

Implementing web innovation tools in a telecom company – developing capabilities to accelerate innovation

The practices of open innovation have been advocated as an efficient way to accelerate innovation processes and expanding the markets for innovations. Open innovation entails practices where firms commercialize external, as well as internal, ideas by deploying outside, as well as inside, pathways to the market. One type of open innovation practice is to involve customers and users into the product innovation process through web-based innovation tools. Web innovation tools can be used to involve users and customers into spawning ideas, share experiences, test products or design products themselves. Empowering customers with design expertise, tools and technologies have however significant effects on the company's management and capabilities. The company's capabilities may sometimes have to undergo serious alterations to adapt to a new value creation process. The issues of management and capability modifications have been recognized by some researchers but have not received a proper investigation. This calls for explorative research to shed light on how and which capabilities that has to be developed in order to successfully implement web innovation tools.

We have performed a case study of a telecom company that has decided to open up their innovation processes in different ways in order to accelerate their innovation processes and with higher accuracy introduce new mobile services into the market. Among their actions they have decided to introduce a web site called "InnovationWorld". On this web site the telecom company tries to involve mobile phone users in presenting and discussing ideas for new mobile phone services, discussing experiences of existing services, and trying out and reviewing beta-versions of new mobile services, mostly developed by third-party developers. The web site has also disclosed so called APIs (Application interfaces) which enables any independent developer to develop software for mobile services. InnovationWorld has been in operation about one year and we have followed and documented the developments of this web innovation tool on the web site as well as on the internal side, i.e., interviewing the managers and employees about their experiences of InnovationWorld. InnovationWorld is part of the telecom company's R&D-unit.

In our analysis of the case we differentiate between three different types of user innovation tools on the web site:

- 1) Users freely generating new service ideas,
- 2) Users testing beta-versions of new mobile services,
- 3) Users developing their own mobile service software.

Our analysis also shows that three different types of capabilities have been developed by the managers of the web site,

- 1) disclosure capability; a capability to disclose information and user tools to the users in order to enable the user to interact and create ideas, reviews, comments, or software etc,
- 2) appropriation capability; a capability to capture value co-produced with users and also protect it from being copied by someone else,

- 3) integration capabilities, a capability to integrate diverse inputs from different users into a single solution and as well as integrating the knowledge into the company's innovation processes.

The development of these three capabilities was very different and the managers could to a varying degree draw on previously developed capabilities in the company. In the case of testing beta-services the disclosure, appropriation and integration capabilities could all be copied from previously developed capabilities as the company had previous experience of testing their own developed mobile services on users (though not through an open web site). Moreover, the internal routines and contracts when transferring a new service from the R&D-unit to the different business units in the company could also be used when transferring and licensing a third-party developed service.

The case of user ideas in the web site forum proved much more tricky for the managers to handle as they had had very limited experience from this before. They have not yet found out what kind of information to give to the users in order to give direction to the flow of ideas. To get a flow of ideas they have started concept competitions which run every year. Neither have they found out how to appropriate and integrate valuable user ideas into their innovation processes. Our analysis of the capability development so far is summarized in the table below. As can be seen in the table some of the capabilities have not yet been developed, the managers are still in a learning process trying to develop solutions.

	Disclosure Capability	Appropriation Capability	Integration Capability
Beta services	Mobilizing software developers	Contractual routines	Transfer to business units
Ideas from users	Idea contests (rewards)	Capability still under development	Capability still under development
New software from independent developers	Disclose Application Interfaces API-contest	Capability still under development	Capability still under development

The paper contributes to the open and user innovation research by high-lighting the importance of appropriate capabilities in order to successfully implement such strategies. The paper also contributes to the capability research by specifying the nature of some capabilities needed in innovation processes.