

The 2007 Spring Conference of IAP2M(International Association of Project & Program Management) was held at Nippon Institute of Technology, Jinbocho Campus, on April 27. More than 30 lecturers made their reports in an individual session, and we show hereunder the summary of their reports taken from their preliminary papers.

Elie Okada

Project Balance in an Innovation System and Intellectual Property Policies in the Global Competition and Cooperation

It is clear that, as the US and European cases show, we cannot develop innovative advanced technologies in a closed manner in a country because of human resource / funding gap. When we want to improve the economic competitive advantage of the nation, we cannot ignore the important role of consortiums. However, when we are to design project domain and intellectual property strategies of consortiums, we notice that there are differences in consortiums between those whose projects are to acquire competitive advantage in a global competition and those whose projects are to acquire international standards. In addition, members' interests become more and more complicated when universities participate in the consortium as active players. This paper insists that balances are to be taken into account in arranging projects in a program management, since balances among projects are sometimes missed and a priority of fundamental needs tends to become lower when we pursue clear demands of customers.

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Takayuki Asada , Tetsushi Miura

Games and real options in valuation and strategy in the cooperative investment

This paper discusses the use of games and real options in valuation and strategy to analyze investment opportunities especially in concurrent alliance or consortium, that enable each firm to decide important competitive/strategic decisions under uncertainty in cooperative research and development investment. It uses examples from IC business/IC chip /IC tag which have made an impact on B to C and B to B business today.

Keyword : games, real options, concurrent alliance, consortium, de facto competition

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Yuji Kishira

Holistic transformation management in multi-project environment

-A study of TOC and Japanese shop floor best exercises

In real life, project organizations exist in multi-project environments, not in a set of isolated single projects. New management techniques currently being implemented in the hope of improvement sometimes create more confusion often, by spreading "silo" mentality throughout organization. This paper illustrates the mechanism of how multi-project realities cause confusion in organization management, and proposes a very simple but effective TOC-based holistic management solution harmonized with Japanese shop floor best practices with case studies.

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Kazuo Tanaka , Masaru Tamaki

Development of the Service Model in Japanese Construction Industry

~ Adaptation of the Building Renewal to the Business Restructuring and the Improvement Activities ~

Japanese corporations, facing serious economic depression in mid-90's and after, were not only suffering the business downturn. Some business owners saw it as an opportunity and put efforts on utilization of their building assets, and it resulted to add vitality onto Japanese Construction Industry. In this thesis, focusing mainly on the Architectural Renewal projects, I will look at corporations that move toward the managerial renovation with value chains, in which business restructuring and improvement activities give missions to architectural projects and, the information as an output of executive projects in construction field links service sectors. Therefore, the discussion will look upon the shape of the service models, with which the construction industry contributes to the value creation in the next generation, and their actions, that is to say the improvement in the ability to contribute for the business value upgrading from the service models.

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Masatohi Nishio,Wei Chen,Shigeru Sugaya,Keita Shinohara,Kei Yamaguchi
An Execution Example of DOA Educational Project Based on Platform Management

In response to an environmental change which surrounds society, a move to the change has been also seen in the university side which tries to send out talented people to society. Meanwhile, it might be really important in the university education that not only a professor teaches students, but also they come to learn by themselves. Namely, it can be said to be important to consider a university to be "a place where learning is induced" rather than a place where students are taught. "DOA educational project" which is targeted in this research has been consecutively undertaken for seven years under such consciousness. In this research, the concept of the "Ba" of the platform management in P2M was taken for the purpose of improvement in the further validity of this project, and the DOA educational project was practiced in the 2006 fiscal year. The execution results are reported.

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Satoka Yamane
The function of strategic MC for NPD performance enhancement

The challenges to be met have become increasingly complex in company's NPD (New Product Development).It is an important function of the management to keep abreast of the constant changes in the market and continue product releases without being exposed to increasing development investment and speed competition. The system of management needs to respond to the change of environment surrounding NPD. So this study focuses on SMCS (strategic management control system) as a system that supports NPD performance enhancement, and performs positive analysis to examine how to use the many financial and non-financial information supplied from SMCS and whether these information contribute for NPD performance enhancement or not.

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Hideo Yamamoto , Atsunori Higashikawa
Program Balanced Scorecard for Research and Development in
System Integration Service Providers

This paper proposes a strategic research and development management using Balanced Score Card for software system integration service providers. It identifies that the software system integration process is quite different from hardware product manufacturing. The procedure of making strategic MAP for R&D division of software system integration service provider is described, taking account of Project & Program Management. The key performance indicators of research projects are designed from the integrated viewpoints of cost evaluation, non-cost evaluation, and the research period. Furthermore, it shows an indirect contribution process of research activities to the final goal of the company.

