

P2M Bibelot

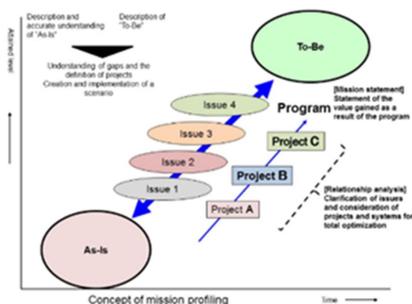
(Overview of P2M Third Edition)



Project Management Association of Japan (PMAJ)

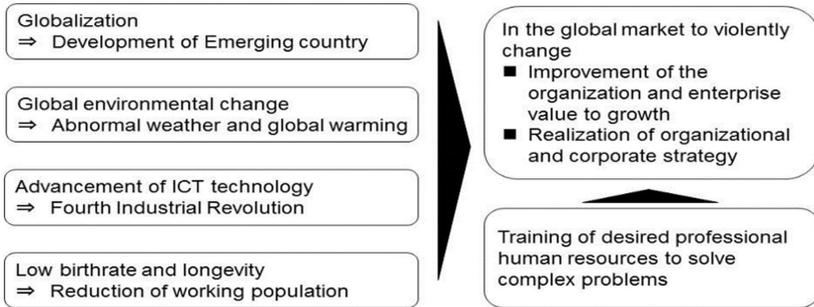
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[Ref]◆ Conceptual Figure of Mission Profiling (For the detail refer to page 11)

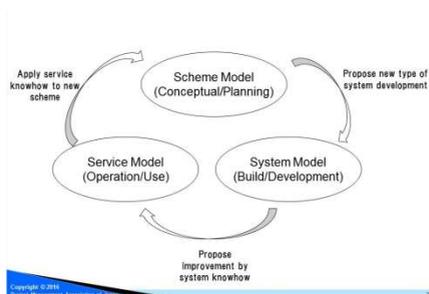
P2M is the body of knowledge combining Program Management and Project Management to solve the complicated issues.



1. Providing a project management system that certainly leads to complete the project
2. Corresponding to the increase in size and complexity of individual projects, provides a comprehensive concept with program management to both "management of the entire integration," and "part of the management."
3. Considering the integrity of the organizational strategy and project groups, applying program management, it acts the project management from building systems to accelerate the high-value-added project organization and innovation for organizational strategy realization.
4. "Responding to the complex Issues of social and economic", "response to complex business issues", "conception, planning - development and construction - operation - business reform" and etc. P2M enable managing them in a consistent cycle as a program.

