How to spot innovation when you see it

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Incentives for innovation can only be adequately designed if managers know what innovation is when they see it. IESE's B. Sebastian Reiche and his colleagues offer a new, broader definition.

It is broadly accepted that innovative organizations have a sustained competitive advantage over their rivals. Companies that release pioneering new products tend to perform well, while those that do not, stagnate.

In a world where "innovativeness" is so highly prized, it is crucial that managers understand what it is and how they can nurture it within their own organizations.

Innovation as an organizational phenomenon has a long tradition of research across a variety of fields. As a result, definitions for the term have become ambiguous or inconsistent.

IESE's B. Sebastian Reiche and his colleagues Eric Quintane (University of Lugano), R. Mitch Casselman (St. John's University, New York) and Petra A. Nylund (EADA) attempt to fill this gap in their paper, "Innovation as a Knowledge-based Outcome," which was published in the *Journal of Knowledge Management*.

They review the existing literature on the topic and come up with a new definition that allows for more precision when assessing the innovativeness of an organization.

Their definition takes in not only new technologies and product patents but also looks at service innovations and how managers can distinguish between the innovative and the merely new.

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What is innovation?

The authors' review of previous research on innovation found that there was a clear distinction in the way that innovation was viewed traditionally from how it has been conceptualized in knowledge management literature.

Back in 1934, Schumpeter defined innovation as "the first introduction of a new product, process, method or system." His definition highlights the dual nature of innovation as both a result and the methods used to achieve it, but traditional research has tended to focus on one or the other.

Defining innovation as a process has allowed researchers to investigate the different activities that lead to innovation. At least two phases are typically mentioned: the idea generation stage (often initiated by the perception of a new market or service opportunity) and the implementation phase.

When looking at innovation as an outcome, novelty is the key. To be innovative, a product or service has to be newer and better than what came before it.

However, as the authors point out, an idea or product only needs to be perceived as new to those who judge, use or need it.

The most common way of measuring the success of an innovation is to focus on the outcome, specifically by looking at the number of patents a product has taken out.

However, this approach fails to take into account innovations in processes or services.

The role of knowledge

In reviewing previous knowledge-based research, the authors identified a missing element. While academics agree that new knowledge is the main outcome of the innovation process, they have failed to specify which knowledge processes are more likely to generate, accelerate or sustain innovation.

Academics also disagree on what knowledge is, but concur that innovation is unlikely to happen without it.

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A new definition

Innovation, the authors argue, is, in essence, new knowledge. While an innovation might be the result of a happy accident, the final result contains all the knowledge needed in order to understand how it has been made, and, crucially, how it can be re-created.

But not all new knowledge is necessarily innovative. To be an innovation, three features need to be present.

1. *Duplicability*. Innovation is nothing if it cannot be reproduced. Once a product has been created, the engineers who created it should have gained the knowledge needed to create a second product similar to the first one without having to re-create the knowledge.

2. *Novelty in the context into which it is introduced*. As we've seen in traditional definitions, innovations are required to have some degree of novelty by those who are judging it. But exactly how new does it have to be to be a creation?

If the knowledge was available beforehand and used, then the group has simply replicated or adopted an innovation. If the knowledge was not previously available or used, then the group has created an innovation, even if it had already been created in a different context.

An example would be a new product that requires extensive adaption before being usable in the new context.

3. *Demonstrated usefulness*. Does the innovation improve on an existing process or situation? An invention can be new, but if it fails to improve on existing processes or situations, it?s not an innovation. As Schumpeter put it, inventions belong to the realm of ideas, while innovations are the practical implementations of those ideas.

Thus, innovation can be defined as the creation of new knowledge that is necessary to replicate the process leading to innovation outcomes. This knowledge needs to be duplicable, considered new in the context into which it is introduced, and demonstrably useful in practice.

By distinguishing between innovation and new knowledge, and in the absence of reference to technology or products, this new, broader definition opens up the possibility of further study into non-product innovations and innovations generated anywhere within an organization.

For practicing managers, viewing innovation in this way should allow them to adopt

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alternative, more comprehensive methods for measuring and rewarding innovation within their organizations.

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