

# Industry Challenges for Social and Professional Networks

Renato Iannella  
Principal Scientist  
National ICT Australia (NICTA)  
[<renato@nicta.com.au>](mailto:<renato@nicta.com.au>)

---

## 1. Industry Challenges

Social Networks and Professional Networks have been a true phenomena of the Web era. Capitalizing on the “Web 2.0” buzz, they have provided innovative spaces for web users to interact and share personal and professional information and experiences. Social Networks, like FaceBook and MySpace, have attracted tens of millions of dedicated global users and provides compelling tools to enable them to digitally recreate social needs such as sharing photos, keeping up with the latest gossip, and forming groups of personal interests. Professional Networks, like LinkedIn and Plaxo, have also attracted tens of millions of dedicated global users and provides powerful tools to enable them to digitally recreate professional needs such as sharing professional details, linking with colleagues, and forming networks of business interest.

However, there are still a number of unresolved Industry Challenges to Social Networks and Professional Networks:

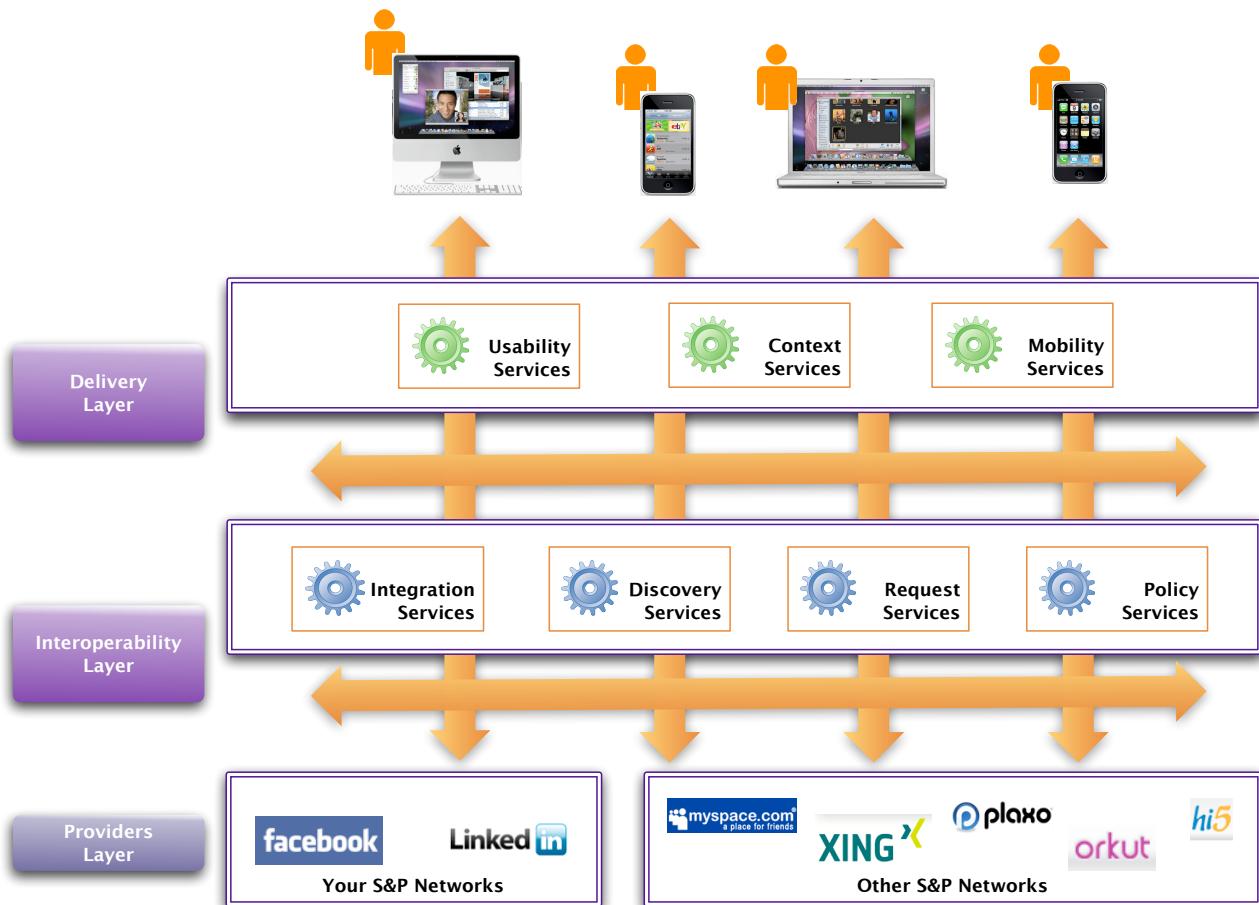
- They behave as “walled gardens” and lock-in users to specific service providers. Even though they are generally free to join, the amount of effort in maintaining multiple profiles, data, and relationship information across these sites is significant and distracts users from participating in a “global” social and professional network.
- They allow limited functionality to find and maintain friends and colleagues, usually based on explicit name search or parsing your personal address book. The latter resulting in semi-spamming from “friends & colleagues” to join a plethora of networks.
- They provide complex and indeterminate mechanisms to specific privacy and other policies for protecting access to personal information, and allow information to be shared that typically would not follow social and professional norms.
- They provide cluttered and confusing interactive interfaces to the myriad of information snippets, requests, and actions, resulting in “useless information sharing”.
- They don’t match and transform services appropriate to mobile users nor exploit the geo-location of the user for additional services.

## 2. Interoperable Framework

We envisage that future Social & Professional Networks will address these Industry Challenges (listed above) and provide advanced services that integrate and federate the Network Providers into a user-centric “mesh network”, as shown in Figure 1.

The Social Network & Professional Network providers will continue to expand and grow with new players entering the market with niche and specific business models. An Interoperability Layer in this framework supports new services by abstracting the common features and allowing these to be integrated across providers. This supports Request management to and from the providers to many individuals and the Discovery

of new friends and colleagues from activities in the various networks. Additionally, the Interoperability Layer supports managing multiple and different policy regimes for privacy, sharing, and rights management.



**FIGURE 1 - Federated Interoperable Framework**

The Delivery Layer utilises the outcomes from the Interoperability Layer to massage the outputs for optimal delivery to the end user. This includes Usability factors conforming to the user preferences, and consistent with the Context information related to the action or event. Mobility services are deployed to support mobile users to capture geo-centric related actions and features.

### 3. Next Steps

The wider Social Network & Professional Network communities will benefit from interoperable standards for data portability, policy expression and accountability, and network migration. These standards need to be developed which addresses both the technical requirements and the business models that drive the service providers to attract the end users. A W3C “Social Networks Interoperability Roadmap” Incubator Group (XG) would be the best mechanism to drive forward the planning processes, requirements gathering, and establishment of the scope and range of technical standards to address the communities needs.

### Acknowledgments

NICTA is funded by the Australian Government as represented by the Department of Broadband, Communications and the Digital Economy and the Australian Research Council through the ICT Centre of Excellence program and the Queensland Government.