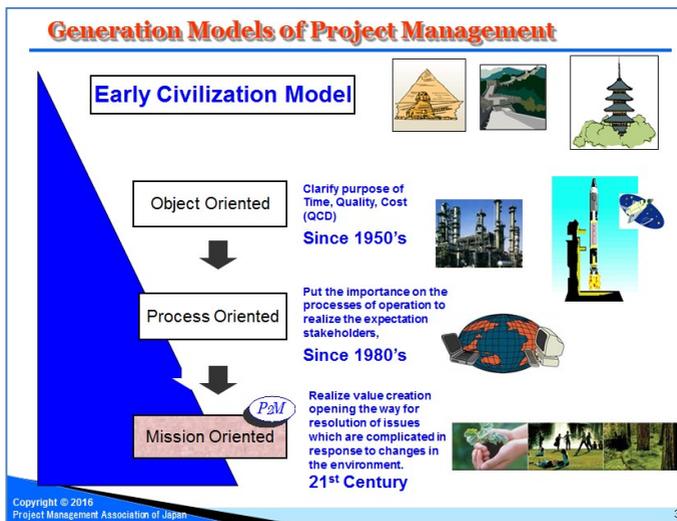


[Ref.]◆ Cycle Type Project Combination

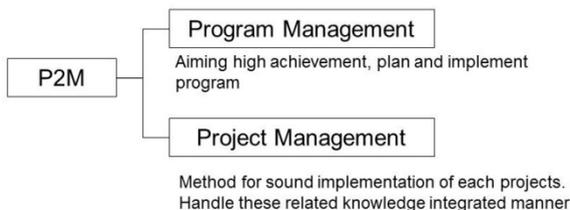


1. Features of P2M

■ Generation Model of Project Management



- PM Standards (Objective and Process Oriented)
 - It focuses on the process to achieve clearly expected outcome at initiation.
- P2M (Mission Oriented)
 - Improve a business value by regarding the external environment changes and opening the way for solutions to complex challenges, and improve the business value.
 - P2M is started as value creation that undertakes to realize the program mission which is directed by organizational mission or strategy, focusing on the program. (P2M: “Program & Project Management for Enterprise Innovation”)



2. Project and Program of P2M

Concept of Project and Program

Project ... Activities characterized by non-repetitive tasks (Individuality) and timelines for completion (fixed term)

The target to be achieved in the official starting point of management has been specifically determined in a form such as "contract" or "project charter".

Program ... Integration activities that combines organically multiple projects to achieve the objectives, such as the realization of organizational strategy

Strategic Type Program

Create new markets, programs, such as creating a mechanism to increase the production efficiency to surpass the other companies, there are various types depending on the purpose, such as creativity and innovation.

Operation Type Program

In case of program such as plant construction or IT solutions, these are handled by specialized companies that the performance itself as the business, are positioned to the steady business.

Types	Classification	Examples
Strategy Type Program	Organizational reform	M&A, Structural reform, Restructuring
	Products development	Large-scale new products & services, New Materials, New Medicines : (essentially new products)
	New Business Creation	Market Development, New Value Chain, Business Model
	R&D	Space exploration, Global Environments (Air pollution, water quality, Disaster prevention)
	Creative Work	Epoch-making Movies
	Social Infrastructure	Smart City
Operation Type Program	Construction	Plant, Power Station, Railway, Urban redevelopment
	Natural Resources	Resource Exploration, Gas and Oil Drilling, Mining and Operation
	IT Business	Accounting and human resources management system, Production Management system, Bank Accounting System

■ Objective of Program Management in P2M

Combining both an organic binding between the whole and the autonomy of underlying projects, to achieve a useful, stable outcome efficiently and fairly.

Program Value > Σ(Value of underlying projects)

3. Application of P2M

■ What to use Program Management of P2M

- ① Project is becoming complex and large in size, or for the location of implementation is dispersed, there is a need for both the management of the overall integration management and the block wise (such as each location)
- ② Project has a number of phases from the development, construction, transition and operation, it is necessary to carry out the management for different phases with different skills and overall management at the same time.
- ③ Project management is good for a single project, but required to take the link with business.
- ④ In manufacturing or service company, they perform the market competition in the short product groups of the life cycle, so for each product in whole or in specific product groups, it requires a parallel and simultaneous management across product concept, planning, production, selling and commodity disposal.
- ⑤ Required to solve an antinomy issue and prepositions, it is necessary to perform the product, system, and service development.
- ⑥ To achieve the program and project aim is largely depended on funding, it is necessary to create the scheme that attracts the fund.
- ⑦ The case to strengthen the management since project management are carried out in each department, but no system to organize division boundaries or no unified approach, and it's weak to foster a synergy of the entire optimization and every sector of business.
- ⑧ In the manufacturing industry, increasing project activities in the business with the traditional technique that has caused a lack of mobility. In such project environment, P2M helps the mobility up by agile management.
- ⑨ In rapidly changing the corporate environment, a company cannot take a time sufficiently for the education of junior staff with OJT. We would to teach intensively the basics of dynamic management.
- ⑩ It is necessary to apply extensively such ISO, TQM, Management Quality, Six Sigma, CSR, and Environmental Management. There is a need for a framework that is able to organize systematically.
- ⑪ Executing a business in around the world, possible to transport the technical knowledge for each country's staff as easily expected. But, we would convey the Japanese management comprehensively for all countries.

