

# The role of users in corporate innovation

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## Project description

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The **main objective** of this research is **to deeply explore a peculiar model of innovation, the so-called "user model," in the context of corporate innovation.** This research aims at understanding the capabilities and limitations of user innovation processes, which involve quite often an open and distributed system (in which innovations may be freely revealed to other users). Its advocates claim that user innovation, involving freely revealing, is an efficient means of producing socially desirable innovation and maximizing "spillovers," or knowledge transfer/leakage. The generation of innovation by users may be a complement or it may compete with innovations produced by manufacturers. In its role as a complement, user innovation may extend the diversity of products without endangering market positions of manufacturers and may help manufacturing firms to mitigate information asymmetry problems vis-à-vis future market needs. As a competitor, user innovation may offer products that better meet user needs.

This **project's major motivation** derives from the conviction that an important benefit of this research will be a proper appreciation in both public and private policy-making circles of the capabilities and limitations of this model as well as of the needs for manufacturing companies to adapt to and profit from it.

In this project we will address **four types of interlinked issues:**

- **Theoretical issues:**  
whether this model works well in the Information Age; what the incentive structures are; why this model often involves open and distributed systems;
- **Empirical issues:**  
how to measure user innovation and to assess its importance (i) at the micro-economic level - user innovation as an intangible asset to be correlated with firm performance - and (ii) at the macro-economic level - user innovation as an important ingredient of national capacities of innovation;
- **Management issues:**  
how manufacturers can profit from user innovation; what kind of adaptations they should pursue to maximize these benefits;
- **Policy issues:**  
given the fact that user innovations contribute significantly to productivity growth and national competitiveness, what kinds of policy should be devised to promote them.

Although case studies show that this is an important phenomenon, it is hard to measure and to assess its economic importance on a systematic basis. The reason lies in the two deviations already mentioned: in contrast with manufacturer innovation, user innovations are often innovations without R&D; and user innovations are almost never patented or even published. This means that the use and interpretation of the standard indicators in science, technology and innovation (R&D expenditures, patent and scientific publication) for exploring and measuring this particular kind of innovation are very limited. They would illuminate only a very small fraction of all user innovative activities (D.Foray, *The Economics of Knowledge*, Cambridge: MIT Press, 2004).

## Senior researchers collaborating in the project

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- **Prof. Dominique FORAY** - Chair in Economics and Management of Innovation (CEMI), CDM, EPFL
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- **Prof. Georg VON KROGH** - Chair of Strategic Management and Innovation (SMI), D-MTEC, ETHZ
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