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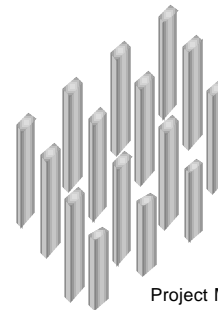


Booklet on P2M

WHAT 's P2M

Project & Program Management

*Project & Program Management
for Enterprise Innovation*



Project Management Association of Japan
(PMAJ)

◆ New professionals from Japan are sought

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■ Principles of human resources for new professionals

Japan's economy has been sluggish. One of the reasons for it is that Japan's systems, organizations and individual common sense cannot adapt themselves to environmental changes. Accordingly, both individuals and organizations have to construct new frameworks resolutely and bravely through a new way of thinking and promote reforms. The key principle of reforms is to develop human resources having a wide view and a lofty viewpoint. A university education has also gradually directed its attention to this new type of professionals and intends to establish courses of project management and P2M in addition to the courses for masters of administration.

■ Aiming to solve complex problems

So far, the certification has been granted to specialists and professionals of the type who are deeply specialized in a narrow field. To give examples, lawyers in the field of law, accountants in the field of financial affairs, engineers in the field of technology and doctors in the field of medical treatment. However, complex problems have been increasing in politics, in our society and in companies. Problems that do not center on one field, but cover several fields, for instance, establishment of new business and development of new products, need such knowledge as technology, finance, and administration. One of the human resources that have such knowledge might be entrepreneurs. However, more and more strongly we feel the need for new human resources for professionals that understand the essence of complex problems in the place of entrepreneurs and put solutions into practice and that cannot be classified into either managers or engineers.

■ New Mission-type professionals

These human resources for professionals are called either human resources of a mission-achieving-type or of a mission type. The specialists having such a wide variety of knowledge as was stated above, however, have not existed so far. Now Japan also needs human resources that can reveal the full-length pictures of complex problems and draw up highly feasible solution scenarios so that even individual specialists can perceive the problems. Such human resources also need to figure out ways and means to handle a situation and produce value by taking advantage of them. In short, Japan has come to need professionals that try to acquire knowledge that enables them to gain a perception on a higher level, in addition to traditional expertise, business practice and experience.

◆ What is P2M?



What is P2M?

Program management based on project management

Project management has been developed so far for the practical execution of projects focusing on one theme. These project management specialists have been recognized in the engineering industry, construction industry, IT industry and other industries in the West.

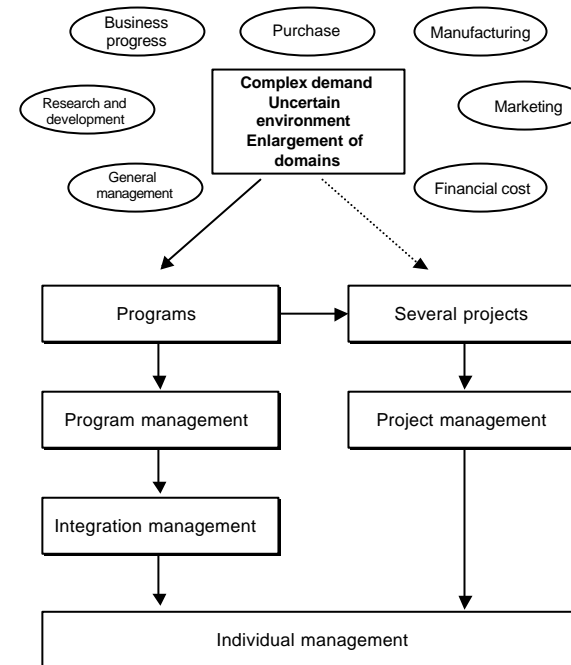
Problems in our advanced industrial society, however, are complex and have several themes entangled. Project management can provide basic knowledge that furnishes a partial solution, but cannot achieve an overall solution that has to grapple with several themes. Therefore, program management based on project management tries to divide complex problems into several projects first and then integrate them as a whole. This standard knowledge that has become available in the world first is P2M.

■ Innovation based on P2M

Japan has become a knowledge-based society. To give a challenge to complex themes and themes that go against a common sense, considerable knowledge, experience and resolution must be transformed into proposals and such proposals must be carried through. There are many organizations that focused on partial improvement of production and plunged into a crisis. It was the solution of complex problems that enabled Mr. Ghosn, president of a car manufacturer, to actualize his well-known corporate rehabilitation. To that end, the president formed a program composed of several key points, such as reduction in workforce, rearrangement of resources, withdrawal from unprofitable businesses, rationalization of procurement of parts, and development of new products, and successfully accomplished a revolution on the whole. Excellent concepts have nothing to do with the size of a company. Recently, a content provider put forward the idea of what dogs are trying to convey and a game manufacturer made much of the idea and developed a translator, achieving fame. In other words, we are at the dawn of a society that attaches importance to ideas to create mechanisms and to produce richness and value in a life. This is the essence of the intention of P2M, which tries to create a framework for innovation.

◆ Relation between programs and projects

(Business reform conducted by N Motors)



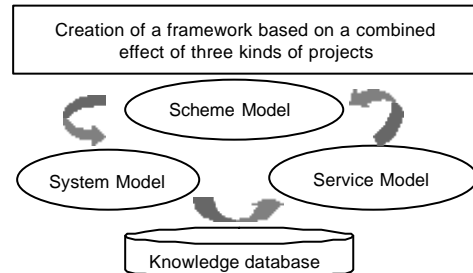
◆ What is the framework of P2M?



Creation of a new framework

The creation of a framework is equivalent to the production of values. Manufacturing is one of these and has been functioning in Japan, but with the rise of Asian young nations, a new framework is needed now. A certain textile manufacturer makes a full use of IT technology and completes products in a week, satisfying the demand for individual designs, colors and patterns. A mobile phone manufacturer intends to add a digital camera to a cell phone to create a new market and satisfactorily introduces the ideas in the planning stage. It started to manufacture products and tries to make good use of user friendliness as data and information.

In the long run, P2M aims to create a new framework. It deliberately distinguishes three kinds of projects that produce values and aims to enjoy a combined effect.



■ Summary of the essence

Introducing the creation of frameworks into manufacturing

The creation of frameworks denotes that non-technical elements will be blended into manufacturing and developed into a new business model. (measures against deindustrialization)

Educational standard for the development of human resources aims at the creation of frameworks.