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Shoei Komatsu
Management Model of Information Development Program
–Adaptive Multiple Spiral-up Management

The society is being extensively furnished with information networks and then the information systems are increasing the value and importance to us. In the meantime, various kinds of process are being worked out and implemented for the development of information systems. Nevertheless, the project of information system development still has a low rate of success. Moreover, studies on the management model for the development are rare. Therefore, the framework is firstly studied to cover the overall lifecycle of information system project, from the viewpoint of user enterprise. Secondly, the study is done on the project breakdown structure consisting of work, organization and communication. Finally, the program management model is studied based on the framework and the breakdown structure.

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Yoshinori Azuma
Designing of Sustainable Framework of for High Value Product R&D
-The case analysis of clinical diagnostic reagents-

The domestic market of clinical diagnostic reagents is estimated to the size of 3 billion dollars, and it is equivalent to one twentieth of the market for medical medicines. Though the market is relatively small, competition is driven to be excessively stiff by a

multiple suppliers. Eventually, for R&D of the new product, long term efforts are exposed in uncertainty until the outcome is gained. To survive and grow in this environment, it is essential for SME to build effective framework of R&D to produce high value and serve continuously. This research is intended to seek for the high performing framework in speed and outcome.

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Tenshou Ujino , Masatohi Nishio
Research on Class Management Strategy Based on Project &
Program Management

In late years university management has been severe because expected roles in educational organization of university from society has been diversified by a social environmental change. Under such an environment, quality improvement of existing students by providing educational services is considered to be important in order to activate the university. This paper regards a class as a project, introduces the concept of P2M (Project & Program Management for Enterprise Innovation), sets class management strategy and reports the execution results. At the same time future takes and countermeasures are proposed.

Fumihiko Isada
Business architecture for Program & Project Management

In this paper, the business architecture is explained, which is the requisite when considering Program & Project Management. The business architecture is the fundamental plan for the whole business, and show the blueprint of business played by many organizations. The business architecture focuses especially on the relationships between business activities, and how to design the interfaces between the activities. In this paper, prior researches are surveyed first, and it is shown that these researches mainly focus on the statistical viewpoints about business architecture. Then, the dynamic angle of the business architecture is considered, which is how to control the relationships, and how to reconstruct the business architecture.

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Kosei Watanabe

Profiling management develops a mission into feasible scenarios by interpreting the intent of a program mission from wide perspectives, using a broader value structure to move from the "status as it is" to an "ideal status." We have already provided a practical method to find out an issue as the "status as it is." This method is capable of overlooking enterprise competence status in 8 view domains. On the other hand, creation of an "ideal status" is not so easy, because many people do not have such kind of insight capability to provide the solution. At this time, we tried to study a practical method to adopt several business models (BMs) instead of utilizing insight. We studied past and current BMs, and assume future BMs.

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Tadamasa Imaguchi

Change program towards project oriented organization

Under the rapid change of the environment, organization must have the organizational abilities to perceive customer and competitor's movement and to communicate their information to most appropriate person in the organization and to get best solutions. It is necessary to construct the platform of perception system, communication system and empowerment system in the organization.

In this paper, fundamental concept to change from hierarchy organization to agile and project-oriented organization is shown. Finally organizational ability to work this platform is discussed.

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Junji Uchida

"Study about the roots for competence of Enterprise Organization
– In case of metaphoric expression of P2M VW-OW Model
like a plant which yields its own fruits –

This report attempts to reveal the roots of competency of Enterprise, using the metaphoric model on the theory of P2M_VMW_OW model; an Architecture of competency of Enterprise Organization, like as a tree that yields its own fruits. Value of Enterprise has been established from an analytic approach on annual financial report of each Enterprise, however, a metaphoric approach from the origins of competency of organization has never been challenged so far. The author wish to have a lot of critics on

this report from the readers who are in charge to contribute to capturing the value of enterprises.

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Miho Nosaka

Theoretical study of choosing between M&A and alliances as alternative ways -Through a case study on steel industry-

Today, the numbers of M&A and alliance have been increasing rapidly. Although both organizational modes have the same purpose of getting external resources or capabilities, they have been discussed separately. As Dyer and Kale and Singh (2004) pointed out, although executives instinctively talk about acquisitions and alliances in the same breath, few treat them as alternative mechanism by which companies can attain goals. In recent years, the concern with choosing either M&A or alliance as alternative modes has been growing among some researchers. This question remains as a matter to be discussed further. This paper, I reviewed the prior literature about choosing either M&A or alliance. Next, through a case of steel industry, this topic is discussed and lead to a conclusion.

