PM Paradigm Shift in Korea: Introduction of PMO to Information System of Public Sectors in Korea

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- President of PMO Enterprise Council
- PMO Working Group, PMO T/F Team Member
- ISO 21500 WG2 Member (ISO PC 236, TC258)
- SW-SOC Project (2011)
- National ICT Convergence Strategy & Roadmap (.2012- Now)
- Posco 6 Sigma Project (2004- 2005)
- North East Asis Logistics Project (2003)
- Motorola Six Sigma Consultant (1998- 1999)
- Sam Sung Motors CIO (1994- 1998)

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Our government recently announced KSAISO21500 as a Korea standard project management process, following official announcement of ISO 21500 in 2012. The fast and active response of our government expanded the interest of PM to all industry sectors from construction areas.

Especially, IT/SW industries including financial company start to have deep concerns about PM to enhance time delay and low quality problems. Recently, many companies adopt PM and PMO as problem solver or value driver of the organization, including our government.

Particularly, PMO introduction to our government system will be a first case globally. Now our government almost complete the preparation of PMO, including PMO legislation, PMO agency, PMO specialist education, etc..

PMO introduction of our government will move to rise further steps toward new paradigm of PM in Korea.
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PM Paradigm Shift in Korea

- Transition of PM focus from construction area to all sectors of industry (from CM to NPD-PM, R&D PM, IT/SW PM, etc.)
- Incorporation of domestic PM standard process (KSAISO 21500) and its application in 2014, following ISO 21500 announcement (2012,9)
- Introduction of PMO to Information System of Public Sectors in Korea
- Increase of PM necessity by large Corporations

PM as New Enabler (Driver)
Major Effort for Project Success in Korea

- Continuously increasing PMP (3.2 PMP/10,000 people in Korea, 0.7 PMP/10,000 in China)
- Adopting PM courses as major and elective courses in many undergraduate/graduate institutions
- Increasing introduction of PM to Electronics, IT(SW), financial industry, and major ICT convergence areas (automobile, shipbuilding, semiconductor)
- Establishing national standard for PM process, Introduction of PMO to Manufacturing, Finance, Automobile, Shipbuilding areas and legislation of PMO to Information System of Public Sectors in Korea
Present State of IT/ SWProject
Characteristics of IT/SW Projects

IT/SW Projects are 4th generation projects, having lower success rate compared to 1st, 2nd, 3rd generation projects.

- Architecture Projects
  - The 1st Generation
    - Known Process
    - Known Product

- NPD Projects (New Product Development)
  - The 2nd Generation
    - Unknown Process
    - Unknown Product

- Long-term R&D Projects
  - The 3rd Generation
    - Known Process
    - Unknown Product

- SW/IT, project Innovation Projects (Process Innovation)
  - The 4th Generation
    - Unknown Process
    - Unknown Product

Decreasing project success rate
IT/SW Projects’ Reality

- SW/HW Projects’ failure rate is 65%

- Over half of IT/SW projects are concluded without structured project management.

- Average cost overrun 45%; schedule overrun 63%; only 67% of originally contracted features

- 47% of IT projects delivered but not used, 29% paid for but not delivered; 19% abandoned
ERP Projects failure rate: over 50%

Avanade (2007) – 40% of project experienced IT project failures between 2004-2006

Gartner – $600 billion spent on ill conceived or poor executed IT projects

ITPI – 45% of operating expense budget consumed by unplanned work

Software maintenance (ongoing) is 2/3 of software build cost

AT Kearney 2004-2005 report;

72% of project leaders believe IT enabled their project strategy but only 30% are “fully aligned”

45% of respondents believe IT is primarily focused on day-to-day requirements
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<tr>
<th>External</th>
<th>Domestic (General)</th>
<th>Domestic (Public Sector)</th>
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</table>
| • SW Complexity grows  
• IT Merging with other industries: Auto, Ship, Manufac, Finance, e-Trade, Electronics, Semiconductors, National defense | • High SW defect rate  
• Low productivity  
• Low Corp. Satisfact.  
• High Maint. Cost | • Unclear Req’ early  
• Frequent change  
• Frequent delay in payment  
• Low quality |

**PM Importance Recognized & Introduced**

**PM Paradigm Shift (Expanded to all industrial sectors)**

- **Plan project**
- **Order Contract**
- **Collect Demand**
- **Basic Design**
- **Detailed Design**
- **Unit Test**
- **Integrated Test**
- **Execution**
- **Stabilize**

**New RFP Legislation**

**PMO Legislation**

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Internal Conditional Factors

Due to unclear demands while planning, assessment of costs and scale is difficult and thus there is a discrepancy between initially estimated scale and the cost/scale at Project execution period. This is the reason for increasing requests for modifications past half-point of projects’ execution.

