



Critical evolution report of information technology project management (ITPM) with case study

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Abstract

Numerous organizations attain their objectives by finishing projects that add to their destinations. Frequently, projects have a limited length, include various exercises and individuals, and have due dates and settled spending plans. Project managers are plan and screen these, and take corrective action when needed. When the management takes a part of the IT side, then it called as IT Project Management (ITPM). However, the recent growth in the technologies it is challenging to handle projects in between time boundaries. This report will take a look into the methodologies are needed to complete the project in between distinct time boundaries, and also it gives a brief idea about the characteristics and skills are necessary to the project manager according to the innovations in the technologies.

Keywords: ITPM, agile, prince2, and managing skills

1. Introduction

Burke 2007 [1] defines that project management is the methodology of arranging the way that progressions are actualized effectively inside an association. Numbers of people and associations today have another or re-established enthusiasm for project management. Until the 1980s, project management principally centered on giving timetable moreover data to top management in the military, PC, and development commercial enterprises. Now a day's project management includes considerably more, and individuals in every industry and each nation manage the projects. Project management is an unmistakable calling with a degree of projects, affirmations, and incredible profession opportunities. New advances have turned into a significant calculate in numerous organizations. PC equipment, programming, systems, furthermore, the utilization of interdisciplinary and worldwide work groups have profoundly changed the work environment. The accompanying insights exhibit the criticality of undertaking management in today's general public, particularly for projects including IT (Information Technology) [Berkeley 1990] [2].

Today's organizations, governments, and not-for-profit associations perceive that to be effective; they have to utilize current project management strategies, particularly for IT projects. People understand that to stay focused on the work environment; they should create aptitudes to end up great undertaking colleagues and task chiefs. They moreover understand that vast numbers of the ideas of undertaking management will help them in their regular lives as they work with individuals and technology on proper premises. [IT project survey 7th edition 2011] [3].

Projects can be vast or little and include one individual or a large number of individuals. They can be done in one day or take years to finish. As portrayed before, IT anticipates it includes utilizing equipment, programming, and systems to make an item, administration, or result. For instance, a group of students creates a cell phone application and offers it on the web; an organization adds to a driverless auto, and

a school upgrades its technology framework to give remote Internet access over the entire grounds are considered as simple examples of IT projects.

2. Methodologies that used in the ITPM

There are several methodologies, which used to implement IT Project Management (ITPM), namely AGILE, PRINCE2, PMBOK and Waterfall methods, etc. Nevertheless, most of the projects are a focus on AGILE and PRINCE2. Before knowing how these methodologies manage current projects, it is imperative to know about both methods.

2.1 Agile Methodology

Ali Barber 2014 said that in the most recent decade or something like that, the pattern to handier and even compelling routines had been the most noteworthy occasion we have seen following the use of the waterfall display in the 1970s. While still discussed in a few quarters, the advantages of agility including quicker time to market, better responsiveness to changing client necessities, and higher application quality, are sure to the individuals who have beaten these practices.

Running from Extreme Programming (XP) through the strategies for Scrum, DSDM, Feature-Driven Development (FDD), and Lean Software Development to the iterative and incremental approaches upheld by the Rational Unified Process and its agile variations, the fundamental standards of programming spryness have been now successfully connected in a massive number of activities. Moreover, various steady spry practices, for example, test-first advancement or test-driven improvement (TDD), engineer to designer and designer to-analyzer blending, and imparted code possession, have been connected inside these strategies and as stand-alone practices too.

In the most recent couple of years, various thought leaders and officials with the bravery to take a stab at something new have tried different things with applying these strategies at big business scale [BMC and Rally 2006], and the outcomes have been promising. As we have encountered

these different systems by and by, we have likewise come to comprehend that while the routines themselves change, the center practices have much in like manner. We have also seen that once understood, a considerable lot of these center practices scale locally and can be explicitly connected to the undertaking level where more prominent and more circulated groups and some degree of outsourcing is the standard.

2.2 Prince2 Methodology

In words of Bentley 2009 [5], PRINCE2 (Projects IN Controlled Environments) is a compelling methodology based strategy for project management. It is a method-based methodology for managing projects. It serves to work out who ought to be included in a project, their part, and their obligations. PRINCE2 has an arrangement of techniques to work through, and it discloses what data needs to be accumulated. The strategy is the accepted standard for project management in the UK.

