

# Using the LOM to Constructs a Simple Information System for Project Continuity Management.

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## Abstract

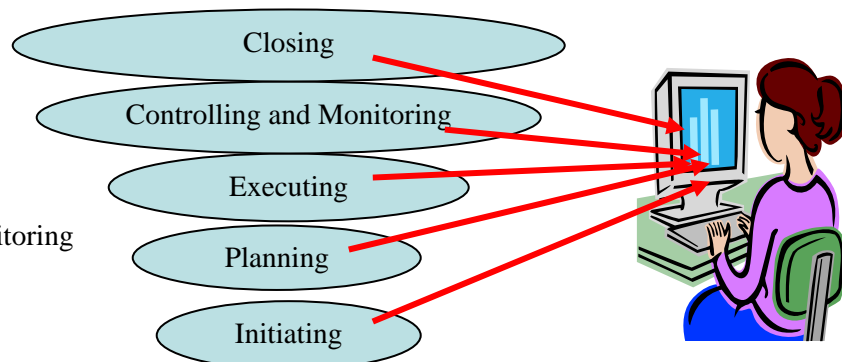
*The talented person and the technology are the enterprise most important property, but the project management unified the human resource management and the technical management. This research using SCORM's LOM as the data structure of the project continuity management, attempts to construct a set to be allowed to use the information system in the project activity process knowledge and the information establishment connection information bank. Provides knowledge share when the project working. And uses SCORM's digital learning to teach project knowledge and provides system to make the project management and project knowledge digital learning material. No matter the project success or interrupts. Project's knowledge may preserve. And we can provide the project's knowledge and digital learning courses to the people who will continue the project. Even to be a sample case study for the all people in the company. And help the project's process smooth and success.*

## 1. Introduction

What is project management? "The project management" is manages the knowledge, technical, the tool and the method synthesis to a project activity in, to conform the project goal by the time. The Project Management Institute (PMI) published the first Project Management Body of Knowledge Guide as a white paper in 1987 in an attempt to document and standardizes generally accepted project management information and practices. The current edition, A Guide to the Project Management Body of Knowledge (PMBOK Guide) – Third Edition, was released on 2004-10-31 and provides a basic reference for Project Management..

The Guide recognizes 5 basic process groups and 9 knowledge areas typical of almost all projects [1]. The basic concepts are applicable to projects, programs and operations. The five basic process groups are:

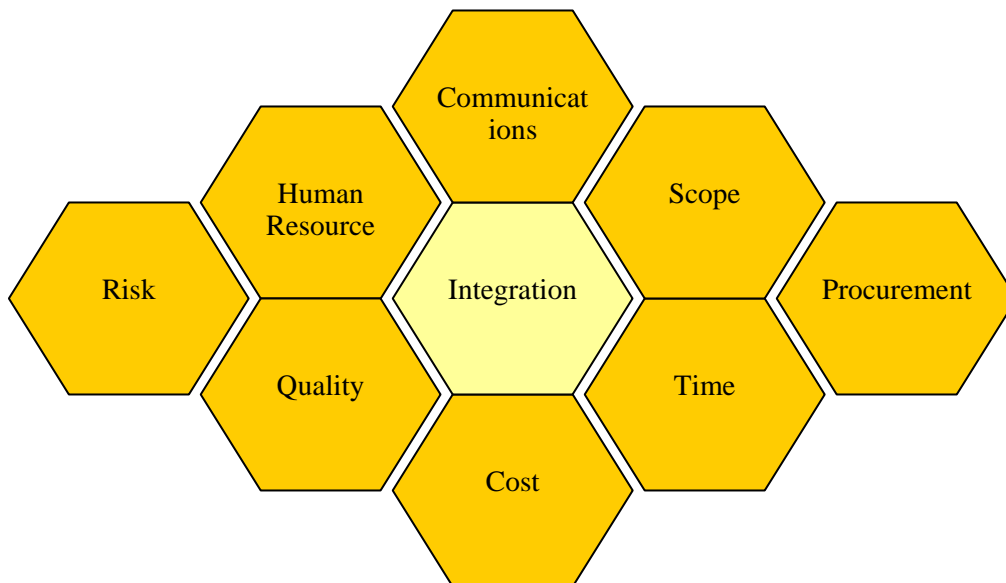
1. Initiating,
2. Planning,
3. Executing,
4. Controlling and Monitoring
5. Closing.



