



The Schöller Chair in Technology and Innovation Management (Prof. Dr. Henkel) offers a Bachelor's Thesis with the following topic:

## Dynamics of open innovation – case studies on collective innovation focusing on the development from open to closed innovation

### Background

Open innovation, characterized as an innovation process spanning firm boundaries, has evolved to a central topic in management literature over the past decade. Various projects have shown that firms profit from disclosing some of their intellectual property (IP). In participating in open innovation, firms may, among other things, increase the efficiency and effectiveness of their R&D efforts by enticing other actors to join in co-creation of value or increasing their chances at standard setting.

However, firm and market characteristics that affect innovation are supposed to change over time (e.g., firm size, customer needs, market growth and competition). Hence, one could argue that a firm's motives to engage in open innovation change as well. With our current research effort, we try to extend the general concept of open innovation by including the dynamics of opening and closing over time.

### Objectives

Dynamics of open innovation can be observed in 3 examples of collective invention: The Homebrew Computer Club (which is said to be the birthplace of Apple), blast furnaces in Britain's Cleveland district and the flat panel display industry. Objective of this study is to outline the development from open to closed innovation, identify the trigger and drivers behind and evaluate this development along reasons for or against openness.

### Approach

- Outline of the historic development regarding open innovation
- Identify trigger and drivers behind this development
- Evaluate the development along a set of generic reasons for or against openness

### Literature

Osterloh, M.; Rota, S. G. (2004): Open Source Software Development - Just Another Case of Collective Invention? In *SSRN Journal*.

Allen, R. C. (1983): Collective invention. In *Journal of Economic Behavior & Organization* 4 (1), pp. 1–24.

Spencer, J. W. (2003): Firms' knowledge-sharing strategies in the global innovation system: empirical evidence from the flat panel display industry. In *Strategic Management Journal* 24 (3), pp. 217–233.

Meyer, P. B. (2003): Episodes of Collective Invention. US Bureau of Labor Statistics Working Paper No. 368.

### Contact

In case of interest or further questions please contact **Dominik Hepp** ([dominik.hepp@tum.de](mailto:dominik.hepp@tum.de)). Your application should include **a CV, a current transcript of records and a Bachelor or Vordiplom certificate (if available)**. For more information on our general requirements, the application procedure, and the style guidelines please go to <http://www.tim.wi.tum.de/index.php?id=210>. The thesis/project can be done either in English or German.