A Multi-agent System for Web services in Competitive Marketing

H.M.S.B.Herath, Asoka S. Karunananda
Faculty of Information Technology, University of Moratuwa, Sri Lanka
sasankaherath@gmail.com, asoka@itfac.mrt.ac.lk

Abstract - This paper presents an approach for the creation and use of ontologies to support agent communication in competitive marketing process. Enterprise Application Integration remains a challenging field in IT, and this is particularly true for the online marketplace selections where a large number of independently operated information systems exist. The mission to integrate those systems (different super markets) to create a common marketplace becomes a complicated problem due to the vast number of different data models and structures that currently exists within these different domains. Existing technologies have given us some possible solutions but these typically lack extensibility. To overcome those limitations and provide better supermarket guidance, this approach proposes a solution with the utilization of an ontology based multi-agent system that runs on a competitive environment and proves to be highly efficient and a flexible supermarket guidance. The use of ontologies in message based communication gives meaning to the contents of the message sent between agents. This solution guides the supermarket customers towards more efficient shopping by pointing out the most appropriate supermarkets according to what they offer their facilities and other benefits providing provided without wasting customers’ time and money. With the help of mobile and web service based technologies this also provides administration facilities to the supermarket owners for better service and revenue.