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A Comparison of PMI's PMBOK® Guide Versions 4 & 3

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The Project Management Institute – PMI announced on December 31, 2008 the availability of PMBOK Version 4, in English language. This paper informs on the differences between versions 4 and 3.



Project Management Body of knowledge – PMBOK Version 4

Initiating point

The PMI- Project Management Institute published on December 31, 2008 the fourth version of the PMBOK- Project Management Body of Knowledge in English language. This version replaces in its entirety the third version. There is a transition period to present the certification examinations up to June 30, 2009 in which exams must be presented based on Version 3. From July the 1st on all certifications will be based on Version 4.

New format: consistency and clarification

A. Format in all the processes was changed to the noun form.[1] This makes easier the understanding of the referred names for processes.

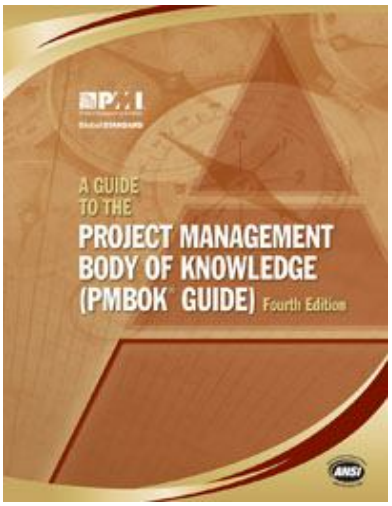
B. Processes' content was written all over again in regard to input, tools and techniques, and results or outputs in a consistent manner.

C. Clarification was made related to interaction between processes and groups of processes. Several images were added to enhance clearness.

D. Flow diagrams were added to each and all of the nine areas of knowledge. These new diagrams show in addition the documents that must be produced and updated. The project plan and the project documents are clearly distinguished.

E. To make easier studying activities the term "change request" is introduced. It applies and encompasses to version 3 terms named as "corrective action", "preventive action", "defect repair" and "requested changes".

F. The Project charter and scope statement elements are explained in detail, furnishing a huge clearness on the content that pertains to each of them.

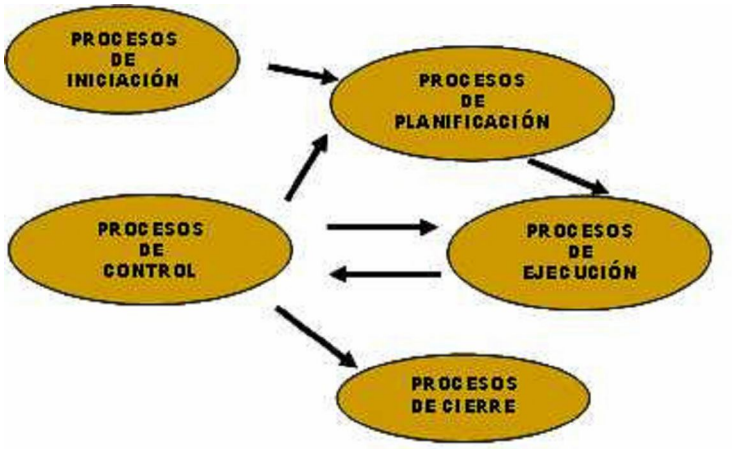


[1] This refers to verbs that are used as nouns. In Spanish language a verb in its infinitive form, preceded by an article, works as a noun and may play the role of the subject in the sentence (e.g. In the sentence "el comer no implica engordar", "el comer" works as a noun and plays the role of subject of the sentence). In English the gerund form is used for this purpose.

Changes to processes

A. Processes are now forty two (42). Formerly they were forty four (44). The groups of processes continue to be the same five (5) groups: Initiating, Planning, Execution, Monitoring and Control. The knowledge areas also continue to be the same nine (9) as before: Integration, Scope, Time, Cost, Quality, Human Resources, Communications, Risks and Procurement or Acquisitions.

B. "Develop Preliminary Scope Statement" has been removed. In the previous version sometimes it was difficult to describe the difference between the preliminary scope and the final scope leading to confusion between project managers. In this new form, work will be more consistent.



