

EPM Development for Evaluation Progress Management

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NAM-KYUN BAIK



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Background [1/2]

- ▣ **Lack of active control process for progress management** regarding product evaluation schedule and cost
 - ▣ **Unable to forecast and adjust the different expected result** compared with plan
 - ▣ [Evaluation team] Evaluation progress management could be made easy, if the standard template for schedule and progress can be provided systematically...
 - ▣ [Senior engineer] I need to glance at the overall evaluation progress status...
 - ▣ [Senior engineer] Joint work and resource management among evaluation team members...
 - ▣ [Quality controller] If the evaluation management process can be improved efficiently...

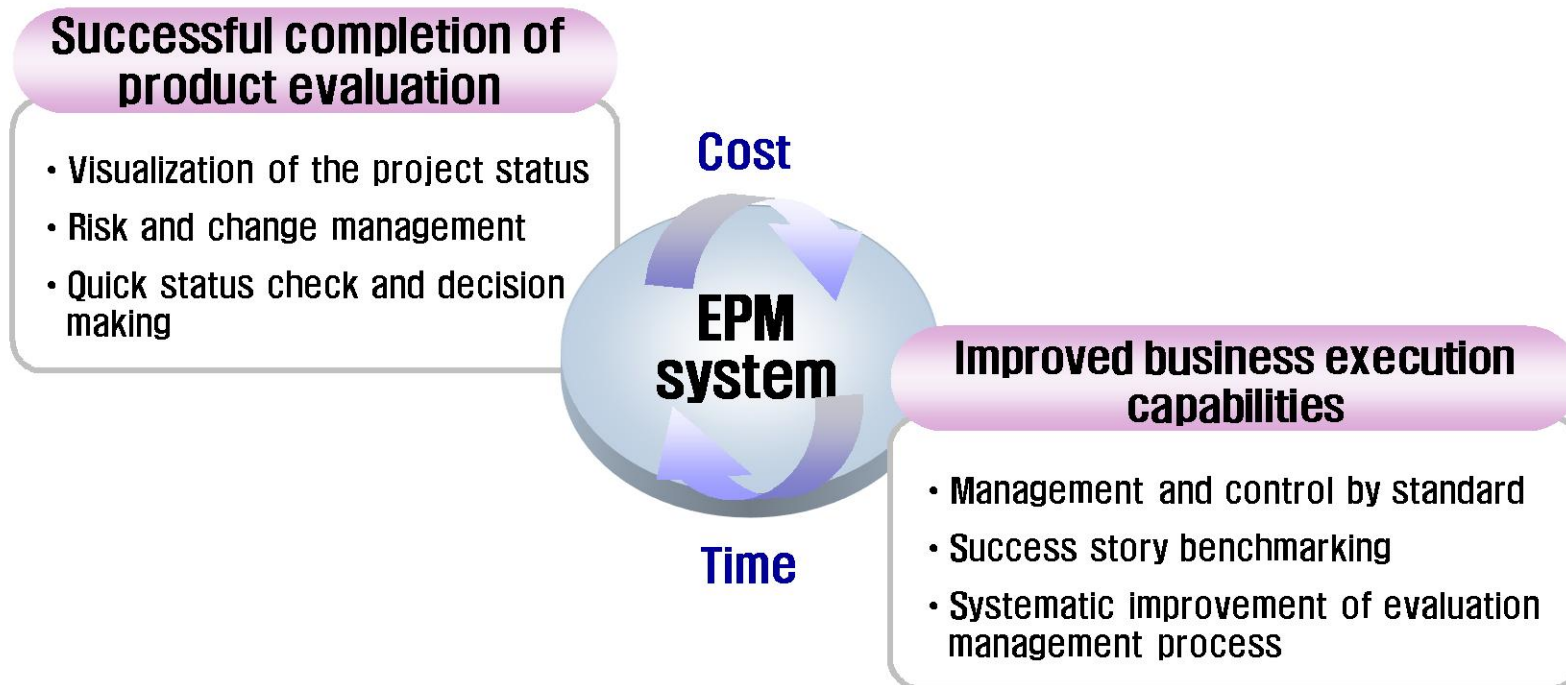
Background [2/2]

- ▣ **Enterprise Project Management (EPM) needs to be developed** for evaluation of on-going information security system and visible management of the related resources for each evaluation team and enterprise.
 - ▣ Impact of the individual work on the entire evaluation business can be identified.

