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Research on Intensive Facts about Explicit Case of Tacit Knowledge

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Abstract

In the current knowledge-based economy, the role of knowledge resources in cultivating the core competitiveness of enterprises has become increasingly prominent, especially those difficult to encode, and highly personalized tacit knowledge, but also play a multiplier role. Tacit knowledge determines the effective level of human knowledge application and knowledge innovation. Attribute reduction is an important part of the construction of case knowledge system. In this paper, through several methods of attribute reduction, they are AHP, PCA, CV, Entropy Method and RS, comparative analysis them from the method theory, advantages and disadvantages, applicable objects and areas of application, combined with the characteristics of tacit knowledge itself index data, the rough set is innovatively applied to the tacit knowledge dominance case, and uses this theory to carry on the attribute reduction to the case storehouse carries on the numerical simulation, but also proved that the algorithm more in line with the practical application needs, but also more feasible and effective.

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1. Introduction

In the field of knowledge, knowledge is divided into Articulated Knowledge and tacit knowledge according to clarity, Articulated knowledge is the visual knowledge that can be encoded using mathematical tools, can be easily represented and processed by computers, and can be easily communicated between individuals and groups; The latter is difficult to visualize, it is difficult to compile code and exchange of knowledge[1]. There are scholars to "knowledge iceberg" to the overall knowledge of human beings, the ice above the explicit knowledge is small, and most of the ice below the tacit knowledge. Tacit knowledge not only occupies the vast majority of human knowledge structure, its status and significance is also more important, Tacit knowledge is gradually gaining more and more scholars' deep research on its proportion superiority and effective promotion to organization knowledge

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innovation. Tang Weihe Tian Ruixue in his research results in a number of previous scholars integrated understanding of tacit knowledge to sum up the connotation of tacit knowledge, from the point of view of understanding and summarizing the tacit knowledge of tacit, individual, situational cultural characteristics[2]. Tacit knowledge of enterprises in the industry's competitive advantage is also a big help. Scholars Xiao Zhenhong and Li Yan in their research results through hundreds of companies to obtain the relevant data from the survey, confirmed from the empirical point of view of corporate knowledge is conducive to the integration of tacit knowledge and innovation, and thus the positive competitive advantage of enterprises influence[3]. Case studies have also been used by some scholars in knowledge management. In the research of Liu Shanghui and Zeng Wenshi scholars, case-based reasoning technology is used to study medical diagnosis[4]. The above research results laid the theoretical foundation of KM tacit knowledge management to a certain extent. The research results have important significance for the further development of tacit knowledge management in knowledge management field. However, if the in-depth analysis can be easily found, most of the existing research results are only in the field of importance, the basic concept of meaning, the role and significance, as well as the realization of strategies and other theoretical aspects of the discussion, there are few research results on how to implement the mechanism, so it is difficult to form an effective guide to the practice domain.

The study of this paper uses the case model to realize the tacit knowledge explicit, Case database corresponding to the knowledge base of attribute reduction, Each case in the case database corresponds to a piece of knowledge, While the set of cases corresponds to the attribute set and decision set in the knowledge base, Knowledge base may contain redundant knowledge, and too many properties, the first will occupy a lot of space in the database, the increase in data information must have a greater impact on the latter part of the calculation rate, But also in the same search process will consume more time. Through the reduction, not only can make the knowledge representation of information system more concise, and attribute reduction for the case to improve the speed of later information to optimize the selection of the basis.

2. Comparative Analysis of the Methods for the Reduction of Typical Attributes

The In this chapter, we use the methods of AHP[5], principal component analysis[6], entropy weighting[7], variation coefficient[8] and rough set^[9] to compare and analyze the theory, advantages and disadvantages, applicable objects and application fields. As shown below:

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