High Impact Requirements Engineering in Software Ecosystems

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Abstract: Requirements engineering constitutes the bridge between the usage world and the development world of software-intensive systems. Its responsibility has thus often been described as to ensure building the right system, complementing other facets of system development which focus on building the system in the right manner.

Many of the RE methods proposed in the 1980's and 1990's have by now found their way into wide practical usage, even though some of even the most basic wisdoms still often get neglected when it comes to very large and political systems. However, beyond these issues, the environment in which systems operate has changed since the turn of the century. Systems are no longer developed from scratch but evolve from earlier ones, are embedded in a broader landscape or ecology of existing systems, and grow further in complexity while changing much faster than before. Embedding of systems in our sense means both the interdisciplinary linkage to other engineering disciplines, and the technical and social networking of systems e.g. in organizational information systems and internet communities.

The presentation will give an overview of some of these changes and the related challenges to requirements engineering research derived from them. It will then specifically focus on the role of software platforms as part of, and contributor to system ecologies. The discussion will address both the viewpoint of the platform owners and developers, and the viewpoint of the communities using the platforms.