Collective Development in Open-Source Communities: An Activity Theoretical Perspective on Successful Online Collaboration
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Abstract
Online collaboration is often organized without strong predetermined rules or central authority, which is why coordination and ways of organizing cooperation become crucial elements of collaboration. This article investigates how online projects can overcome problems of dispersed work, solve inherent contradictions and utilize tensions in the activity system to develop collaborative artefacts and practices. Empirical evidence is based on a detailed observation of a successful open-source project — the K Desktop Environment (KDE). Our findings show that successful collaboration is based on coat-tailing systems. Coat-tailing means to inextricably bind together individual action and collective activity through careful design of complexes of technological, mental and cultural artefacts.

Keywords: activity theory, co-configurative work, online collaboration, open-source

The Internet has opened up new space for boundary-spanning collaboration and has generated invaluable technological improvements for the coordination of online projects. Organizations have embraced these promising opportunities for global collaboration with external partners, and for user integration in new product development. Victor and Boynton (1998) have coined the term ‘co-configurative work’ for these new, technology-enabled forms of 21st-century, post-bureaucratic, networked conglomerates, wherein organizations, users and other external actors share resources, and collaborate. Organization theory has just begun to explore the potential, the idiosyncrasies and the drawbacks of these new forms of online collaboration. In such online work groups, work is often organized without strong predetermined rules or central authority, which is why coordination and ways of organizing cooperation become crucial elements of collaboration. This article introduces the notion of ‘coat-tailing’ — a term used to denote the parallel pursuit of individual and collective objectives — as a successful mechanism for online coordination and cooperation in co-configurative (Engeström 2004) online projects. Our central argument is that online cooperation is not just a matter of task coordination but rather a question of overcoming tensions that derive from the alignment of strategic activity and individual action within a highly dispersed group. Coat-tailing means to inextricably bind together individual action and collective activity through careful design of complexes of technological, mental and cultural artefacts.