P2M is a guidebook of practical capability that changes middle managers of an organization from a control type to a project producing type. (achievement of strategic problems as a mission)

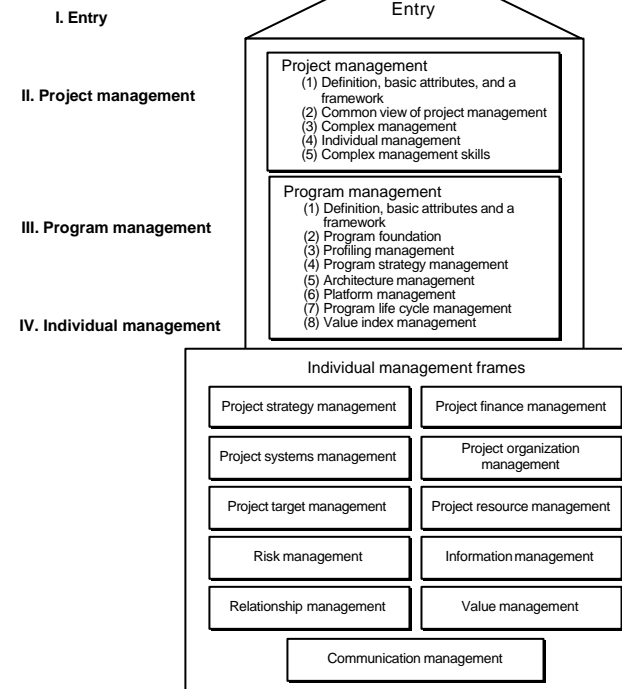
Realization of new companies based on the development of human resources

P2M realizes a program-type administration model which enhances corporate value and Japan takes the lead in. (background of a direct financial era)

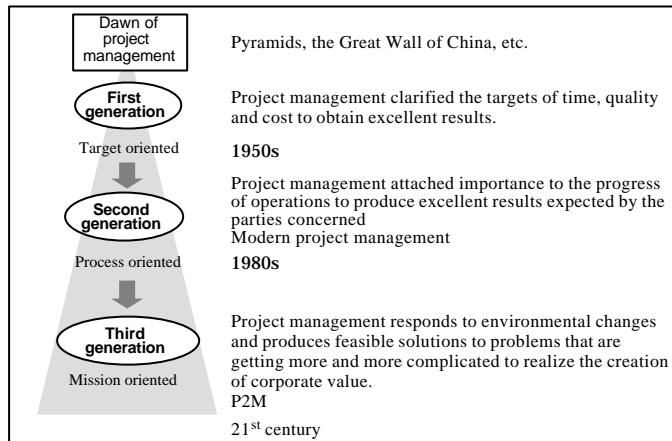
Overall structure of P2M

Program and project management of P2M differ from continuous management of administration in that they fix time limits in accordance with special missions and solves problems. It is the project management tower that illustrates the system and scope of P2M. Once a mission is achieved, its leader's duties will be completed and its team will be disbanded.

■ P2M Tower



History of project management



Taking a look at the history of project management, we can tell that the basic concept of project management of the first generation was that it clarified the targets of cost, time, quality and the scope to obtain excellent results steadily. It was intended for large-scale project transactions and its core lay in an attitude that tried to protect securely the terms and conditions of contracts.

Then from the latter half of 1980s the United States intended to enhance organizational competitiveness and re-edited this knowledge system. The project management of the second generation was developed into the concept that emphasized operational processes to produce expected results that satisfy stakeholders. Business process engineering that stresses productivity and speed reflects the concept of project management of the second generation.

What is a modern problem pursued by Japan? The answer to the question is the creation of strategic frameworks of corporate value. The project management of the third generation aims to be aware of environmental changes and find a means of bringing about solutions to complex missions in order to improve business value. Compared with the project management of the first and second generations that attached importance to the internal environment, this project management is aware of changes in the external environment and takes advantage of good points of teams. It lays stress on a starting point in the upper course of projects to reveal how to solve problems and expanded its scope and started to use the accumulated knowledge and data in the lower course of projects.

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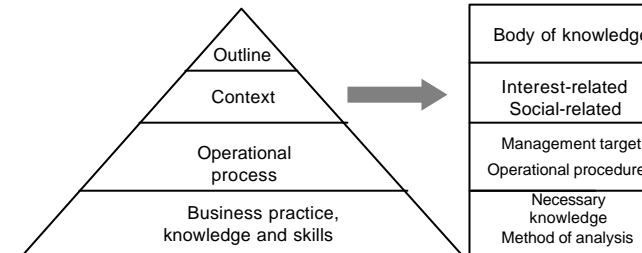
Project management of the first generation

- ##Standard requirement for the order control## by the Department of Defense
- C/CSCS(Criteria/Cost Schedule Control System)
- targets of a contract (1) cost (2) time (3) quality
- It controls such complex and large-scale artificial structures as warplanes, submarines, dams, and plants in accordance with their schedules.
- Since "Project Engineering of Process Plant" was published by H.F. Rase & M.H. Barrow sometime between 1950s and 1960s, it was mainly adopted by the projects of oil refining and the construction industry.



Project management of the second generation

Representative western-type knowledge system



Project management of the third generation(P2M)

P2M (system of practical capability):
First project management published outside the west

- Creation of value
- Expansion of the scope of projects
- Certification of the three level qualifications for the professionals of a mission achieving type in connection with the creation of frameworks

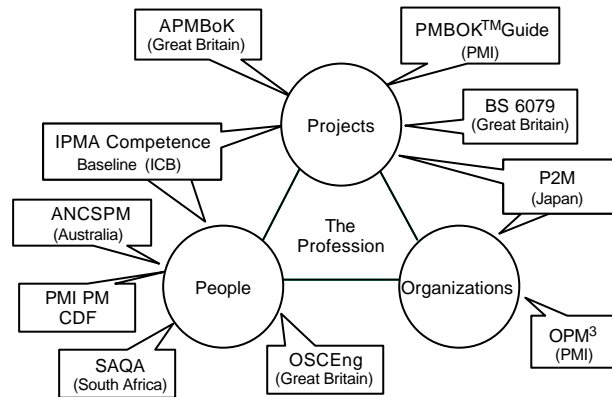
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◆ Global System of Project Management



A variety of project management systems are found in the world. PMBOK™ of the United States and IPMA of Europe are well known. P2M is a standard guidebook of program management developed in Japan and it has been expanded from the conventional program management focusing on job sites only and effects an intention to actively introduce it to the whole body of an organization, including general administration standard. It aims to become a global standard.

■ Global PM standard



(Source : Lynn Crawford, Executive Forum 2002)

■ Comparison of bodies of knowledge

United States	PMI® (Project Management Institute) Guide on the Body of Knowledge: PMBOK™ (Body of Knowledge) PMP®, (CAQ®, PMA®)
☆The number of Japanese who obtained PMP® is believed to exceed 2,000.	
Europe	IPMA (International Project Management Association) Capability System Guide: ICB (IPMA Competence Baseline)
Japan	PMCC(Project Management Professionals Certification Center) ...examinations and certification of P2M JPMF(Japan Project Management Forum) ...professionals organization

PMBOK™ PM

< knowledge area >

1 Integration management	6 Scope management
2 Time management	7 Organization management
3 Cost management	8 Risk management
4 Quality management	9 Communication management
5 Procurement management	

IPMA

Sunflower

- PM capability (competence)
= experience + attitude
+ knowledge
- IPMA (European Union)
Competence Baseline

▼

Establishment of 28 main
competence areas Self-
established process

14 items: respect for
culture and spiritual climate
by country



◆ Usefulness of project management

Project management can accomplish cross-sectional purposes.