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Shigenobu Ohara

The Fourth Generation Type Japanese Project Management-Synergetic integration of innovation, development and improvement-

Since P2M (Project & Program Management) had been developed as the Japanese first standard version in 2001, 6 years have elapsed. Its knowledge framework has been noted in particular to the type of problem solution as the third generation PM from complex mission. It has contributed to cause mind shift in its applications either on engineering construction or on the interface with business domains. In line of this thinking trend, ICT solution industry is interested in the holistic lifecycle management from scheme, system to maintenance. The author believes that the core of PM potentials is hidden in creative innovation and knowledge integration. In this belief, development of the new PM framework for corporate reforms is essential to cope with rising demands. In the meanwhile, reviews are also imperative to look into counter level management

against failures and setbacks. This paper is prepared to guide a part of the fourth generation PM framework to reframing, which harnesses critical roles of innovation, development and improvement.

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Emi Yunokawa

Research of reusable IT project framework

~ Plan, organization, and change management to use WBS and sharing of knowledge ~

IT Projects often starts in unpredictable and uncertain situations, and the ambiguity of the first definition and frequent changes to specifications/requirements of them are important risk factors in business. Profitability of projects shows the tendency to worsen with the commoditization of WEB technologies. In addition, these projects have short delivery dates, frequent specification changes and scales not so large. To raise profitability of IT projects, we need to obtain ""visualization"" of working process of projects, find out similarity of each of them and build a framework of improving quality and productivity of them.

This paper describes a common framework "" Research of reusable IT project framework "" , the method of accumulating knowledge for projects, sharing change information and acknowledge the influence of them and managing them more effectively.

Yuan Zheng , Motosh Shimizu

A Study on a Global System for Energy Sustainability

Solar power generation is regarded as the core energy source in very long term future of hundreds of years. An integrated system of generation and transmission for such energy system is studied from the stand point of the global technology development program. The capability of the present distributed small systems such as the roof-top photovoltaic systems is limited to be supplementary. To apply the solar power as the future core primary energy source, it is necessary to operate very large scale solar power generation plants located around the world in coordination by connecting them with super conductive cable network. We made a study on a global energy network system model integrating three major energy consuming areas of China, EU and US and five very

large solar power generation plants, to estimate the requirements for the generation and transmission of solar power electric energy.

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Hiroshi Sasaki

Business Portfolio Strategies for IT Services Companies in Japan

Michael Cusumano divides software business into 3 types; services companies, products companies, and hybrid solutions companies and insists that the hybrid type is the most realistic strategy. This paper investigates all the listed IT services companies in Japan, and seeks desirable business portfolio strategies that fit the tough business environment.

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Kunihiko Taniguchi

P2M Spun Knowledge Cores by Knowledge Thread

~A Case Study : Fostering Technicians for Robot Industry~

We are fostering technicians while promoting research and development for robot industry from viewpoint that the keys for success of the industrial promotion policy are innovation policy and human development.

We have developed the fostering program by combining the following projects;

Searching the fostering policy, Planning the fostering project,

The practical study at technical high schools, Development of the text

In this report, I am focusing the role of the mediator [named "Knowledge Thread"] to combine the projects toward the program by spinning the knowledge activity [named "Knowledge Core"].

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Kazushi Hirai

P2M approach in the policy proposal process to the "Asian Gateway Strategy Council" where Prime Minister Abe serves as the chairperson

Prime Minister Abe hammered out the "Asian Gateway Vision" which will make Japan

a conduit between Asia and the rest of the world in terms of the flows of people, goods, money, information, and culture in his policy speech. Now, the "Asian Gateway Strategy Council" where Prime Minister Abe serves as the chairperson is doing the examination work of the concrete subject for the design realization for which seven fields, such as financial-and-capital-markets functional enhancement of Japan and Asia, are made into a frame. The task force probed the subject. However, the probed subject was only the unsolved difficult problem with which the governmental agency dealt until now. For solution, conversion of the way of thinking is needed. Then, the subcommittee of NIRA (National Institute for Research Advancement) where I participate drew the solution for whole optimization after arrangement of a point of argument anew using approaches of P2M, such as profiling management.