P2M as Innovation and Change Tool

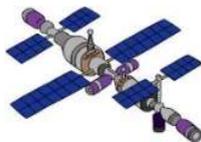
■ Application of P2M

The application field of P2M is from the heavy industry infrastructure and facilities construction to ICT, organizational reform, and such as large-scale events, it extends to all fields of industry and public service sector.

Field		Main concrete examples
Classification by industry		
1	Infrastructure	National traffic and transport systems; lifeline (electricity, water, gas, telecommunications) systems; national safety and defense facilities; public and social service facilities; urban and regional development; flood control, disaster prevention, and environmental conservation systems; reconstruction from disasters
2	Resources and energy	Oil, natural gas, electric power development; mineral resources development; oil refining, petrochemical, chemical, metal refining, electric power, nuclear power plants; storage and distribution systems; renewable energy plants; seabed resources development; energy saving
3	Manufacturing	Machinery manufacture; electronic equipment manufacture; steel and metal manufacture; chemical manufacture; food manufacture; medicinal chemical manufacture
4	Selling, distribution, services	Retailing; transport and distribution; internet shopping services; telecommunication network services; various online services; games and electronic books; entertainment and sports events; various charge systems; new business models
5	Social and industrial engineering	Social development; energy and resources development; planning, design, construction, operation, maintenance of production facilities
6	Administration	Government agencies; local government policies, development strategies, and industrial strategies that require high mobility; multiple issues across government agencies, etc.
7	International cooperation	Official development assistance; technology transfer; economic and social development of developing countries through international cooperative development; development of human resources; organization reinforcement, etc.
8	Education, medical care	University reform; educational reform; medical care and hospital systems
Classification by program mission (or issue)		
9	Business creation, management reform	Management reform; organization reform; reengineering; corporate merger; business separation/combination; creation of new businesses; creation of new markets; PFI; ventures
10	Product development, production reform	Product development; drug development; materials development; open-modular production; supply chain reform
11	Production facilities	Various production plants/facilities; distribution system; production system reform (automation/intelligence systems, virtual factory)
12	Research and development	Advanced research (e.g. supercomputers, use of super conductivity, IPS cell research/application, driverless driving); space exploration; nuclear fusion, etc.
13	Community	Various events; life support projects; management of volunteer groups; regional development/revitalization; disaster prevention security systems
14	Digital information	Systems development; systems integration; creation of IT solutions; various financial systems

■ Program Management Application Examples

- Ex 1 Space development-related Company A, their enterprise is implemented by hierarchized from "Program" → "Project". That is supported by Systems Engineering.
- Ex2 General Engineering Company B has been implemented by using the program management for the whole management of energy-related projects in excess of 2 trillion yen with customers in the Middle East country.
- Ex3 General Engineering Company C is originally strong in the energy and chemical system of the project. He was awarded and constructing the PFI Medical Center project the total commission amount is ordered to 100 billion yen. P2M is applied for planning and conception, design, construction, and operation.
- Ex4 Major ICT Company D, as part of the measures to achieve an increase in the information services business value, they have implemented human resource development by P2M.
- Ex5 The leading system company E has struggled to project development by using the P2M to increase the propose capability for the customer's sales force.
- Ex6 Pharmaceutical leading Company F applies P2M on integration management (pipeline management) for planning product concept, development – market-in and customer management.
- Ex7 Company G with highly global market share in the high-tech system components is utilizing the program management of P2M to R&D management.
- Ex8 Food Company H is utilizing the P2M program management to product development.
- Ex9 Medium-sized information services J Company is leveraging P2M to management reforms.