- ▣ Evaluation of the information security product has the complete characteristics of the project
 - ◆ Temporality of product evaluation
 - ◆ Unique result for the unique product and service
 - ◆ Evaluation completion by progressive elaboration

Promotion Strategy

- ▣ **Making the evaluation resource as knowledge and management** through systematized classification and integrated management
- ▣ **Provides** integrated and consistence **progress management environment**



Development Details [1/7]

- ▣ **Definition of the classification system for the business, which becomes the project, and control process identification**
 - ▣ **Quantitative and qualitative analysis by evaluation work workflow stage**
 - ▣ e.g., Contracted, standby, progressing, completion, and others.
 - ▣ **Functional requirement definition by collecting opinions from evaluators and managers**
 - ▣ Proposing a standard template (Evaluation execution plan by class, evaluation work plan)
 - ▣ **Identification and definition of the work classification system**
 - ▣ e.g., Assigning personnel for the evaluation team
 - ▣ **Control process identification**
 - ▣ e.g., Resource allocation for the evaluation tool to analyze the vulnerabilities

Development Details [2/7]

- ▣ **Selection of the operation parameters**
 - ▣ Required resource identification and unit price assignment.
 - ▣ Definition of the milestone for the evaluation progress status

- ▣ **Implementation of the major progress and management functions**
 - ▣ Analysis of achievement by each work classification system
 - ▣ Retrieval of the resource use status
 - ▣ Warning of expected achievement compared with plan
 - ▣ Project status retrieval and statistical analysis
 - ▣ Configuration management by project

