
Knowledge management and data classification in Pellucid

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Abstract. The main aim of the Pellucid project is to develop a platform based on the multi-agent technology for assisting public employees in their organization. This paper deals with a problem of classification and identification of needed information for agents performance. This paper presents methods for encoding data and creating the database, so that agents can have an easy access to the required information. Furthermore, two methods applicable with every type of database for classification and selection of historical information are presented.

1 Introduction

Organizationally mobile employees belong to the class of large-dimensional applications related to many various domains, which require optimalization. Each employee can execute many different activities, with different results or effects, moreover each of them might have different capabilities, possess various kinds of information or knowledge; therefore it is really necessary to optimally re-organize their work, share knowledge or activities, so that the collective performance could be improved as much as possible. The overall objective of Pellucid is to develop an adaptable platform for assisting organizationally mobile employees, in effect re-engineering their work in the organization. Because of the short frame of this paper we will deal with only a problem, that is how the Pellucid agents are able to automatically identify and capture desired information that they need in the current situation. This task appears during realization of the Pellucid system and however it does not belong to one of the main declared tasks, but it has strong influences to the quality of the final product.

2 Problem formulation

The agents functionality in the Pellucid system is described as follows: on the basis of information from the system and from user, an agent has to calculate and choose the most optimal action for the users execution in the current situation and recommends it to the user. This process is repeated at every time when the user meets a new situation. In order to make a quality decision,