

NeP4B

Networked Peers for eBusiness

NeP4B - Networked Peers for Business - is a national RTD project funded by the Italian Ministry of Research and high education on the Basic research funds (FIRB 2005).

ICTs have often been claimed to provide small and medium enterprises (SMEs) with new opportunities to face the challenges posed by globalisation processes. However, besides pointing out the high potential of e-business, both theoretical and empirical contributes emphasise the persisting weaknesses of smaller businesses against larger ones also in electronic markets. SMEs, in fact, transfer to the electronic arena the problems of their scarcer endowment of financial and managerial resource, as well as their lower visibility. As a matter of fact, tools and architecture specifically targeted at SMEs look as a pre-requisite to turn the ICTs into a chance for allowing Italian SMEs to catch up with their foreign competitors. Taking into account the above issues, NeP4B (Network of Peers for Business) aims at contributing innovative ICTs solutions for SMEs, by developing an advanced technological infrastructure to enable companies of any nature, size and geographic location to search for partners, exchange data, negotiate and collaborate without limitations and constraints. The infrastructure will base on independent and interoperable semantic peers who behave as nodes of a virtual network. With these results the NeP4B project intends to provide a substantial contribute to the Single European Electronic Market (SEEM) concept, which represents one of the core aspects of the European Information Society 2010 initiative.

The project vision is towards an Internet-based structured marketplace where companies can access the huge amount of information already present in vertical portals and corporate databases and use it for dynamic, value-adding collaboration

purposes. In order to develop this vision, the project will investigate and design a technology as the basis for creating a network of semantic peers, providing advanced semantic services for B2B applications, where companies can classify their own profiles, offers and features so as to gain public visibility to potential customers and partners. The peers will cooperate on the trusted network on a P2P basis to deliver the targeted semantic services to all the users of the system. Economic and organizational goals of NeP4B are: framing the economic and organizational relationships between ICTs, business processes and performance, for internetworked SMEs, analysis of collaboration issues emerging from software and human-centred business processes within multi-party

operations management systems that aim at transforming the supply networks, developing a trust model coherent with a scenario in which several business players can meet in a virtual environment and need to decide whether a participant is trusted for a business transaction.

Business knowledge representation and modelling goals based on natural language are: providing the semantic peers with advanced and possibly automated functions for effective acquisition, categorisation, organisation, sharing and use of the business knowledge (mainly expressed in natural language), extracting relevant knowledge from textual documents, describing the business logic of the company.

Official website: <http://dbgroup.unimo.it/nep4b/> .