

# Mining and Utilizing Social Networks within the Organization

**Ido Guy**

IBM Haifa Research Lab  
Haifa University, Mt Carmel  
ido@il.ibm.com

**Vladimir Soroka**

IBM Haifa Research Lab  
Haifa University, Mt Carmel  
vladi@il.ibm.com

In the recent three years, we have been working on research projects of social networks and social software within the organization. As social software proliferate in the web 2.0 era – both on the web and behind organizations’ firewalls – many social applications spring up like mushrooms. Yet, in most cases each of these applications, which typically contain rich information about people relationships, either explicitly or implicitly, do not interoperate to leverage each other’s social network information.

Our main focus has been on building a framework for sharing and aggregating social network information across multiple data sources within the organization. This framework is called SONAR (Social Networks Architecture) and it leverages information about people relationships across 15 different sources within IBM, from blogs to social bookmarking, and from wikis to communities. SONAR extracts weighted relationships and provides “evidence” as for how people are connected. Its description is given in [1], where the core principle of aggregating social network information is validated. The key goal of SONAR is to provide a central service within the organization which allows to any other application or service to tap into the aggregated organizational social network

SONAR also supports private social network sources, such as email and instant messaging. It combines the data coming from these sources with data from public social sources, such as the ones mentioned above, without infringing privacy. The work in [2] compares social network information coming from more traditional private data sources, such as email, IM, and phone calls, to information coming from public sources, such as blogs, SNSs, and wikis. The latter are found to give better representation of the broader network and people’s reach within the organization.

Another key distinction is among different relationship types. While some sources, like SNSs, people tagging, and wikis represent direct familiarity relationships, others, like forums and social bookmarking represent similar interests. Comments in blogs, subscription to one’s bookmarks, and following on Micro Blogging represent a third type of relationship, which is interest. Combining these types can

support interesting scenarios, such as recommending to a user similar people, with whom he is not familiar.

SONAR has been used by various clients within the organization, including two SNSs, in which it was used for the following two scenarios:

- (1) Recommending people to connect to for new and existing users
- (2) Showing people and artifacts in common with another person whose profile is being viewed.

Many other scenarios are planned, such as social name auto-complete, content recommendations based on social network information, path calculation between users, and more.

In the recent year, we have seen quite a few applications within our organization, from an SNS to a feed reader, and from an internal Twitter service to a recommendation engine, using the SONAR service to retrieve social network information.

For the workshop, we are particularly interested in discussing how social applications within the organization can more closely interoperate, and how rich social network information can be utilized in more novel manners. We are keen to explore the different types of relationships that are exposed in an enterprise SNS. We also believe that within the organization, as opposed to on the web, people need one basic explicit network rather than a variety of networks for different purposes. We hope to be able to discuss this topic as well.

## REFERENCES

1. Guy, I., Jacovi, M., Shahar, E., Meshulam, N., Soroka, V., Farrell, S. 2008. Harvesting with SONAR: the value of aggregating social network information. Proc. ACM CHI’08. 1017-1026.
2. Guy, I., Jacovi, M., Meshulam, N., Ronen, I., Shahar, E. 2008. Public vs. Private – Comparing Public Social Network Information with Email. ACM CSCW’08.