Trends and Development in Management Studies

Vol. 1, Issue 1, 2012, Pages 25-41

ISSN 2319-7838

Published Online on November 30, 2012

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http://jyotiacademicpress.net

A REVIEW TOWARDS THE NEW JAPANESE PROJECT

**MANAGEMENT: P2M AND KPM** 

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Received September 17, 2012

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Abstract

To survive in the economic recession, Japanese organizations looked for alternatives in project

management methods as a mean of revivification. P2M is the Japanese version of project and

program management, and is the first standard guide for education and certification developed in

2001. KPM is the developed version of P2M. P2M/KPM manages projects and programs based

on the mission-driven approach and are proposed to foster development of project management

through value creation in a complex and changing environment. It is a project management

approach that is comprehensive and adaptable to flexible environmental. It has been proven that

flexibility, adaptability, and reformation are essential to survive during an economic crisis. The

strategies and methodologies of P2M/KPM have proven to be effective and successful in

providing learning opportunities in companies, enhancing participation, and motivating the

consensus and awareness of core leaders. Essentially, during the economy downturn, the

successful companies were those who applied P2M/KPM methods.

*Keywords*: review, Japanese project management, P2M, KPM, philosophy.

## A Review Towards the New Japanese Project

# Management: P2M and KPM

For over 20 years, The Engineering Advancement Association (ENAA) of Japan has been the pillar on continuing researches and studies on Japanese project management (JPM). JPM is a Japanese-style management system developed in Japan to effectively solve complex problems in enterprises, and manage projects and programs to promote value creation activities (Ohara, 2005). ENAA established a committee that later on developed the first published philosophy of JPM, known as Project and Program Management (P2M). A new Japanese-type project management knowledge and qualification system of project management, based on P2M, is proposed to foster development of project management through value creation in a complex and changing environment.

Although P2M is still being put into practical use both internationally and in Japan (Kinoshita, 2005), an improved paradigm called *Kaikaku* Project Management (KPM) has been introduced (Ohara and Asada, 2009). The application and effectiveness of P2M and KPM need to be addressed, as many studies have shown an increased interest in and appreciation for Japanese management principles and practices in recent years (Lee and McCalman, 2008).

This research article thus stresses the relevance of JPM's P2M and KPM. A critical review of both these management methods was carried out and by clarifying the features and essences of each method, a project manager can apply them when managing projects in order to obtain the ultimate results. Therefore, the objective of this article is to provide an introductory, development, and evolution on P2M and KPM methods.

This article explains the background, processes, and principles of P2M and KPM, and classifies the features and essence of P2M and KPM. This is followed by a description of the research methodology. Subsequently, the development and evolution of P2M and KPM are discussed, and finally, followed by the conclusions.

### P<sub>2</sub>M

P2M is the first Japanese project and program management for enterprise innovation developed by Professor Shigenobu Ohara in 2001 (Ohara and Asada, 2009). It was developed with the support of government, industry and professional associations; and gained widespread support for adoption and application within enterprises (Crawford, 2009). Two keywords to describe P2M are value creation to enterprises and its mission-approach ideology in managing projects (Ohara, 2005; Ohara and Asada, 2009). The P2M model aims at creating a strategic framework of innovation in order to improve corporate values in project management methodologies (Ohara, 2003a) and to create a way for Japanese enterprises to develop more innovative approaches to ensure that their businesses can compete in the global business environment (Dinsmore and Cabanis-Brewin, 2006).

The P2M model comprises of entry-level project management, programme management, and 11 segment management frames: project strategy management, project systems management, project target management, risk management, relationship management, communication management, project finance management, project organization management, project resource management, information management, and value management (Ohara and Asada, 2009). The essence of P2M is focused on the profiling ideas of complexity to implementation and findings solutions to complex issues (Ohara, 2003b). The basic context of P2M defines programme and programme management as a *practical capability* to respond to external changes, allowing flexibility that copes with ambiguity, complexity, uncertainty, and expandability (PMCC, 2008).

