Principle.

### **Introduction**

Project Management (PM) needs solid planned approach to maximise the probability of project success; as failure in IT projects largely are management related (Schmidt, Lyytinen, Keil & Cule, 1996). Projects are unique and there are several factors that must be planned to manage a project. PM has been given great deal of thought and research. Several tools, methodologies, principles and frameworks are available for PM. Summer (1999) states the PM methodology as a critical success factor. To the best of our knowledge, adequate research does not exist to find out the impact of using simplistic or complex approach towards PM and its subsequent impact on project success do.

To follow any specific framework or methodology, it is important that all the members of a project team should become familiar with the framework or methodology. It is a reality that people move around organisations, and people leave one to join another. The training to learn any PM framework or methodology incurs some overheads as they are not related to the projects themselves. Besides, when people switch to another job, if the organisation they join uses a different framework or methodology, they need to re-educate themselves to cope with the new job. This may not only be inconvenient for an

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employee but may also be an indirect contributing factor towards lower employee morale that does not essentially originate from any work environment; but rather from an overall context of the job marketplace and industry. A simple principle-based framework that does not require extensive training or rely on any of the existing tools for PM may help to overcome this issue. Besides, if a framework exists on which only a project manager is required to have expertise on and releases the necessity of extensive training for the rest of a project team; it might help a project team to focus more on the project activities instead of caring about the bits and pieces of the framework they are following. This is the motivation behind proposing SITProMP.

The rest of the paper is organised as follows: Existing approaches towards PM are discussed and analysed in Literature Review. The section SITProMP illustrates the framework presented in this paper. We discuss possible and planned further research in Future Developments section.

## Literature Review

There are several structured approaches towards project management, either in the form of methodology, framework or principle. Each approach comes with its own standards, procedures and jargons. IT projects are distinct in that, technologies play an important role in IT projects (Orlikowski & Lacono, 2001). Unlike projects in all other fields, IT projects can be accomplished by a team of geographically dispersed people (Maznevski & Chudoba, 2008). Martinic, Fertalj and Kalpic (2012) argue that existing PM methodologies are not entirely suitable for IT projects involving virtual team (i.e. a geographically dispersed project team).

Some of the leading PM methodology of frameworks are PMBOK, PRINCE2 and CMMI. PMBOK is a widely accepted standard in PM which has 42 processes. All these processes are organised in five process groups (Fitsilis, 2007; Rdiouat, Nakabi, Kahtani & Semma, 2012). PRINCE2, which is a process-based approach towards PM, is structured around principles, themes and processes. It has seven principles, seven themes and seven processes (TSO, 2018). CMMI provides a PM framework for engineering projects. It comes with 22 process areas (Rdiouat et al. 2012).

Pich, Loch and Meyer (2002) suggest that the existing PM methodologies advocate partially conflicting approaches. The chosen methodology for a project influences the way a project is managed, and as mentioned by Nassa and Yadav (2012), effective management is crucial for project success. The importance of effective PM stages for project success is also ascertained by Stamelos (2010). Nelson (2007) mentioned a case study where complex nature of a project “overwhelms” both vendor and client’s PM capability leading to a failure project. Hewagamage and Hewagamage (2011) state that ad-hoc interpretation of PM jargon creates confusion for managing IT projects. Probably the stringent nature of its successors (Maurer, Cohn, Griffiths, Highsmith, Schwaber, &

Kruchten, 2004) leads to the development of Agile approach for PM. Agile helps to cope with emerging requirements and thus maximising the probability of project success in a rapid emerging and changing world of IT requirements from the end-users (Cervone, 2010). As IT projects are somewhat different compared to projects in other fields, prototyping limits risk (Fitsilis, 2007) by helps to better understand the business requirements – this is one of the strengths that gave Agile its popularity. For the development team, to concentrate on the above activity and to focus more on delivering product, they should be immune from the overwhelming maintenance related PM activities and should be given their scope only within the product development or producing artefacts without thinking about PM.

Mohan and Ahlemann (2010) argue that the existing PM methodologies for IT projects are often rejected by users. “The project management worked out a comprehensive and differentiated offer of management methods. The abundance of these methods results from the complexity and specificity of projects and from individual experiences and preferences of project managers and participants” (Kaczorowska, Motyka & Sloniec, 2016, pp. 15). The above study suggests the need for a simplistic approach for managing IT projects. There is not much evidence of managing IT project artefacts from a security perspective, but opinions exist on awareness of information security within the context of PM. Few examples of such opinions can be found in Biswas (2018), Ismail (2017), and Alecu, Pocatilu and Capisizu (2011).

## **SITProMP**

SITProMP removes the burden of learning PM related aspects by all team members. Instead, it takes an agile perspective and encourages to use whatever is at the disposal of the project team that may deem to be a fit for purpose. It also considers the aspects that make IT projects different from projects in other areas.

