SYNOPSIS

This research is concerned with the study and analysis of the feedback control in process management and proposes an information model for representing the information associated with the feedback control. The technical process is a process of gradually building up the right information and linking up the process activities with required skills so that the project can be finished in time. The process is typically controlled as a project using traditional project management tools. Technical process management requires effective management of the activities involved, vast amount of data involved and communication between the geographically distributed teams working on the project. Concurrent Engineering has emerged as one of the most commonly referenced enablers for improved process management. Crucial for the process management under the concurrent engineering is a technique to represent the feedback mechanisms.

Existing software tools for process or project management do not represent feedback control in an explicit way. In order to represent feedback control for process management, it is necessary first to study and analyse the information associated with the feedback control and then to design and develop an information model for feedback control. Hence, this research has been carried out to represent feedback control in process management. Semantic data representation technique is used to represent the information model and the schema of information model for the feedback control is represented using Express-G language. A software prototype has been developed to prove the identified concepts for representing information on feedback control using MS-Access as back end and Visual Basic as front end. The
oncepts have been tested using a case study on software development process and found successful.