

Approach of Agent Oriented Technology in Designing of Sale's Tool in Pipe Manufacturing Industry

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Abstract: Most omnipresent technologies used in Software tool designing is software agents. Software agents also called "Agent-Mediated e-commerce". Agent - Based Role Modeling (ABRM) approach and MA CBR approach of Multi Agent in Case Base Reasoning, which is started to realize better designs in agent technology. In the recent past, more than hundred methodologies have been proposed. They offer a range of modeling concepts, elaboration and analysis techniques, and opportunities for tool support. They vary in maturity and scope of coverage. The diversity of approaches offers rich resources for developers to draw on, but can also be a hindrance to progress if their commonalities and divergences are not readily understood. The traditional designing software tool is very slow in process execution and they have lack of automation and decisions. By using the agent base architecture it over comes the limitation of traditional mechanical industries sale's software.

Keywords: Case-Based Reasoning (CBR), Agent - Based Role Modeling (ABRM), URL -Uniform Resource.

I. INTRODUCTION

Software agents also called "Agent-Mediated e-commerce". Software agents are now used to support virtual business processes and facilitate them to enhance e-market places. Software agents[1] have received their importance over the last decade. Increasing work has been done in which intelligent agents support software tools and other Internet-based transactions. Agents deployed to perform tasks such as matchmaking, monitoring, negotiation, bidding, auctioning, transfer of goods, and follow-up support. These agents collect information from multiple commercial sites, filter it and provide appropriate responses for client tools. The agent metaphor, due to its suitability for open environments, has recently become popular with distributed, large-scale, and dynamic applications such as virtual enterprises. It is generally recognized that a major reason is the lack of systematic methods to guide the development of agent-oriented systems. Agent-oriented[2] methodologies have thus become an important and urgent area of research.

II. RELATED WORK

In 2009 Leo Sennott worked on the architecture of the business intelligence solutions used at Skyworks and details how this integrated system is being used to improve our competitiveness in a global marketplace.

In 2010 A. TEJASWI & J.N.V.V.S. PRAKASH introduced business intelligent decisions that take place from the data-warehouse through the Actionable-Knowledge Discovery (AKD) in Domain Driven Data Mining (D3M for short). The general architecture of D3M for enterprise decisions was proposed and the model storage was presented, and its characteristics would be analysed.

In 2009 Reza Khajavinia presented the paper titled "THE BASIS FOR BUILDING A BUSINESS CASE IN SOFTWARE DEVELOPMENT, A CASE STUDY" in which in many software companies, software engineers and business decision makers live in separate worlds, using their own terminology, decision criteria, and working methods. Building a business case is one possible way to bridge the gap between business and software engineering and to

increase the quality and the profitability of software development. Main empirical findings of this study are that case companies used a software business case to allocate resources between concurrent projects, to support sales and pricing activities and to identify the technical platform of their customers' products.

Venkatadri. M [2010] presented the paper titled as A Novel Business Intelligence System Framework that states Business Intelligence (BI) systems plays a vital role in effective decision making in order to improve the business performance and opportunities by understanding the organization's environments through the systematic process of information. The development of BI systems is limited due to its huge development costs. Developing the complex systems with Self Organized Multi Agent technology would reduce the building cost without affecting the scalability and reliability of the system. Hence, this paper presented a novel framework based on Self Organized Multi Agent technology for building the low cost BI systems.

III. INFORMATION REQUIRE FOR SALE'S TOOL DESIGNING

For sale's tool information is about markets or customers and their competitors in the market. It is a very important component of business strategy[3]. Sale's tools is concerned specifically about handling marketing processes and help in control markets problems related to customer handling and both the outer edge and inner edge of the company level so that they got maximum business and maximum profit from this business and they work all these by smoothly and highly efficiently. Market information - Through Market information you can know the prices of the different commodities in the market, the supply and the demand situation. Information about the markets can be obtained from different sources and varieties and formats. And the sources and varieties have to be obtained to make the business work.

IV. PROBLEM WITH THE TRADITIONAL SOFTWARE TOOLS

The traditional tool is very slow in process execution and they have lack of automation and they did not have any concept of artificial intelligence [4] so that they make self decision in the absence of manual guidance so they have lack of automation in both tool operations and decisions. Designing the architecture of Agent based tool which overcome the limitation of traditional software tool for sales.

V. DESIGNING OF MARKETING RESEARCH TOOLS USING AGENT TECHNOLOGY

The architecture for designing the marketing research tools systems have their layer or three tier structure

- Application layer
- Communication/ Interface/middle layer
- Data collection & handling layer or information get and controlled layer

These three layers further divided in sub layers according to the system requirements

5.1 Application layer

In this layer so many agent work there first agent is **CIA (Client interaction agent)** this agent basically deals with the client of the company for which they are working for marketing research. In this the work like Bid type functioning, in which both argument and the requirements of the client deals[5].

