Open Source Application Software, Organizing and Innovation

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Open Source (OS) is an approach to design and development based on shared and open access to a common set of design artifacts, driven by volunteer communities, or ‘crowds’. The original form of OS, software development, is seen as a harbinger for future forms of organizing and innovation. Work is increasingly being conducted by crowds on software platforms such as Github or Mechanical Turk, and innovations are often crowdsourced on platforms such as OpenIDEO, or shared in 3D printing communities such as Thingiverse. As OS is becoming an important paradigm for innovation, design, and development, the understanding of its basic mechanisms promises to deliver value to a wide range of phenomena.

The studies in this track address the role of requirements throughout an evolving lifecycle as well as inquiry into how open source communities collapse. These contributions provide important insights into the longitudinal aspects of OS design and development. Hence, they address OS projects not only as a unitary ‘mode’ of creating shared artifact, but also as a process that changes across time.

As such, inquiry into OS research is moving beyond its roots in comparative studies which essentially attempted to delineate how OS software is different from traditional forms of software development, towards considering OS as a domain that a) stretches beyond software, and b) has its own dynamics which are worthy of inquiry in itself.

Future avenues for research in this area are indicated by the increasingly deep insights into the fundamental social nature of OS design. Despite its fully virtual and distributed nature, discourse and other forms of communication are vital modes of coordination. This is an area of inquiry that we increasingly want to bring into focus. Through understanding social interactions in OS design contexts, including its longitudinal nature, we can better understand the full range of coordination mechanisms and success factors which are at play in such design processes.