



> Semantic Web Use Cases and Case Studies

Case Study: Real Time Suggestion of Related Ideas in the Financial Industry

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General Description

The financial industry is becoming increasingly competitive. There is strong pressure to rapidly generate new products and services, and successful ones are copied by competitors within months. Time to Market is thus a critical factor. Bankinter, the fifth largest Spanish bank, is recognized as one of the most innovative banks in Spain, and technology often plays an important role in the innovation. To speed up the process of innovation, Bankinter has had a system in place for many years where any of its 4200 employees can submit ideas for new products or services, cost reduction, or improvement of internal processes. Several successful products and the efficient operation of the bank are partly due to those ideas.

The problem

Over the years, tens of thousands of ideas have been submitted by employees. Consequently, managing and evaluating these ideas has become a major role of the human resource management (HRM) department. Apart from the effort it costs to evaluate ideas, it is also hard to identify the similarities, and to perform analyses on the information (most valued employee, social networking, implicit collaboration between departments, etc.). The result is that there maybe many missed opportunities.

The solution

Bankinter is currently deploying a system based on Semantic Technology that helps HRM to manage the ideas. When an employee enters a new idea, the system analyzes the text and recognizes the relevant concepts from a financial perspective. This happens in real time, enabling the user to be shown other ideas that contain the same concepts (not words!). This approach provides employees with a simple tool for checking whether their idea is actually new.

The concepts are defined and related in a financial ontology, which includes products, channels, departments, clients, etc. In the same way, employees can search for ideas that contain relevant concepts, and concepts are highlighted in real time to provide feedback to the user. The [figure](#) shows a small fragment of the ontology, that is defining different types of channels, objectives of ideas, and operative actions.

Search and analysis can also be performed on dates, individual employees, departments, etc. Moreover, the system is able to give an explanation as to why it thinks certain ideas are similar by showing the semantic relations between the concepts in the new idea and existing ones.

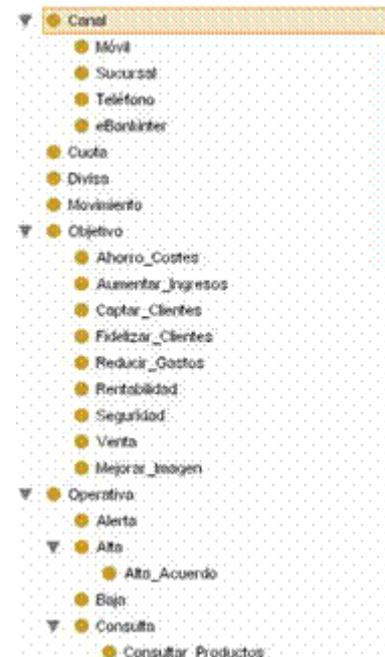


Figure 1: Image of the ontology

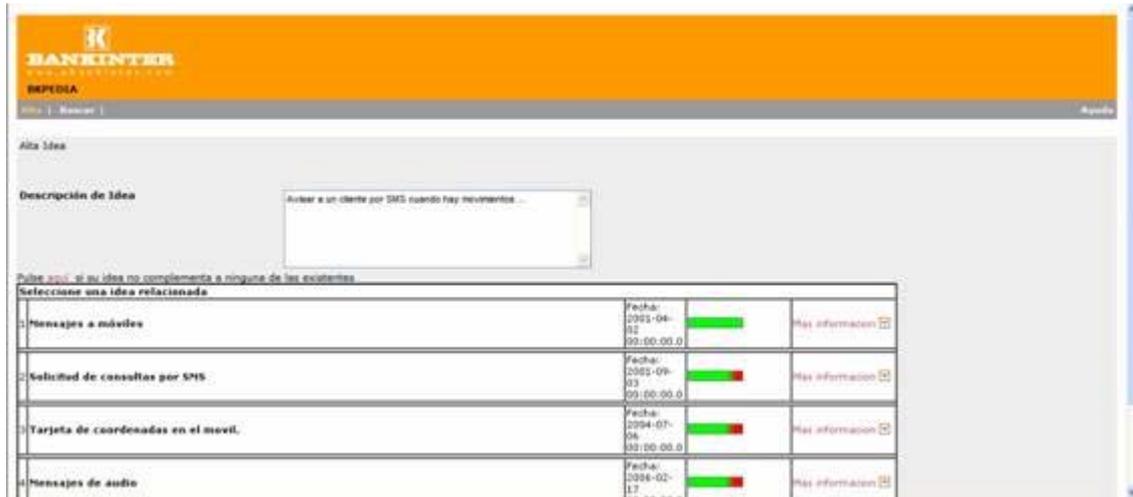


Figure 2: Screenshot of the system

Key Benefits of Using Semantic Web Technology

- Better innovation management leading to faster time-to-market
- Differentiation from competition
- Talent management
- Leverage full intellectual capital for improvements of business and operations
- Employee satisfaction
- Documented, shared understanding of relevant vocabulary for business

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