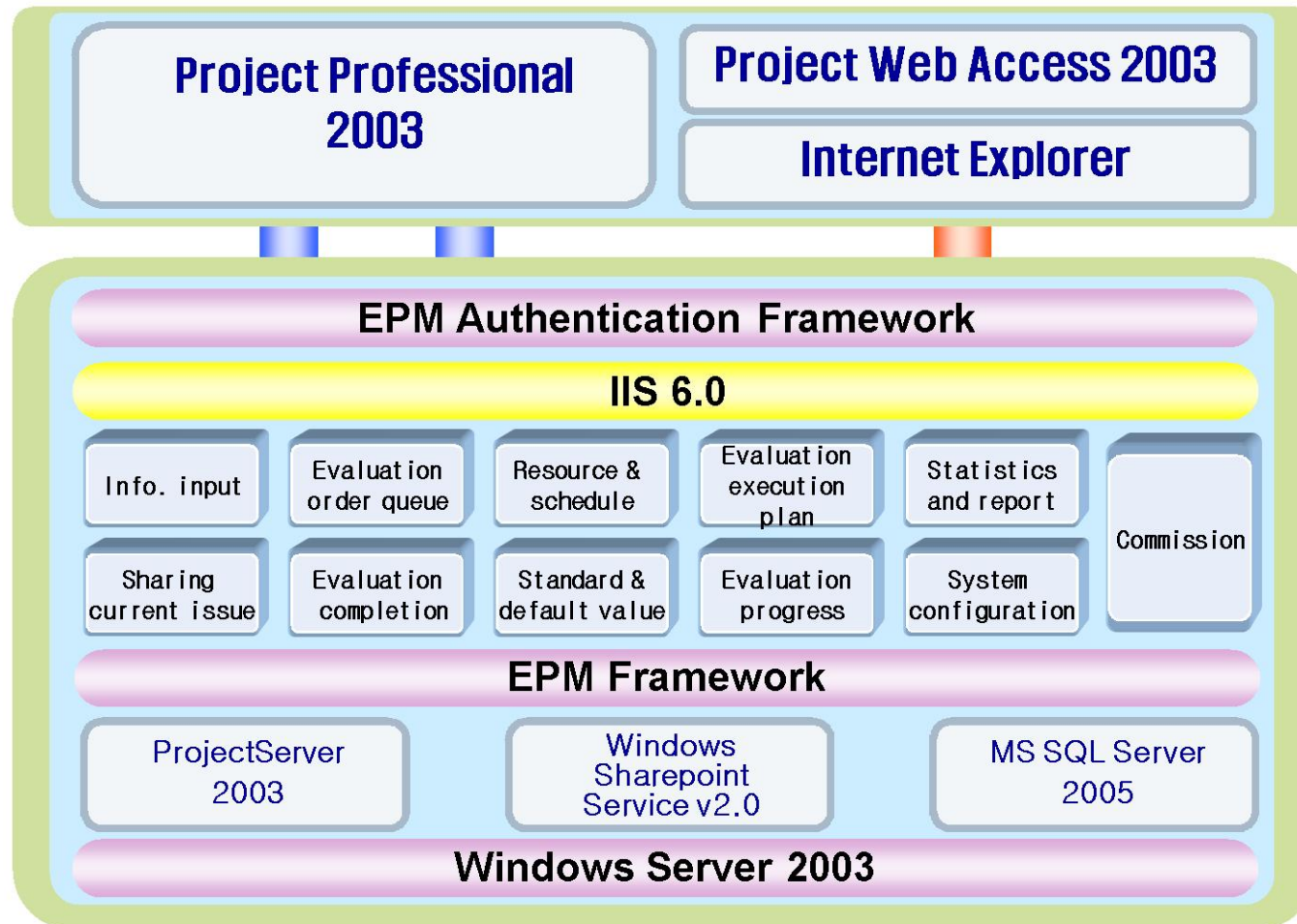
Development Details [3/7]

▣ Detailed design: Requirements selection

Upper level design elements	Detailed design elements (outputs)	Requirements (principle)
1. Information input	1. Submitting materials check	• Checking the list of submission materials for evaluation product
	2. Evaluation	• Input the registration information related with the product requested to evaluate
2. Evaluation order queue	3. Evaluation order queue	• Maintaining the evaluation waiting list information for the contracted evaluation product
3. Resource and schedule management	4. Evaluation manpower	• Information on the personnel assigned for evaluation
	5. Evaluation Schedule	• Evaluation schedule information sharing
4. Evaluation execution plan	6. Composing the evaluation execution plan	• Entering the evaluation execution plan, based on product characteristics (class, product family) and resources (manpower)
5. Evaluation progress management	7. Evaluation progress management by product	• Entering the progress ratio for the product that is being evaluated
6. Generation of recent statistical information and reports	8. Evaluation status	• Understanding the evaluation progress status by product
	9. Real-time generation of the evaluation statistics information and report	• Maintaining the real-time statistical information (progress ratio and evaluation status statistics) and generation of the evaluation status statistics report
7. Current issue sharing	10. Public notice	• Sharing the public notice related with evaluation
	11. Problem information sharing	• Sharing the problem related with evaluation
8. Evaluation completion processing	12. Authentication management	• Keeping evaluation completion product information and status
	13. Commission calculation	• Calculating the evaluation commission by evaluation agency and product
9. Commission calculation	14. Commission simulation	• Providing commission simulation
10. Standard and default value	15. Standard and default value	• Setting/Modify the default value by standard form and menu
11. System configuration	16. System configuration	• System management, such as adding/deleting/modifying user, organization, group, authorization environment setting value