The framework is based on broad categorisation of people involved in the project – the project manager and the rest of the team. SITProMP makes it important that the project team members are not overwhelmed with any kind of PM related training and knowledge.

SITProMP defines PM practices by means of two broad categories – foundations and pillars. Foundation is the fundamental category within which several features exist. These features are termed as pillars. SITProMP has two foundations – PM View and Member View. PM views are the key focus areas that a project manager needs to plan and manage. Member views are the key focus areas that a non-managerial project team member needs to carry out to achieve project deliverables.

Figure 1 illustrates SITProMP.

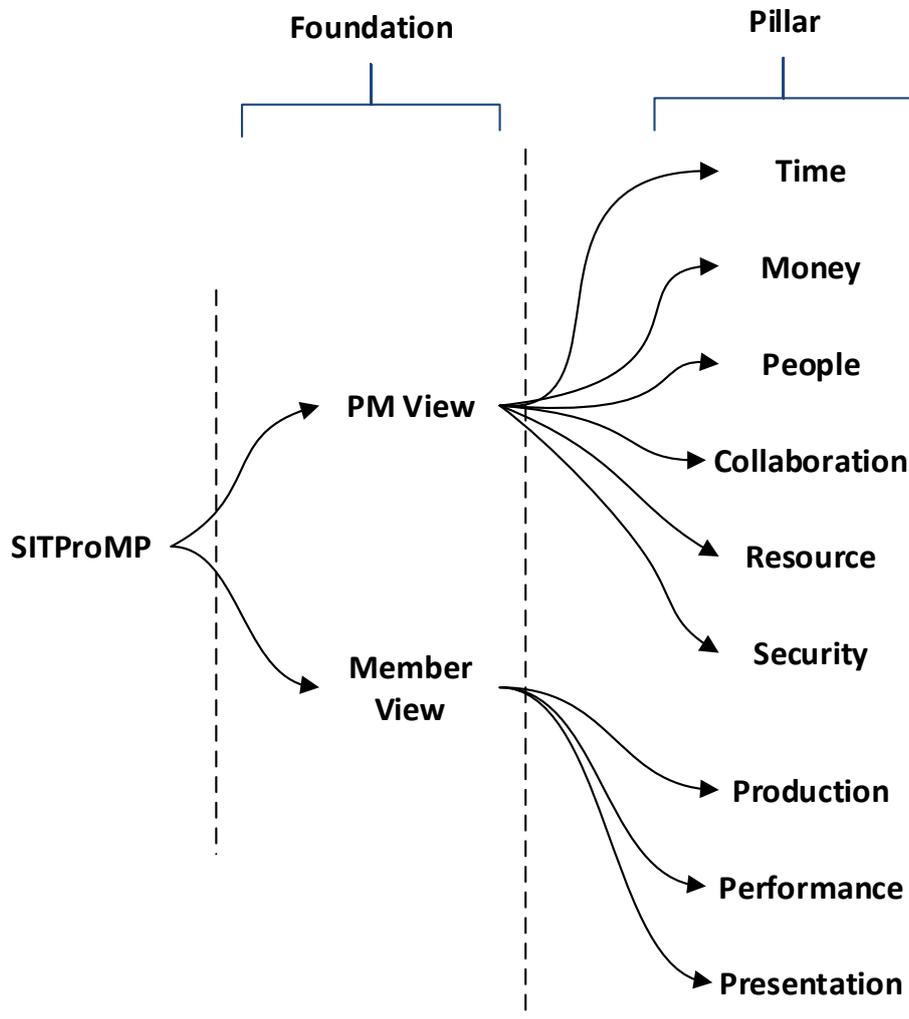


Figure-1: SITProMP

A project manager manages the pillars under PM View, and the project team members performs the pillars under Member View. For a project team member whose role is entirely non-managerial, it is only required to perform their task to yield the production (i.e. deliverables), to ensure their performance are at desired level, and to present the outcome of their work to the relevant people within the context of a project.

The pillars a project manager needs to plan and play with are time, money, people, collaboration, resource and security. The planning and management related to time, money, people and resource are addressed greatly in the existing PM approaches or frameworks, and SITProMP makes no conceptual differentiation for these terms. The only PM pillars that SITProMP stresses to be foundation knowledge areas for PM are 'collaboration' and 'security' in IT projects.

As mentioned above, the PM view pillars time, money, people and resource and their relevant management aspects bears the same meaning and significance as in other PM framework/methodologies. The only difference is that, SITProMP do not suggest any specific tool(s) for managing time, money, people and resources. Any suitable tool or approach can be used when SITProMP is followed, since it is a PM principle-based framework.

IT projects are distinct compared to other projects. In an IT project, a geographically dispersed group of people may work as a team referring to Global Virtual team (GVT) (Maznevski & Chudoba, 2000). The project team can meet at the virtual 'project site'. Collaboration for a GVT is somewhat more challenging than that of a non-GVT team. Thus, the collaboration in an IT project's context mean more than interactivity and group work. If a team is geographically dispersed, the temporal, spatial, cultural and location difference require distinct management knowledge and effort.

