

EA Case Study : Tung Ho Steel Enterprise Corporation

Case THS: Tung Ho Steel Enterprise Corp. has been devoted to manufacturing construction steel products that meet the highest quality and safety standards in Taiwan since 1962. The market capitalization is NTD 94B. The employees are over 1,500 people.

Implementation Duration: Year 2007 - Year 2010

The Goal of EA Implementation:

The development team of THS has a strategy plan to transfer the old mainframe system into the distribution system which is developed by Visual C# .NET. The career path of the original developers in mainframe system will transfer to become requirements providers, the user interface designer and data modeler due to they know the system needs very well. The other developers will develop all functions in the new system and maintain well. The system is planned to go live in the new factory, 2010.

Three phases of project development plan:

Phase I: Year 2007

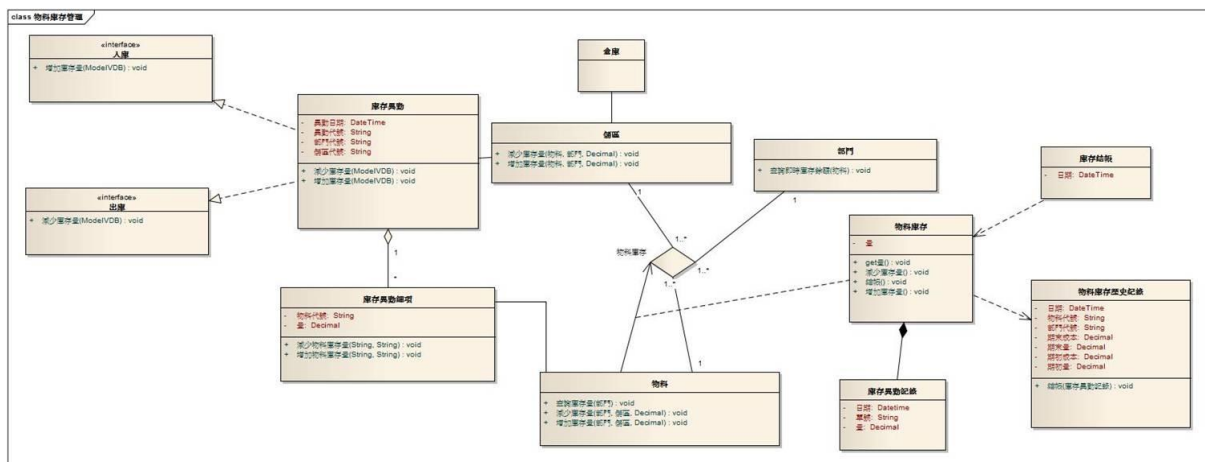
1. Select the essential key module first. The team use BPM knowledge to create the process of the key modules in EA model.
2. The architect consultant team assists to build the EA repository and version control environment. The development teams joint to create the analysis diagram and activity diagram together.
3. The architect consultant team assists THS development team to build the specific software architecture and the implementation methods of THS and create the prototype of the essential use cases.
4. Start the pilot run the 43 use cases by the development team. The developers began to practice and know the EA tool very well to write use case descriptions, draw the sequence diagram and write the program of prototype.
5. Evaluate the operation process of all teams. Decide the next operation policies and the focus of THS development teams.

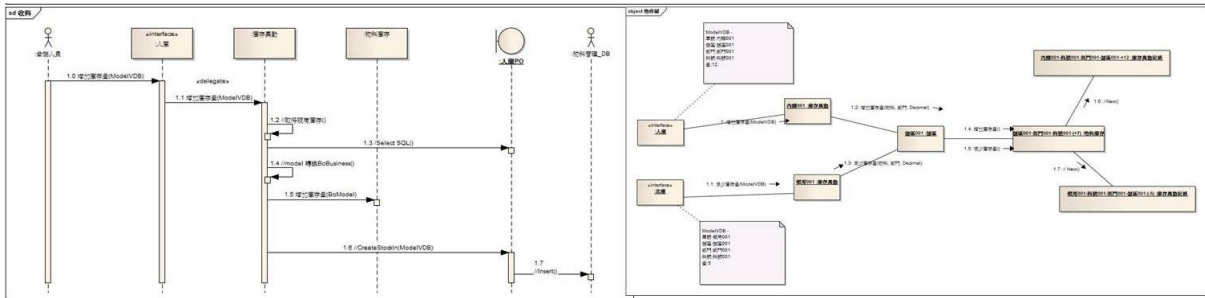
architecture of THS.

- THS team wants to assure the kernel know-how of the steel industry and decide the build the business framework of this industry. THS team request the architect consultant team to design and implement the business object and plug and play the result with the application.

Phase III: Year 2009 – Year 2010

- The system continuous to develop system and is ready to go-live.
- THS team creates use case model and use case descriptions with EA tool by itself.
- THS team wants to assure the system which is conformed to the requirements and is maintained smoothly by THS team itself. THS team plays the roles of domain experts and developers. THS team draws sequence diagram and generate the program skeleton by EA tool. It also develops the source code of the function points with the software architecture of THS.
- THS team wants to assure the kernel know-how of the steel industry and decide the build the business framework of this industry. THS team requests the architect consultant team to design and implement the business object (BO) and BO code refactoring.
- THS team maintains the artifacts with EA model tool in maintain phase.
- For the advance the schedule of the go-live request, THS team creates prototype system rapidly. However, to assure the whole systems to fulfill THS software architecture, the development team proceeds with code refactoring and reverse engineering as planned.





Conclusions:

1. It is easy to collaborate with all teams by EA tool. We can control all requirements and the changeable of the system by version control and color management.
2. The centralize management of EA model helps to gather and publish the artifacts without redundancy. The owner of each element begins to present the right information precisely in common model by confirmation form.
3. The technical developers become proficient at using EA model to manage, update and search all artifacts in development and maintain phase.