



# Software Project Management

Tamanna Kundra<sup>1</sup> & Abhinav Sharma

Electronics and Computer Science , Maharishi Dayanand University, Gurgaon, Haryana, India

[tamannakundra@gmail.com](mailto:tamannakundra@gmail.com); [Abhinav.Sharma1@aol.com](mailto:Abhinav.Sharma1@aol.com)

## ABSTRACT

*In this paper we discuss that Software projects have several properties that make them very different to other kinds of engineering project and discuss a platform where people share their skills and work on the project. In this platform the project managers make out a handbook in which all the basics and essentials about the project are laid out. It is a rich knowledge about manager's experience and view about the work atmosphere to be created and maintained. The research in the handbook enhances the previous knowledge about a software's project management. This handbook becomes the shared knowledge from personal knowledge and aids in the development of the software's project. The basics and the use of expert knowledge in managing a software project are the key factors in a proper development of the project.*

## 1. INTRODUCTION

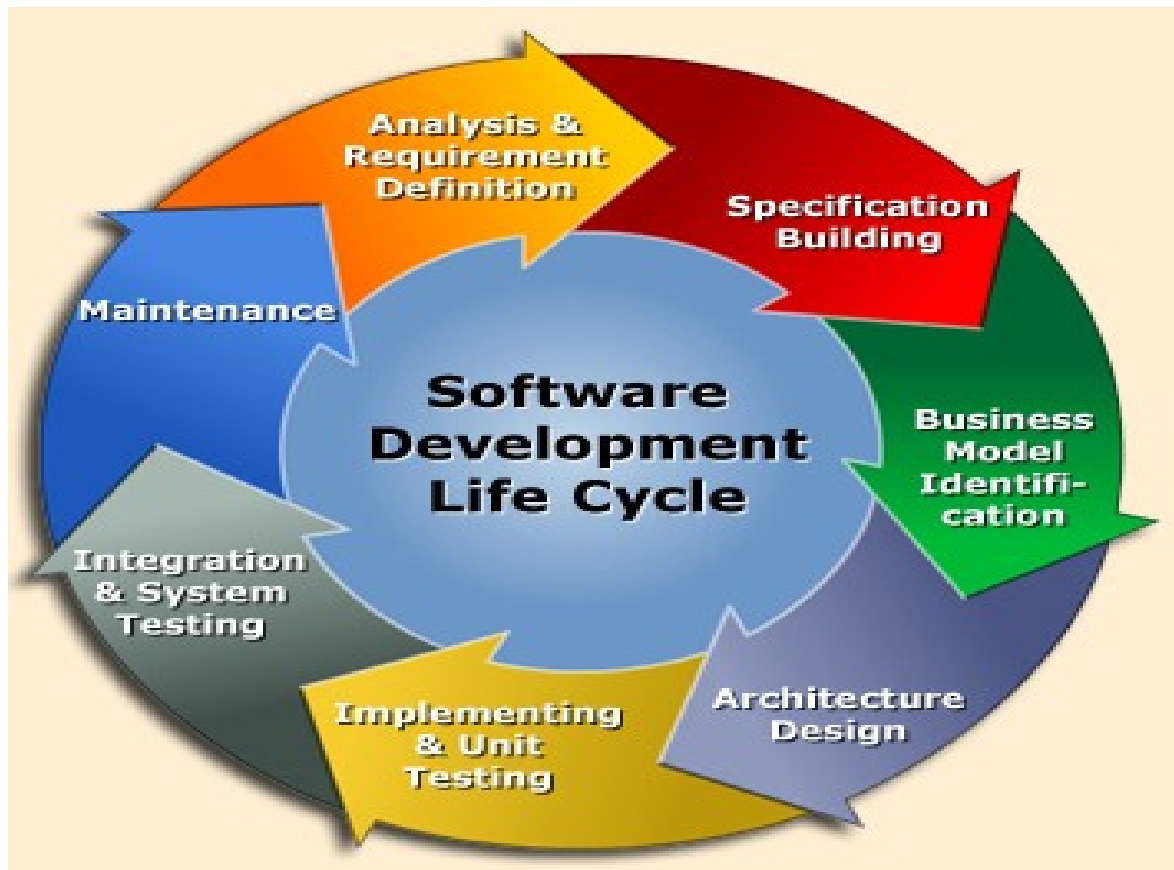
In the 1970s and 1980s, the software industry grew very quickly, as computer companies quickly recognized the relatively low cost of software production compared to hardware production and circuitry. The concerned people have ever been working on different projects since the very early days of organized activities or joint work. The very much famous the Egyptian Pyramids, the Greek Parthenon and the Great Chinese Wall are considered to be the examples of mega projects of great historic importance. Typical project management philosophy and methodologies have evolved as a special kind of management work from the modern engineering work that has been done on very large-scale military related projects. In such kind of projects an organized approach and a set of properly managed activities was considered to be the necessary work to manage the very complex

