# Modeling of Project Planning Architecture by Case-Based Method in System Analysis

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**Abstract:** A case-based method is important activity for variety system modeling in system architecture. The project planning management method and work breakdown structure is a reason why cost is wasted and a number of project planning is failed. It is necessary to develop a structure of work breakdown structure identification and output selection along to project's planning specificity in project planning management by case-based method. This study presents the method with the limits of the existing study that has uniformly been customizing the method in system architecture. And also present method to cope with the limitations of existing study that has uniformly customizing the method by case-based method in system architecture.

Keywords: System modeling, Case-based method, Planning management, Management architecture.

## **1. INTRODUCTION**

The system integration carried out by several system integrators and goal of managing have been separate project in order to perform the necessary requirements. In particular, today's system development projects is depending on the size of the bigger in development process in order to minimize the risks associated with developing a architecture to apply a universal trend. Despite the existing product development architecture for variety of projects on environment will generalize that all the conditions zero based because it accessed in development architecture which occupies a very large scope of work for a project. Because it is inadequate as it is followed by the crowd [3].

Therefore, the method is developed for the sake of system integration, adjust the development method customizing that work breakdown structure is required. In other words, the project planning phase through development architecture scope management should be made for adjustments in procedure are a deliverable. The system planning actually work against the goals of this project have been drawn at not being more than is necessary or unnecessary, or if you are a waste of budget and staffing commitment commonly develop remains to be seen.

For considering the characteristics in the individual projects need to sort out a work breakdown structure development architecture. Even if it is in the planning phase have an understanding of the architecture the lack of development work in progress this tasks and deliverables during development. But, this is ongoing mismanagement and practically adjustment method and eventually leading to main cause of the project failure. In starting a project or proposal phase, it was included as an essential project item and scope for defining system on a scale. Therefore, in this study, these systems integrated project management planning. The project has many attributes and impact on the work breakdown structure. This is one of the appropriate actions based on its impact on the system for project management to build. And the scale plan is searching the address in knowledge base. Due to the nature of work breakdown structure is dependencies [1]. This cannot exist in the same project planning. It can also apply the same in all kinds of projects work breakdown structure. And it has other elements of the profound impact for project environment or attributes and so on. The larger the project and the complex pattern of these projects can have an impact on internal complexity work breakdown structure [7].

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In this study, a size and complexity of the project work breakdown structure is performed to identify the impact on the project complexity to find objective criteria architectures. In addition, development architecture is to perform this systems integration and to carry out this project tasks in the process. This is produced a process to go through when planning a project. In course of project size or complexity, these adjustments is shown in previous studies terms of goal oriented rather than only considering element to reflect the project for this goal. It is showing how to derive the optimal operation of project success work breakdown structure process. It is first step of the project manager for the uncertainty in the scheduling burden to promote comfort and consistency [6]. This study performed at the system as a research project that will limit the scope. This study point is the position and non-project attendant a direct agreement among the owner. This project is assumed that premise a separate process and the project management for the work breakdown structure creation. In the development of this study are first centered on the project management and work breakdown structure through theoretical discussion. This is an introduction to the types of characteristics [8]. The work breakdown structure and derived execution output is depending on the size of the project affected how the existing literature and discussion. According to the project size, work breakdown structure is to catch a look or indirectly affect the availability [2]. Finally, the objectively project scale for determining is the value of attribute factors independent variables and the hypothesis proved to be a variable. It is use the proven this regression equation to estimate the scale of the project and the model. It has produced the first work breakdown structure approach to project objectives. The project system became final step on the work breakdown structure.

## 2. WORK BREAKDOWN STRUCTURE MODEL

The project scope management is included a category of project planning. The project plan will be included a category of project management, project objectives, scope settings, scheduling work assignments, resource assignments. Therefore, Project management process is as Figure 1. The first part is about the system scope and estimate work activities. It is necessary to define a manageable basis. This project scheduling is the appropriate range of settings. These tasks range for work planning division is standard from management and achievable in a short time. The process is proceed through performs the task in the activity. And, project scope is standard.