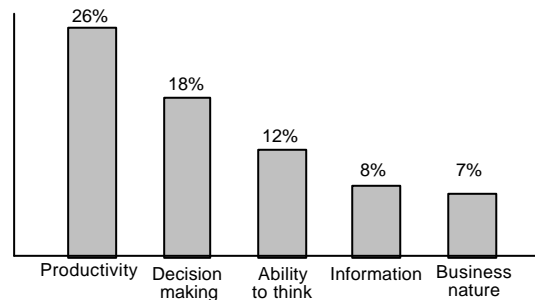
- ◆ Changes are one of the problems assigned to administration, but they cannot be handled in the conventional vertically divided organizations.
- ◆ In order to grapple with a variety of complex problems concerning the whole company, it is necessary to make integrated efforts covering many fields and it is project management that can deal with such various problems.

Eiji Watanabe (former chairman of Nikki)



- PM enables fewer staff members to carry out more work in a shorter time period.
- Improvement of productivity
- PM makes it possible to supervise changes in the services better.
- PM produces efficient and effective organizations by leading to improved organizational actions.
- PM makes it possible to closely cooperate in operations with customers.
- PM provides means to solve problems.

■ Survey on expectation of P2M



However, it takes more than projects to find a complete solution to problems.

- Who is responsible for a project is unknown.
- Knowing that it is impossible, companies are forced to accept difficult delivery dates.
- Top management's slow decision making throws projects into confusion.
- Projects are broken down and operated for in-house reasons.
- The priority order of projects are frequently changed for reasons of lines.
- The cost of projects are shadowed and problems are hidden.
- Influenced by other projects, plans go wrong.
- The same products are independently produced in different projects.
- The same failures are repeated in different projects.
- Impermissible projects are carried out.

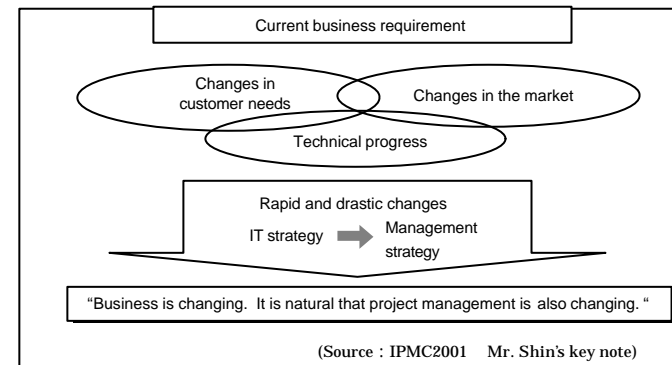
Program management for the whole company has not been developed yet.

A responsibility-taking system is not revealed.

- The top management does not understand the circumstances.
- Lessons learned have not been established.
- Is a project office set up?
- Control by P2M over the whole company is desired.



Program management that matches an economic environment



◆ Background of the development of P2M



■ Environment surrounding Japan ...5K

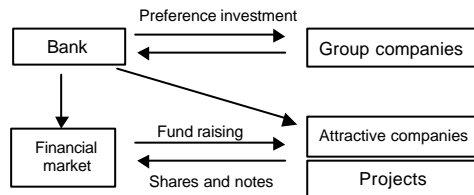
Decline in international economic competitiveness ... Swiss IMD survey (chief 49 nations)

1K

2002: first place: the U.S. 30th place: Japan (Japan was in the first place in 1993.)
 < Research and development > 2nd place (1)United States (3)Switzerland
 (4)Germany (5)Sweden
 < Proportion of skilled workers > 10th place (1)Philippines (2)Iceland (3)Austria
 < Productivity > 26th place (1)U.S. (2)Norway (3)Luxembourg
 < New business oriented > 49th place (1)Hong Kong (2)Israel (3)U.S.

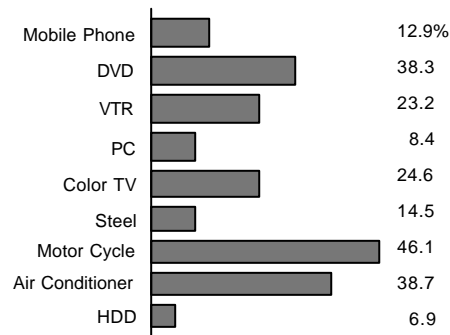
2K

Financial rules : changing into direct financing



3K

Competition rules: Deindustrialization Is China the world's factory?

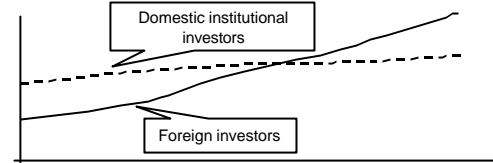


(Nikkei July 27, 2001)

4K

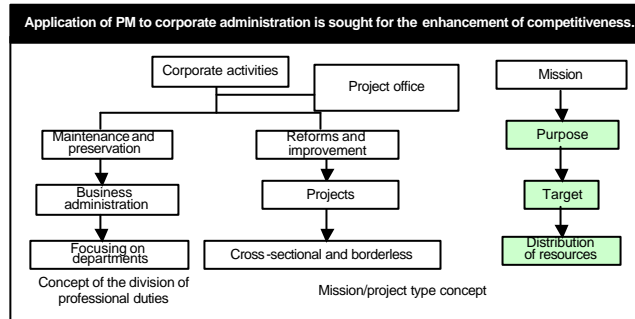
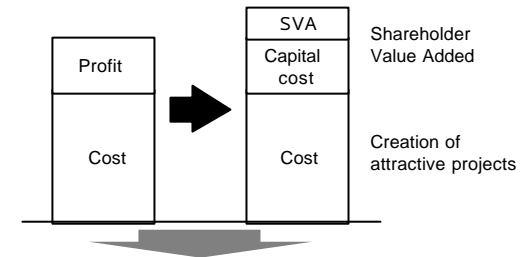
Administration rules: Seeking reforms

Changes in the ratio of treasure shares of domestic institutional investors and overseas capital Tokyo Stock Exchange



5K

Accounting rules : Attaching importance to cash flows



(Source: Cited from explanations given by Kunio Yoshida and Shigenobu Ohara)

◆ Features of P2M

P2M is a Japanese version of the system of project management and aims to create a strategic framework for the purpose of improving corporate value in the method of project management. The creation of frameworks denotes that the management takes the initiative to ask the whole organization what corporate value is and reconstruct a new business model.

- Creation of value
- Expansion of project areas
- Taking out Japan's accumulated wisdom
- Certification of the 3 level qualifications for the professionals of a mission achieving type in connection with the creation of frameworks
- Making knowledge and ability hybrid
- Adoption of a project model approach: scheme, system, and services
 - Upgrading the integration of individual management of PMBOK™ to original program management
- Edition of the context (background and a common view) of PMBOK™ as PM
- Expansion of individual management
 - Management of each of the following items
 - strategy •finance •systems •resources •relevance •value

■ Creation of frameworks

1 Division of the middle course (system)

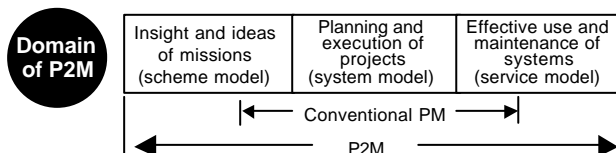
Distinguish the structure of combination of profit-based independent units from the groups of substitutes and incorporate "a framework for getting adapted to circumstantial changes".