We argue that security is a major aspect specifically in management of IT projects. Security in computing is a concern. Any system that is developed for and deployed within computing settings must be given adequate consideration. While the security aspects of IT/IS systems are considered during the development aspects, we argue that it should be considered at the PM layer too. Considerations around hiring security consultants as part of project team members, as well as strategic planning on how security features and policies will be embedded into the project deliverables are to be included in ITPM.

### **Future Developments**

Based on the presented framework, we aim to develop a quantitative PM methodology. The envisioned PM methodology will be based on SITProMP principles. Qualitative as well as quantitative metrics will be explored for efficient PM in an informed and specific manner thus yielding better PM quality.

### **Conclusions**

The essence of PM stands in people management. A PM approach that is associated with longer learning curve may not be flexible for small medium organisations to adopt. SITProMP considers that the project managers (including other managerial roles within project organisation) are only to be learned with the framework. It is a simple approach which represents a generic framework rather than a specific methodology or process to manage a project. We take the fact into consideration that the process of managing a project should not be cumbersome with the PM tasks. This may lead to project deliverables with compromised quality. Besides, requirement of a specific methodology adds an extra and unnecessary requirement for a project team member (who is not a PM or not in a managerial role in) to educate themselves on the methodology followed.

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## References

- Alecu, F., Pocatilu, P. & Capisizu, S. (2011). *Project Management with IT Security Focus*, Journal of Mobile, Embedded and Distributed Systems, 3(4), 186-192.
- Biswas, P. (2018). ISMS: Information security in project management. Available at: <http://isoconsultantpune.com/isms-information-security-in-project-management/>, accessed on 14 December 2018.
- Cervone, H.F. (2011). Understanding agile project management methods using Scrum. OCLC Systems & Services, 27, 18-22.
- Fitsilis, P. (2007). Comparing PMBOK and Agile Project Management software development processes. SCSS. Available at: <https://pdfs.semanticscholar.org/d334/eb0f0a62b936e8d93b87f00c21e780be5daf.pdf>
- Hewagamage, C., & Hewagamage, K.P. (2011). Redesigning Framework and Approach for IT Project Management.
- Ismail, N. 2017. What project managers need to know about cyber security. Available at: <https://www.information-age.com/project-managers-need-know-cyber-security-123465431/>, accessed on 14 December 2018.
- Kaczorowska, A., Motyka, S., & Sloniec, J. (2016) , Methodical ICT Project Management, DOI: 10.22367/jem.2016.25.02, Journal of Economics and Management, Vol. 25 (3), 2016, ISSN 1732-1948
- Martinic, A., Fertalj, K., & Kalpic, D. Methodological Framework for Virtual Team Project Management. International Journal of Innovation, Management and Technology, Vol. 3, No. 6, December 2012
- Maurer, F., Cohn, M., Griffiths, M., Highsmith, J., Schwaber, K., & Kruchten, P. (2004). Agile Project Management. XP/Agile Universe.
- Maznevski, M.L., & Chudoba, K.M. (2008). Bridging Space over Time: Global Virtual Team Dynamics and Effectiveness. ORGANIZATION SCIENCE, 2000 INFORMS, Vol. 11, No. 5, September–October 2000, pp. 473–492
- Mohan, K. (2010). Understanding the Acceptance and Usage of IT Project Management Methodologies: Towards a Conceptual Model supported by Case Studies. AMCIS.
- Nassa, V.K., & Yadav, S.K. Project Management Efficiency – A Fuzzy Logic Approach. International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume -1, Issue - 3, February 2012

Nelson, R.R. (2007). IT Project Management: Infamous Failures, Classic Mistakes, and Best Practices. *MIS Quarterly Executive*, 6.

Orlikowski, W.J., & Iacono, S. (2001). Research Commentary: Desperately Seeking the "IT" in IT Research - A Call to Theorizing the IT Artifact. *Information Systems Research*, 12, 121-134.

Pich, M.T., Loch, C.H., & Meyer, A.D. (2002). On Uncertainty, Ambiguity, and Complexity in Project Management. *Management Science*, 48, 1008-1023.

Rdiouat, Y., Nakabi, N., Kahtani, K., & Semma, A. (2012). Towards a new approach of continuous process improvement based on CMMI and PMBOK. *IJCSI International Journal of Computer Science Issues*, Vol. 9, Issue 6, No 1, November 2012

Schmidt, R.C., Lyytinen, K., Keil, M., & Cule, P.E. (1996). Identifying Software Project Risks: An International Delphi Study. *ICIS*.

Stamelos, I. (2010). Software project management anti-patterns. *Journal of Systems and Software*, 83, 52-59.

Sumner, M. (1999). Critical success factors in enterprise wide information management systems projects. *SIGCPR*.

TSO (2018). *Managing Successful Projects with PRINCE2*. ISBN: 9780113315338, UK.

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