Processes overlap and interact throughout a project or phase. Processes are described in terms of:

- Inputs (documents, plans, designs, etc.)
- Tools and Techniques (mechanisms applied to inputs)
- Outputs (documents, products, etc.)

The book covers the following knowledge areas: Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management.



What is project continuity management, "the project continuity management" is a method of project process in each kind of knowledge, the data information, Data-Log of project. And save them in the information system, for the project in broken or finish. The team member or new member can continue the project to carry on the project continues knowledge to help the project success. And provides the project knowledge bank for the company can share to other project or to training the new employee.

## Background

Sometime, the high tech industries when the person walked, and then take out the technology and know-how. Then question has come. PM (Project Management) sounds good idea for the enterprises to keep the know-how and knowledge. But it is a method not a workable information system with computer, so we need to constructs a system for project continuity management. Maybe PM can help the project at the moment, but its knowledge and experience is helpful to whole company's every case of project or people.

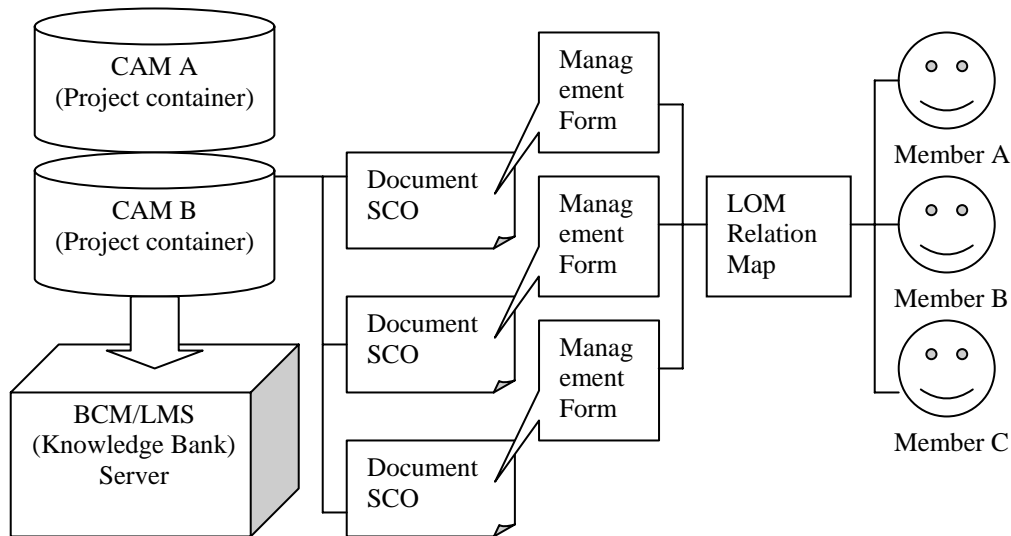
In "Mastering Project Management"[2]. It said if you are a project manager. It has three suggestions to the project manager.

1. Project manager should to seek a system to share some information to the team member.
2. Project manager should focus in project status and using data analysis to decide priority of project.
3. Project manager should control time schedule.

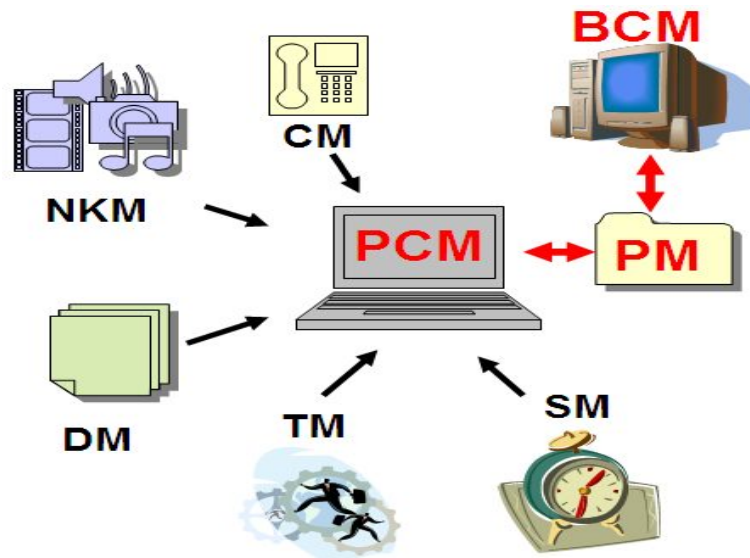
In project management including the participation conference, the group discussion, the meeting, E-Mail, MSN, produces the document, the work... Not only that, the material is also possible loss when the time past away. A success PCM system should be help staff setup all the message, data and help them put into a knowledge bank in office. And even can send back to the past time to get old data and information.