P2M was designed as a curriculum forming the basis for a project management professional qualification system, which recognizes the importance of integration and the complex relationships between projects; and between projects and their environment (Crawford, 2009). Japanese organizations place an emphasis on the flexibility to adapt to environmental changes, and their models are created based on this concept. P2M also deals specifically and in depth with the concept of programs of projects, which is a challenge that other global professional associations, such as the project management institute (PMI), international project management association (IPMA), association for project management (APM, UK), and Australian institute of project management (AIPM) were slow to take up, (Crawford, 2009) as it was not until four years after the first release of the P2M that PMI released their standards for program and portfolio management (PMI, 2006a, 2006b).

Project and program management has great potential in contributing to corporate strategy implementation and enterprise innovation (Pellegrinelli and Bowman, 1994). P2M represented the first significant advance towards genuine integration and acceptance of the role of project and program management at the enterprise level (Crawford, 2009). Other guides and standards mention 'integration', it was used in reference to integration within a single project, while P2M is the only standard guide that provides patterns for integration management across programs and portfolios of projects at enterprise level (Ohara, 2001). Table 1 summarizes the objectives of P2M as the first guide (Crawford, 2009).

**Table 1.** The objectives of P2M

approach enterprise project and program management afresh from the viewpoint of the enterprise;

directly address program management (rather than focusing only on single projects);

recognize and respond to the complexities of fast-moving, multistakeholder environments.

recognize and address the systemic nature of projects and programs.

Specifically, address the role of program manager

P2M is intended not only to benefit Japanese organizations but to profitably apply to any organizations globally, who seek a comprehensive guide to program and project management (Ohara, 2005). Some western companies have introduced P2M into their own organisations (Ohara, 2003a). P2M is already widely used as a standard guide, and with its respect for other standards and innovative approach of project and program management for value creation in enterprises, it provides a sound foundation for further development and improvement of the project management.

#### **KPM**

After the Japan's economy bubble burst in the 1990s, Japanese companies tried to look for solutions to survive the depression and to regain their global competitiveness. The Japanese looked into reformation or *kaikaku* (reforms) of not only in terms of business management, but also its organization and technology. Although not all companies could accept reformation in

order to keep up with the economic crisis, it was found that those who were successful at reforming were those who had utilised the intellectual property of the entire organisation rather than those who had only focused on technological abilities (Ohara and Asada, 2009). It is difficult for Japanese companies to accept reformation and easily adapt to external changes, as they are a community, who stand firm in their cultures and existing business methods. Despite Japan's cultural hesitancy to change, it has been proven that flexibility, adaptability, and reformation are essential to survive during an economic crisis. Essentially, the successful companies were those who applied KPM, which is a new project management paradigm and an advanced version of P2M consisting of three significant Japanese elements for successful performance: The 3K - kakusin (innovation), kaihatsu (development), and kaizen (improvement).

KPM is the core management for integration and innovation by 3S/3K combined methodology, where 3S is the proposed scheme, system, and service project models in terms of lifecycle in value creation paradigm in organizational models (Ohara and Asada, 2009). Those companies that construct their organizations with the elements of KPM, namely, *kaikaku* and 3K with 3S project models will have a project management system that functions well, that will often lead to successful projects (Taketomi, 2009a). 3K's *kakusin* (innovation) indicates breakthroughs and modification of new knowledge, *kaihatsu* (development) indicates the enhancement and expansion of knowledge and information; and *kaizen* (improvement) represents incremental and continuous effort in a proactive work life for improvement at work-floor level (Ohara, 2009a). As for 3S, a sequence of scheme, system, and service is practiced in managing projects. For instance, justifications of the project investment, risks, cost, feasibility or value of the project are done in the initial scheme stage of a project lifecycle, followed by the system stage where a check is done on whether those selected members or organizations to manage the

projects are doing their job according to original plan or whether they will bring it to completion; and finally, a confirmation will be done to see if the business is maintained and operated smoothly or if expected results are attained at the last service stage (Taketomi, 2009b).

In P2M, there was no classification according to *kakusin*, *kaihatsu*, and *kaizen*. The KPM method concentrates on the innovation, development, and improvement of Japanese management methods using the foundations of P2M. Thus, it takes into account the whole lifecycle of the project from idea, planning, execution, investment, and recuperation to creating value for the future. The KPM method promotes the creation of future value by implementing a number of reform projects linked to strategy, thus providing a body of knowledge to train core leaders, whose responsibility is to recoup the investment, and propose a methodology for avoiding the risks of failure and resistance in an organisation that solves complex issues (Ohara and Asada, 2009, Bredillet, 2007).

