Abstract

Computer systems are becoming commonplace; indeed, they are almost ubiquitous. We find them central to the functioning of most business, governmental, military, environmental, and health-care organizations. They are also a part of many educational and training programs. But these computer systems, while increasingly affecting our lives, are rigid, complex and incapable of rapid change. To help us and our organizations cope with the unpredictable eventualities of an ever-more volatile world, these systems need capabilities that will enable them to adapt readily to change. They need to be intelligent. Our national competitiveness depends increasingly on capacities for accessing, processing, and analyzing information. The computer systems used for such purposes must also be intelligent. Health-care providers require easy access to information systems so they can track health-care delivery and identify the most recent and effective medical treatments for their patients' conditions. Crisis management teams
must be able to explore alternative courses of action and support decision making. Educators need systems that adapt to a student's individual needs and abilities. Businesses require flexible manufacturing and software design aids to maintain their leadership position in information technology, and to regain it in manufacturing.

**Reference**


**Index Terms**

- Computer Science
- Artificial Intelligence

**Key words**

- Artificial Intelligence
- Knowledge
- Earth centric model