2 Expansion to the upper course (scheme)

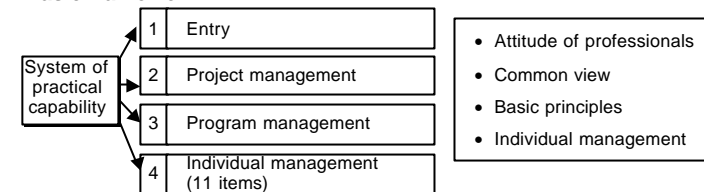
Process of expressing the management's ideas and insights in concrete documents, scenarios and plans as a mission (starting point)

3 Expansion to the lower course (services)

Look for new opportunities by accumulating and processing know-how and data acquired from the construction and use of systems.



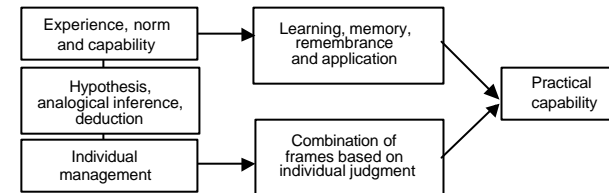
■ Basic framework



Fundamental tasks: Shared fundamental tasks are shown in a flow chart.
 Scope of knowledge: The scope of cross-sectional knowledge necessary for solving problems are shown.

Solution of individual problems: Frequent hands-on learning is shown in formalized procedures.
 Solution of complex problems: Hypothesis and analogy are incorporated into hands-on learning.

■ Means to improve judgment of practical capability and introduction of frames



■ Ideas, course of action and uniformity

	Project management	Program management
Definition	Evaluation based on specific missions	Evaluation based on entire missions
Basic attributes	Individuality/ terminability/ uncertainty	Ambiguity/expandability/ complexity/uncertainty
Common view	<ul style="list-style-type: none"> •Systems approach •Project life cycle •Project platform("BA") •Project stakeholder •Use of management skills 	<ul style="list-style-type: none"> •Program mission •Program value •Program community •Program architecture •Program integration management skills

* Use templates for practical capability for procedures.

* Construct frameworks on individual judgment and develop analogical and foreseeing capability and adaptability.

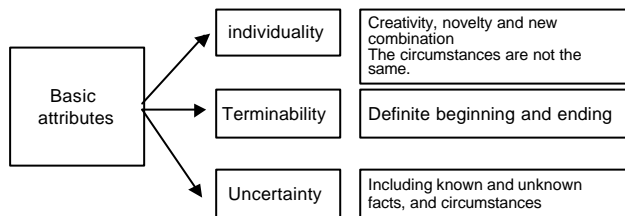
* Introduce examples and acquire practical capability through simulative learning on events that occur at any time.

◆ Project management of P2M



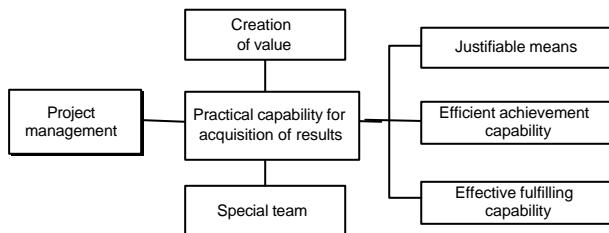
■ Project

A projects represents a value creating business that aims to accomplish a special mission assigned during a specific period marked by the beginning and the end under specific constraints, including resources, and circumstances.



■ Project management

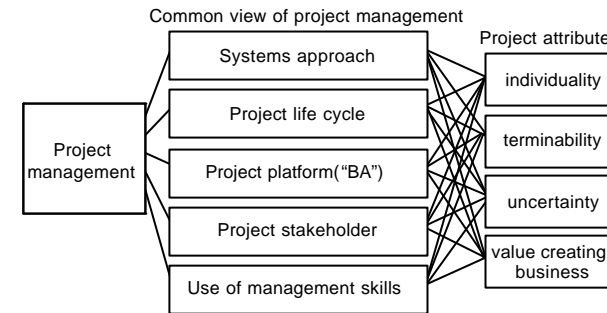
Project management is a general term of practical capability that organizes an organic team for the accomplishment of a mission and carries out a project efficiently and effectively by a justifiable and specialized means and acquires certain results.



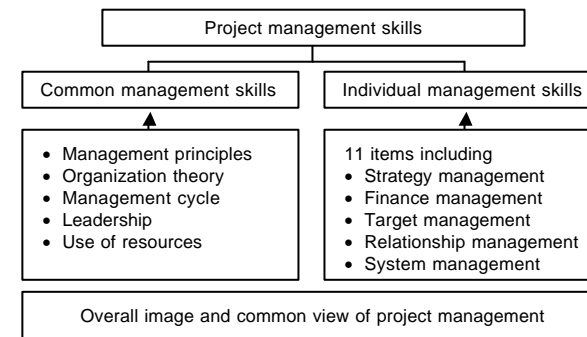
General term of practical capability that organizes an organic team for the accomplishment of a mission and carries out a project efficiently and effectively by a justifiable and specialized means and acquires certain results.

● Common view of project management

In terms of project attributes, regardless of field, scale and circumstances, ideas, approach, rules, environment and influence are common attributes.



● Project management skills



The common view is set to get rid of i) inconsistent interpretation, ii) disoriented course of action and iii) actions that do not conform to rules at all.

◆ Program management of P2M



■ Program

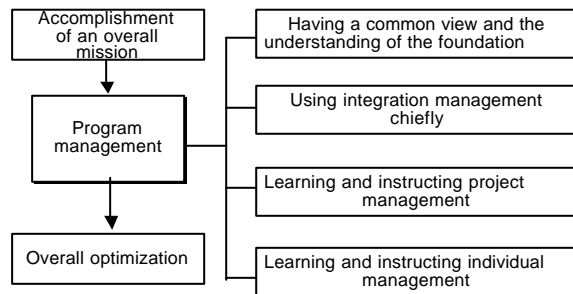
Programs are assigned tasks on requirement. Their basic attributes include

- (1) Ambiguity-profound views, ideas and meaning
- (2) Expandability-their area, scale and structure can be expanded.
- (3) Complexity-several themes are entangled and deeply related with each other.
- (4) Uncertainty-they include new elements and are subject to circumstantial changes.

Programs are an organic combination of several projects that accomplish realize an overall mission.

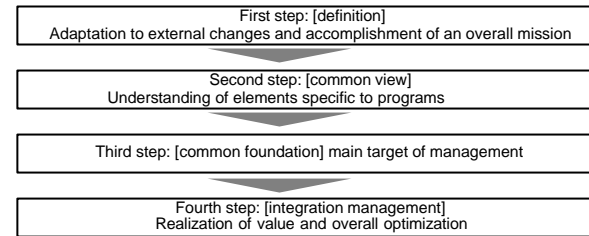
■ Program management

Program management is equivalent to practical capability that responds to external changes and flexibly adapts the fulfilling capability of an organization to them, in order to accomplish an overall mission. The role of practical capability lies in integration activities to enhance the overall value by optimizing the relationship and combination among projects and to accomplish the mission.