The KPM method has originality in two areas: in its thorough responsibility for quality control in the world's leading *monozukuri*, which means the art of making things, and in its backward operation process planning system with a focus on securing delivery (Taketomi, 2009a). Backward operation process is sometimes known as concurrent engineering system. Organisations adopting the KPM method have well-designed systems and well-equipped devices to accommodate these two areas. Adjustments and necessary adaption are made in office devices, manufacturing, and production systems in factories. The strategies and methodologies of KPM have proven to be effective and successful in providing learning opportunities in companies, enhancing participation, and motivating the consensus and awareness of core leaders (Ohara and Asada, 2009).

### Methodology

An exploratory study has been carried out to examine project management theories by extracting relevant information from Japanese project management guidebooks as well as from other major journals, articles, conference proceedings, and published books. Two major processes were involved in this critical review. Firstly, a summarised introductory on the principles of P2M and KPM were done. Subsequently, their development and evolutionary were discussed. Lastly, a conclusion was included.

# Development and Evolution of P2M/KPM

Project management is a management process that has to be managed in order to seize the profit for the clients even under unforeseen changes of circumstances and environment, uncertainties, and ambiguities. Project managers need to face different and new challenges day in day out to ensure the success of a certain project. Moreover, based on a study done in 2007 on behalf of project management association Japan, it provides some insights on management of projects that could be summarized as: (a) project failures are not necessarily linked to project managers' capabilities; (b) project definition and development are critical factors of success, and should be more clearly specified; (c) project troubles relate to the gap of business practices and perceptions between clients and suppliers (Bredillet, 2007). A good project management approach could address to the above-mentioned three criteria. Classical project management approach centred on analytical and positivist thinking paradigm might not be so suitable to handle such new challenges, and there is a need for a new project management method based on a constructivist perspective enabling to address complex ambiguous and uncertain situations in order to translate the strategic intent or idea (Bredillet, 2009). The new project management approach has to be comprehensive, adaptable to flexible environmental changes and be able to solve complex issues. In P2M/KPM, the 11 discrete types of individual management frameworks

highlighted by the core philosophy of findings solutions to complex issues are demanded in Japan, and this has widely penetrated into academic, government, community, and business society (Ohara, 2003b). Innovative approaches, flexibility, and adaptability are the distinguishing features of P2M/KPM. Projects and programmes are managed by these concepts and mindsets.

Therefore, P2M/KPM is essential as a project management method or body of knowledge that exhibits such features, and could overcome the above-mentioned three summarized insights. Project definitions were emphasized and the related perception gap between clients and suppliers has to be addressed. P2M/KPM handles programme management as well as project management; therefore, evaluations are based on the entire mission rather than on just a specific mission as practiced in project management (Ohara, 2003a). P2M/KPM focuses on clients' goals and how they are being achieved, while taking into account their opinions and suggestions. P2M/KPM considers the overall goal for strategic businesses. On the other hand, it has an equal interest in the process and in how things can be done better next time (Rashid et al., 2009). P2M/KPM is a generic approach that integrates multi/interdisciplinary knowledge and methodologies that proposes a framework based on mission driven approach and insightful thinking that emphasizes on value creation operations and capital recovery (Bredillet, 2007). Table 2 lists the key characteristics of P2M/KPM (Bredillet, 2009).

Characteristic 8

Mission is ambiguous (adaptive and implicit) rather than with clear Characteristic 1 definition (explicit) if an innovative view is desired. P2M/KPM framework addresses implicit and explicit mission type. Characteristic 2 Mission is a creative output from human insight capability combining Characteristic 3 rationality and intuition, explicit and implicit, linear and non-linear approaches, divergent and convergent thinking. Mission is a "meta-model representation" of the future ideality in a Characteristic 4 complex, ambiguous, uncertain world. Focus on "Mission-Driven Approach", which explores and includes value Characteristic 5 creation activity. Modelling is part of P2M/KPM. 3 project models (scheme, system, and Characteristic 6 service) represents a generic lifecycle from mission to capital recovery through value creation. Profiling and modelling are core methodologies powered by a combination Characteristic 7 of human insightful capability and scientific analysis.