## System concept

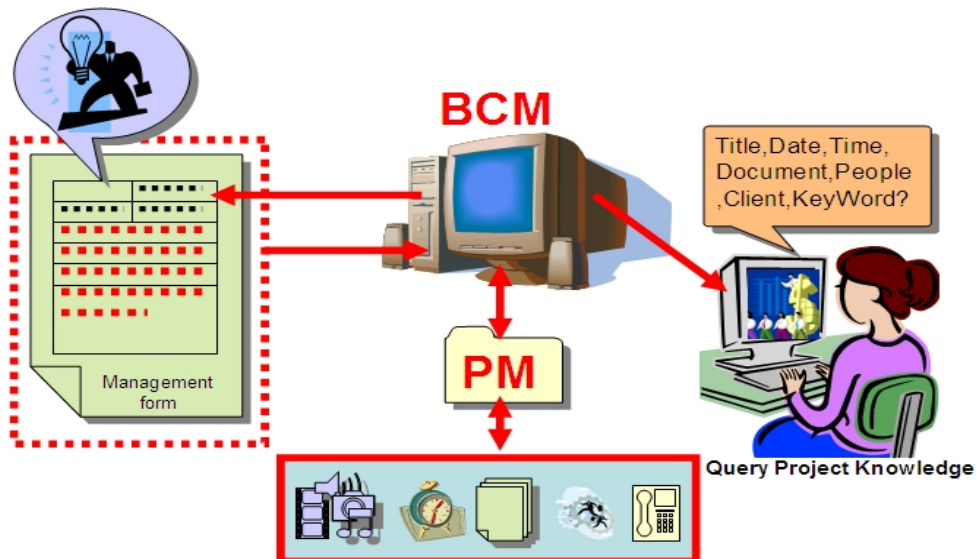
The SCORM (Sharable Content Object Reference Model) [3] it provides a good chance to constructs the information system for project continuity management. Especially the LOM (Learning Object Meta-Data) [4] can be a good tag to link to the document and all data of the project. And the CAM (Content Aggregation Model) is also can be the package specification for the project. It provides LOM Meta-Data that can to describe file of the data and it's relation to the project and relation of team member of the project. And we also can insert the version information and time and date data to the extend tag in the LOM. The all kinds of document and data and Meta-data can be packaging in one CAM with hyper link and object. Then we can share the project knowledge and know-how by SCORM RTE (Run Time Environment) in LMS which have provide security management for all data and document.



All the CAMs which is project container and SCOs (Shareable Content Object) which is document or data of project are links to management form which is present by LOM. And all the user information (maybe team member or administrator) will have a record in the LOM meta-data that will describe the user how to use the document file. Read only, has modify, delete or make a copy. And the date and time will be a record in LOM extension tag.



This PCM System provides 5 knowledge areas typical of almost all projects. Schedule Management, Task Management, Document Management, Nature Knowledge Management, Communication Management. All kinds of data can be package in SCO with LOM meta-data by software in client PC. All the data will make a copy in BCM server by PM folder. It can provides whole data update synchronize with all team member is just like web hard disk with project management.



Project manager can design many kinds of management form to manage many kinds of document and tasks. But all the management form will be represent into LOM. Then all the input data will be package in LOM's tag and will record the date and time data and author information and relation map in project. By this kind of data structure can help administrator or project manager to query all the knowledge and the relationship behind the document. And it can be data mining to find more detail in project between projects.

