

This document is an article extract from a journal titled "AI in Business Process Reengineering," written by Walter Hamscher in 1994. It discusses the use of AI in business process reengineering (BPR) and summarizes the Workshop on AI in Business-Process Engineering, held during the national AI conference, which allowed participants to learn about projects aimed at exploiting insights from AI.

The article starts by giving a short definition of Business-process reengineering, presented as a variety of perspectives on how to change organizations. It then informs us of the role that AI plays in business process reengineering. One role is as an enabling technology for reengineered processes, and the other, which is less common but more important, is the tools to support the change process itself.

Business is a collection of processes that respond to customers' demands by inventing, producing, and delivering goods and services. These processes are supposed to vary depending on the business, and in most cases, they may not have been engineered in a meaningful sense as they evolve depending on their environment. That is why viewing businesses like that is the essence of business process reengineering and that in 1993, 60 percent of management letters are about processes.

In the second part of the article, it develops the two roles of AI in business process reengineering. Techniques of AI can be used to automatically produce new process designs. A prototype system proposed by Andersen Consulting suggests new designs by transforming existing models, such as the G2/SPARKS system, which provides a knowledge base for typical business processes in service industries, allowing for rapid simulation modeling. But at that time, it lacked the ability to evaluate the impact of proposed changes, which may have changed nowadays. AI helps in supporting the analysis of existing processes and modeling proposed changes. He gave as an example The TOVE (Toronto virtual enterprise) Project at the University of Toronto, which focuses on modeling business processes using a generic ontology and providing tools for browsing, visualization, simulation, and deductive queries.

The article ends with challenges that may face the business in implementing changes in an organization, which can lead to the failure of BPR efforts. The article suggests that AI tools, specifically modeling tools, could potentially increase the likelihood of success by helping anticipate stakeholder reactions to proposed changes and supporting the design of new business processes. AI has a significant role to play in BPR, both in supporting the analysis and modeling of existing and proposed processes and in understanding and managing the human aspects of organizational change. The workshop participants agreed that there is already enough knowledge in AI to have a significant impact on practice, but further research is needed to fully realize the potential of AI in supporting business-process change.