Workshop at the Free University of Berlin, September 17-18, 2007
sponsored by the Volkswagen Foundation

CALL FOR EXTENDED ABSTRACTS

Paths of Developing Complex Technologies: Insights from Different Industries

Organizers:*

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With this workshop we aim to bring together leading researchers from all over the world who are interested in understanding the institutionalization of developing complex technology in general and of paths of technology development in particular. We would like to exchange and cross-evaluate the latest conceptual ideas and empirical findings in this two-day forum, to look for common ground and collective advances as well as for conceptual augmentation, self-critical reflection and unresolved problems.

Developing complex technologies, like in the automotive or semiconductor industries, biotechnology or nanotechnology, receives a lot of attention from managers, researchers, politicians, and the general public. Not least, this is because of their great promise and importance for further societal developments. On the other hand, developing complex technologies is seen as a rather risky and uncertain endeavor. Huge sums of money, perseverance, and extensive research at the edge of scientific knowledge are only some of the characteristics of these increasingly globally-distributed processes, which are driven by economic, political and research interests and coordinated mainly in and through different kinds of networks between private and public agents. Important questions are: How can we understand these processes of complex technology development? How do these processes get under way? How are they stabilized in heterogeneous and dynamic settings? How do they become institutionalized and eventually irreversible? Can processes of technology development be shaped intentionally, or are they processes beyond the reach of even powerful agents? How are markets for these technologies constituted in the processes of technology development?

Past experience has shown that the successful introduction of new technologies requires careful attention to the interactions between the technological, economical and social factors and mechanisms involved and, especially, to the forms of coordination used. There are a number of lessons to be learned from experiences with the introduction of technologies in different industries, and their comparisons may offer guidance with respect to what pitfalls to avoid and what issues to be sensitive to. Against this background, the focus of this workshop is twofold, as indicated by the title: First, we are looking for a comparison of concepts that stem from evolutionary, institutional, structuration or actor-network theory, for example, and that help us to understand processes of developing complex technology; second, we wish to compare empirical results on these very processes across different industries.

We invite the submission of extended abstracts for conceptual and/or empirical papers without any restriction as to the theories or methodologies applied. Abstracts should be 1,000 words long, specifying the papers' theoretical foundation, original contribution and concrete area of application. Full papers will be required in time for the workshop. Within management research, we expect submissions from organization theory, strategic management, marketing, innovation and entrepreneurship. Beyond management, we explicitly welcome contributions from economists, sociologists, historians and political scientists. In sum, any serious research on 'paths' and on the institutionalization of technology development could be relevant to this workshop.

Deadlines:

Submission of abstracts: June 15, 2007
Notification of authors: June 30, 2007
Uploading full papers: August 30, 2007

* The workshop has been planned together with Raghu Garud (PennState), Peter Karnøe (CBS) and Arie Rip (Twente) and around the research project "Path-Creating Networks: Innovating Next Generation Lithography in Germany and the U.S.". Workshop participation will be restricted to 25 researchers so that we can discuss our conceptual ideas and empirical findings intensively.