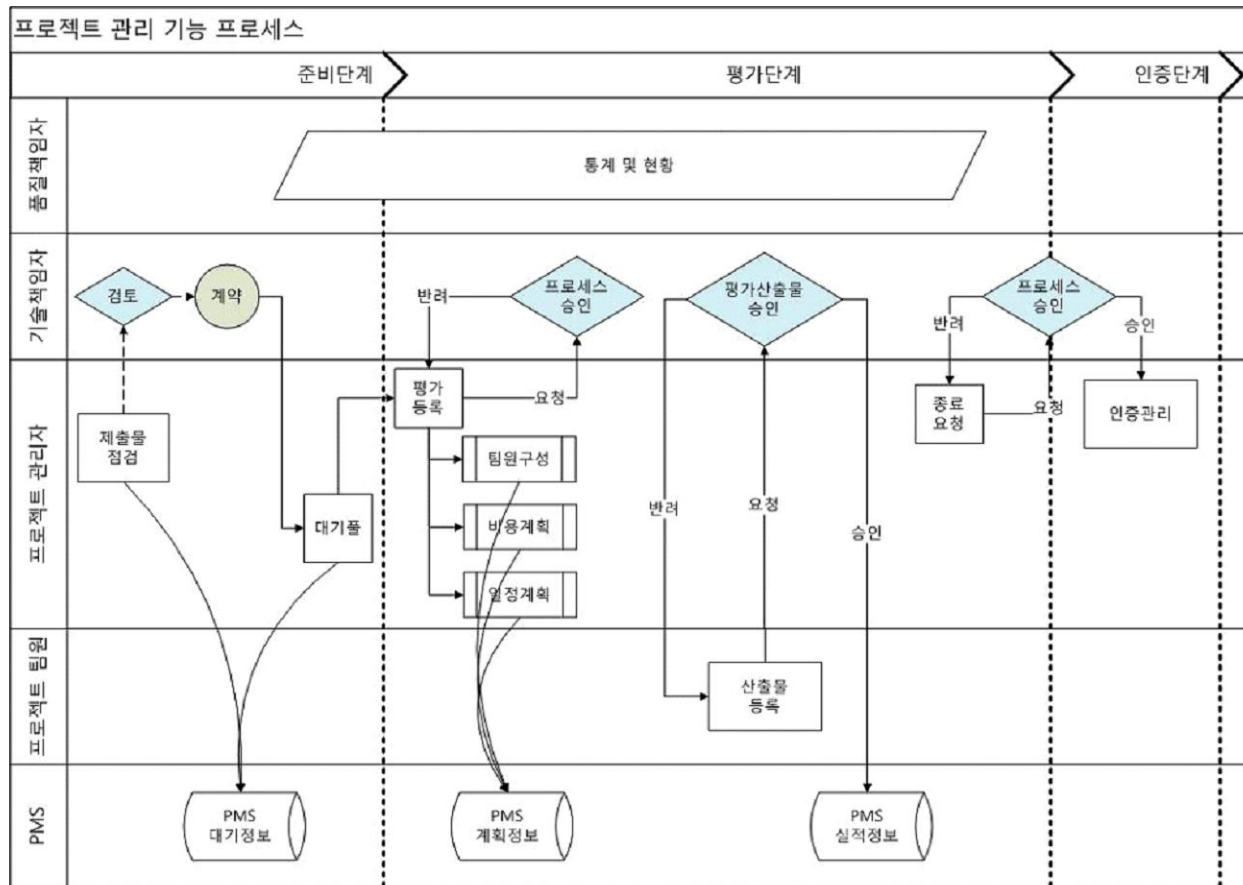
Development Details [4/7]