C. "Close Project" was changed into "Close Project or Phase". This process was added with the closing of a phase, which clarifies project manager's work when, in certain opportunities, project must be worked in several phases.

D. "Scope planning" has been removed. A new process named "Collect requirements" was added to cover former's process functions and to add new concepts.

E. "Manage Project team" has been reclassified from a control process into an execution process based on the practices of the contemporary project managers.

F. "Plan purchase and Acquisitions" and "Plan Contracting" have been merged into "Plan Procurements" simplifying therefore the knowledge area of procurement or acquisitions.

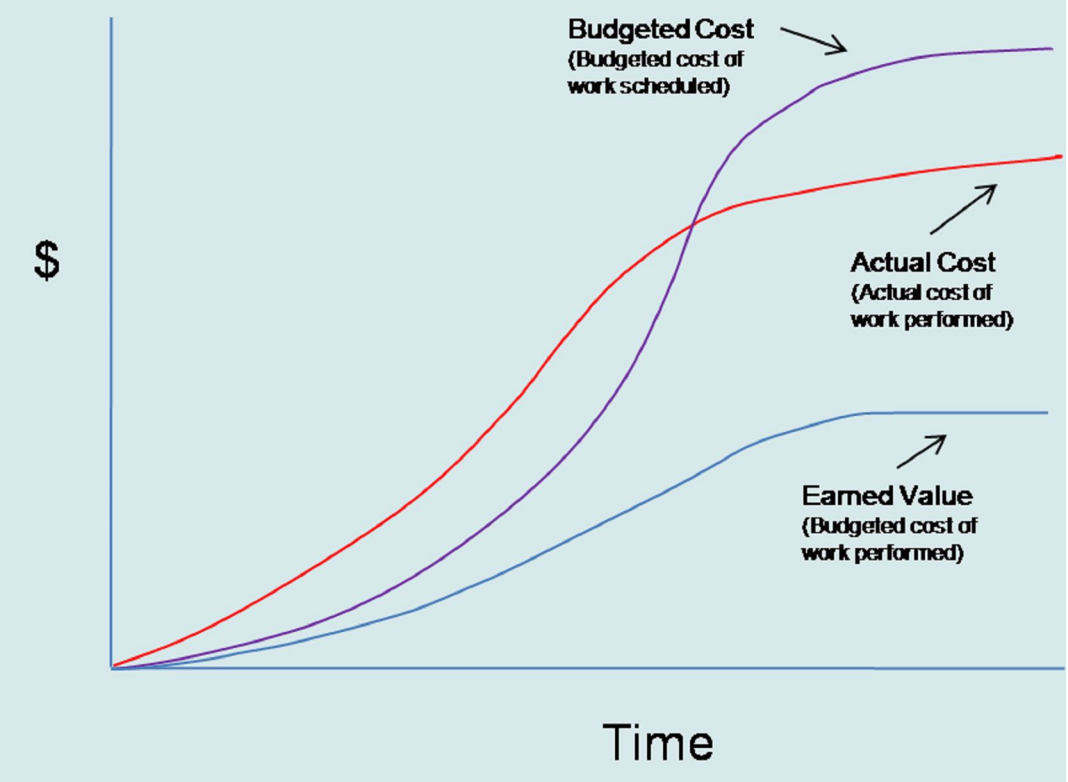
G. "Request Seller Responses" and "Select Sellers" have been merged into "Conduct Procurements".

H. "Manage Stakeholders" has been changed into "Manage Stakeholder Expectations"

Other interesting changes:

A. "Arrow Diagramming Method" is rarely being used and will not be taken into consideration in most of the processes. It has been removed from PMBOK'S chapter 6.

B. "Earned Value" is now explained in detail on chapter 7. In addition CPI – Complete Performance Index- calculations have been added.



C. "Develop Project Team" and "Manage Project Team" have been extended in chapter 8 to cover everything related to people skills.

