## User Innovation

Jim Euchner

When I was a graduate student, I had a compelling need for sleep. My thesis involved many experiments in sequence, each of which required me to spend about 20 hours doing the analytical chemistry to generate results. My sleep was suffering. To reduce the time needed to complete the experiments, I decided to automate the process. That proved harder than I thought. It required innovation, not just implementation. The automated gas sampling system I developed to meet my own needs went on to be used by future graduate students and was eventually commercialized by an analytical equipment company. And I got my sleep.

I later met Eric von Hippel and realized that I was a user innovator—someone who innovates, not with the expectation of profiting from the invention, but with a desire to benefit from *using* it. I learned that over 80 percent of the functionally new innovations in the analytical equipment industry were created by users (and later commercialized by firms).

The phenomenon of user innovation has been studied by a growing community of academics, and its prevalence,

DOI: 10.5437/08956308X5603002

motivations, and importance are becoming better understood. Surprisingly, most companies have failed to capitalize on it, or even to acknowledge it. This is unfortunate. User innovation has the potential both to enhance innovation practices in corporations and to disrupt business models. Companies that ignore it risk losing competitive advantage.

This special issue of *RTM* is devoted to user innovation and user innovation communities. It includes an interview with Eric von Hippel, who coined the term "lead user" and has been studying user innovators and open-source and user communities for over 30 years. In the interview, von Hippel discusses the surprising prevalence of user innovation, the forces driving its growth, and how leading companies have learned to collaborate with users to everyone's benefit.

Yun Mi Antorini and Albert Muñiz, in "The Benefits and Challenges of Collaborating with User Communities," discuss LEGO's experience with user innovation, particularly their approach to engaging adult fans of LEGO in innovation. They discuss their experience managing the challenges any company is likely to face in embracing user innovation, including finding good lead users, integrating them with the firm's strategies, and untangling IP issues. These issues are difficult, but the benefits of overcoming them are substantial.

Javier Guzman and his colleagues discuss another approach to user involvement in their paper "Living Labs for User-Driven Innovation." Living labs are physical spaces in which innovators can collaborate with users to "define, design, develop, and validate new products and services." Critical to their success are participative design practices used to manage the collaboration. Guzman and his coauthors studied six such collaborations in the context of a reference model for living labs that they developed. This controlled approach to user engagement may be more appealing to some companies than nurturing user communities because it is more managed and may be more efficient. Future research will reveal whether the living lab model can tap the full potential of user innovation.

Susumu Ogawa and Kritinee Pongtanalert look at user innovation on a macro scale. Their paper, "Exploring Characteristics and Motives of Consumer Innovators," compares community innovators with individual innovators in Japan. An interesting finding of their study is that user innovation communities are more inventive than individual innovators-and also produce innovations that are more likely to have commercial appeal. The implication for companies is that they need to take seriously the search for and engagement with user communities in their industries.

This issue also includes an excerpt of a chapter I wrote for a book called *Chance and Intent,* edited by David Bodde and Caron St. John. The article compares open innovation and

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user innovation from a strategic perspective. User innovation is, in some ways, an extreme example of open innovation, but its underlying drivers and ethos make it different in kind. Open innovation may challenge the role of R&D in a company, but user innovation challenges the very concept of the firm itself. I try in this chapter to identify the questions companies must ask when assessing the importance of user innovation in their context and the strategic responses open to them.

Even this issue's C-Scape provides insight into user innovation. It profiles Bill Coughlin, CEO of Ford Global Technologies, which has been a leader in opening up its vehicles as platforms for user innovation. Coughlin is a patent attorney by trade, so his thoughts on the benefits and risks of opening up innovation to users are particularly noteworthy.

User innovation is real. It is large, growing, and powerful. This issue provides insight and perspective that should be helpful to practitioners and executives interested in understanding and harnessing its power. AUTHOR QUERIES DATE <u>12/03/2013</u> JOB NAME <u>RTM</u> ARTICLE <u>2939</u> QUERIES FOR AUTHORS <u>Jim Euchner</u> PLEASE ANSWER THE AUTHOR QUERIES WHERE THEY APPEAR IN THE TEXT. THERE ARE NO QUERIES