- ▣ Detailed design: System configuration diagram



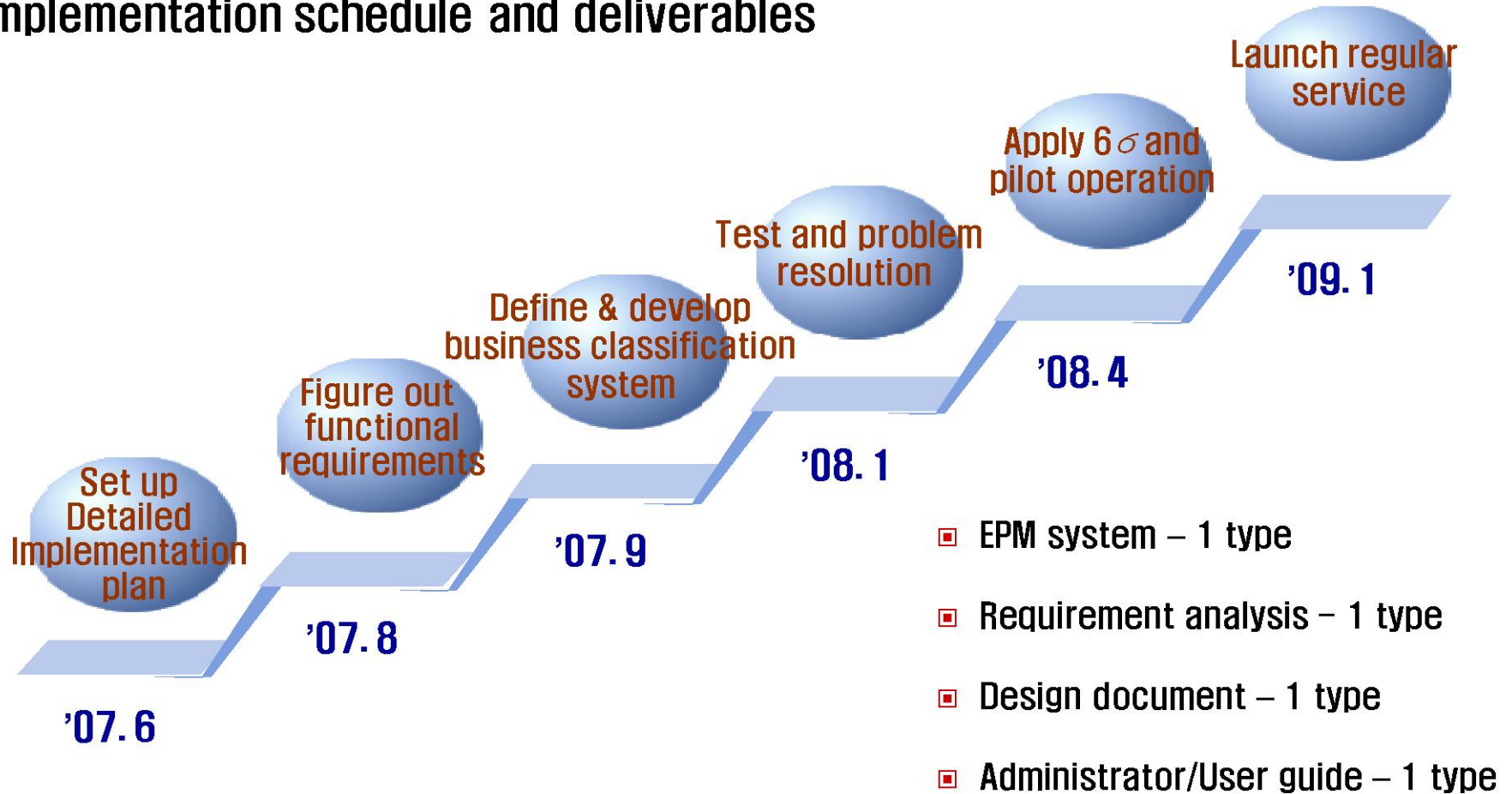
Development Details [5/7]

▣ Design details: Project management function process



Development Details [6/7]

▣ Implementation schedule and deliverables



Development Details [7/7]