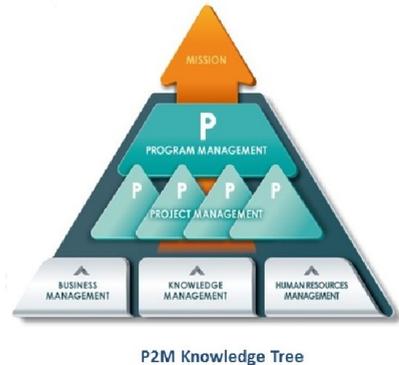
4. Configuration of P2M 3rd Edition

【P2M Main Subjects】

- Part 1 Overview and Features
- Part 2 Program Management
- Part 3 Project Management

【P2M Common Knowledge Platforms】

- Part 4 Business Management
- Part 5 Knowledge Management
- Part 6 Human Resources Management



[Program / Project P2M Common Foundation Domain]

Part 4 Business Management (Business Management Foundation)

Clarify the position of program and project in business operations.

Define a major business management foundation in the conduct of the program

- Project Organization Management
- Accounting and Finance
- Information Management and Infrastructure

Part 5 Knowledge Management (Knowledge Foundation)

Required knowledge of the mechanism understanding of the body of knowledge on the basis of P2M activities

- "Systems approach" as the engineering basis
- "Knowledge and information assets" in order to connect the results of the activities
- "Value and evaluation methods" for the control of practice and the target setting of activities

Part 6 Human Resources Management (Human Capability Foundation)

Basic knowledge of the program / project practice

- Practical ability of a program / project manager and capability foundation
- Leadership, communication, multi-cultural adaptability

4-1 Program Management (Part 2)

The methodology for defining and resolving based on the issues and problems,

■ Contents

Introduction : Outline

Chapter 1 : Program and Program Management

Chapter 2 : Program Integration Management

Chapter 3 : Program Strategy and Risk Management

Chapter 4 : Value Assessment Management



■ Relationship with Corporate Strategy (Corporate and Business)

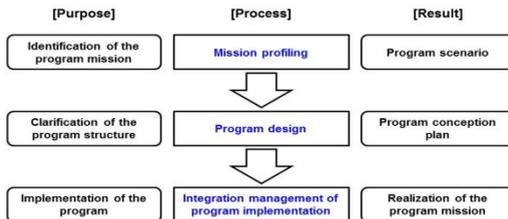
Management strategy is to determine by considering the overall optimization focusing on what business areas of management resources should be allocated to practice from the top philosophy. In order to practice the strategy of the company-wide organization, a division is a subordinate organization to leverage the management resources that have been allocated from the higher-level organization, and continue to practice to build a business strategy.

■ Program Management

In order to practice the business strategy, this is "management for the purpose to accomplish the program mission". It consists of a series of processes in order to achieve this value creation defining multiple projects group with relevance;

■ Program Integration Management

This is to plan, design and control their implementation so that each of them can be managed autonomously and be put together to achieve the program mission.



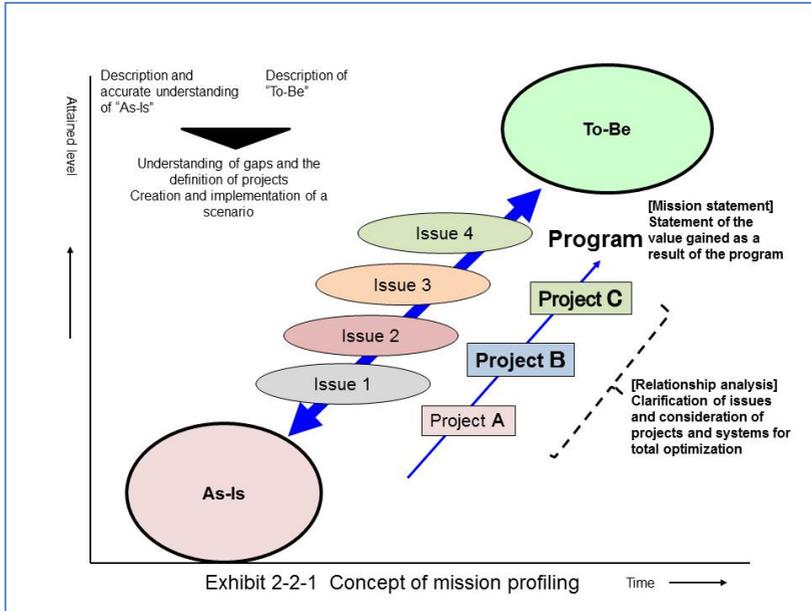
◆ Concept of Program Integration Management

