To be, or not to be (socially oriented): that´s the question

Jaelson Castro

Centro de Informática – Universidade Federal de Pernambuco (UFPE)
Recife, Brasil
ccb@cin.ufpe.br, jbc@cin.ufpe.br

Abstract. New technologies and systems are greatly impacting people's lives. However, innovation has the potential to bring benefits as well as threats. In this world of technical revolution we argue that in order to arrive at proper systems requirements, one should examine and understand the relationships among social actors. Rather than focusing of behavioral properties of the software, we should ask how the system will advance the relation that some actors have in relation to other actors. In fact, in the last fifteen years have seen a new approach to the requirements challenge, the so called Social Perspective, which have provided much insight.

The i* modeling framework proposed by Eric Yu introduces some aspects of social modeling and reasoning into information system engineering methods, especially at the requirements level. Unlike traditional systems analysis methods which strive to abstract away from the people aspects of systems, i* recognizes the primacy of social actors. Actors are viewed as being intentional, i.e., they have goals, beliefs, abilities, and commitments. Actors depend on each other for goals to be achieved, tasks to be performed, and resources to be furnished. A notion of soft-goal is used to deal systematically with quality attributes, or non-functional requirements. Dependencies among actors give rise to opportunities as well as vulnerabilities. The analysis focuses on how well the goals of various actors are achieved given some configuration of relationships among human and system actors, and what reconfigurations of those relationships can help actors advance their strategic interests.

In this talk we review research that applies, adapts, extends, or evaluate the social modeling concepts and approaches. We also raise research challenges for our community.