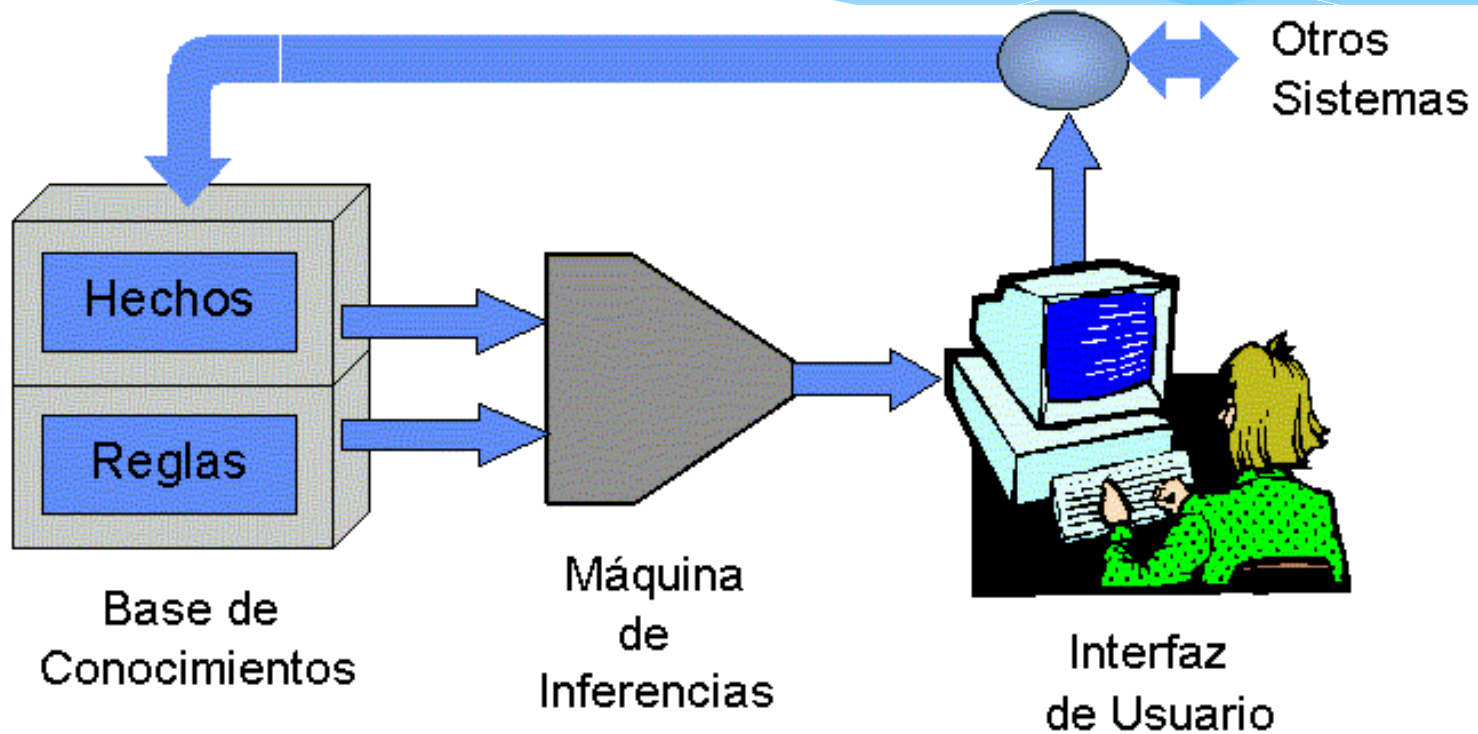


EXPERT SYSTEMS

It is an artificial intelligence system that is based on the conversion of knowledge from an expert on a specific topic in software code.

This code can be combined with other codes (based on knowledge of other experts) and used to respond to questions submitted to through a computer.

Expert System Architecture



Architecture. A knowledge-based system consists of :

- * Knowledge Base: represents the expert's knowledge and the problem in the form of descriptive facts and rules of logical inference.
- * Machine Inferences: following its own rules translated search algorithms, control and conflict resolution.
- * User interface: receives and delivers information interacting with the user.

EXPERT SYSTEMS APPLICATIONS

- * In the field of education, many expert system application are integrated into the Intelligent Tutoring System (ITS) techniques using adaptive hypertext and hypermedia.



Electronic Text

EXPERT SYSTEMS APPLICATIONS

- * In the field of industry: systems classification, fault detection systems, control of critical systems, material identification.
- * In services: diagnosis of diseases, segmentation, audit, budget alignment.

CLASSIFICATION

For its functionality, we have:

1. Discovery systems that generate new concepts based on rules and principles.
2. Diagnosis: failure to detect the malfunction of a system.
3. Design: In order to set up some structures from initial conditions.

ADVANTAGES OF EXPERT SYSTEMS

- * Reducing costs to put the experience of these systems.
- * The dangers are reduced, as these systems can be put where human beings can not reach.
- * Experience multiple, because the knowledge of several experts can be available simultaneously.

EXPERT SYSTEMS - REQUIREMENTS

- * The problem must be solved by using experience and / or knowledge.
- * Knowledge must give correct solutions.
- * The amount of knowledge must be commensurate.
- * Problems should not be based search (intelligent games)