■ Mission Profiling

This is a core process to create value by the program. The process is used to visualize and embody the beginning of the concept of abstract, ambiguous program mission embodies with taking into account the complexity and the organizational constraints for

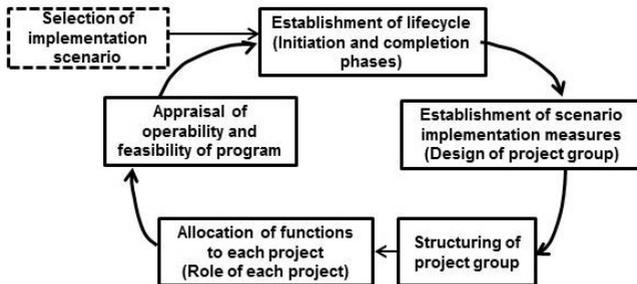
the environment.

◆ Concept of Mission Profiling



■ Program Design

This process designs architecture of the program according to mission described and the execution scenario.

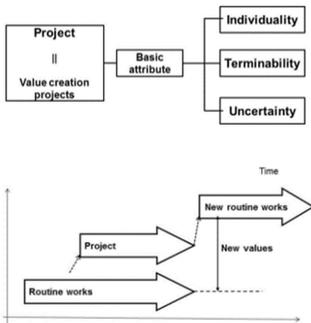


◆ Program Design Process

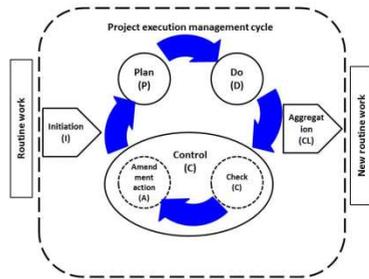
4-2. Project Management (Part 3)

A project is defined as value creation undertaking based on a project mission which is completed in a given or agreed time frame and under constraints, including resources and external circumstances.

◆ Basic Attributes of Project



◆ Management Cycle of Project Implementation



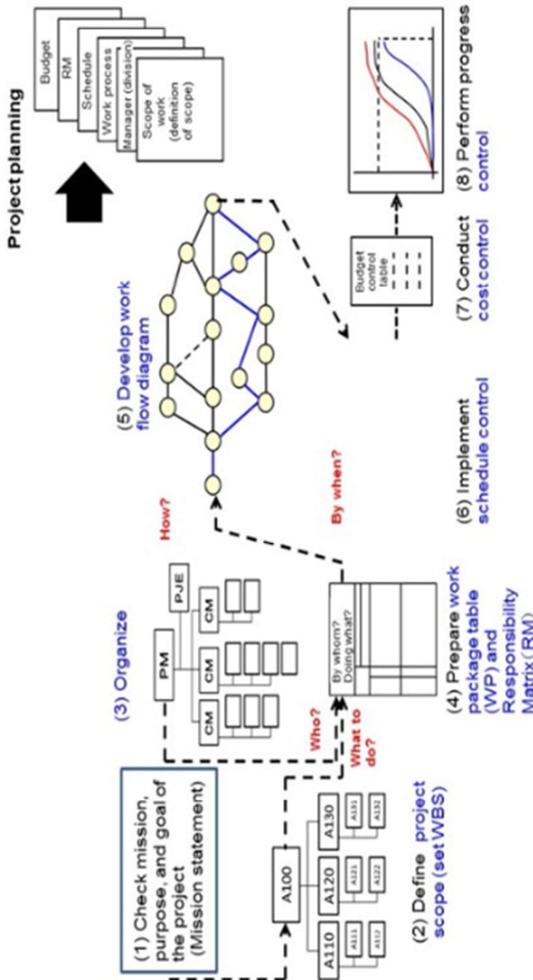
※PDCA Cycle

■ Management Area [from Chapter 2 to 11 are following the order of ISO21500 /2012]