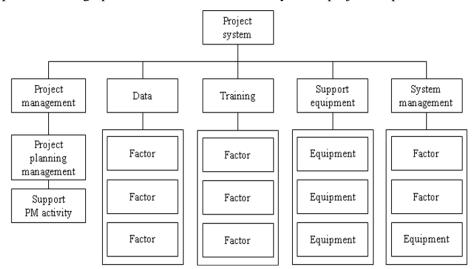


Fig 1. Work breakdown structure for project system factors

The work breakdown structure is a technique for defining system scope. This work makes it possible to control for the range. In other words, the work breakdown structure is any comprehensively defined 'manageable' infrastructure work unit tasks enabling technique. In addition, work breakdown structure is the hierarchical structuring and quantification. The structure is based on a range of breaks its want to manage. As a purpose of this form to create a work breakdown structure, system scope is to define the activity for a task. Identify is based possible actions to select a hierarchical structure and easy to manage scheduling on the partition.

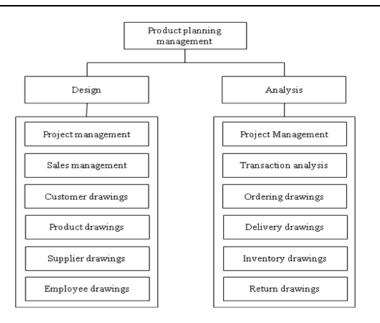


Fig 2. Example of sales project planning management structure

The work breakdown structure is used to set the scope of the project. It has been set up with a lot of project management. It is used as a basis for resource management system in cost management and value management scope. However, the scope defines the content work to set up and categorized. This is never an easy thing. It exist the same forms of projects and project specific tasks. These are different due to the different purposes. For this reason, the project's work breakdown structure creation is the similar and applying architecture of steps. It is tasks or some of the changes to the project. In addition, it s carry out a project using the work breakdown structure and the efficient project management experience from their own experience includes the work breakdown structure.

## **3. System Architecture**

The system architecture analysis method is identified and design for a given problem domain from the object. And the object's attributes are identified and related to the association between them. This object's inheritance is defined an object in detail. It is represent an object model based on unified modeling language class diagrams notation of it [10]. The unified modeling language class diagrams are static relationships and their associated diagram representation. Also, these component elements are unified modeling language class diagrams.

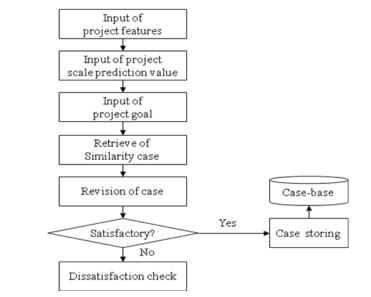
## **3.1. Architecture Modeling**

The class is a similar data structure and behavior and related association with the objects. This class is the name and a data structure to represent a property. It is configured for the operation that represents the action. The display is the class name in the center of the rectangle, the properties and the operation in a straight line representation. The properties are public and distinguished as a property. The relevance of the two classes is related association. There is a special form of collectivization aggregation. This is related to part of relationship expresses one class has been configured with any multiple classes. The generalization between classes share is similar characteristics while keeping each of the attributes for the technique. Any common generalization is the multiple classes. And it has a class other than class properties and operations and operations among the special relationship. The inheritance is a triangle and the straight line between the parent class and child class notation. The class 'is-a' is the generalization relationship taking over the attributes of parent class. The multiplicity is to be displayed, along with the collectivization in the parent class to configure the number of child classes. The dependency is awarded when two or more this model element notation that represents relationship between some model elements. The case structure of database is query to process the structure of the tree. However the logical case is a diagram of the general structure. The database is composed of nearly identical. The entityrelationship diagram will help it find the data you need to cover every people. Any stored data helps to determine the structure. This case-based method can be very useful in the design.

Therefore, the logical practices should be designed to determine the structure of the base case when the physical database structure. Also, the physical database design is no difference. This case of physical database is used in case-based reasoning include all of the knowledge structure.

# 3.2. Architecture Output

The result range of management and administration is needed to define in order to control and manage a range of work breakdown structure. The deliverables have work breakdown structure on the substance. The main deliverables are mounted in case of system integration projects with Korean Project Applications. The unified modeling language diagram notation is an example and knowledge object model. These deliverables is to create some project factor and the nature of the various documents [9]. In this case, the simplicity of the deliverables is based on degree and project's complexity of contribution. This is considering the deliverables degree for the project. It was plus or minus to express the personality or choice of the appropriate development in accordance. The project objectives and goals are the project by the project's complexity level one size fits all the deliverables a deliverable. The many institutions and companies in the software development method is outcomes research on the creation and management. This is actively working tricks and industrial output for the Industrial Standards Board. But there is also the type of project, nature and deliverables. It is detailed information about a variety of projects significantly different and extremely difficult. Many of them are for the foreign large scale projects and the development of domestic technology. This is not suitable for many. In a case, the project deliverables plan is to apply a uniform scale of accident at task that exists within the development methodology of considering project type. This operation is quite dramatic in that selector. It can proactively in addition to the project type and a myriad of elements to consider among other things. This is range management objectives management.



