

How technology is creating a new world of work

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In this interview, Dan Levin, the COO of Box, explores how technology is changing the way we work, and how companies can adapt.

Advanced computer capabilities we carry in our pockets, knowledge-based workforce productivity skills, new ways for large corporations to partner on joint projects—from oilfields to retail stores, technology is transforming the world of work. In this interview, Dan Levin, COO of online file-sharing and cloud-based content-management service Box, discusses with McKinsey's Barr Seitz some of the ways companies are managing—and profiting from—the changes. What follows is an edited transcript of their conversation.

The three big tech trends

We're now carrying around in our pockets incredibly capable computers that can run sophisticated apps and do a lot of heavy computational work, even though they're very small. So that's the first piece.

The second piece is the integration into those devices of connectivity and other capabilities, especially connectivity. The fact that a cellphone uses a cellular data network to talk to the World Wide Web, and thus is connected to the outside world, is huge. But the advent of other peripherals that can be built into or easily added onto these teeny little devices is also huge.

The third thing is that cloud-delivered enterprise applications that can be accessed over the web and don't require access to a VPN¹ or a firewall have just radically improved accessibility of these technologies from mobile devices. So you put those three things together, and they're driving a huge amount of change.

The emergence of 'knowledge' workers

I think work is evolving from being a place to being a mind-set. It's evolving from something I do during a fixed period of time to something that I do almost all the time, from something that was separate from my life to something that, for many of us, is integral to our life.

¹ Virtual private network.

I also think that work is going from something that's physical to something that's about information, creation, and utilization. There are hundreds of millions of people around the world—people who are repairing aircraft engines, people who are working in retail stores—who are now knowledge workers. Technology is enabling them to work in a much more interesting way than they used to.

A quick example is guys on job sites in the Bakken oil field in North Dakota. It used to be that if something broke at a wellhead and the manual for it wasn't handy, it could take weeks to find somebody who knew how to fix it, get the documentation you needed, et cetera. Now these guys can pull up the information on every piece of equipment at the wellhead instantly, using a mobile device over a cellular network. On the one hand, it's more productive because the well gets back into productivity quicker, but it's also better for the employee—nobody wants to sit around waiting for the manual to show up, especially at -30 degrees in North Dakota.

How companies are using tech

We have data that suggest that especially for mobile knowledge-worker populations, the productivity increase can be very significant, on the order of 10 percent or 20 percent.

Here's one excellent example. One of the largest companies that rents construction equipment in the US moved from a paper-based process to an iPad-based process for their salespeople. In the old world, those salespeople spent four days in the yard renting equipment, and every Friday in the office keypunching all the paper they'd collected over the course of the week. In the new world, they literally saved that entire day every week by using forms on iPads to enter all the information electronically, rather than keypunching it after the fact.

The importance of change management

These new-world technologies are pretty easy and inexpensive to deploy. So the challenge is a mind-set challenge, an awareness challenge, a use-case identification challenge, a change-management problem. The companies that are good at change management tend to do really well.

Change management is pretty well understood. In this context, it's got a couple of discrete pieces. There's a piece around top-down sponsorship that's really about making everybody comfortable that this is OK, that it's sanctioned, that it's secure, that it's reliable, that we're going to use it to solve real business problems—it's not just a toy.


There's a piece around awareness, helping every employee understand that this capability is available to them. Of course, it's much easier if you have an enterprise license agreement with any vendor of this kind of technology, so you don't have to worry about paying extra if too many people use it.

And then it's really use-case identification. What kind of business problems can we solve with this? How will we prioritize the ones to go after? Are they very broad, horizontal use cases that are just related to sharing information with a vendor or with our colleagues in Tokyo? Or are they more narrowly focused use cases around the automation of a business process or some regulatory compliance burden?

Technology in business partnerships

Partnerships come in roughly two flavors: short term and long term. Short-term partnerships, or transactions, might relate to mergers and acquisition, or to the production of a particular movie, to the creation of a joint venture, something like that. That kind of problem is brilliantly solved by cloud-based solutions in general, and by Box in particular, because the ability to set up and tear down quickly and easily and securely and reliably is very important, especially if these things are short-lived, a couple of months, say.

On-premises technologies are horrible in those situations because it takes heavy lifting to get started, and then you're going to tear it down in three months. But Box is also a very good platform to facilitate what I would call longer-term collaboration—for example, a marketing team working with an advertising agency, a legal team working with an outside law firm, an automobile manufacturer working with a parts supplier. In those cases, you've got a document-based collaboration problem that needs a tool that works easily across organizations and through the corporate firewall, particularly if there are three or four or more companies involved in a given project, which is very common in film production, for example.

Cloud-based tools like Box are brilliant in those kinds of situations because it's much easier to deal with authentication—provisioning and de-provisioning of users, et cetera, even in a fairly complicated environment like that. 

Dan Levin is the president and COO of Box. This interview was conducted by McKinsey Digital and Marketing & Sales Practices' **Barr Seitz**.