D. "Teaming Agreements" concept is introduced in chapter 12.

E. A new appendix that deals with the skills and competences of people working for the project is now available.

F. The glossary has been updated and expanded.

Summary of changes to processes

A. Processes were reduced from 44 to 42
B. Following processes were removed:
    a. Develop Preliminary Scope Statement
    b. Scope Planning
C. Following processes were added:
    a. Identify Stakeholders
    b. Collect Requirements
D. Knowledge area "Project Procurement Management" changed from 6 to 4 processes. They are:
    a. Plan Procurements
    b. Conduct Procurements
    c. Administer Procurements
    d. Close Procurements
E. All 42 processes include:
    a. Clearness through additional graphics
        i. Flow Diagrams which show origin of input information and destination of output information.
    b. Clearness on contents of "Project Charter" and of "Project Scope Statement"
F. Clearness to distinguish between "Project Management Plan" and "Project Documents"
G. "Communications Management" and "Human Resource Management" processes moved from "Monitoring and Control Process Group" to "Executing Process Group"
H. A new appendix containing "interpersonal skills" has been added. It contains skills such as:
    a. Leadership
    b. Team Building
    c. Motivation
    d. Communication
    e. Influencing
    f. Decision Making
    g. Political and cultural awareness
    h. Negotiation



Emperor Carlos V. (1500 – 1558) was always outstanding for his great competence in all the fields.

Interesting tables taken from PMBOK

Following explanation tables were taken from PMBOK Version 4.

Table A1. Differences between Project Management Plan and Project Documents

Project Management Plan	**Project Documents**	
Change management plan	Activity attributes	Quality metrics
Communications management plan	Activity cost estimates	Responsibility assignment matrix
Configuration management plan	Activity list	Requirements traceability matrix
Cost management plan	Assumption log	Resource breakdown structure
Cost performance baseline	Basis of estimates	Resource calendars
Human resources plan	Change log	Resource requirements
Procurement management plan	Contracts	Roles and responsibilities
Quality management plan	Duration estimates	Sellers list
Requirements management plan	Forecasts	Source selection criteria
Risk management plan	Issue log	Stakeholder analysis
Schedule baseline	Milestone list	Stakeholder management strategy
Schedule management plan	Performance reports	Stakeholder register
Scope baseline: - Scope statement - WBS - WBS dictionary	Project funding requirements	Stakeholder requirements
	Proposals	Statement of work
	Procurement documents	Teaming agreements
	Project organizational structure	Team performance assessments
Scope management plan	Quality control measurements	Work performance information
	Quality checklist	Work performance measurements

Table A2. Project Charter and Project Scope Statement elements

Charter	Scope Statement
Project purpose of justification	Product scope description (progressively elaborated)
Measurable project objectives and related success criteria	Project deliverables
High lever requirements	Product user acceptance criteria
High level project description, product characteristics	Project boundaries
Summary milestone schedule	Project constraints
Summary budget	Project assumptions
Project approval requirements (what constitutes success, who decides it, who signs off)	
Assigned project manager, responsibility and authority level	
Name and responsibility of the person(s) authorizing project charter	



Knowledge area		Version 4		Version 3
Integration	4.1	Develop Project Charter	4.1	Develop Project Charter
	4.2	Develop Project Management Plan	4.2	Develop Preliminary Project Scope Statement
	4.3	Direct and Manage Project Execution	4.3	Develop Project Management Plan
	4.4	Monitor and Control Project Work	4.4	Direct and Manage Project Execution
	4.5	Perform Integrated Change Control	4.5	Monitor and Control Project Work
	4.6	Close Project of Phase	4.6	Integrated Change Control
			4.7	Close Project

Scope	5.1	Collect Requirements	5.1	Scope Planning
	5.2	Define Scope	5.2	Scope Definition
	5.3	Create WBS	5.3	Create WBS

Time	6.1	Define Activities	6.1	Activity Definition
	6.2	Sequence Activities	6.2	Activity Sequencing
	6.3	Estimate Activities Resources	6.3	Activity Resource Estimating
	6.4	Estimate activities Duration	6.4	Activity Duration Estimating
	6.5	Develop Schedule	6.5	Schedule Development
	6.6	Control Schedule	6.6	Schedule Control

Cost	7.1	Estimate Cost	7.1	Cost Estimating
	7.2	Determine Budget	7.2	Cost Budgeting
	7.3	Control Cost	7.3	Cost Control