1. Project and project management (Chapter 1)
2. Integration Management (Chapter 2)
 - Management for overall optimization integrating all processes of the project
3. Stakeholder Management (Chapter 3)
 - Management for stakeholders to effect on the project target.
4. Scope Management (Chapter 4)
 - Management for deliverables and the scope of work for creating deliverables.
5. Recourses Management (Chapter 5)
 - Management to control the resources needed to execute the project
6. Time Management (Chapter 6)
 - Management to complete the project with in planned delivery schedule
7. Cost Management (Chapter 7)
 - Management to complete the project within the given budget
8. Risk Management (Chapter 8)
 - Management to identify the associated risks and control the project
9. Quality Management (Chapter 9)
 - Management for controlling quality of project activities and deliverables
10. Procurement Management (Chapter 10)
 - Management for controlling contracts and external procurement for the project
11. Communication Management (Chapter 11)

• Management for ensuring smooth communication with project stakeholders

■ Overview of Management Activities for Project Execution



■ Key Word for Project Management Activities

- ▶ Mission/Objective/Target
- ▶ Stakeholder
- ▶ Scope (WBS/WP)
- ▶ Critical Pass (CP)
- ▶ Time Management
- ▶ Counter Measures for Risk Item
- ▶ Quality of Project Management
- ▶ Quality of Products

* WBS : Work Breakdown Structure * WP : Work Package

4-3. Business Management Foundation (Part 4)

Clarify the position of the program in its business operations.

Define a major business management foundation to implement the program.

■ Management Area

Introduction Strategy and its formulation

Understanding the business foundation is necessary for business operation, having an important view point of the effective practice of value provide which is the origin of the business significance, and describe application of program and project management concept to the business operation.



Chapter 1: Business Enterprise and Programs

Established strategy does not necessarily be practiced. In practice everyone should grasp the connection between the self-business and the strategy, and it is necessary to devise that can properly work in the direction indicated by the strategy.

Chapter 2: Program Strategy Method

Strategy is the fundamental plan created to achieve business objectives, and determines a course of actions to lead the organization to continued success. Strategy should be down loaded to concrete activities and draw up the scenario for the success, and it is necessary to practice as concrete activities following the scenario.

Chapter 3: Project Organization Management

Project organization is composed in fixed term by the personnel with participate directly that has different characteristics with daily work organization. Understand the feature of organization referring the relationship between the daily work organization and the project organization to design and operate the project organization.

Chapter 4: Accounting and Finance

Understand the purpose of corporate accounting, and the difference between the accounting of the program and project. Knowing the mechanism of project finance (PFI) is to know the wide range of funding, and also leads to expand the possibilities of the realization of value creation by the program and project.

Chapter 5: Information Management and Infrastructure

In carry out programs and projects to run the business strategy, the organizations perform information utilization to increase the competitive advantage. To build the best information infrastructure for businesses seek, and to operate management of the appropriate information, and making continue to improve is the source der of business competitiveness.

4-4. Knowledge Foundation (Part 5)

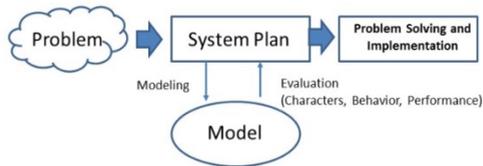
Described following three paragraphs which are the knowledge required to understand the mechanisms as core of P2M.

- "Systems Approach" as the engineering basis
- "Knowledge and Information Assets" in order to connect results of the activities
- "Value and Value Assessment" to cooperate with each other to understand the results of the activities

■ Management Area

Chapter 1: Systems Approach

Regarding P2M as a system, and is to understand the contents described from Part 2 to Part 4 as systems with engineering manner.

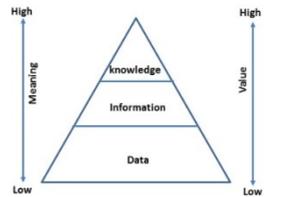


◆ Problem Solving with Modeling

Chapter 2: Knowledge and Information Asset

To capture the knowledge and information as irreplaceable "invisible assets", and summarizing from 3 features below.