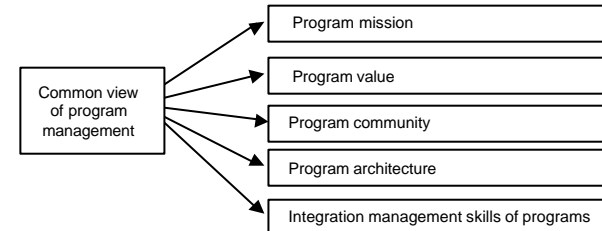
Prerequisites are to understand (1)program attributes (2)program rationality and (3)integration principles.

● Roadmap of program management

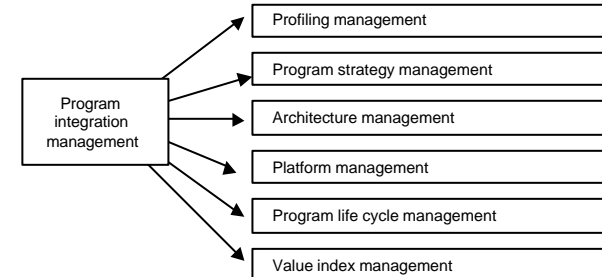


● Common view of program management

A common view represents basic (minimum) common recognition and interpretation that is needed in the actual fulfillment of management in connection with characteristic phenomena arising from basic attributes of programs.



● Program integration management



◆ Domain of individual management of new project management based on P2M



■ Project strategy management

Framework that clarifies a relationship between corporate (including public institutions and non-profit organizations) strategies and projects and introduces project activities effectively to the creation of corporate value

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Having projects create maximized corporate value Effective project investment Elimination of business risk 	<ul style="list-style-type: none"> Making use of evaluation system of strategic projects <ul style="list-style-type: none"> Real option Balance score card Project portfolio Maintenance of the foundation system of projects Construction of partnership 	<ul style="list-style-type: none"> Project companies Learning companies Construction of a Win-Win relationship Improvement of project competitiveness <ul style="list-style-type: none"> Improvement of speed, cost reduction quality improvement improvement of customer satisfaction

■ Project finance management

Project management method that aims to build a framework of fund raising necessary for the execution of projects

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Creation of a framework for efficient fund donation for projects Containment of risk in projects (limited retroactivity of debt repayment) Ensuring profitability and enforceability Creating a framework for fund procurement while forming a framework of projects Alleviation of a burden and dispersion of risk 	<ul style="list-style-type: none"> Creation and selection of basic concepts Selection and specification of elements Creation of a feasible framework and an optimal framework Allotment of optimal risk Evaluation of profitability and evaluation of finance eligibility 	<ul style="list-style-type: none"> Guarantee of realizability and signs of projects Creation of the framework of stable risk management that supports projects (integrated realization of a risk management system as a framework and fund raising)

■ Project systems management

We may come across ambiguous and unexpected matters at the time of performing project activities. This is one of the thinking methods that avoid such problems as much as possible.

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Rearrangement of complex problems existing in projects Fulfillment of required specifications Prevention of the occurrence of problems Improvement of the value of plans and results Improvement of project profits 	<ul style="list-style-type: none"> Systems management Systems engineering Soft systems approach <p>For instance, system thinking, problem solution methods, and modeling methods</p>	<ul style="list-style-type: none"> Project plans that can be accomplished Arranged and balanced project concepts Improvement of the quality of project management Improvement of results and productivity Customer satisfaction

■ Information management

How to make the most of information and information technology (IT) in fulfilling projects

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Improving efficiency and increasing sophistication of project operations Quick and reliable decision making Project cost reduction Promotion of information shared by stakeholders of projects 	<ul style="list-style-type: none"> Decision of project management methods Decision of project management operations which information systems are applied to Information shared within projects and communication methods 	<ul style="list-style-type: none"> Improvement of accuracy of project management Improvement of communication among project members Accumulation and effective use of shared information

■ Relationship management

A series of operational process that determines a relationship among stakeholders involved in a project and maintains the project in a good condition and leads it to a success

Purposes	Operational procedures	Result
<ul style="list-style-type: none"> Customer satisfaction Satisfaction of stakeholders Fulfillment of projects Maintenance of and progress in corporate activities 	<ul style="list-style-type: none"> Designing of relationships Maintenance of relationships <ul style="list-style-type: none"> -proposal -agreement -adjustment of relationships Reconstruction of relationships 	<ul style="list-style-type: none"> Clarification of the role and responsibility of each party concerned (stipulation in proposals, agreements and other documents) Solving problems during the fulfillment of projects Development into the proposal of next cases and new cases

■ Value management

Value circulation process that accumulates knowledge, experience and the like arising from typical corporate or project activities as a value source and gives feedback to projects

Purposes	Operational procedures	Result
<ul style="list-style-type: none"> Quantification of value Maximization of value Reproduction of value Maintenance of value Creation of value 	<ul style="list-style-type: none"> Recognition and evaluation of value Knowledge management Technology transfer Maintenance <ul style="list-style-type: none"> <i>Kaizen</i> TQM Contract of suretyship Collection of investment Environment Creation of service business 	<ul style="list-style-type: none"> Clarification of value Creation of new business Maintenance of business Complex effect

Domain of the existing individual management of project management included in P2M

Project organization management

Method for operating project organizations for quickly and flexibly responding to circumstantial changes in a strict environment surrounding projects

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Construction of the foundation of project organizations Improvement of productivity of project organizations Decision of decision making rules Improvement of communication efficiency Achievement of customer satisfaction 	<ul style="list-style-type: none"> Understanding of the environment of project organizations Designing of project organization Construction of project teams Securing human resources Operation of project organizations Evaluation of project organizations 	<ul style="list-style-type: none"> Improvement of the productivity of projects Improvement of the maturity of organizations Satisfaction of project teams

Project target management

Function that supplies a route map so that project managers and team members can imagine processes from then to the completion under the constraints of contract terms and resources and fulfill projects in a well-balanced manner

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Analysis of life cycles Visualization of targets Definition of the scope of services Establishment of a baseline for measuring and controlling progress Forecasting results Optimal execution Effective information transmission Control over changes Formalization of know-how 	<ul style="list-style-type: none"> Life cycle plan Scope management Cost management Time management Quality management Progress control Control over reporting and changes Control over delivery 	<ul style="list-style-type: none"> Successful completion of projects Customer satisfaction Accomplishment of targets Effective use of resources Contribution to corporate administration Creation of new projects

Project resource management

Management that clarifies six (material, fundamental, human, intellectual, information, financial) resources required for projects and properly secures them

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Resource plan Achievement of required specifications Basic plan for budget control Setting and ensuring delivery dates Improvement of the profits of projects 	<ul style="list-style-type: none"> Specification of resources Preparation of plans Confirmation of results Measures for improvement Accumulation of resources 	<ul style="list-style-type: none"> Securing resources (required quality, necessary time, securing within budgets) Improvement of results and productivity of projects Customer satisfaction



Domain of management

Risk management

Most of the projects contain uncertainty and risk and this method controls and responds to such risk to a certain extent.

Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Understanding uncertainty and risk (degree of danger) and drawing up countermeasures Giving a challenge to uncertainty and risk and decision on acceptance Minimization of the cost of loss Securing accountability (responsibility for results) 	<ul style="list-style-type: none"> Basic plan Specification of risk Preparation of measures (plans) against risk Execution of countermeasures Evaluation of the circumstances in which risk management is executed (reevaluation, monitoring and decision of countermeasures throughout a project period) 	<ul style="list-style-type: none"> Evasion of an excess over estimates Evasion of risk and securing safety Completion of projects within budgets Completion of projects within delivery dates and construction periods Customer satisfaction Improvement of project profits Expansion of business

Communication management

Basic matters of communication and a method of getting involved on the basis of one's business experience, focusing on cross-cultural communication closely related to project management

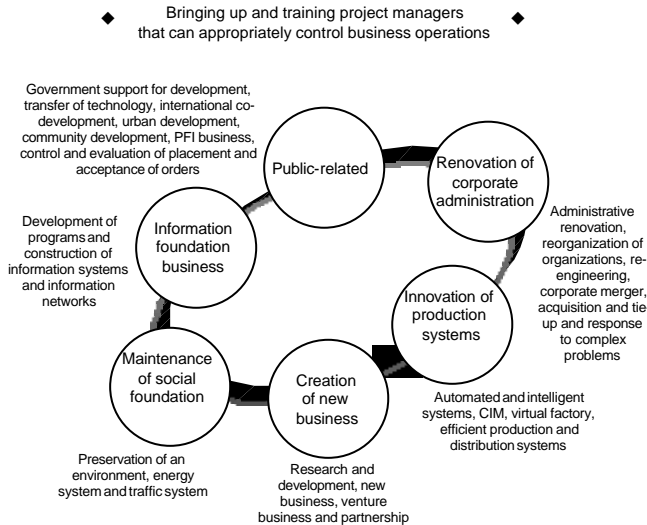
Purposes	Operational procedures	Results
<ul style="list-style-type: none"> Accurate communication among parties concerned Understanding of the actual condition for solving problems Making it easy for heterogeneous persons to participate in projects 	<ul style="list-style-type: none"> Ideas for alternatives Capability to deal with different cultures Role of local staff Understanding of one's own culture and different culture Making full use of information technology 	<ul style="list-style-type: none"> Control over forecasting Establishment of a confidential relationship among stakeholders Establishment of a communication style proper for such projects

◆ Domain of use and training activities of P2M



■ Domain of use of P2M

A large number of Japanese companies have employed western style knowledge and project management and obtained excellent results. Many Japanese companies also achieved a success with their independent project management. What is worth attention is that energetic Japanese companies employed creative and complex themes and had program management that enabled them to solve problems successfully. It is P2M that was turned into a practical system and it goes beyond western style project management and matches the current Japanese cultural climate. Accordingly, it is easier for Japanese companies to use it, and expectations that western companies will introduce it also rise. The domain of use is illustrated below and it includes reforms of self-governing bodies showing financial deficits, stagnant corporate renovation, survival of small and medium-sized businesses, IT solution business, speedy product development and global supply network.



■ Training of employees

Valuable projects are produced by human resources. Development of human resources comes before development of companies. It is necessary to learn about the creation of frameworks as part of training. Persons and organizations that have learned project management are have an edge, but there is more than learning project management. Reasons for it are as follows. Firstly, independently developed knowledge and lessons on the creation of frameworks are not share. Secondly, no efforts have been made to grapple with complex problems. Thirdly, advantages in an information-based society cannot be turned into rules. Japan has already obtained a far superior results. It is P2M that standardized Japan's wisdom, knowledge and experiences.

- (1) PMCC offers short-term P2M courses to leading companies and organizations.
- (2) PMCC offers about 10 open classes a year.
- (3) PMCC is scheduled to offer tie up courses with Waseda University and Lille University, France in 2005.
- (4) PMCC is planning to tie up with other training institutions.

◆ System of the certification of P2M qualifications and P2M club



■ System of the certification of qualifications

This full-fledged certification system grants the three level qualifications of project management based on the concept of P2M and it is the first of its kind in Japan. These new qualifications are granted as valuable qualifications based not only on knowledge but also on experience and practical capability. The certification system is a neutral one and anybody can take its examinations regardless of one's past experience of taking seminars. In 2002 the examination of PMS was given and in 2004 the examination of PMR is also scheduled to be given.

Abbreviation	English appellation	Examination	Eligibility and term of validity
PMS®	Project Management Specialist	Written knowledge-based examination	Academic background business experiences are disregarded Renewal of every 5 years
PMR®	Project Manager Registered	Practical knowledge+ written examination on practical capability + interview	PMS + experience of project management Renewal of every 5 years
PMA®	Program Management Architect	Essay on practical capability + interview	PMR + experience of project management Renewal of every 5 years

● Merits of the acquisition of the qualifications

For individuals

- Acquisition of new PM practical capability
- Pride and establishment of a social status as PM professionals
- Recognition of responsibility and self enlightenment as PM professionals

For employers (companies)

- Useful for corporate renovation
- Contribution to the creation of corporate value
- Useful for the creation of business models
- Useful for the actualization of corporate visions
- Serving as judgment criteria for individual capability at the dawn of a mobile employment society

- PMS® makes it possible to diffuse education and acquire an immediate asset of business adaptability
- PMR® increases social recognition of project managers and employment opportunities
- PMA® increases opportunities for rehabilitation and renovation arising from the creation of project-type businesses
- The qualification system improves responses to complex problems confronted by the professionals of project management.

■ P2M Club

"P2M Club" is intended for those that acquired the qualifications. Its members are given various privileges to obtain self-training and social confidence.

Eligibility for taking programs of continuing education for the renewal of the qualifications

Participation in specific theme study groups

- Members can participate in specific theme study groups.

Information exchange groups and meeting places

- Members can participate in exchange groups of those who acquired the qualifications and can exchange information and obtain new technical information.

Ability to serve as instructors of short courses

- Members can become instructors of short courses on P2M.

Participation in P2M symposiums

- Members can participate in P2M symposiums held at various places at discounted fees.

Acquisition of PMCC journals

- PMCC newsletters
- P2M mail magazines
- PM journals (dissertations)

Permission of use of the appellation of PMS

- Members can use the appellation of PMS for name cards, etc.

● Continuing education program for the renewal of PMS qualification (CPU)

Those who acquired the qualification of PMS can take a continuing educational program for 5 years to allow them to improve the level of knowledge of project management and learn the up-to-date technical knowledge of their specialized fields.

◆ Purposes

- Enhancement of the level of knowledge
- Acquisition of the up-to-date technical knowledge on PM
- Self training and self enlightenment
- Acquisition of social trust and quality improvement

◆ Forms

- Execution of PM activities
- PM self training activities
- Receiving PM education given by official academic institutions
- Attending courses designed for the renewal of the P2M qualifications designated by PMCC
- Participation in PM professional communities

◆ Example of the application of P2M ...1

Dye manufacturer transformed itself into a life value creating corporation by taking advantage of profiling management

A dye manufacturer faced a crisis of bankruptcy once. Now the same company is dealing with fashion, interior decoration, automobiles and housing after diversifying its business fields. It has come to obtain excellent results as a life value producing company.

▲ Four symptoms common in the manufacturers that faced a crisis

Since a financial big-ban, leading manufacturers, including those of semi-conductors, home appliances, heavy machinery, and automobiles, have faced a crisis and manufacturers having difficulty rehabilitating are too many to enumerate. What caused this to happen?

