A Brief History of Project Management

~ By Duncan Haughey

In this history of project management, I chart all the major developments and events in the discipline as far back as there are records. Although there has been some form of project management since early civilisation, project management in the modern sense began in the 1950s.

2570 BC: The Great Pyramid of Giza Completed

The Pharaohs built the pyramids and today archaeologists still argue about how they achieved this feat. Ancient records show there were managers for each of the four faces of the Great Pyramid, responsible for overseeing their completion. We know there was some degree of planning, execution and control involved in managing this project.

208 BC: Construction of the Great Wall of China

Later still, another wonder of the world was built. Since the Qin Dynasty (221BC-206BC), construction of the Great Wall had been a large project. According to historical data, the labour force was organised into three groups: soldiers, common people and criminals. The Emperor Qin Shihuang ordered millions of people to finish this project.

1917: The Gantt chart Developed by Henry Gantt (1861-1919)

One of the forefathers of project management, Henry Gantt, is best-known for creating his self-named scheduling diagram, the Gantt chart. It was a radical idea and an innovation of worldwide importance in the 1920s. One of its first uses was on the Hoover Dam project started in 1931. Gantt charts are still in use today and form an important part of the project managers’ toolkit.

1956: The American Association of Cost Engineers (now AACE International) Formed

Early practitioners of project management and the associated specialities of planning and scheduling, cost estimating, cost and schedule control formed the AACE in 1956. It has remained the leading professional society for cost estimators, cost engineers, schedulers, project managers and project control specialists since. AACE continued its pioneering work in 2006, releasing the first integrated process for portfolio, programme and project management with their Total Cost Management Framework.
1957: The Critical Path Method (CPM) Invented by the Dupont Corporation

Developed by Dupont, CPM is a technique used to predict project duration by analysing which sequence of activities has the least amount of scheduling flexibility. Dupont designed it to address the complex process of shutting down chemical plants for maintenance, and then with maintenance completed restarting them. The technique was so successful it saved the corporation $1 million in the first year of its implementation.

1958: The Program Evaluation Review Technique (PERT) Invented for the U.S. Navy's Polaris Project

The United States Department of Defense's US Navy Special Projects Office developed PERT as part of the Polaris mobile submarine-launched ballistic missile project during the cold war. PERT is a method for analysing the tasks involved in completing a project, especially the time needed to complete each task and identifying the minimum time needed to complete the total project.


The United States Department of Defense (DOD) created the WBS concept as part of the Polaris mobile submarine-launched ballistic missile project. After completing the project, the DOD published the work breakdown structure it used and mandated the following of this procedure in future projects of this scope and size. WBS is an exhaustive, hierarchical tree structure of deliverables and tasks that need to be performed to complete a project. Later adopted by the private sector, the WBS remains one of the most common and useful project management tools.

1965: The International Project Management Association (IPMA) Founded

IPMA was the world's first project management association, started in Vienna by a group as a forum for project managers to network and share information. Registered in Switzerland, the association is a federation of about 50 national and internationally oriented project management associations. Its vision is to promote project management and to lead the development of the profession. Since its birth in 1965, IPMA has grown and spread worldwide with over 120,000 members in 2012.

1969: Project Management Institute (PMI) Launched to Promote the Project Management Profession

Five volunteers founded PMI as a non-profit professional organisation dedicated to advance the practice, science and profession of project management. The Commonwealth of Pennsylvania issued Articles of
Incorporation for PMI in 1969, which signified its official start. During that same year, PMI held its first symposium in Atlanta, Georgia and had an attendance of 83 people. Since then, the PMI has become best known as the publisher of, ‘A Guide to the Project Management Body of Knowledge (PMBOK)’ considered one of the essential tools in the project management profession today. The PMI offers two levels of project management certification, Certified Associate in Project Management (CAPM) and Project Management Professional (PMP).

1975: PROMPTII Method Created by Simpact Systems Limited

Development of PROMPTII was in response to an outcry that computer projects were overrunning on time estimated for completion and original budgets as set out in feasibility studies. It was not unusual to experience factors of double, treble or even ten times the original estimates. PROMPTII was an attempt to set down guidelines for the stage flow of a computer project. In 1979, the UK Government’s Central Computing and Telecommunications Agency (CCTA) adopted the method for all information systems projects.

1975: The Mythical Man-Month: Essays on Software Engineering by Fred Brooks

In his book on software engineering and project management, Fred Brooks's central theme is that "Adding manpower to a late software project makes it later." This idea is called Brooks's law. The extra human communications needed to add another member to a programming team is more than anyone ever expects. It naturally depends on the experience and sophistication of the human programmers involved and the quality of available documentation. Nevertheless, no matter how much experience they have, the extra time discussing the assignment, commitments and technical details as well as evaluating the results becomes exponential as more people get added. These observations are from Brooks's experiences while managing the development of OS/360 at IBM.

1984: Theory of Constraints (TOC) Introduced by Dr. Eliyahu M. Goldratt in his Novel "The Goal"

TOC is an overall management philosophy that is geared to help organisations continually achieve their goal. The title comes from the view that any manageable system is limited in achieving more of its goal by a small number of constraints, and there is always, at least, one constraint. The TOC process seeks to identify the constraint and restructure the rest of the organisation around it by using Five Focusing Steps. The methods and algorithms from TOC went on to form the basis of Critical Chain Project Management.