Quality	8.1	Plan Quality	8.1	Quality Planning
	8.2	Perform Quality Assurance	8.2	Perform Quality Assurance
	8.3	Perform Quality Control	8.3	Perform Quality Control

Human Resources	9.1	Develop Human Resources Plan	9.1	Human Resource Planning
	9.2	Acquire Project Team	9.2	Acquire Project Team
	9.3	Develop Project Team	9.3	Develop Project Team
	9.4	Manage Project Team	9.4	Manage Project Team

Communications	10.1	Identify Stakeholders		
	10.2	Plan Communications	10.1	Communication Planning
	10.3	Distribute Information	10.2	Information Distribution
	10.4	Manage Stakeholders Expectations	10.3	Performance Reporting
	10.5	Report Performance	10.4	Manage Stakeholders

Risk	11.1	Plan Risk Management	11.1	Risk Management Planning
	11.2	Identify Risk	11.2	Risk Identification
	11.3	Perform Quantitative Risk Analysis	11.3	Qualitative Risk Analysis
	11.4	Perform Quantitative Risk Analysis	11.4	Quantitative Risk Analysis
	11.5	Plan Risk Responses	11.5	Risk Response Planning
	11.6	Monitor and Control Risk	11.6	Risk Monitoring and Control

Procurement	12.1	Plan Procurement	12.1	Plan Purchase and Acquisitions
	12.2	Conduct Procurement	12.2	Plan Contracting
	12.3	Administer Procurement	12.3	Request Seller Responses
	12.4	Close Procurement	12.4	Select Sellers
			12.5	Contract Administration
			12.6	Contract Closure

PMBOK 4th Edition Release and Exam Dates

The PMBOK 4th Edition was released on December 31, 2008.

Please review the chart below for the corresponding exam release dates:

Credential	Examination Updated
PMP®	30 June 2009
CAPM®	31 July 2009
PMI-SP	31 Aug 2009
PMI-RMP	31 Aug 2009
PgMP®	31 Aug 2009

Please be advised that, in all circumstances, all exams taken after 30 June 2009 will be based on the updated PMBOK.

PMBOK 4th Edition Study Prep

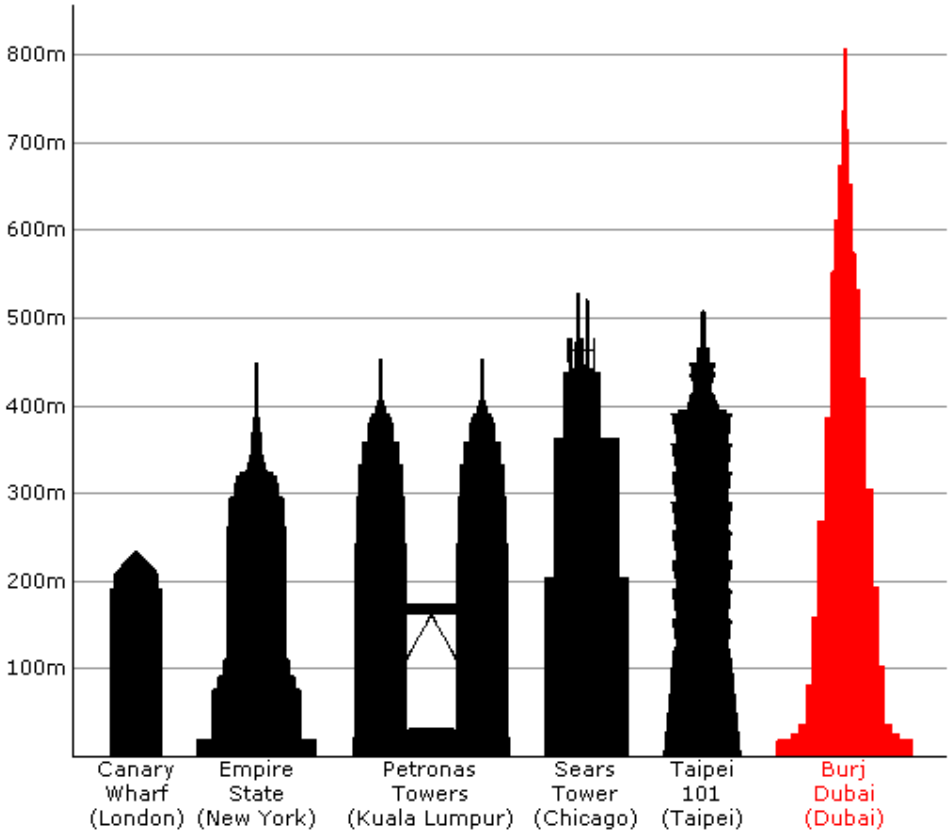
You will start studying the PMBOK 4th Edition depending on your planned test date. Below is a general point of reference for when to start using the PMBOK 4th Edition for study purposes:

