

ABSTRACT

ABC Company is a third party logistics provider specializing in warehouse management, inventory management, on-site management, transport and distribution management, and international freight forwarding service. However, in 2008, the purchasing and human resource departments of ABC Company received a request from the warehouse department to purchase new equipment and hire more employees since the warehouse operator cannot finish the issuing activities within the working hours, and which results in high cost of overtime payment and workers' job dissatisfaction.

The objective of this project is to redesign the working process of warehouse issuing processes from receiving an order to dispatch of goods, in order to reduce work processing time and improve work productivity and performance of employees so as to reduce working overtime, overtime payment cost, and to increase job satisfaction of employees.

Agent relationship morphism analysis (ARMA) is a business process redesign used to analyze a complex process, which has multiple interrelated steps of sub-processes being executed concurrently. ARMA's capability of reasoning about the relationship between organizational structure and organizational processes in business modeling is also carried through in business analysis by analysis of the structural perspective (analysis of the abstraction level of the business model and dimensions of transactions) and analysis of the behavioral/process perspective (mission/non-mission analysis, activity value added analysis, fragmentation/concentration analysis, and process cycle time analysis).

The focus is on three main areas: warehouse issuing process, product storage location, and issuing process cycle time, with the intention to improve communication, coordination and control across departments. The deliverable results of this project are to reduce work processing time per order of both receiving and issuing activities by 44%-49%, improve working performance and productivity of warehouse operation processes by 7%-9%, save the cost of purchasing new equipment and hiring more employees by 48% or Baht 604,067 per year.