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Takahisa Udaki , Takayuki Asada

Feasibility study of the production process of hydrogen from biomass

We have evaluated the feasibility of the production process of hydrogen from biomass. In these days, Biomass energy has been expected as an alternative to fossil fuels from the aspect of environment and energy issues. Intended biomass is the leftover food, because many leftover foods aren't effectually being leveraged as energy resource in Japan. The collected leftover foods are gasified, and converted to hydrogen by the steam reforming. Feasibility of the production process of hydrogen from biomass has been evaluated from the result of cost estimations.

Kumiko Shirai

Human Capital Management for Competitive Advantage

Human capital management enhances the value of "Jinzai" i.e. the talented personnel who belong to companies and leads the company to a success.

Strategic measures to create system that can convert employees into "Jinzai", and to form a competitive advantageousness towards corporate innovation is the practice of human capital management. In the IT industry, it is not too much to say that, as a

system integrator, the source of differentiated advantage is human assets, which is “Jinzai”. Intellectual property, experience and lesson, and business models; these are all created by Jinzai.

Nihon Unisys group is developing strategic personnel training program in order to practice consolidate “basic Jinzai visualization system” to promote human capital management, and to make use of human resource portfolio, aiming to become a competitive system integrator that outlives through the next generation.

In this report, the author discusses human capital management and introduces Nihon Unisys’ works. Also, the author surveys service business to create customer value based on know-how of practicing the human capital management, and refers to the validity of introduction reports of applied cases that appear in this issue.

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Masatoshi Nishio

Educational Effects and Execution of KPM in the University Education

Changes in the social environment have requested changes in the fields of University education. Guaranty on quality of University students by outer evaluation has enforced educational fields to make innovation as a social requirement according to the arrival at the age of all enrollment. In spite of such environmental changes, in the current situation where the managerial organization of University having a bureaucratic character has not attained to drastic innovation, we had tackled trying to get educational effects by applying KPM to educational fields. We regard a student as a customer, introduces CRM systems to seminar management, grasp both lecture type of class and practice type of class as subsystems and executed program management raising as a total mission of seminar management cultivation of human talents which are needed in the society. This paper reports the execution results.

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Yuji Matsumoto

On the effects that lower-hierarchy and performance-measurement-system have on project management competence for organizations

Many organizations try to adopt autonomous organization mechanism (AOM) in order

to obtain management flexibility and decision-making acceleration. This paper analyzes the effects that lower hierarchy as AOM and performance measurement system have on project management (PM) competence for organizations, based on the questionnaire to a certain public organization. This paper statistically shows that there are some effects on PM competence, and also shows that relation management is important in AOM.

Keyword: autonomous organization, lower hierarchy, performance measurement system,

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Kenichi Aihara

Relationship on CIO and P2M Leader in view of ICT Governance

Human skill issues to be achieved for leader have been discussed through business position such as Chief Information Officer and Program/Project management leader individually. The concept of ICT Governance is successfully introduced among organizational innovation and capability for sustaining competitive advantage in Web2.0 age. This paper presents possible relationship between CIO and P2M leader in view of ICT governance. Discussion is done through a proposed 「MONO Production to KOTO Creation」 Process Innovation concept.

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Yuji Morikawa , Ryuji Isigami

Cultural consideration for PM software in Japanese manufacturing industry

With growing interest in Project Management (PM) in general manufacturing, a number of companies are strengthening the efforts of development and education of PM method. They, however, haven't made positive use of PM tools which are supposed to play a significant role in practice, compared to computer systems in other fields. Although Japan has accepted and utilized a great number of foreign products so far, why don't the PM tools prevail? In this article, I studied the cause of this issue. In addition, I made my observations about what PM software should prepare for Japanese manufacturers as well as the characteristics required for realizing traditional Japanese management.

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Shigeru Sugaya , Akie Sano , Masatosi Nishio
Research on Corporate Social Responsibility in Case of
Enterprise
– Proposal of Sustainability Balance Score Card –

Recently, the social responsibility in the business activities is greatly asked in the social environment. An enterprise should consider the approach to CSR in order to set up the management strategy. However, CSR has not functioned enough under the present situation as a part of the management strategy. The dilemma of a managerial demand and the social demand expected by the stake-holder has made practices of CSR difficult, and it would be important how to draw the route to make the expectation and the demand of various stake-holders balance. In this research, balance score card (BSC) is used to set up a CSR strategy of whole company, and it proposes the sustainability BSC to evaluate the sustainable growth of an enterprise.

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