The more substantial part of associations that wish to utilize PRINCE2 as their selected as project management system begins with licensed preparing, and Preparing is a need as it is an unpredictable system with numerous methods and edges; and the preparation will give everybody the learning they have to deal with a project with a comprehension of the wording utilized.

PRINCE2 is exceptionally versatile and can be connected to a wide range of projects, regardless of how enormous or little the project is; even activities enduring a couple of days will advantage from specific utilization of PRINCE2 rules. In a preparation domain, the standards sound intelligent. However, placing the hypothesis into practice can be another story. Now and again, clients of PRINCE2 battle with ultimately seeing how the system can improve a project. This can prompt a firm adherence to excessive levels of custom and subtle element - subsequently giving the impression PRINCE2 is bureaucratic and loaded with standards and regulations. Just as it could prompt improper accessible routes being taken in activities, which can

undermine the uprightness of the system and the control and management of risk, it gives in the execution of the project [Bentley 2009] [5].

Simon 2014 argued that Prince2 methodology was divided into four different elements namely Forms (i.e., portraying who is in charge of doing what and when), Subjects (zones of venture administration, which need to be persistently tended to all through the undertaking). Standards (the building squares after that the topics), and methods have been based customizing PRINCE2 to suit the needs of the project (Simon 2014).

3. Results

3.1 Selection of suitable method to new IT projects

Based on the discussion and our research both methodologies are excellent to adopt the new technologies, but the majority of projects will prefer the PRINCE II methodology, because of the process is significantly perceived and comprehended consequently offers a common vocabulary to every an integrated into a venture, which helps victorious correspondence. The process moreover accommodates the specific acknowledgment of enterprise obligations, so individuals see one other is parts and wishes. There is a characterized structure for accountability, appointment, vigor, and correspondence.

The development of PRINCE2 used to be pushed via the input from finish-purchasers, enterprise administration masters, and an audit board of 150 open and private division associations. This has triggered a non-unique high-quality practice system, which is sufficiently adaptable to be custom-made to the unique wants of distinct associations for all tasks, including agile conveyance [Hinde 2012] [6]. Moreover, PRINCE2 is about the procedure. It's best depicted in a straight manner from beginning up an undertaking, starting it, managing product conveyance inside stage limits, and afterward shutting the task down so it can be given off to the same old thing. Figure 1 representing business case study using Prince II methodology.

