Cloud & Social Computing

Cloud computing solutions are now becoming a reality and, in the public Cloud vision, they enable the dynamic provisioning of scalable services with no upfront economical costs for IT infrastructure deployments. Social services for smart cities can take great advantage from the easy scalability ensured by a Cloud, for instance to properly scale provisioned resources depending on the amount of social data to process (user profiles, social ties between them, etc.). Indeed, that is fundamental in urban environments where services can experience extremely time-varying workloads along the day, consequence of specific time-of-the-day or particular events in limited city areas. Hence, Cloud technologies pave the way toward the deployment of smart-city social services that are both economically sustainable and capable of adapting to current requests. Related topics of interest include, but are not limited to:

- design of novel social services for the smart city vision;
- new models for dynamic resource allocation, scaling, and sharing;
- efficient distribution protocols for data movement between Cloud and mobile devices;
- interoperability and scalability aspects over large-scale mobile systems.

The following schema shows the main architecture and ideas behind the Social Cloud project: