Eric von Hippel is a professor at the MIT Sloan School of Management and has made a career of studying user-led innovation. This article profiles an investigation of consumer-led innovation in the US, UK and Japan.

The ideas presented apply to industrial customers as well as consumers—the basic concept is the same. In fact, the authors emphasize this by providing an example of novel process equipment. Once an equipment manufacturer (think sawmill equipment) sees an innovation it has an opportunity to commercialize the idea and provide it to its larger customer base.

The main message of the article is that users are a major source of product innovation. According to von Hippel, lead users are those that are ahead of most users with respect to key market trends and have a high incentive to innovate. The classic examples he uses are products like skateboards and mountain bikes, product categories that originated with users.

The authors describe a “new” user-centered innovation paradigm. They find that users in each nation regularly,...innovate to create and modify consumer products to better fit their needs." Innovative users tend to be male, more highly educated, and have a technical education. The new paradigm consists of three phases. In Phase 1, novel, new products are developed by users, not for their market potential, but to serve a specific need. In Phase 2, other users exposed to the product reject, copy, or improve the concept. Finally, in Phase 3, companies identify the new product as something with larger-scale market potential and begin improvement and commercialization.

The authors suggest that you consider how to adapt your new product development efforts to accommodate concepts and prototypes developed by users. They also suggest efforts such as innovation contests with customers to help identify innovations. Basically, user-led innovations have been prototyped by the user and have, to some extent, already been market tested. This formula allows you to commercialize an idea that already has some level of market acceptance.

von Hippel has developed methods for identifying lead users (http://mit.edu/evhipple/www/teaching.htm). From this link you can access a series of YouTube videos that provide very practical advice on how to conduct lead user research.

So, what does this mean for your company? You need to create ways to identify innovations developed by your customers. You probably already have a good idea who your most innovative customers are. Following them closely can be an effective way to identify user-led innovations. Maybe those customers are adapting your product for a specific purpose—you need to be aware of those adaptations—they present an opportunity attractive to other customers.

By the way, it’s not just your customers that hold valuable, innovative ideas. With respect to your manufacturing or business processes, it could be lead users in totally different sectors that could give you invaluable new ways of doing things. Think of Toyota as the lead user with lean techniques and how those have been adopted across a range of other industries. If you are a composites manufacturer, what techniques might you glean from the aerospace industry about how to stick things together? What sort of quality control techniques might you glean from experiences at NASA?

Finally, the authors outline three recommendations to make your products attractive to user-innovators: 1) support user innovation (make it easy for users), 2) determine what users want in exchange for their ideas (free products/parts, access to your technical people, etc.), and 3) when you do commercialize a concept, give credit to the innovator that originated the idea.

Here at OSU we have conducted two lead-user projects. One was in cooperation with FPInnovations in Canada focusing on the building industry and the other focusing on Oregon’s window industry. Examples of user innovation ideas from these studies are:

- pre-insulated, trimmable headers
- flexible trim for arches
- backing on moulding to prevent splits
- more and better hardware systems (windows)
- 3-D, online design specs for use in Revit

It is difficult to identify pure examples of lead user derived innovations in the forest products industry. However, examples of innovations derived from customers include:

- Furniture producers in South East Asian countries are important suppliers of outdoor furniture to Europe. By 2000, they foresaw environmental requirements in that market for FSC certified wood. Their demand resulted in Eucalyptus grandis plantations of Uruguay and Brazil becoming certified. Today, hundreds of containers of FSC Eucalyptus grandis are purchased by furniture makers in South East Asia.

Great innovation ideas are out there waiting for you to capture—actively monitor how your most demanding customers are doing with your product!!