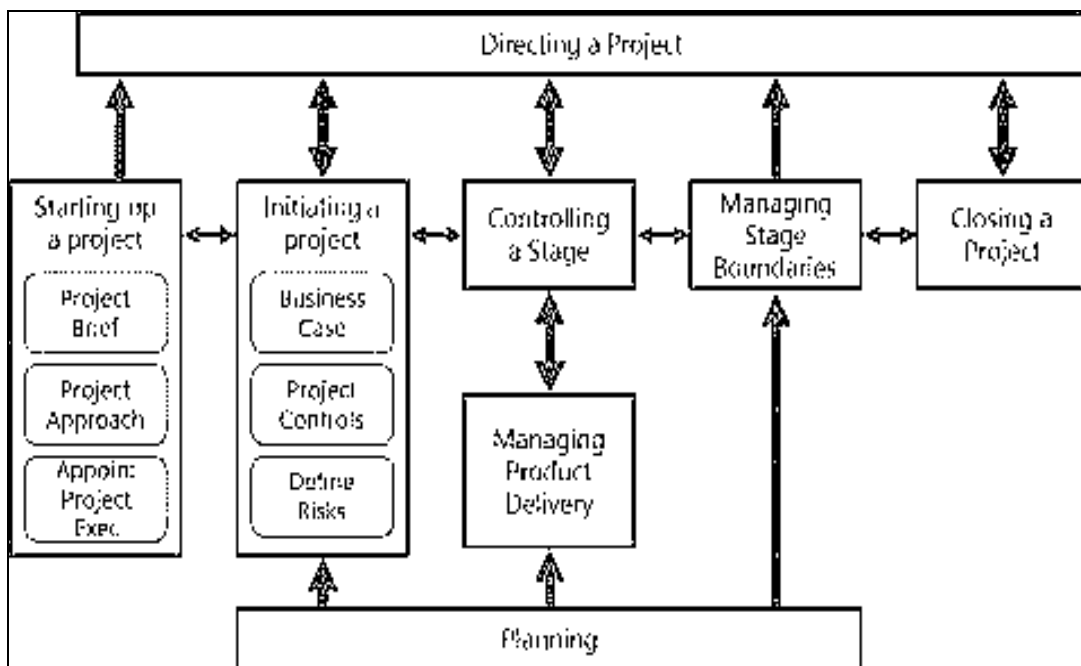


Fig 1: A business case study using Prince II methodology

Thus, Prince2’s center of attention on managing initiatives through phases with suitable stages of governance, and its mandated technique to adapting its ways to go well with the project and its atmosphere, permit Scrum and its Sprints to without difficulty operate within Stage Boundaries and inside the Managing Product delivery segment. Scrum and PRINCE2 are flawlessly suitable on this means; however, they eventually, require abilities of and expertise in each to produce an efficient task administration framework that can quickly adapt to alter.

3.2 Case Study Chester City Council

In 2004, Chester City Council began up a venture to make a great gathering way to deal with undertaking management. The developing prominence of PRINCE2 in general society

division settled on it the first decision. However, some key partners had reservations, and there was a general suspicion that PRINCE2 might demonstrate excessively bureaucratic for the Council. To confirm that a PRINCE2-style methodology could work the Council understood that acquainting this strategy would have with being an undertaking in itself (Prince2 2010).

In September 2004, Chester drew in ILX Group with a brief to help them do PRINCE2 work 'without a doubt.' The original item they distinguished was to an establishment occasion so that agents from all committee directorates could take in the standards and language of the technique. The following thing was a workshop to demystify PRINCE2 and add to a 'Prince on a page' technique that would be straightforward and simple to utilize (Figure 2).

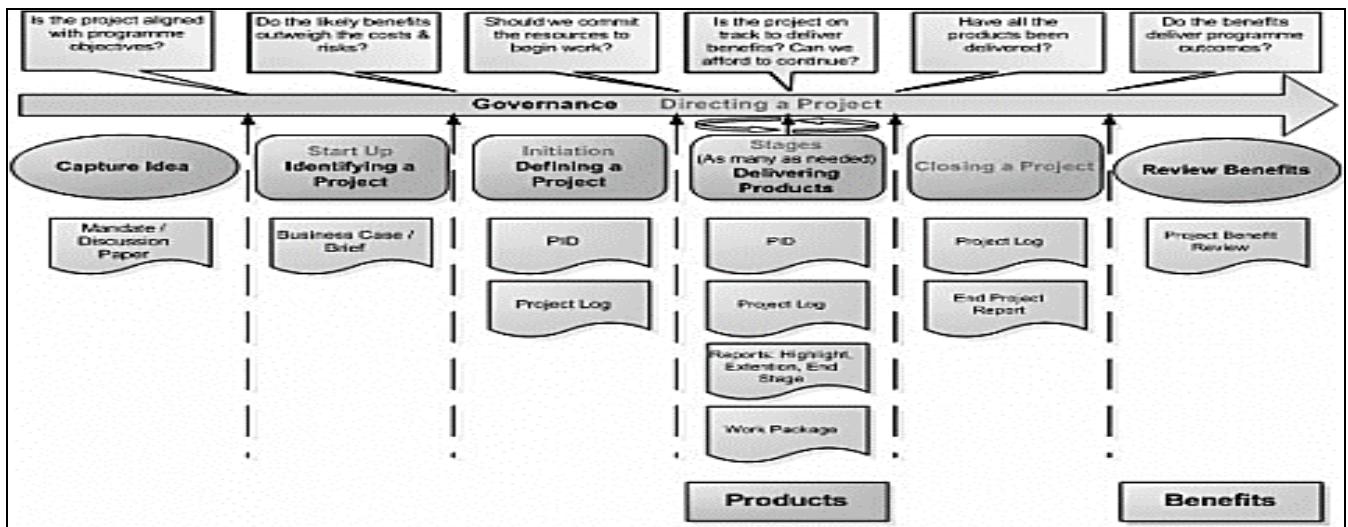


Fig 2: The workshop output

4. Discussion

In 1998, Elbik suggested that some critical skills and characteristics which are very important for the project manager. Some of them are

