

Innovation and the Cloud

By: Michael Schrage

Emerging from the recession, many companies are talking about the need to focus on innovation in a new way.

What's changing—what has to change?

Everyone says they want to innovate. But actions speak louder than words. Always. Too often, executives view innovation as complicated, time-consuming initiatives that will undermine focus. They hold legacy perspectives of innovation as something that requires too much of their time, too much money, too many people, and too much risk. Technology has made that kind of innovation mind-set anachronistic and obsolete. Today's digital technologies let you find secure, flexible, fast, and fairly inexpensive ways to test many ideas without huge commitments. The cloud dramatically reduces the barriers of entry to meaningful innovation actions.

The cloud creates what we might call “accordion innovation”: you can try something small, test it at larger scales, and then bring it right back down to study what you learned. You can customize the scale as easily as you can customize your test. We've gone from the cloud only meaning software as a service to incorporating more open-ended platforms that provide scalable experimentation. That's huge. That deserves C-suite attention. Then again, the cloud facilitates bottom-up experimentation and innovation just as readily as it empowers top-down innovation initiatives.

That's why exploring innovation in the cloud is so important. Many organizations aren't designed to be agile, adaptive, and responsive; they are kind of muscle-bound in their processes, and their systems don't lend themselves to agility. They emphasize optimization over innovation. The cloud provides an environment, a playground that enables “just in time” innovation on many fronts—rather than over-rely on thumb-sucking, let's-wait-until-we-get-it-perfect analysis.

How does the cloud create a climate for this kind of ongoing experimentation?

The cloud creates innovation climates where what used to be time-consuming and resource-intensive is now pretty quick and surprisingly easy. The evolving architecture of the cloud makes exploration and experimentation friction-free compared to more traditional IT infrastructure. Plug-and-play interoperability gives you the ability to quickly and easily write mash-ups that can create new data, information, and processes. Instead of dreading the idea

of connecting disparate software and systems, people can get excited about the opportunity. And decoupling systems is as easy and convenient as coupling them. The economics of experimentation become friendly. You don't need huge investments to get huge results. In fact, if you're making huge investments, you're probably doing something wrong. You can quickly launch lightweight, high-impact experiments that allow you to manage innovation risk faster and safer.

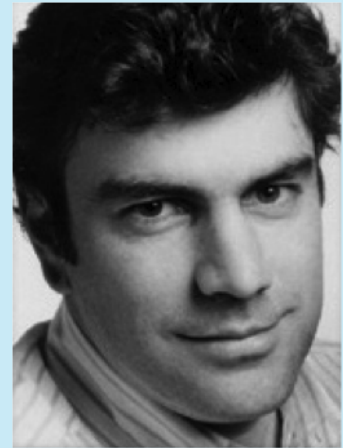
There is increasing emphasis on the need for collaboration—inside and outside the organization. How do the new technologies facilitate that?

I am someone who believes that collaboration—like innovation—is a means to an end. We innovate because we want our innovations to both sharpen and amplify our strategic intent. We collaborate because we believe that we can deliver more value or more efficiencies working well with others than doing it all by ourselves. When organizations decide what principles and practices collaboration should be built on, there is no better medium for enabling them than the cloud.

The world-class organizations I've observed and work with make the cloud a medium for shared space. The cloud is where vendors can virtually interact around models, prototypes, or simulations of product and process simulations. Digital versions of documents or dynamic representations can be tracked, managed, and evolved. You see this done really well with computationally-intensive CAD/CAE-driven firms—or companies confronting ever-larger data-sets for analytics—that have to deal with spikes and surges in demand.

Again, the interoperability architectures of the cloud—the fact that the standards and APIs are public and accessible—make the economics of creating, sustaining, and exploiting these shared spaces friendly and accessible. This is so beyond email plus attachments that it's not funny. The cloud is a place for interaction, not just transmission; collaboration, not just exchange of information.

Just as we've seen the consumerization of enterprise IT with the influence of the Internet and digital devices of all kinds, we're seeing the cloud enables a richer variety of enterprise collaboration services—that teams and their leaders can scale, accordion-like as demand requires.



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