

How PMBOK© help in Product Development Projects?

PMP certification addresses the general project management concepts, which can be applied for any kind project, irrespective of the domain. It is just a collection of project management good practices, which the practitioners can choose and apply in their projects, based on their project needs.

To understand this, let us try to classify projects based on their exploratory factor. In a standard construction project or for a standard SAP implementation project, the exploratory factor (the R&D nature) of the project can be very low, where as for a new technology product development project; the exploratory factor will be very high. Based on these the project approach / strategy will vary and at the same time, the basic building blocks of project management will remain the same.

For a software project which follows the water fall model, the stages of requirements freezing, design, coding and testing happens sequentially. This is perfect, if the requirements are clear and the project's exploratory factor is low. For a new product development project, the exploratory factor and the requirements volatility are high; hence a compartmentalized waterfall approach will not work. Then we go for agile project management, where requirements, design, coding and testing phases are repeated in every iteration. That means a project following a waterfall model has just one heavy weight iteration, where as a project which is following agile project management has multiple iterations and the building blocks of both waterfall and agile remains the same (requirements, design, coding, testing, planning, risk management, quality management, human resource management, time management, procurement management, stakeholder management, communications management etc...). This is exactly what the project management body of knowledge covers. It covers the basic building blocks of project management and gives all the freedom under the sun to the project manager to tailor it to the project's needs.

The following table maps some key aspect of product development projects and the linkage to the project management body of knowledge based on which the PMP examination is based.

The product development aspect	The PMBOK correlation
Choosing the right projects to execute	Project selection methods like NPV, IRR, ROI, Cost benefit analysis, Portfolio management
The product sponsor	Sponsor roles and responsibilities
Product vision	Project charter
Project strategy	Project charter

PMBOK in Product development

Business case	Project charter
Project manager roles and responsibilities	Project charter
Product manager roles and responsibilities	Not covered explicitly
Organizational structure	Functional organization, projectized organization, matrix organization
Requirements management	High level scope definition, detailed scope definition, Brainstorming, Delphi technique, Function analysis , affinity diagrams, product breakdown structures, work breakdown structures, change management
Stakeholder management	Stakeholder identification, classification, strategies for management
Risk management	Risk identification, quantitative risk analysis, qualitative risk analysis, decision tree
Communication management	Communications requirement analysis, channel design, technology priorities, amplification factor
Human resource management	Team design, selection, Maslow's hierarchy of needs, Vrooms theory of motivation
Ethics	Professional ethics of a project manager
Project planning	Initial scope, detailed scope, work breakdown structure, AOA diagrams, AON node diagrams, Critical path, Critical chain, Rolling wave planning, resource leveling, scope, schedule, cost baselines
Project tracking	Earned value management
Project execution	Fast tracking, Crashing
Stage gates	Stage gates, Kill points
Product quality	Implied requirements, Explicit requirements, stakeholder management, and definition of quality, Ishikawa diagram, project metrics, pareto analysis, corrective actions, and preventive actions.

If we consider the total product development lifecycle comprising of;

1. Concept phase

PMBOK in Product development

2. Prototype
3. Development
4. Production
5. Marketing

The PMBOK addresses mainly the development phase.

As we can see, PMBOK is more descriptive in nature. It is just a collection of project management good practices and it is the discretion of the project manager to decide which ones to use, within his project.

Will PMP credential help in a product development scenario?

Knowledge of best practices in project management will help any manager in a product development scenario, and PMP training from a coach with product development background will help in stressing the relevancy of professional project management in product scenario. That will make the difference. Again, there should be management commitment in implementing the concepts learned in the class room.

Abbreviations

- PMBOK - Project management body of knowledge
PMP - Project management professional certification

About the author

Abrachan is a Corporate Consultant, Coach and Practitioner of Software engineering, Project management and Quality management. He has around two decades of experience in software development, quality management and project management. He started his career as a computer programmer and subsequently played the roles of Systems Analyst, Senior consultant, Project manager, Senior project manager, Head – QA, Manager – Process Engineering and Profit center head. He worked for organizations such as HCL, FEC, OTE, Think Business Networks and Novell. At Novell, he did the project management of 'Pragati', a comprehensive tool for software project management, which got accolades at Linux Bangalore, Brain share USA and Brain share Europe. At present he works for Prologic systems (private) limited, as it's Managing Director.

He is the architect of the PMPdistilled premium PMP preparatory program, which is being delivered in multiple countries successfully. He has successfully conducted several customized project management programs for several leading organizations. He is a member of the OPM3® 2007 Update Project Team, PMI, SPIN and SPI - SIG (software process improvement special interest group). He co-authored and conducted a workshop on iterative software development at the SPM-ICON, 2004 international conference on project management.

He holds a bachelors degree in Electrical engineering from Bangalore University, Masters in Quality Management from BITS Pilani, Diploma in systems management from NIIT, Certification in quality analysis from QAI USA, PMP (project management professional) certification from PMI (Project management institute), USA and is PRINCE2 and CSM (certified scrum master) certified. .

His current interests include organizational development, agile project management and PMO consulting

Contact details

mobile phone : +91 9895372115 web page : www.abrachan.org email abrachan@prologic.in
skype : pmpdistilled