- **Be a reliable communicator:** Correspondence is 90% of a project manager's occupation once a day. To be an excellent communicator, we need to lead and oversee individuals through two-path communication, by communicating our thoughts and desires unmistakably and listening mindfully to colleagues, partners, and sponsors
- **Develop Integrity values:** Trustworthiness is an individual decision. To sharpen this conduct, it is necessary to be reliable in our activities, morals, and standards on every project. We can practice honesty fitness every day by deciding, being candid, fair and showing moral norms
- **Built the trust:** Collaboration in the working environment obliges building associations with the group, partners, and supporters. We will inspire confidence and increase believability from our associates by knowing your business well, approaching others with deference, and managing projects with respectability
- **Always be strategic with the goals:** Overseeing activities adequately requires being adjusted to an association's vision, mission, and vital objectives. To

remain focused, we can lift fundamental intuition forms by building up your enthusiastic insight abilities and keeping an open dialog with your administration group about organization status and general vision. Also, afterward, bear in mind to set short and long term objectives

- **Develop the multi-faceted skills:** Major organizations like Information Technology, Telecommunications, and Healthcare have experienced critical combining because of the economy. All associations are running undertakings of different sizes and multifaceted nature, so the requirement for representatives who are versed in venture administration, program administration, and in utilizing agile philosophies will keep on being accessible.
- **Built soft skills:** Our enthusiastic knowledge is generally as vital as ability. Much of the time, particularly in case of taking a look at an administration or authority position, having great delicate aptitudes like reliable communicator, smart, positive can issue you the upper hand in case we were going after a vacation or searching for your next task or advancement
- **Development in leadership Qualities:** Self-awareness and improvement are critical to project managers making their vision, qualities, and administration styles. Innovative interruption is developing as more associations keep on advancing and discover

approaches to build their image, stay aggressive in the commercial center, and hold clients. The initiative is a decision, not a position. When we decide to lead as a project manager, we were picking action.

- **Having Necessary technical skills:** To be a decent project manager, we must have active learning of the stages, programming, and projects that our organization frequently lives up to expectations with, regardless of the possibility that employment is not specialized.

Bob Herman mentioned that extraordinary project manager

needs to have enough specialized learning about zones of the projects. To have the capacity to allow themselves to a portion of the tasks, which gives IT, portable and online networking management, Allotting a percentage of the undertaking assignments and effectively finishing those tasks on time helps procure the admiration you have to deal with the project team effectively.

Competencies for the Project Manager and Checklist

The competency checklist will explain by Hazel 2010 [8] is as followed as

Table 1

Core Task	Competency	Explanation
Project Management	Planning	a) Capacity to focus proper measures for themselves and for others to accomplish the project objectives b) Prioritization of these measures c) Co-appointment of the measures
	Controlling	a) Capacity to manage methodologies and exercises in an outcome arranged a way b) Guarantees undertaking advancement
	Stress Tolerance	Capacity to work viably to tight due dates paying little mind to conceivable setbacks
Customer Management	End User Orientation	a) Experience and sharp intuition for the client's separate field of movement or area of industry and the various adjusted levels b) Capacity to "offer" the undertaking results in the association
	Personal Chemistry	Capacity to make a decent and equipped impression right from the first contact
	Analytical Skills	Capacity to concentrate on the essentials, limit for deliberation, sound judgment, and experience
Team Management	Manage people/ Leader Ship Qualities	Capacity to motivate a group to cooperate towards a typical objective and to accomplish co-operation inside the group Gives proficient backing Ability to delegate
	Sensitivity	Perceives and admires each's qualities, hobbies, and issues Reasonableness when managing others Support of a society of valuable discussion

5. Conclusion

In conclusion, the changes or developments in IT (Information Technology) industry keep going on. However, according to the project requirements, the manager needs to update themselves because the success or failure of any project will be in the hands of the project leader. So adopting correct methodology into a plan for managing current projects is also an essential aspect in it.

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