Modelling is a generic approach, which integrates interdisciplinary

**Table 2.** The key characteristics of P2M/KPM

Basically, P2M/KPM revolves the 3K concept in its project management framework. The *kakusin* concept is extremely valuable to provide important insights into intra-market competition and strategy (Zapata, 2010). The idea of *kakusin* that incorporates strategic and innovation thinking is applied in various industries to enhance the quality of the project. P2M/KPM incorporated knowledge and intellectual properties into the *kaihatsu* and reform processes, which includes new inventions, development of new ideas, R&D and technologies know-how (Crawford, 2009). These *kaihatsu* activities play an important role in a company to secure the company's competitiveness and to increase the value of intellectual property rights (Kinoshita, 2009). *Kaihatsu* is not limited to development of technology alone, but also covers process, business, product, and even market as well (Ohara, 2009a). P2M/KPM emphasizes

knowledge, methodologies, and approaches.

flexibility and adaptability and proposes how organizations can achieve total optimization (Ohara and Asada, 2009). Rather than focusing on mere partial optimization when economic crises occurred in the 1980s and 1990s, Toyota maintained its market share by using the flexible *kaizen* philosophy. This philosophy applied to manufacturing and production processes (Murata, 2010; Kato, 2011) that strive to eliminate waste and problems and to improve quality through persistent efforts (Glover, 2011). Honda, Canon, and Sharp also survived, as they adapted to changing times by continuing to invest in people (Kinoshita, 2005). Other examples of *kaizen* activities that were practised by organizations, who apply P2M/KPM are continuous improvement of products, business operations and management systems, achieving highly flexible approaches to rapid changes, and learning from accumulated knowledge (Ohara, 2005).

There are, however, some limitations of P2M/KPM, and there is no guarantee that an organisation's KPM programme will be successful (Ohara, 2009b). Many factors determine the success or failure of such programmes. For example, because environmental changes require new efforts for adaption, such as restructuring or shifting people into other jobs in the workplace, employees tend to dislike and resist *kaikaku*, unless their anxieties are resolved and *kaikaku* is justifiable for them to accept it (Ohara, 2009b). Thus, efforts are required to relieve such problems.

In addition, when the economy turns sour in the 1990s for Japan, changes have been made in some areas of Japanese conventional management in order to survive the recession. Restructuring, which includes work force lay-offs, production and inventory reductions, and plant closures, was applied (Schonberger, 2007) Japan's conventional model of 'seniority-based payment and lifetime employment' has been revised and reduced, even to zero in some extreme cases, and it has also extensively embarked on accepting contract workers and temporary

employees (Kinoshita, 2009). Other activities included to overcome the recession were *kaikaku* or innovative (*kakusin*) reformations that encompass joint venture agreements with foreign companies (Schonberger, 2007; Robertson, 2004).

### Conclusion

P2M/KPM emerged as a result of the realization by Japanese organizations to survive in the global economy after the recession. There was a need for P2M/KPM's evolution. Japanese organizations that practise reformation and applied this new innovated project management method appeared to be successful. Through P2M/KPM's body of knowledge, organizations exhibit the ability to reform under critical situations. This article introduces briefly the concept and ideology of P2M/KPM that will assist in giving theoretical insights of this new management approach. Moving beyond the classical project management approach, a newly developed and evolutionary project management method is essential to face new challenges encountered in the process of managing projects that is always unpredictable. This method has to be flexible, able to solve complex issues, and adaptable to environmental changes. Hence, the development of P2M/KPM was eventually suitable to fit to its demand.

### Acknowledgements

It is an honour for us to express deep appreciation to P2M's founder Professor Shigenobu Ohara, a guest professor of Tokyo University of Agriculture and Technology and Vice President of International Association of Project and Program Management (IA-P2M), for his patience, guidance and help with resources. We would also like to extend our gratitude to The Sumitomo Foundation for granting us financial support under The Sumitomo Research Grant (Vote Number: 108410).

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