One of the biggest reasons is that the framework that maintained growth and profitability in the past has lost its power to produce results due to environmental changes. For the moment, too, most of the companies are desperately making efforts in terms of administrative strategies, cost reduction, "kaizen", development and reduction in lead time and reduction of inventories. However, no desired results have been realized yet.

To take a look at these manufacturers, we can tell that there were symptoms in common as follows.

- (1) Though reforms are proposed, they are abstract and do not focus on definite themes.
- (2) Though themes are set up, they have little effect on the entire company.
- (3) No desired results on themes have been realized.
- (4) Evaluation and treatment after the execution of reforms are ambiguous.

Under such circumstances, could we possibly declare that the concept and intention of entrepreneurs have certainly spread into their organizations?

▲ Profiling that clearly defines problems

P2M has profiling management as one of program management methods. Profiling refers to a process that clearly defines problems seen through current complex phenomena and gives comprehensive control over the initial stage when the details of missions are well understood and links between purposes and goals are created. In the same stage relational analysis reveals the meaning of the entirety and parts, cooperation, and interests and problem solving scenarios are envisioned. In surveys on feasibility and simulations the scenarios need to be carefully examined. What is especially important in this stage is to make the comprehensive views and profound insights of entrepreneurs look like a mission of the companies or organizations and have several projects integrated under such view and insights.

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▲ Construction of direct relations with end users on a new information network

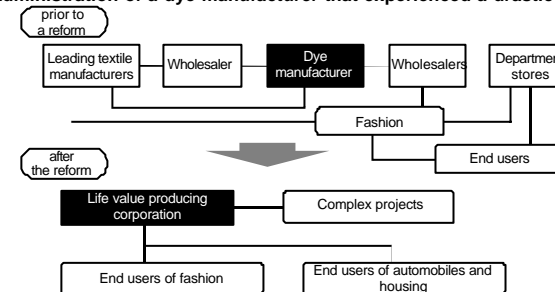
This dye manufacturer is a long-established company that handled a variety of textiles from silk to synthetic fibers. Fibers were supplied to it through wholesalers from leading fiber manufacturers and it was commissioned to dye them for a long time. However, cheap textiles came to be imported from overseas in a large quantity and a domestic demand for dyeing drastically dropped, leaving the company on the verge of a crisis of bankruptcy at one time. Now the same company is dealing with fashion, interior decoration, automobiles, housing, electronics and medical supplies after diversifying its businesses. It is producing excellent results. What on earth enabled the company to successfully transform itself in such a short period of time?

When the company was on the brink of bankruptcy, a new president took office and worked out a comprehensive view and insight seen through the tendency of the times, environmental changes and importance of IT development. He set out new corporate value, that is, the conversion from a dye manufacturer to a life value producer. The corporate mission led to the acquisition of profitable growing businesses and enabled the company to understand environmental changes ahead of other companies and change itself from a subcontractor to an independent manufacturer.

However, the abovementioned explanation is still too abstract. The dye manufacturer originally had connections both at the upper course and lower course of distribution. To sum up, the company had complex interests in the field of distribution. Therefore, the company severed these old conflicting interests and changed the whole framework. It also approached end users and constructed direct relationships with them. Thus, it finally became able to manufacture products having life value.

In this regard, a means to directly link local factories and the market in Tokyo was a problem. It was profiling management that was made full use of as a method of solving the problem. To be concrete, what solved the problem was a CAD business model that receives individual orders on dyeing and patterns by means of computer graphic interfaces. Then data are transmitted on the Net at a surprising speed and through a CAD manufacturing model, automation, a CAM model and marketing several projects are created and each order is carried out. As a result of this profiling management, innovative fashion was produced one after another and further a marketing project developed businesses of interior decoration for housing and automobiles.

▲ Administration of a dye manufacturer that experienced a drastic change



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◆ Examples of the application of P2M ...2



Use of P2M at waste disposal plants, which is accelerated by the switchover into the PFI system

Nowadays more and more self-governing bodies intend to privatize public waste disposal plants. As far as companies are concerned, they have to assume long-term risk. Therefore, it is necessary to launch a project after taking the overall administration into consideration.

◆ Legal regulation led to the creation of a new project

Waste disposal business is now at a big turning point due to the formation of a resource circulation type society, which was stated as a national policy, and prevention of global warming.

So far Japan has made it a fundamental rule to incinerate wastes from the standpoint of sanitation. General wastes from households have been disposed of as a part of administrative services, but as the problem of dioxin came up, the surroundings of waste incinerators have been under stricter control. As a result, it is getting more and more necessary for self-governing bodies that operate disposal plants to maintain the facilities carefully and construct new facilities.

On the other hand, among companies that construct these facilities competition in technical development has started to heat up in order to meet environmental regulation and they have further developed waste disposal technology that enables material recycling, thermal recycling, and chemical recycling to be carried out in accordance with the concept of the resource circulation type society.

Also, wastes generated from corporate manufacturing activities and products themselves became regulated by various recycling laws, including Containers and Packaging Recycling Law, Electric Appliance Recycling Law, and Automobile Recycling Law, and manufacturers were forced to dispose of them on their responsibility.

▲ Administrative reforms will change private businesses

Due to a shortage in tax revenue attributable to recent depression, funds to be invested in waste disposal administration have been insufficient. The number of self-governing bodies that plan to privatize public waste disposal facilities has drastically increased for the reason of efficient and effective management of funds and use of private sector vitality.

The former contracts were lump sum subcontract agreements based on orders on performance and they covered the processes from designing, manufacture, construction and trial operation to delivery in conformity to order specifications drawn up by self-governing bodies, but owing to the transition to privatization of public facilities, the processes from the operation to the maintenance and management of the facilities fell under the scope of subcontractors. Risk assumed by companies used to be the cost of construction alone, but now companies have to assume risk for about 15 years when the facilities will be operated. Consequently, companies are forced to argue about whether they will take part in a bid or not from the administrative standpoint as well.

Therefore, in the past waste disposal business needed to make judgment from the standpoint of whether or not their technical capability matches the production and demand made by customers, but now they also need administrative judgment. Especially, since the project is a long-running one from the acceptance of orders to the operation of facilities, it has been transfigured into a business that exerts a great influence on corporate administration.

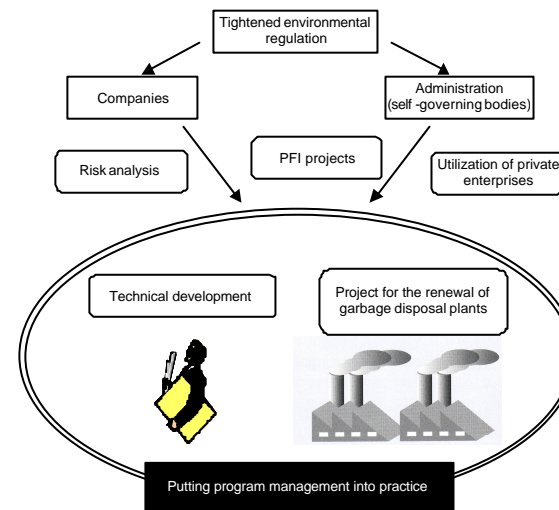
▲ Necessity of program management

Changes in an external environment produce new technology and demand changes in the corporate administration. Technical development projects have to fight short decisive battles now and projects for constructing waste disposal plants have gradually taken the PFI (Private Finance Initiative) system. Projects have been extended over a longer period of time and come to shake the very foundations of corporate administration.