Exam	Planned Date to sit for exam	Study Recommendation
PMP®	Prior to 30 June 2009	*PMBOK® Guide* – Third Edition
PMP®	After 30 June 2009	*PMBOK® Guide* –Fourth Edition
CAPM®	Prior to 31 July 2009	*PMBOK® Guide* – Third Edition
CAPM®	After 31 July 2009	*PMBOK® Guide* –Fourth Edition
PMI-SP	Prior to 31 August 2009	*PMBOK® Guide* – Third Edition
PMI-SP	After 31 August 2009	*PMBOK® Guide* –Fourth Edition
PMI-RMP	Prior to 31 August 2009	*PMBOK® Guide* – Third Edition
PMI-RMP	After 31 August 2009	*PMBOK® Guide* –Fourth Edition

Please note that standards are only one reference in the full project management body of knowledge, therefore a sudden change in the examination does not occur.

a project manager utilizes when managing a project.

A complete list of changes can be found in Appendix A of the Fourth Edition.





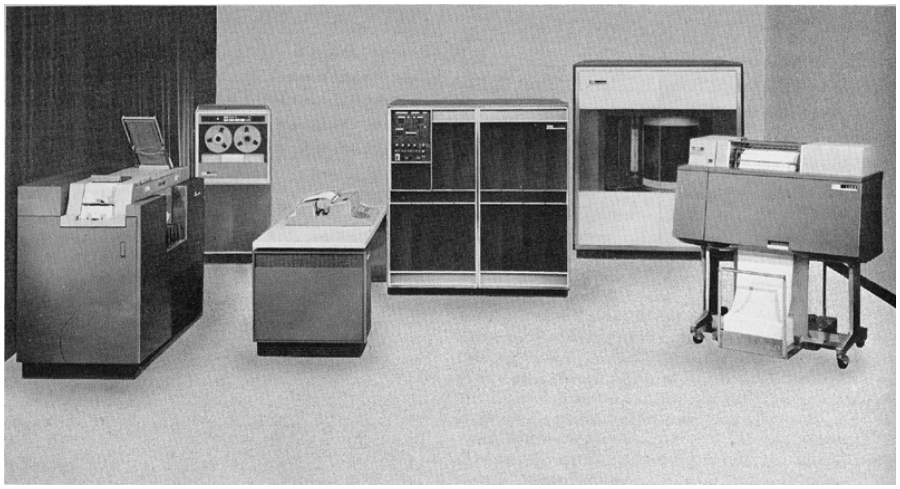
Burj Dubai – World's highest building.
Project was managed by engineers from the Project Management Institute - PMI

Cost of Quality (COQ)

Cost of Quality is clearer in PMBOK Version 4. From page 195 of mentioned book following text has been extracted:

Cost of quality includes all cost incurred over the life of the product by investment in preventing nonconformance to requirements, appraising the product or service for conformance to requirements, and failing to meet Requirement (rework). Failure cost are often categorized into internal (found by the project) and external (found by the customer). Failure costs are also called cost of poor quality. Figure 8-4 provides some examples to consider in each area.