- Not easy to buy with money, but only the way is to make by yourself
- It takes a long time to make
- Once made, it is possible to use simultaneously and multiply



◆ Correlation Diagram of Data, information, knowledge

Chapter 3 Value and Value Assessment

The final deliverable of the program is a "value improvement of the business" and it shall be of value to all of stakeholders. It is necessary to evaluate the "value of the business," which is an indicator of the business program & project by the following three perspectives

- The point of view from business investment
- The point of view from business continuity
- The point of view from business parties (stakeholders)

4-5. Human Capability Foundation (Part 6)

Descriptions focusing on the human resource and organization to support program and project.

■ Management Area

Introduction: What is Human Capability

Foundation?

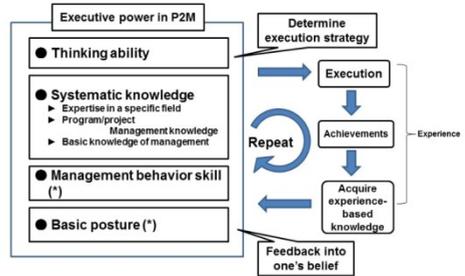
Chapter 1: Capability of Manager for Practicing P2M

Chapter 2: Human Capability Foundation on Program/Project

Chapter 3: Leadership

Chapter 4: Communication Skill and Creation of Community

Chapter 5 : Multicultural Correspondence



◆ Concept of executive power in P2M

■ Importance of taxonomy in practical skills

The important component of practical ability of P2M includes, even inexperienced world, more personal systematic knowledge and of the foundation of thinking ability and decision-making in order to determine the probable policy, sense of responsibility and sense of ethics, etc. such a basic attitude. As evaluation criteria of practical ability of this component, which is systematically classified on the basis of the unified point of view is taxonomy.

◆ Ability elements consisting of capability and assessment criteria (Ten items of taxonomy)

	Ability element	Evaluation criteria
I	Integrative thinking	Mission pursuit Identification of objectives, definition of the challenge to be solved, scenario analysis for solution, planning of alternative scenarios
II	Strategic thinking	Strategic key perception Identification of strategic elements, prioritization, addressing impediments
III	Value judgment	Value pursuit Cognizance of customer and customer value, setting of changes in a timely manner, maintenance of value, comparison of alternative plans
IV	Planning activity	Management in planning Setting a target and planning resources, building an organization, establishing rules
V	Execution activity	Management in execution Systematic thinking ability, guidance at the helm
VI	Control and coordination	Control and coordination Progress and impediment prognosis, skills for problem-solving and negotiation
VII	Leadership	Leadership Commitment to reform, decision-making ability, salvaging the situation
VIII	Human relations	Human communication Maintenance and motivation of the team, making opportunities to nourish togetherness
IX	Pursuit of achievement	Attitude of achievement Will to carry through to achieve results, perseverance, sense of responsibility, negotiation skill with external parties, confidence in self and associates
X	Personal attitude	Attitude of self control Self discipline, act ethically, responsibility for one's actions, forward-looking attitude

P2M Certification System and the examination

Level	Application	Name of Certification	Eligibility
Entry	PMCe	Project Management Coordinator Entry	Students such as graduate school, university and technical colleges, will be the qualifications of candidacy for an exam's PMC qualification test.
Basic	PMC	Project Management Coordinator	Training course of 24 hours or more (PMC training sessions) who complete, PMCe qualified personnel (No preference educational background and practical experience)
Intermediate	PMS	Project Management Specialist	Anyone can be Candidates
Application	PMR	Program Manager Registered	PMS qualified personnel or special certification system eligibility person (Note 1) A person has PM experience for 3 years over.