PSA (Parameter setting agent) This agent interacts with the CIA and then set the parameter for the application task which is functioning on the instruction set by the client.

AGA (Applications Generating Agent) This agent creates the different -2 application agent for the different-2 the task. The agent for task 1 to n interacts with the user for various purposes for solving marketing research problem.

5.2 Communication/ Interface/middle layer

In this layer basically deals with control communication and message passing b/w the agents. For interaction of the agent it provides an

interface. It has special type of agents for this work and this layer is also deals with the planning and coordination between the tasks. In this system agent communication languages (ACLs) use and It is based on speech act theory where in human utterances are viewed as actions in the sense of actions performed in the everyday physical world. ACLs specify message types called performatives, such as *ask, tell, or achieve*, which by virtue of being sent from one agent to another. Two agents play important role in this layer[6].

Agent (Control Communication and Interface b/w different task)- this agent deals with control communication and help in interacting and message passing between the agents[7][8][9].

Planner - scheduler and coordinate Agent- this agent is used to plan and scheduling the task and agent operations so that they work in highly coordinating environment.

5.3 Data collection & handling layer or information get and controlled layer

This layer basically deals with the information collection and handling the data or information, in this layer data is divided on the basis of their resources and the agent set the priority of the data retrieving in case of redundancy[10].

Primary data agent - the data is provided by the company or the main source of the company (from each department of company)

Secondary data agent - the data is collected from the internet, manual resources, marketing agent, and other extra resources of data collection

Third party data agent - this data is given by the other company on which the company owner shows Trust or the other marketing research company.

CBR agent support – This is agent support the design for handling the pervious case with the help of Agent

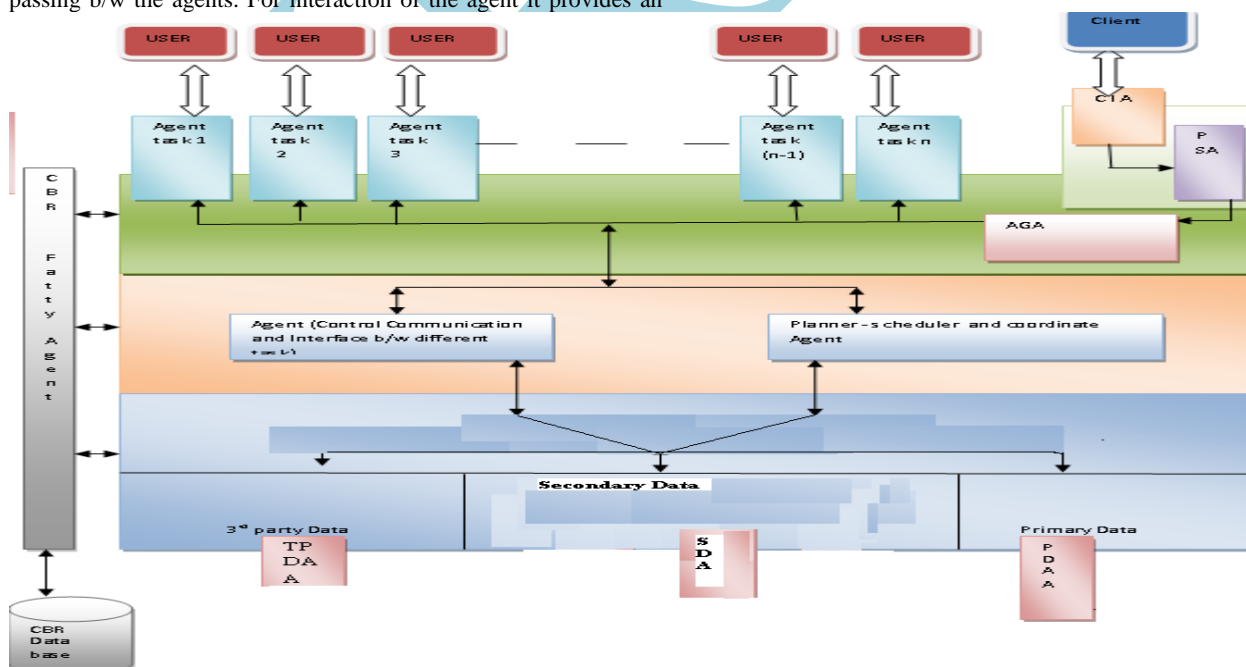


Fig.1 Sale's tool architecture

VI. CONCLUSION

Approach of agent oriented technology in designing of software sale's tools, Enhance the efficiency and capability of traditional sale's tool. The traditional tool is very slow in

process execution and they have lack of automation and decisions. By Using the Agent base architecture it over come the limitation of traditional marketing research tools.

VII. REFERENCES

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