	Cost of Conformance		Cost of Nonconformance	
	Prevention Cost		**Internal Failure Cost**	
	(Build a quality product)		(Failures found by the project)	
	• Training		• Rework	
	• Document processes		• Scrap	
	• Equipment			
	• Time to do it right			
	Appraisal Cost		**External Failure Cost**	
	(Assess the quality)		(Failures found by the customer	
	• Testing		• Liabilities	
	• Destructive testing loss		• Warranty work	
	• Inspections		• Lost business	
	Money spent during the project		Money spent during and after	
	To avoid failures		The project because of failures	



IBM 1401 system - 1964

Samples of PMBOK'S Version 4 graphs

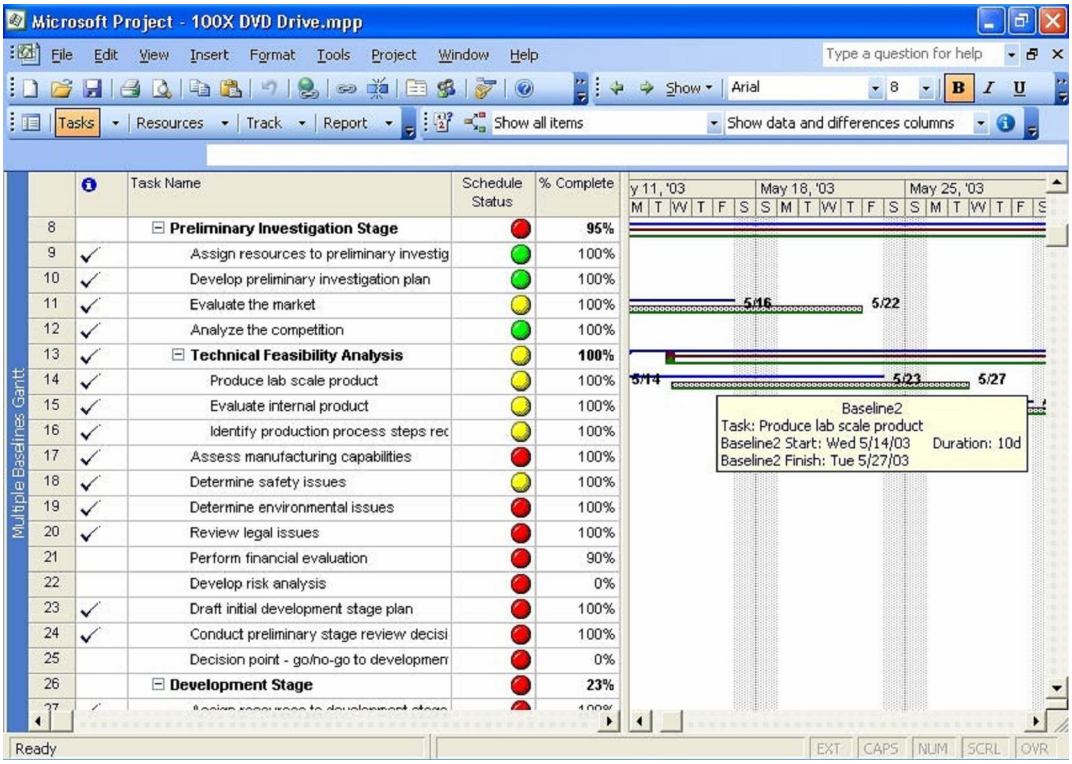
PMBOK'S Version 4 graphs are clear and provide an excellent support to Project's directors. Graphs own the virtue of clearness and communicate in a simple way the necessary concepts to understand the relationship between processes. Following process was chosen as a sample:

Images 4-5 – 4.2 Develop Project Management Data Flow Diagram;

Stakeholder must read all graph fields. The first field in the left top area is: 5.2 Define Scope. Close to it, it is shown the document it delivers: Project Scope Statement. Going through the graph reading we find field 4.1 Develop Project Charter, which delivers the Project Charter. And reading continues so on.

Project Plan must be developed always as indicated. Accompanying processes, depending on project's size, may vary in its application extension however; undoubtedly, all of them must be examined and validated along Project Plan's development.

Image 3-1 Project Management Process Groups and Knowledge Area Mapping, is the core of Project Management. It is recommended that users consult it on permanent basis regardless of users experience level. This graph works as a "Master Check List" and its observance contributes to attain success in all projects.