Of the Five Major Causes of problematic projects, those related to demands: 42.2%
Introduction of PMO to Information System of Public Sectors in Korea
2011: The President approves the introduction of PMO-related statutes, 2012: SW Industry Promotion Act, 2013: e-government basic law amendment, 2014: Legalization of introduction of PMO systems to e-government law enforcement ordinance, and currently notification for application has been complete. Begins execution in the latter half of 2014.

PMO to Public Sectors
Defining PMO in E-Government

- Preventing risks of E-government project and entrusting the supervision/management in order to enhance product quality, an expert in project execution supports all levels of technical aspects ranging from planning to post-project support.

Major Functions of PMO

- Support project management and technical aspects in all levels from pre-project planning to post-project planning
  - Overall project execution management (Schedule management, Risk management, Quality management, etc)
  - Technology assessment related to design, implement, testing and specialized areas, such as data architecture and security
<table>
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<tr>
<th>Category</th>
<th>Details</th>
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<tr>
<td>Public Service</td>
<td>projects that establish or enhance necessary information system for public convenience and security through electronic public discontent report system, natural disaster security management system, etc.</td>
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<tr>
<td>Common Administration System</td>
<td>projects that are shared and used by various administrative organizations such as electronic document circulation system within government, and aimed to establish or enhance information system that affects administrative efficiency</td>
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<tr>
<td>Integration/Interface System</td>
<td>projects that require capacity of high quality management due to integration/linkage of more than 2 information systems such as Administrative information sharing system.</td>
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</table>
| Administration wanted System     | • projects that require entrusted management due to shortage of labor or experience/expertise in e-government project management by administrative organizations  
                                 | • Other projects that require expert management/supervision based on importance and difficulty similar to those of above categories. (Public Service, Common Administration sys, Integration/hedge projects) |
PMO Consists of Executive Manager group, Management support group, Technical support group

- Executive Manager group manage and lead the project, Communication with Decision-maker and project executor of Contractor

- Management support group support such as Schedule management, Risk management, and quality management

- Technical support group support analysis, design, and testing of specialized areas such as database, system architecture, quality and security
Major Roles of PMO

- Designing step
  - Establish project plan and support project proposal
  - Support result management ex) setting up goals for outcome

- Execution Step
  - Management/supervision of main project
  - Review and correct plans for each processing level of main project, and review execution condition
  - Recognition/analysis/report of main issues and risks & provide solutions
  - Support of e-government project management and corresponding report and decision making
  - Review decision making, command, management and execution status
  - Review technology of analysis, design and testing in special areas which include application system, database, system architecture, security

- Post-execution managing step
  - Support stabilization of information system ex) Defect repairing
  - Support usage vitalization of information system ex) Education advertisement

- Additional steps decided in PMO project contract
Major Criteria for selecting PMO Specialist

- Executive in charge of PMO project, Expertise in project execution manpower i.e. project management support manpower, technological support manpower

- Concreteness of PMO project plan and contents and potential for realization

- Record/experience of performance in e-government project or e-government project management

- Support system of quality management and outcome management

- Skills acknowledged as necessary according to the nature of e-government project management or discretion of head of executing organization related to expertise
Contractor must submit PMO promotion plan to the responsible minister by December 31<sup>st</sup> of each year, and publicize it through electronic communication network within 15 days.

In the case of entrust of e-government project management, the head of contractor submits all of the information regarding the project, PMO project, and the outcome to responsible minister within 1 month after PMO project’ conclusion.

- The project name, period, contract sum, workers, contents and range of project
- PMO name, period, contract sum, PMO project titles, Executive officer and manpower status, execution summary, main accomplishments, etc.
- Additional data for system reform regarding entrusting e-government management.
Relationship between PMO and Related Org.

Ordering Agency
- Organization that ordered projects, which perform final take over related to the projects
- Perform decision-making through consultation with PMO

PMO
- Organization for managing overall project’s project. External consulting companies, or internal promoting division all belong to PMO range.
- Broad concept. Managing department and specializing department can be included

Order Department
- Entrusts PMO (external)

Ordering Agency
- Following Managing department’s entrusting, manage overall project management
- 발주기관 or separate specializing department executes

PMO (external)
- Contract (PMO)
- Report

Project Management department
- Following Managing department’s entrusting, manage overall project management
- 발주기관 or separate specializing department executes

Supplier
- Project PM
- Supplier
- subcontractor

Contract (Main Supplier)
- Inspection Agency
- Inspection

Supervising department
- Middle/ Final supervision or constant monitoring. Inspects progress of projects
PMO project execution range in public sector consists of 5 processing groups and 12 PMO managing groups after adding public sector’s special characteristics and preceding examples besides project management range suggested by ISO 21500.
Final Comments

- Acquisition of PMO company and Specialist
- Continuously revision of PMO legislation to adapt current problems
- Establishing evaluation system of PMO project
Thank You!

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