The administration switched its policies to the cost reduction of the entire projects and minimization of operation-related risk and the big problems grappled with by companies are the administration methods concerning increased efficiency of individual projects, improvement of profitability and minimization of risk. Companies are trying to control and merge several projects and the choice of individual projects also requires crucial administrative judgment.

This is why the concept of program management is effective in terms of administrative strategies and has been introduced.

▲ Positioning of corporate administration and technical development in the environmental administration



◆ Questions & Answers on P2M



Q1 We often hear the term, “project management”, used these days. How could we interpret it?

▶ **A** We explain the term to beginners as activities that can actualize desires and dreams within a specified time limit. In terms of corporate duties, projects can be defined as plans having specific themes. Since human resources, money and materials are invested in plans, we desire plans to produce results matching the investment of resources. The entirety of reasonable activities is called management.

Q2 However, P2M explains it as value producing projects. Why are two different explanations given?

▶ **A** Basically the two explanations are the same. A precondition of project management for companies is to select projects that can produce profits and carry them through and that of self-governing bodies intending to conduct public works is to select projects that can produce benefits, such as welfare, convenience and safety, and to put them into practice. So far this fact has not strongly been recognized and quite often useless projects were conducted. Accordingly, it is very important to recognize projects as value producing projects over and over again.

Q3 Why have project management and P2M come to attract attention recently?

▶ **A** In short, as Prime Minister Koizumi emphasizes, both self-governing bodies and companies need structural reforms. Duties are classified into two types, that is, those called routines that are repeatedly conducted in a daily life and projects temporarily carried out by teams within specified time limits. Projects contain unexpected and inexperienced details, such as new and creative matters and the solution of problems. Project management and P2M have attracted attention as an effective practical standard that can systematically offer ideas, knowledge and methods on renovations and problem solutions in all the fields of administration, industries, and education.

Q4 Project managers were already acknowledged in the engineering industry and IT industry. Why was P2M guidebook expressly published?

▶ **A** It is because the problems confronted by Japan have become complex. The wages of Japan reach the top level of the world and are twenty-five times higher than those of China. China has come to be able to manufacture products of the same level, such as home appliances, materials and parts, in terms of quality and delivery dates and overwhelms Japan with its competitiveness. Consequently, deindustrialization of the manufacturing industry and downsizing occur everyday and investments are made in technical development. However, China's technical development ability ranks second, but in light of difficulty in practical implementation and establishing new businesses due to regulations and its environment China occupies the 49th place. Quality of difficulty differs in connection with the creation of necessary frameworks. In other words, we need project managers that can understand the entirety from a lofty point of view concerning business and a technical field and transversely solve problems with a wide view. Accordingly, project management does not intend to bring up managers specializing in plant and information technology.



◆ Questions & Answers on P2M



Q5 P2M proposes program management that goes beyond project management, but what is the reason behind the proposal? Is it possible to use P2M for small and medium-sized businesses?

▶ A You asked a very good question. Program management tries to optimize several projects on the whole. Program management and project management are mutually and closely related, but program management governs project management. In other words, program management is suitable for the solution of complex problems project management find its limits in.

For instance, suppose a building (system) will be built. Unless the fund is financed by banks, the project will not become effective. The role to be played by project managers was to be given funds and build a building. However, as a matter of fact, we collect project funds, forecasting the needs of offices and housing in urban districts and estimating the collection of investment. What if this company issues shares and notes and collects funds? This is a scheme project that needs expertise, time and cost similar to the construction of a building. It also needs knowledge to acquire the users of the building and a service project for its maintenance. What I have just explained is the creation of a framework and if small and medium-sized enterprises start up a new business, they can quickly use it with the application of knowledge.

Q6 I hear that P2M has attracted attention in the west, but do you think that it will become a global standard?

▶ A I believe that it is very likely. The P2M standard guidebook was published in November 2001 and the training and certification of qualifications started in April 2002. However, IPMA of Europe is showing its interests in mutual certification as well. A P2M course will be started at the Graduate School of Lille in France on an experimental basis in the academic year of 2003. P2M needs more accumulation, but we hope to realize its global standardization in a few years.

Q7 I work for the personnel affairs department of a company. If desire to adopt project management as a part of employees' education, not for the purpose of acquiring qualifications, in accordance with the P2M standard guidebook, what would you suggest that we should do?

▶ A The P2M includes program management that differs from the western standard and individual management that supports project management also covers the scope of knowledge, such as strategies and finance. The certification of study training institutions is scheduled to be independently conducted soon. For the time being please contact PMCC for details, for PMCC provides various training services.

Q8 I major in the humanities. I hear that students in science and technology are eligible to take the examinations, but are students in the humanities ineligible?

▶ A Regardless of majors, the examination of the project management specialist in P2M opens its door to everybody for a qualification challenge. We are not in the times when human resources should be classified into a humanities major and a science major, but merger of knowledge is the most important value assets. We hope that you will take the exams.

Q9 Is the qualification of P2M a national state qualification?

▶ A No, it isn't. The Ministry of Economy, Trade and Industry provided funds for the development of this standard guidebook and actively supports the promotion of the qualification system and helped us to operate the system as a non-profit organization. The system of certification is also being privatized independently and the trend is the same in the West as well. Since this qualification is recommended by the nation, fairness, justice and neutrality are its important operational principles. A club designed for those who passed the examinations was set up and it makes efforts to provide services after the qualification was granted.

◆ Questions & Answers on P2M

Q10 Since I would like to take the qualification examination, could you give any advice on the quickest way to success? Also, if I acquired the qualification, what merits can be provided? I studied the American standard, but is it useless?

▶ **A** PMCC offers study training courses designed for the qualification examinations twice a year and taking these courses will surely be beneficial. However, taking them is not a requirement for the examinations, and you can choose to prepare for the examinations by studying all by yourself. The acquisition of the qualifications is one of personal goals, but in a society that no longer guarantees lifetime employment, academic history and business history alone cannot sufficiently prove your career or capability. The certification by a third party institution is needed. Fortunately, the qualifications on project management has already been evaluated highly in the west, ahead of Japan, and they are being recognized not only in the construction, IT and engineering industries, but also in the manufacturing, consultant, financial and service industries. At PMCC, a club for those who passed the examinations was set up and provides opportunities for deepening knowledge and supplying information. As for the scope of knowledge common with P2M, examinees might be excused from taking an examination of the American standard, since discussions are going on, and so studying the American version won't be useless. Since P2M covers a wider scope, we will provide an additional examination on the coverage for the purpose of granting the certification.

Q11 If I have learned everything in the standard guidebook, will I satisfactorily pass the qualification examinations?

▶ **A** The guidebook merely shows the scope of knowledge. Accordingly, it is not a textbook. We intend to publish, specify and recommend textbooks for the qualification examinations of P2M independently in the near future.

If you would like to purchase Project & Program Management Standard Guidebook (P2M), please send an order form to the secretariat of PMAJ specified below by facsimile.

Booklet on P2M

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