PMBOK® Guide — Fourth Edition
Pre-Release Version August 26, 2008

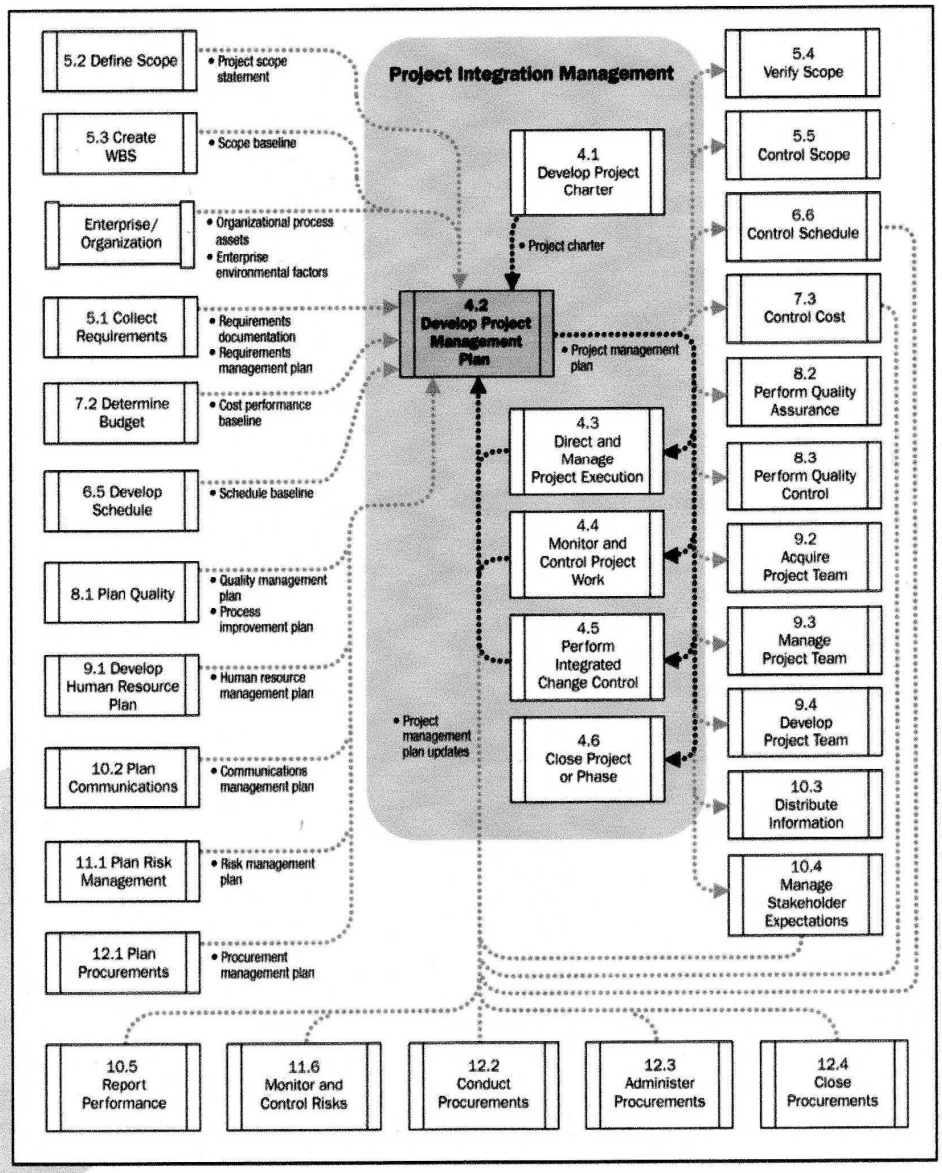


Figure 4-5. Develop Project Management Plan Data Flow Diagram

.3 Enterprise Environmental Factors

The enterprise environmental factors that can influence the Develop Project Management Plan process include, but are not limited to:

- Governmental or industry standards,

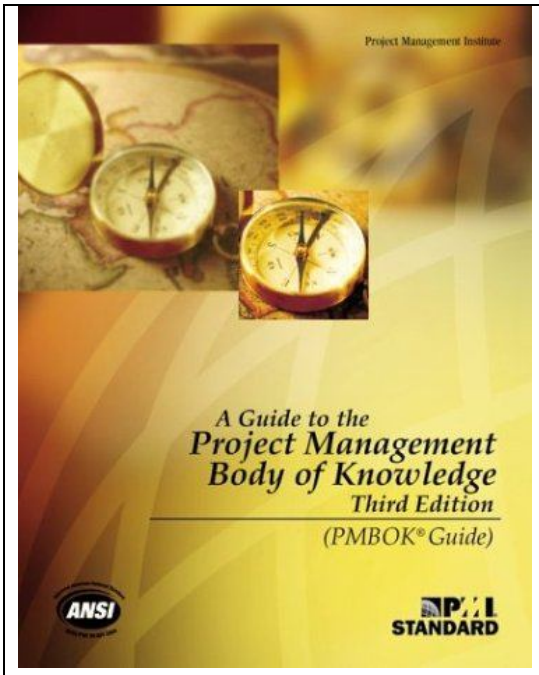
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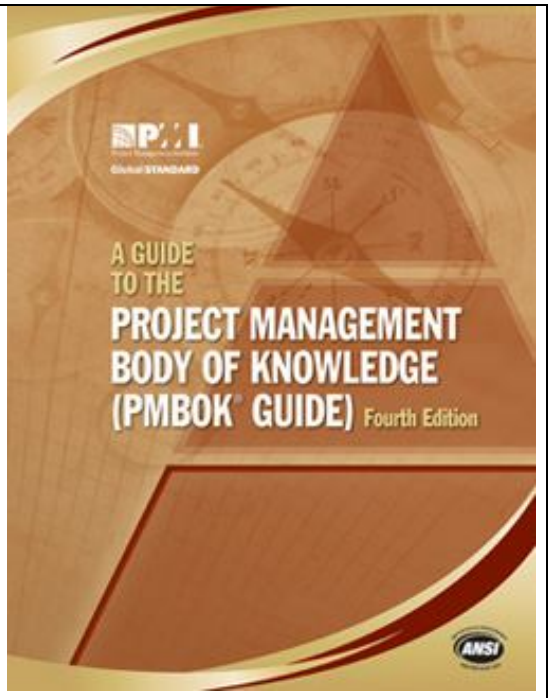
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Table 3-1. Project Management Process Groups and Knowledge Areas Mapping.

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring & Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Execution	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
5. Project Scope Management		5.1 Collect Requirements 5.2 Define Scope 5.3 Create WBS		5.4 Verify Scope 5.5 Control Scope	
6. Project Time Management		6.1 Define Activities 6.2 Sequence Activities 6.3 Estimate Activity Resources 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Estimate Costs 7.2 Determine Budget		7.3 Control Costs	
8. Project Quality Management		8.1 Plan Quality	8.2 Perform Quality Assurance	8.3 Perform Quality Control	
9. Project Human Resource Management		9.1 Develop Human Resource Plan	9.2 Acquire Project Team 9.3 Develop Project Team 9.4 Manage Project Team		
10. Project Communications Management	10.1 Identify Stakeholders	10.2 Plan Communications	10.3 Distribute Information 10.4 Manage Stakeholder Expectations	10.5 Report Performance	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses		11.6 Monitor and Control Risks	
12. Project Procurement Management		12.1 Plan Procurements	12.2 Conduct Procurements	12.3 Administer Procurements	12.4 Close Procurements

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Germán Bernate is General Manager and Founder of ALMAGESTON Consulting Firm. Based in Bogotá, he is also an International Correspondent for PMForum and *PM World Today* in Colombia. Germán holds a degree in Electronic Engineering from the Universidad Distrital Francisco José de Caldas. He has over 45 years of experience in the engineering and software industry in the areas of strategic management, Balanced ScoreCard, and Project Management, including 30 years at IBM Colombia. He also worked as a Project Manager at NCR Colombia. Germán is the immediate past president of the PMI Santafé de Bogotá Chapter of the Project Management Institute (PMI). Germán Bernate can be contacted at gbernate@cable.net.co. For more information about German, please visit http://www.pmforum.org/pm%20forum%20team/index.htm.