People Don't Need a Profit Motive to Innovate

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"People don’t need a profit motive to innovate" - Eric von Hippel - 2011

The finding: Innovations developed by individuals who give them away increasingly compete with patent-protected, for-profit innovations in many parts of the economy.

The research: Recent studies of representative samples of adults in the U.S., Japan, and the UK have found that many consumer products are developed by consumers themselves instead of by companies intending to sell them. For example, in the UK, 61.9% of adults had created or modified consumer products within the past three years. In aggregate, UK consumers spent 2.3 times more on consumer innovation than all UK firms combined. Only 2% of these innovating consumers patented their ideas, and many distributed them free of charge.

The challenge: Can innovation thrive if ideas aren’t protected and paid for? Professor von Hippel, defend your research.

von Hippel: There's no question that what we call user innovation—innovation by people and firms who invent things intending to use them rather than sell them—is increasing, for lots of clear economic reasons. Many costs associated with innovating have fallen precipitously because of advances in technology. Users are finding it cheaper and cheaper to develop exactly the products they want for themselves. We know that only a very small proportion of user innovators protect their ideas from imitators via patents or other means, yet innovation by users is thriving.

HBR: Why wouldn't people want to protect their innovations from being copied? Unlike commercial developers, users are motivated by the private return they get from using their innovations. They generally don’t expect to profit from selling them. If others do adopt the innovation for free, it often doesn’t hurt the user innovators—as, in fact, it may even help them. Say I build a new kind of mountain bike and ride it every day. I built it to use it, and I’ve gotten the private benefit I planned on as payback on my investment. Now I’m riding my new bike around and people see it, try it out, and ask me questions. At some point someone else decides to build a copy. Does that hurt me? No, it enhances my reputation, and that other user may make improvements to the bike that I can copy. If a bike company makes a commercial product out of my unprotected innovation and makes a lot of money from it, that may annoy me, but it doesn’t affect my original incentive for innovating. I get the reward I expected for the investment I made.

Same story with respect to user firms that innovate. Say a firm creates a new machine to use in its manufacturing process. My co-researcher Jeroen de Jong and I have found that the firm often will reveal its innovation to suppliers for free. Why? Because user firms frequently benefit if a supplier starts to build their innovations commercially. They don’t have to keep building copies for themselves in-house. Still, at some point it must pay to protect ideas. I don’t see Gillette sharing its razor-production innovations.

True, Gillette is tight about its blade-making machines. It’s a big competitive advantage for them. In general, what we see is that the free sharing of ideas goes down as rivalry goes up. For example, a competitive biker may not reveal his bike improvement just before a race. Similarly, a manufacturer that thinks that a novel process machine it has developed is critical to its competitive edge will not reveal it.

But users are not always rivals, and our research shows that they generally do reveal their innovations for free.

That thinking is a radical departure from current theory. True. Ever since Schumpeter in 1934, the fundamental assumption among economists and policy makers has been that only producers innovate, and that they do it in order to sell their creations. Without intellectual property protection, the conventional wisdom goes, there will be free copying, innovating producers’ profits.
will shrink or disappear, and there won’t be enough innovation to serve society’s needs. At the same time, economists have always known that intellectual property rights were a devil’s bargain. Society pays a huge price when it grants monopoly rights to people and firms. Monopolies created and supported by the patent system are known to increase prices and retard follow-on innovation.

But IP and the profits it produces fuel the economy. There’s no growth without profit. Companies compete on, and profit from, many things besides invention: brand, excellence in production, service, distribution, and so on. You can build a healthy economy around all those other things.

I have a hard time envisioning businesses participating in a user-innovation economy.

That’s ironic, because businesses are living and thriving in a user-innovation economy right now! User innovation has not been measured previously because it’s not supposed to exist, according to traditional theory. But my colleagues and I have now measured it at national levels in a number of studies—and the evidence is very clear that users today do generate a very important feedstock of free innovations that producers of both consumer and industrial products adopt and improve. I don’t see companies complaining about it.

Are companies wising up to this paradigm shift?
Some have. More should. All eventually will. Think of platform companies that

Twitter knows well that its users are the ones who initially develop the new functions that the firm eventually adopts and monetizes. Think about video games where producers invite users to modify scenery and characters. In scientific statistics, researchers constantly develop tests they need, and statistical test sellers incorporate the most popular of these in their own commercial products. As a very recent example, think about Microsoft’s experience with the Kinect accessory it introduced for the Xbox 360. Shortly after that product came out, many users modified it and improved it and created new applications. Microsoft first deplored this “hacking” of its product by users. Then, within days, it reversed course and applauded and offered support to those same users. It recognized the potential for profit and mutual gains.

The traditional paradigm of “producers innovate—users don’t” has turned out to be wrong. The model of freely shared innovation by users is steadily gaining ground. As firms and nations learn to adapt to it, users and producers will benefit, and so will economic growth. ☝