Factor	Identity	Property
Input	Yes	Yes
Revise	Yes	Yes
Retrieval	Yes	Yes
Registration	Yes	No
List	Yes	No
Output	Yes	Yes

Fig 3. Procedure of project planning management

# 4. PROJECT PLANNING ARCHITECTURE MODEL

It can identify that you have completed starting and purposeful system. Therefore, a factor is willing to fulfill by means of series set. This project was for time being because of the nature and production of conventional concepts on repetitive distinct systems<sup>4</sup>. The various scale projects become construction, the shipbuilding, the heavy industries, information technology sector,

information systems sector, research areas, a prime project such as software development areas<sup>7</sup>. The project planning is usually at certain times in order to fulfill the project with a limited cost and maintain appropriate quality level. This is limited resources to effectively manage. In addition, project management needs expectations of project. Project activity meets transcendental knowledge, skill, tool, technique, and applications. The project management scope were identified time, cost, quality and other requirements with the project expectations needs. It has not been identified or it needs to balance various requirements such as expectations to pursue.

Usually, this is selected when adjusting the resize factor to consider is the development methodologies. However, development method is a time consuming and overly picky to the tune of adjustment elements. Therefore, a practical matter can consider only the following three major tweaking anything. Therefore, the management techniques, navigator, information engineering method is developed in specific method such as route selection or application of deliverables. It is required this providing the convenience of this architecture standards. Depending on the size of Japan's operations and development will be able to distinguish of a development project deliverables. It is necessary to adjust the development system which is less than 15 billion in Korea measurement, for 15 to 55 billion, small, medium and large scale exceeds 6 billion. Pure software development is the project and application, system, hardware, network. This is other equipment and more complex system integration projects, tasks, deliverables and the type of system.

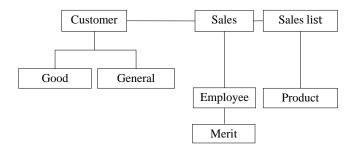


Fig 4. Representation of project planning

 $\begin{array}{l} A = \{A_1, A_2, A_3, A_4, A_5, A_6\}, \\ C = \{C_1, C_2, C_3, C_4, C_5, C_6, C_7\}, \\ A_1 = <<\!\! customer, general customer, Null>, <H, H>>, \\ A_2 = <<\!\! customer, good customer, Null>, <H, H>>, \\ A_3 = <\!\! customer, sales, Null>, <M1, Mm>>, \\ A_4 = <\!\! customer, sales list, Null>, <G, Mm>>, \\ A_5 = <\!\! customer, sales list, product, Null>, <Mm, M1>>, \\ A_6 = <\!\! customer, \{customer name, true, false>, <phone number, false, false>\}, {retrieval}>, \\ C_2 = <\!\! general customer, {<sales limited, false>}, {NULL}>, \\ C_3 = <\!\! good customer, {<sales number, true, false>, {input, revise, cancel, retrieval}>, \\ C_4 = <\!\! sales, {<sales number, true, false>, {input, revise, cancel, retrieval}>, \\ C_5 = <\!\! sales list, {<sales quantity, false, false>}, {input, revise, cancel, retrieval}>, \\ C_6 = <\!\! product, {<product name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, {retrieval}>, \\ C_7 = <\!\! employee, {< employee name, true, false>, <product cost, false, false>}, <product cost, false, false>},$ 

#### Fig 5. A Project planning model representation

American consulting entrepreneurs Ernst & Young developed system development architecture scope management project deliverables and tasks selected. The objective-deliverables-workplan models are the approach to the definition for developing the project plan and forecasts. The project goals define the deliverables a project manager using development route and phase. As a project, management selected the best corresponding steps in the project. In order to achieve the objectives of this project, the project's steps are required to define the deliverables. This project manager select deliverables or work products are not required in a project, or remove components can get out. It is a project manager and the new tasks can be added row the action plan.

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A general procedure of work breakdown structure is as follows. This is defined performance, reliability the project's tasks and determine whether its can reach the goal of this operation. This study goal is deliverables appropriate action through the management got to work and how to define how you want to add to the existing line. The selection got to work with the goal of the deliverable. This is appropriate and how to define and to add an existing these lines objective-deliverables-workplan model development and targeting the method. These are presented in appropriate drive and deliverables of project management work breakdown structure. This is a decision model in the project management system basic concepts of planning module concept.

