Getting Orientation in Complex Information Spaces as an Emergent Behaviour of Autonomous Information Agents

Results in Brief

Multilingual unified taxonomies for efficient database retrieval

As part of the IRAIA project, a Bavarian institute has been developing the pre-structuring of keywords so that the different taxonomies could be fully integrated.

DIGITAL ECONOMY

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During the Fifth Framework Programme, the IRAIA project was established with the aim of ensuring that technologies and applications would be able to meet the needs of tomorrow's world. The requirements meant that the information society must improve and develop usability, dependability, interoperability and affordability.

This aspect of the project was focused on the unified taxonomy for economic information, but one that would create a diverse and comprehensive foundation retrieval system. The field of economics was chosen because the Bavarian institute behind this development and one of the other contractors for the IRAIA project, both have

institutes for economic research. Thus and because the design of any given subject of interest requires a substantial amount of expertise, the maximum possible scenarios could be applied and tested.

The initial presumption derived, was that the structures of many keywords provide the user with both ease of navigation and the ability to handle different languages. Thus the user can access the system, and retrieve the desired documentation in both the native default language, and all the other languages currently on the system. This project realised the unification of two different taxonomies, through the development of metadata and their parallel representation in different languages.

In the early phases of development, the system structures were based on economic time series structures. In most scenarios these structures had a three-dimensional status comprising of Theme, Sector and Geographic Region; for example Computers, Software and Greece. The potential future developments for other series structures exist in agriculture, chemicals, conferencing, education, manufacturing, aerospace, construction and the list is endless.

The developers believe that for this system to achieve its maximum potential, it should be accompanied by a metadata exchange platform for uploading and downloading metadata proposals. In addition, the foundation developments thus far designed mean that any upgrade and future generation stages could begin at an advanced level. And this in turn will facilitate the system to reach critical mass coverage for all types of industrial series structures.

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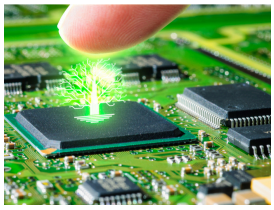

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IRAIA

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