Interface example of the product to develop

ID	작업 이름	기간	07월	08월	09월	10월
1	SECUREWORKS	97 일	[Progress bar]			
2	ST 평가	20 일	[Progress bar]			
3	ASE_INT,1	1 일	[A,B]			
4	ASE_DES,1	1 일	[A,B]			
5	ASE_ENV,1	3 일	[A,B]			
6	ASE_OBJ,1	3 일	[A,B]			
7	ASE_PPC,1	1 일	[A,B]			
8	ASE_REQ,1	5 일	[A,B]			
9	ASE_SRE,1	1 일	[A,B]			
10	ASE_TSS,1	5 일	[A,B]			
11	TOE 평가	72 일	[Progress bar]			
12	ADV 플랫폼	17 일	[Progress bar]			
13	ADV_FSP,1	6 일	[A,B]			
14	ADV_HLD,2	5 일	[A,B]			
15	ADV_LLD,1	3 일	[A,B]			
16	ADV_JMP,2	2 일	[A,B]			
17	ADV_RCR,1	1 일	[A,B]			
18	ACM 플랫폼	3 일	[Progress bar]			
19	ACM_CAP,3	2 일	[Progress bar]			
20	ACM_SCP,1	1 일	[Progress bar]			
21	ADO 플랫폼	4 일	[Progress bar]			
22	ADO_DEL,1	2 일	[Progress bar]			
23	ADO_JGS,1	2 일	[Progress bar]			
24	AGD 플랫폼	5 일	[Progress bar]			
25	AGD_ADM,1	4 일	[Progress bar]			
26	AGD_USR,1	1 일	[Progress bar]			
27	ALC 플랫폼	3 일	[Progress bar]			
28	ALC_DVS,1	2 일	[Progress bar]			
29	ALC_TAT,1	1 일	[Progress bar]			



팀명	일반업무	PJ업무	기준	비율
AAA팀	40	40	100	80%
BBB팀	70	35	100	100%
CCC팀	50	75	100	100%
DDD팀	90	35	100	100%
EEE팀	50	30	100	100%
간 계	300	215	500	100%



Expected Effects

- ▣ **Prevention of the evaluation resources** by implementing progress and risk management that minimizes the impact by the schedule change
- ▣ Able to **cope quickly with risk** of changed achievement compared with plan
- ▣ **Increased efficiency** of team member productivity and evaluation team management by establishing the systematic communication system for the progress status
- ▣ Laying a foundation of **transparent evaluation management that secured visibility of** evaluation team management
- ▣ **Improved customer satisfaction and output quality** by strictly complying with schedule plan
- ▣ **Utilizing the raw data for evaluation commission cost calculation** and PR about the systematic evaluation management system

Applying 6-Sigma (Simulation)

▣ Project summary report: Selecting optimal concept alternatives

Project name	EPM development for evaluation progress management
Promotion background	· Active and real-time management for comparing product evaluation plan with achievement and invested resources is required , because of evaluation congestion due to increased evaluation application and the change in the evaluation commission system.
Problematic technology	<ul style="list-style-type: none"> ▣ Difficult to cope with the problem like delayed evaluation quickly, since the evaluation status is identified manually. ▣ Degraded evaluation resource efficiency due to insufficient response to risk and change management ▣ When calculating the evaluation commission, there can be an argument about investing personnel and period.
CTQ	Manual work (4 hours a week) → Keeping real-time status
Objectives	<p>Provides product evaluation status and develops the decision-making support system</p> <ul style="list-style-type: none"> - Real-time management of the evaluation status, such as comparison between plan and achievement - Invested resource and schedule management
Project scope	Information security system evaluation
Expected effects	1. Reduced various costs 2. Quick decision-making 3. Increased management transparency
Team organization	Noh Byeong-kyu (champion), Sim Won-tae (project leader), Baik Nam-kyun (team member)

Applying 6-Sigma (Simulation)

Expected effect

$0.89\sigma \rightarrow 5.2\sigma$



“Real-time evaluation information management”

- Information collection rate: 100 %
- Capturing time: 30 min/week
- Analysis time: 2 hr./each
- Consistency and accuracy: 100 %

Q & A