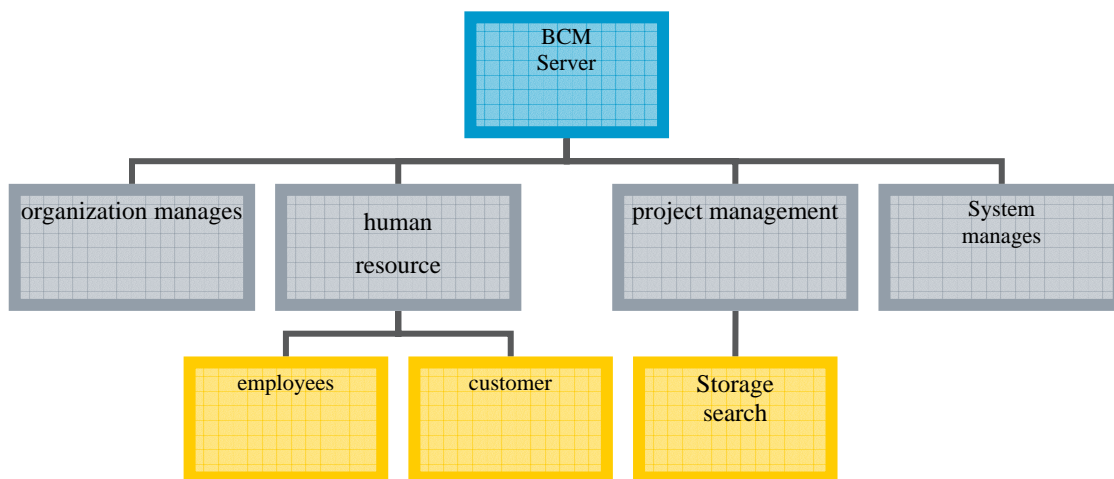
## System introduces

This system to divide into PCM (Project Continuity Management) & (Business Continuity Management) . BCM is a server that can manage all projects in whole company. It means BCM is knowledge bank of all projects in the company. It provides the project team member could search project data and knowledge or to save the data and information in directory. And it can provide another interface by LMS (Learning Management System) to train their team member. BCM is like the LMS and search engine. And Project is like a CAM (Content Aggregation Model), all the documents, knowledge are the asset. And we package whole information and data into the CAM object. And whole the log for the project is package into the LOM Meta-Data. By this way, people can search the project information or knowledge is just like search engine and learn the knowledge by LMS.

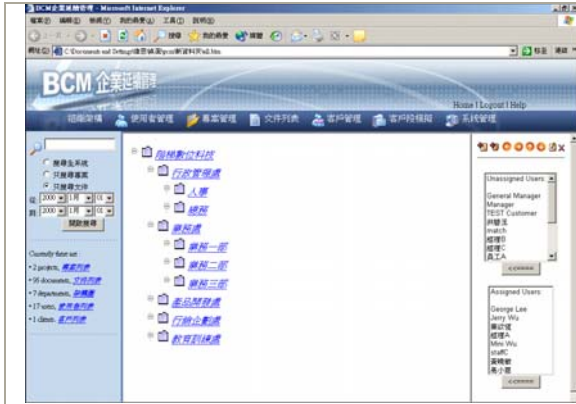
Because BCM main function is on the PCM, therefore this article will introduce by PCM primarily, in addition although PCM might independently operate, but will penetrate BCM to provide the project material storage, the exchange and the surveillance processes, the share as well as safely to control, the practice continues goal of the management.

## BCM function

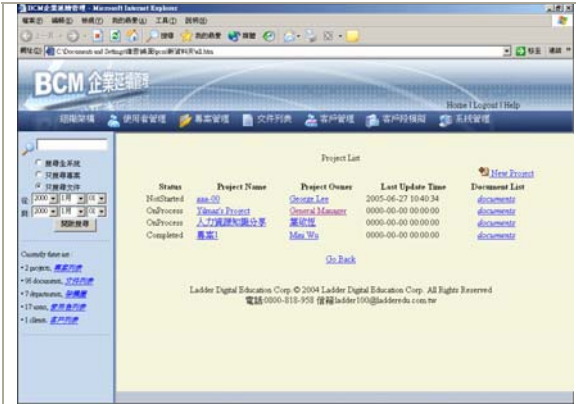
1. The organization manages, establishes and maintains the organization map and the jurisdiction level and so on.
2. The human resource management, the revision, the deletion including the staff account number, PCM records the confirmation as well as the customer material maintenance and so on.
3. Project management, including project data storage, exchange, retrieval, and establishment application.
4. System administration, including item and system information, data tag, managing form, log, etc.



