

# Challenges of Knowledge Discovery and Management

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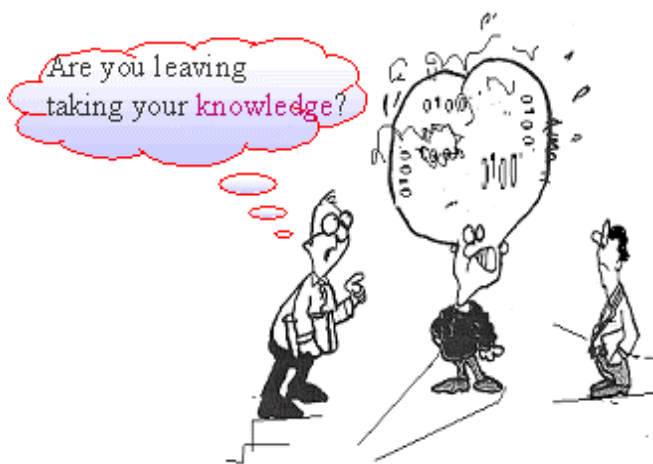
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## Abstract

Parallel with the developments in information and communication technology (ICT), the manufacturing industry is facing software sophistication that demands qualified personnel to both operating the machines and diagnosing the software itself. The size of the manufacturing database is also growing to the extent that we are unable to analyse and visualize the knowledge hidden in the huge data using traditional techniques.



At a time when a qualified and experienced personnel retires or quits his/her position, being able to replace the accumulated knowledge in no time is an important factor for the highly competitive industrial business. Today, several multi-disciplinary research areas such as artificial and computational intelligence, data mining, and knowledge discovery in databases are emerging to assist this challenge.

The aim of this presentation is to highlight the challenges facing manufacturing organizations to capture and manage knowledge. Starting with concept definitions like knowledge, knowledge management, information and data, the presentation attempts to show the areas where focus should be made for research in this area in order to convert data and knowledge into an asset of competitive factor.