

**Identities Management: An Approach to Overcome Basic Barriers
in E-Commerce and Collaboration Applications**

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Abstract:

The development of the Internet was originally based on the assumption that a user remains anonymous. In the real world, however, people always have an identity – often even more than one. The transfer of real world transactions to the online world therefore requires identity information. More and more services, especially in e-commerce and collaboration applications, need to know the user for providing personalized services or for presenting the user to other users. As in real life, a user in an online environment usually plays different roles and will interact with different services hosted by different providers. Current approaches to provide identity information on the web still force users to provide and update information about their identity for each service independently. Being contradictory to intuitive user expectation, this proves to be a basic barrier for many e-commerce and collaboration applications, it results in cold-start problems for new services and in inconvenience for the user.

The availability of identity information for user representation, therefore, will be important for future Internet based e-commerce and collaboration applications. Information about the users is needed for performing transactions, for providing personalized services, and for presenting users to each other. Identities management and central user profile repositories might help

- *to motivate users making user profile information available (because they have control and awareness about who is using it), and*
- *to enable services to provide effective personalization without cold-start problems.*

These two effects could help to boost the use of personalization in online services and help to overcome a basic barrier for the diffusion of e-commerce and collaboration applications.

Our paper highlights the role of user-centric global identities management for future e-commerce and collaboration application. It presents a review of the current state of the art in the area of identities management (for Intranets and for the Internet) and discusses needs and possibilities for future developments. This discussion is illustrated by the detailed presentation of two scenarios in the areas of personalization and user-to-user-presentation in community support applications.

Keywords: *Identities management, User profiles, User Representation, Personalization, Electronic Commerce, Privacy*