

REMARK - Reusable Agent-based Experience Management and Recommender Framework [★]

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Abstract. In this paper we introduce an advanced experience management and recommendation framework. The framework exploits software agent technology to ensure distributed and robust functioning. In design and implementation we use state of the art methodologies, technologies and tools. Ontology is used for modeling and describing knowledge. The infrastructure is able to provide relevant recommendations to a requester entity based on recorded experiences from the past depending on the current context of the environment. Such infrastructure is suitable for environments where instant recommendation is required in a given situation. A concrete example implementation of this framework is introduced in the public administration organization where employees need knowledge according to their current work context which is represented by activities in a workflow process.

1 Introduction

There are many experience management (EM) frameworks but each of them is usually liaison to a concrete application area. Having a general reusable infrastructure for EM where final implementation would not require redesign of the whole system but only customization and maintenance of a knowledge model is highly demanded. In this paper we describe such experience management framework which employs software agent technology. Our aim was to make our framework integrable with existing software so we do not create a barrier for information flows.

This introduction is followed by a section in which we give an overview of relevant experience management systems and sketch the motivation of our work (Section 2). The core framework is described in Section 3. CommonKADS is a methodology for developing and maintaining knowledge management (KM) systems. We discuss the use of CommonKADS methodology for developing systems based on our framework in Section 4. A project called Pellucid [8–10] being

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