1986 Scrum Named as a Project Management Style

Scrum is an agile software development model based on multiple small teams working in an intensive and interdependent manner. In their paper, 'The New New Product Development Game' (Harvard Business Review, 1986) Takeuchi and Nonaka named Scrum as a project management style. Later they elaborated on it in, 'The Knowledge Creating Company' (Oxford University Press, 1995). Although Scrum is intended for management of software development projects, it can be used to run software maintenance teams, or as a general project and programme management approach.
1987: A Guide to the Project Management Body of Knowledge (PMBOK Guide) Published by PMI

First published by the PMI as a white paper in 1987, the PMBOK Guide was an attempt to document and standardise accepted project management information and practices. The first edition was published in 1996, followed by a second in 2000, and a third in 2004. The guide is one of the essential tools in the project management profession today and has become the global standard for the industry.

1989: Earned Value Management (EVM)
Leadership Elevated to Undersecretary of Defense for Acquisition

Although the earned value concept has been around on factory floors since the early 1900s, it only came to prominence as a project management technique in the late 1980s early 1990s. In 1989, EVM leadership was elevated to the Undersecretary of Defense for Acquisition, thus making EVM an essential part of programme management and procurement. In 1991, Secretary of Defense Dick Cheney cancelled the Navy A-12 Avenger II Programme because of performance problems detected by EVM. The PMBOK Guide of 1987 has an outline of Earned Value Management (EVM) subsequently expanded on in later editions.

1989: PRINCE Method Developed From PROMPTII

Published by the UK Government agency CCTA, PRojects IN Controlled Environments (PRINCE) became the UK standard for all government information systems projects. A feature of the original method, not seen in other methods, was the idea of ‘assuring progress’ from three separate but linked perspectives. However, the PRINCE method developed a reputation for being too unwieldy, too rigid and applicable only to large projects, leading to a revision in 1996.

1994: CHAOS Report First Published

The Standish Group collects information on project failures in the Information Technology (IT) industry with the objective of making the industry more successful, showing ways to improve its success rates and increase the value of IT investments. The CHAOS report is its biennial publication about IT project failure.

1996: PRINCE2 Published by CCTA

An upgrade to PRINCE was considered to be in order, and the development was contracted out, but assured by a virtual committee spread among 150 European organisations. Originally developed for Information Systems and Information Technology projects to reduce cost and time overruns; the second revision became more generic and applicable to any project type.
1997: Critical Chain Project Management (CCPM) Invented

Developed by Eliyahu M. Goldratt, Critical Chain Project Management is based on methods and algorithms drawn from his Theory of Constraints (TOC) introduced in his 1984 novel titled, 'The Goal'. A Critical Chain project network will keep the resources evenly loaded, but will need them to be flexible in their start times and to switch quickly between tasks and task chains to keep the whole project on schedule.

1998: PMBOK Becomes a Standard

The American National Standards Institute (ANSI) recognises PMBOK as a standard in 1998, and later that year by the Institute of Electrical and Electronics Engineers (IEEE).

2001: The Agile Manifesto Written

In February 2001, 17 software developers met at The Lodge, Snowbird, Utah resort to discuss lightweight software development methods. They published the Manifesto for Agile Software Development to define the approach now known by the same name. Some of the manifesto's authors formed the Agile Alliance, a nonprofit organisation that promotes software development according to the manifesto's 12 core principles.

2006: "Total Cost Management Framework" Release by AACE International

Total cost management is the name given by AACE International to a process for applying the skills and knowledge of cost engineering. It is also the first integrated process, or method of portfolio, programme and project management. AACE first introduced the idea in the 1990s and published the full presentation of the process in the 'Total Cost Management Framework'.


The fourth edition of the guide continues the PMI tradition of excellence in project management with a standard that is easier to understand and implement, with improved consistency and greater clarification. The updated version has two new processes, not in the previous versions.

2009: Major PRINCE2 Revision by Office of Government Commerce (OGC)

A major revision has seen the method made simpler and more easily customisable, a frequent request from users. The updated version has seven basic principles (not in the previous version) that contribute to project success. Overall the updated method aims to give project managers a better set of tools to deliver projects on time, within budget and with the right quality.

In September 2012, the International Organisation for Standardisation published "ISO 21500:2012, Guidance on Project Management". It is the result of five year’s work by experts from more than 50 countries. The standard is designed for use by any organisation, including public, private or community groups, and for any project, regardless of complexity, size and duration.

2012: 5th Edition of PMBOK Guide Released

The fifth edition of the guide, published in December 2012, provides guidelines, rules and characteristics for project management recognised as good practice in the profession. The updated version introduces a 10th knowledge area called, 'Project Stakeholder Management' and also includes four new planning processes.

What's Next?

With globalisation come ever bigger challenges and the need for increased speed-to-market with products and services. Projects become larger, more complex and increasingly difficult to manage. Teams are more diverse and spread across the world. The economic crisis pushes work offshore to low-cost countries, which itself presents several issues. The world is changing, and project management will need to change with it.

No doubt new techniques and better practices will arise as we push the boundaries of what is possible and new challenges face us. Human need drives us forward to a better future and with it will come improvements in the way we manage projects. When and where these developments will happen is uncertain, but they will happen.

Here's to the next one hundred years!

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