

Abstract

Nowadays, function of expert is substituted by the expert system based on computer. Commonly, an expert system is substituted only for one expert. In development, there is a system that can be used by some functions of expert, called shell. Expert system shell as tool is one effective alternative to solve some cases, although it must adjust by only one method.

Generally, human learn from their past. Use the last cases to solve a new case. This principle is used case-based reasoning (CBR), reasoning method based on solved old cases. Expert system shell and CBR is one effective system to be applied in many sector.

With this system, an expert can build an expert system, define a knowledge representation and store cases as its knowledge. To get the solution for a new case, this system calculate similarity value new case and old case in knowledge based. Case with highest similarity value showed to user as an alternative solution for new case.

Keywords: expert system, expert system shell, *case-based reasoning* (CBR)