### Organization map of enterprise



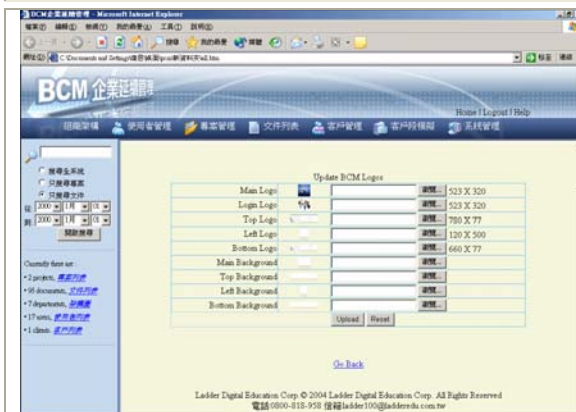
### Project management



### User management



### Search engine

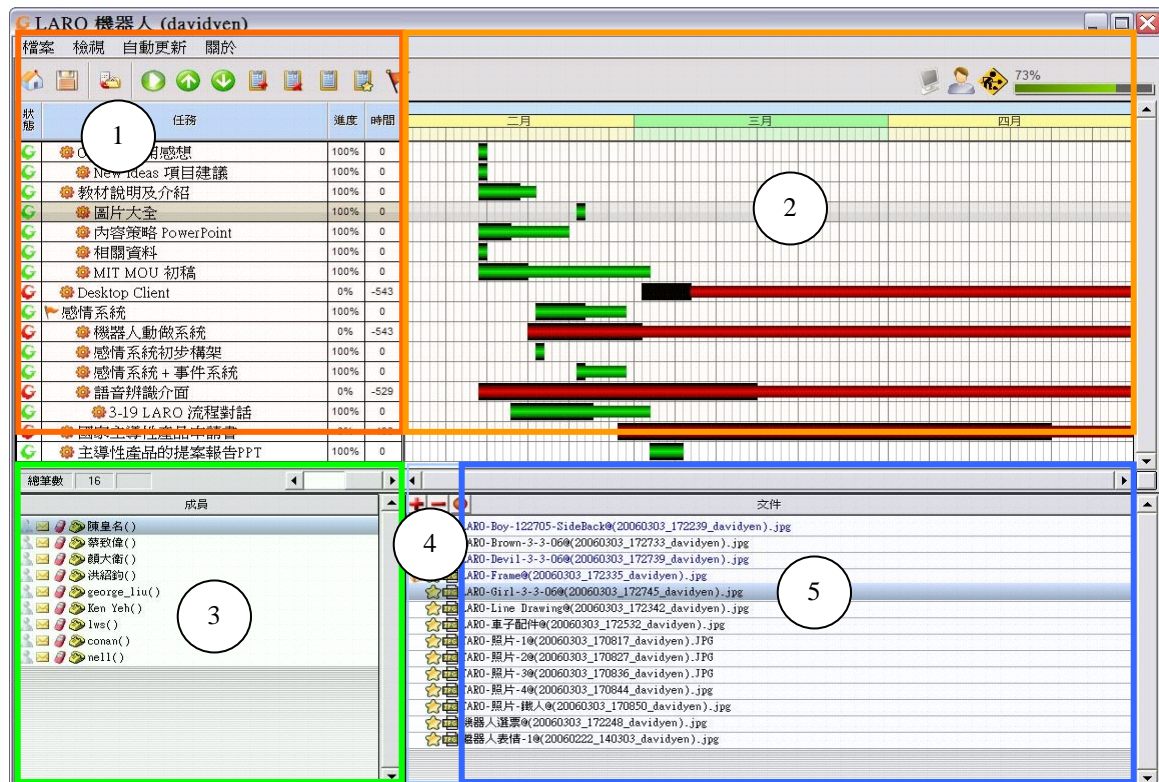


### Document table

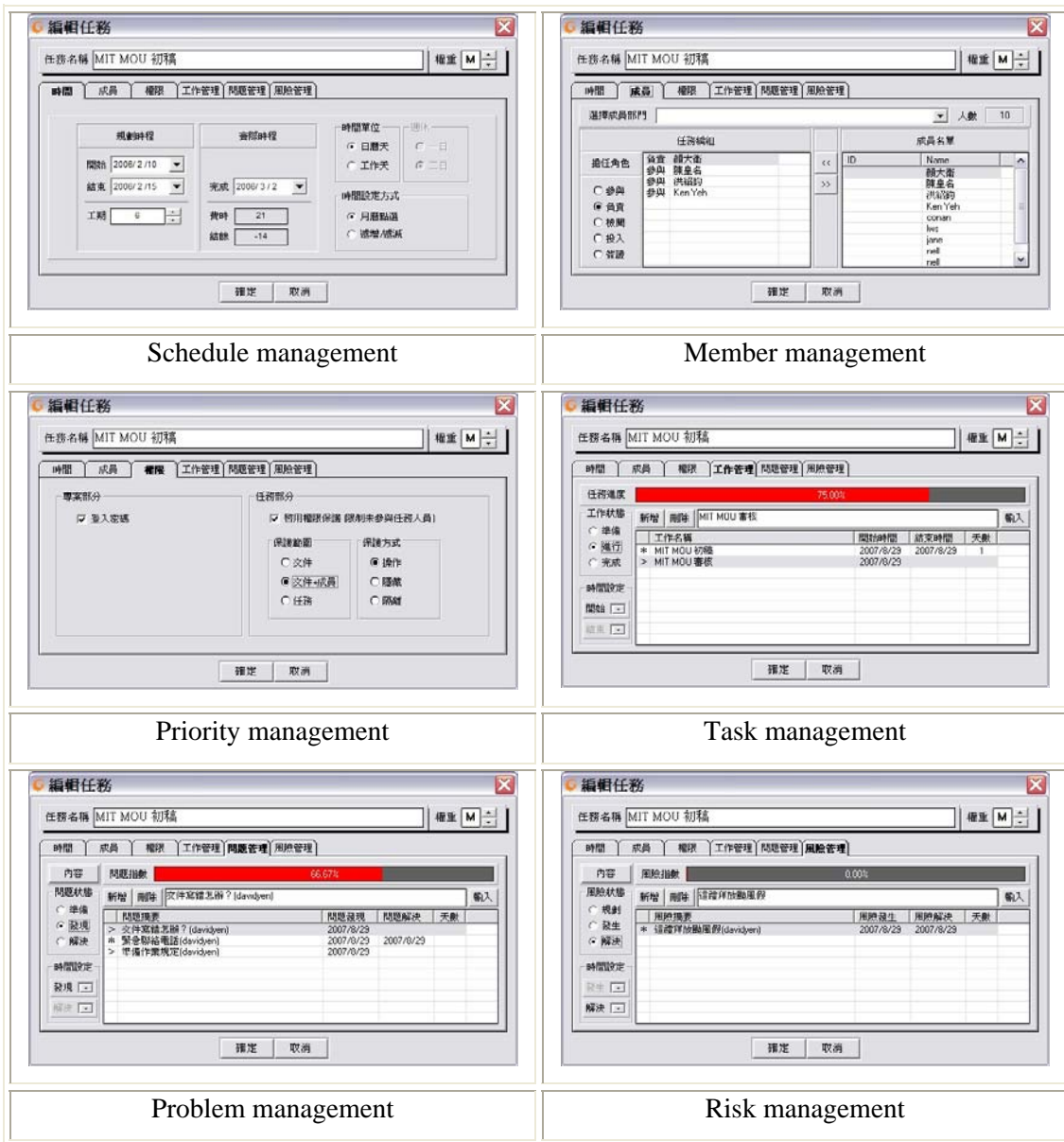


## PCM Function

1. All the business manages by Project Continuity Management in whole enterprise.
2. Integration human resource management, project management, learning management, document management in one system.
3. Provide the data storage, knowledge query, and security level control management.
4. A workable project management system not only a document management system.
5. Project data allow return and log whole process.
6. Easy to use and fit the SCORM format.
7. Provide document guiding tools to record nature knowledge that can be a course to teach in LMS.
8. MSN, phone book, email link provide ccommunication management.



	item	description
task	1	Task Management
	2	Schedules Management
member	3	Communication Management
document	4	Natural Knowledge Management
	5	Relation Document Management



Schedule management

Member management

Priority management

Task management

Problem management

Risk management

## References

- [1] Project Management Institute, A Guide to the Project Management Body of Knowledge (PMBOK Guide), Project Management Institute, December 2000.
- [2] James P. Lewis, Mastering Project Management, McGraw-Hill, USA, March 1, 1998.
- [3] Advanced Distributed Learning Initiative, Sharable Content Object Reference Model 1.2 Overview, Advanced Distributed Learning Initiative, USA, October, 2001.
- [4] IEEE Learning Technology Standards Committee, Draft Standard for Learning Object Metadata, Institute of Electrical and Electronics Engineers, Inc., USA, 15 July 2002.