(1) As a response to the future of "overseas infrastructure package export," "overseas expansion of small and medium-sized enterprises", etc., small business consultant / professional engineer General Technology Supervision / Construction Manager (CM) / IT Coordinator (ITC) / advanced information processing engineer (project managed) / PMP credential holders, can take the PMR exam. However, it needs take the PMS program test for understanding of P2M.

■ P2M Qualification Support

- PMS Training Session: You will learn from project creation to implementation and service totally. (8 days, group training)
- PMC Training Session: You will learn management techniques systematically, such as basic concepts necessary to plan and to implement the project, and knowledge (4 days, group training)
- PMCe : PM knowledge acquisition and credits earned students in university course, in units acquired, four years PMC qualification can be acquired.

■Continuing education program for PMS renewal

CPU: Continuing Professional Development Unit

For PMS accredited Persons, preparing a continuing education program that corresponds to the update of a three-year cycle of qualification to master state-of-the-art knowledge for improvement with specialized field of knowledge level of program and project management.

<p>【Purpose】</p> <ul style="list-style-type: none"> •Improvement of the knowledge level •Acquisition of PM state-of-the-art knowledge •Self-study, self-development •The acquisition of social credit and improvement of qualities 	<p>【Embodiment】</p> <ul style="list-style-type: none"> •Practice of PM activities •PM Self-study activities •PM education by academic institutions •P2M renewal course PMAJ specified •Participation in PM professional community
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6. Activities of PMAJ

■ Mission

- (1) Educate and train project management practitioners, who with a high outlook and broad vision have the capabilities to meet the requirements of today's global and rapidly changing environment.
- (2) Introduce “Program and Project Management for Enterprise Innovation (P2M)” in Japan and to the world, and contribute to improving and advancing project management through educational activities and popularization of P2M.
- (3) Provide products and services that support the project management practitioners' lifecycle. Provide opportunities for project management practitioners to share knowledge and experience and to enhance the capability to apply project management.

- 1) Qualification
 - ・Maintenance and updating of the P2M guide book
 - ・Certification based on P2M
- 2) R&D
 - ・Basics of project management research
 - ・International exchange
- 3) Popularization training
 - ・Various training activities
 - *P2M Training Course
 - ▶PMS Training Session
 - ▶PMC Training Session
 - *PM General Training Session
 - ▶Co-sponsored course
 - ▶PMP® Exam Prep Course
 - * Companies and organizations training



- 4) Member interchanges
 - ・Group, SIG (Specific Interest Group) activities
 - ・PM Symposium / New Year Seminar
 - ・P2M Study Regional Group (Tohoku, Tokyo, Chubu, Kansai, Shikoku medium, Kyushu, Okinawa)
 - ・International Exchange / International PM congress with other countries PM Association

7. PMAJ membership benefits

(Member procedures, etc., please check the website.)

The PMAJ member is applied member special discount system in PM training sessions and public lectures or PM symposium. In addition, it is possible to participate members interchange activities, and research and development activities, and to take information services, which can be useful in self-study and mutual study.

(1) Member special discount system

※ please refer to PMAJ Homepage for price, etc.

- PMP® Certification *PMP® Examination Preparation Course 4 Days
- *PMP® Examination Preparation Course 1 Day
- PM Open Lecture
- PM Symposium, Seminars

(2) Participation for member interchange activities

- Group, SIG (Specific Interest Group) activities
 - *You can participate P2M Group、IT-PM Benchmarking SIG、International Relations Group、Women's-SIG etc. And can achieve a self-study.
- PM Symposium
 - * You can experience the project management participating as staff for Japan's largest PM events "PM Symposium", and also can touch the outgoing and educational activities of the information.

(3) Information providing service

- Quarterly magazine "PMAJ journal" that has been edited by readers corner or specialists etc. will be sent as PM feature article and PM practice. It can serve as a reference material for hands-on activities.

(4) International PM Network

- There are exchanges with leading PM associations and PM graduate of the world, and you can have access to the PM of world.

Home Page of Project Management Association of Japan (PMAJ)

<http://www.pmaj.or.jp>
<http://www.pmaj.or.jp/ENG/index.htm>



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