dependencies or interrelationships among a large number of related different tasks being performed by a group of different specialized persons. Specifics software project management tools are useful and often necessary, but the true art in software project management is applying the correct method and then using tools to support the method. Without a method, tools are worthless. Since the 1960s, several proprietary software project management methods have been developed by software manufacturers for their own use, while computer consulting firms have also developed similar methods for their clients

## 2. PROJECT LIFE CYCLE

In software engineering, a software development methodology (also known as a system development methodology, software development life cycle, software development process, software process) is a division of software development work into distinct phases (or stages) containing activities with the intent of better planning and management. It is often considered a subset of the systems development life cycle. The methodology may include the pre-definition of specific deliverables and artifacts that are created and completed by a project team to develop or maintain an application. Common methodologies include waterfall, prototyping, iterative and incremental development, spiral development, rapid application development, extreme programming and agile methodology. Some people consider a life-cycle "model" a more general term for a category of methodologies and a software development "process" a more specific term to refer

to a specific process chosen by a specific organization.



**SOFTWARE LIFE CYCLE DIAGRAM**

### **3. MAJOR ACTIVITIES OF MANAGEMENT**

#### **3.1 PLANNING**

- Set objectives or goals
- Develop Strategies.
- Develop Policies
- Determine courses of action.
- Make Decisions.
- Set procedures and rules.
- Develop Programs
- Forecast future situations

- Prepare budgets
- Document project plans.

#### **3.2 ORGANIZING**

- Identify and group required tasks.
- Select and establish organizational structures.
- Create organizational positions.
- Define responsibilities and authority
- Establish Position Qualification.



### 3.3 STAFFING

- Fill organizational positions
- Educate or train personnel.
- Provide for general development.
- Evaluate and appraise personal.
- Compensate.
- Document Staffing decisions.

### 3.4 CONTROLLING

- Develop standards of performance
- Measure results.
- Initiate corrective actions.
- Reward and discipline.
- Document controlling methods.

## 4. BENEFITS OF SOFTWARE PROJECT MANAGEMENT

- **Better Efficiency in Delivering Services:** Project management provides a “roadmap” that is easily followed and leads to project completion. Once you know where to avoid the bumps and potholes, it stands to reason that you’re going to be working smarter and not harder and longer.
- **Improved / Increased / Enhanced Customer Satisfaction:** Whenever you get a project done on time and under budget, the client walks away happy. And a happy client is one you’ll see again. Smart project management provides the tools that enable this client/manager relationship to continue.
- **Enhanced Effectiveness in Delivering Services:** The same strategies that allowed you to successfully complete one project will serve you many times over.
- **Improved Growth and Development Within your Team:** Positive results not only command respect but more often than not inspire your team to continue to look for ways to perform more efficiently.
- **Greater Standing and Competitive Edge:** This is not only a good benefit of project management within the workplace but outside of it as well; word travels fast and there is nothing like superior performance to secure your place in the marketplace.

➤ **Opportunities to Expand your Services:** A by-product of greater standing. Great performance leads to more opportunities to succeed.

➤ **Better Flexibility:** Perhaps one of the greatest benefits of project management is that it allows for flexibility. Sure project management allows you to map out the strategy you want to take see your project completed. But the beauty of such organization is that if you discover a smarter direction to take, you can take it. For many small-to-midsize companies, this alone is worth the price of admission.

➤ **Increased Risk Assessment:** When all the players are lined up and your strategy is in place potential risks will jump out and slap you in the face. And that’s the way it should be. Project management provides a red flag at the right time: before you start working on project completion.

➤ **Increase in Quality:** Goes hand-in-hand with enhanced effectiveness.

➤ **Increase in Quantity:** I saved the best for last. An increase in quantity is often the result of better efficiency, a simple reminder regarding the benefits of project management.

## 5. CONCLUSIONS

In this article we addressed the research questions of how software project managers draw on software project issues, various benefits of project managements, the stages of the life cycle of development of the project and how to work on them collectively.

## 6. REFERENCES

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