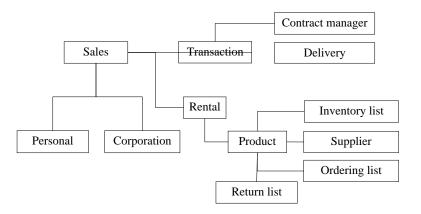


Fig 6. Extension of project system architecture model

# 5. ARCHITECTURE SELECTED PROJECT EVALUATION

According to project deliverables, this is to identify changes in levels of any system projects. And, it is completed and done of the project period for each project. This is committed personnel average of some personnel performing in literature. It is identifying a common commitment to project. Therefore, the range management is required the project management. The scope of the project is to define some criteria. This project manager is to refer the past. The similar cases will be utilized. And the large artifacts are included the project in the effort to find necessary information. Moreover, information systems and system domain is depending on the extent of accumulated knowledge about the utilization of the effects in past instances.

The project planning is required project managers rely on the knowledge. The project manager is to assist decision-making in order to find similar cases and giving it the ability to reflect. When it is perform a system architectures project for this process is derived from the operation. And, it will be referenced when planning. A project objective is the goal considering aspects of work breakdown structure and the project size according to the level by advantage into virtual project management system. First, project's planning is the objectives and projects to identify. The query was configured with many queries project manager must answer in order to query. The project manager should be presented project duration, personnel, and persons to the value. The average career is entered the output level of the project to inform scale of the project objectives that target from the process based on those projects size.

Complexity	Document form										
0~12						UM					
13~16					EM	UM					
17~28	FD	DS			EM	UM		MM			IP
29~42	FD	DS			EM	UM	OM	MM	PT	RT	IP
43~54	FD	SS	DS	DS	EM	UM	OM	MM	PT	RT	IP
55~70	FD	SS	DS	DS	EM	UM	OM	MM	PT	RT	IP
FD(Function Description) OM(Operation Manual)											
DS(System/Subsystem Design Specification) MM(Maintenance Manual)											
SS(System/Subsystem Specification) PT(Test Plan)											
EM(End User Manual)					RT(Test Analysis Report)						
UM(User Manual)				IP(Implementation Manual)							

**Table 1.** Project planning complexity and document output

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Financial institutions, such as banks and credit card companies, aim at reducing credit risk by screening potentially faulty customers. Reducing credit risk may results in improved profits for the institutions. In this domain, the main issue is how to detect faulty customers without rejecting healthy applicants. Since this topic is very typical analytical modeling domain, numerous applications can be found. For example, Quinlan applied decision trees and showed from 89.6% to 87.0% of classification accuracy with pruned DTI methods [14]. He reported that the pruning methods provided from 7% point to 11% point improvement in accuracy.

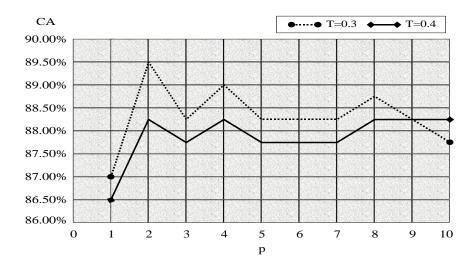


Fig 7. Comparative classification accuracies

#### 6. CONCLUSION

The outcomes of study are summarized as follows. First, in this study, the project is the management models for objective-deliverables-workplan. This is proper work breakdown structure for ways how to come up with. Secondly, this is based on the tasks, processes and deliverables into project. And, this is selected detail level to determine the basis of actual project data and a regression model level. Third, the project development path and selection are based on the type of the query. And deliverables is based on the project scale to define. The project deliverables is required by an algorithm to work on a project plan as the project manager using providing force.

However, project measure is based on the model selected operation process for input elements step. It should be drawn through the techniques. And, this is project manager defines the empirical elements rely on the figures dropping limit point. The line validity to schedule is the task for the next build. The project management scheduling actually is selected a work breakdown structure scheduling tools on the job fair and deliverables. The solution must be prepared not to re-enter. This knowledge base is implementation of the measures for project management scheduling to build the project and similar cases. The similarity is searching the case-based method which produced work breakdown structure with case-based method. This study has been added to the implementation of the system. It must combine academic realism than measures. It seems to be a future research in a model system. So, linkage is determined in accordance with the mapping rules. It is necessary to compare the practices work breakdown structure. In this study, the actual implementation of the system is directly the project manager did not valid the effectiveness of the system.

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