INCREASING SPEED
IN THE DIGITAL ERA
INTERVIEW WITH JEANNE ROSS

Jeanne Ross *serves as research director and principal research scientist for MIT's Center for Information Systems Research (CISR). She has researched and written extensively on digital strategy and digital business and co-authored three books, most recently, "IT Savvy: What Top Executives Must Know to Go from Pain to Gain" (2009).*

According to her research, companies pursuing successful digital strategies need to build both an efficient, integrated operational backbone, and a more fluid digital services backbone—a technology environment where small experiments can come and go. She also stresses the value of ongoing organizational redesign.

TCS spoke to Ross about those concepts and what she believes established companies that were not 'born digital' can do to increase speed in the digital business era.

TCS: *What organizational factors feed into a speed disadvantage for companies that were not born digital?*
How can they move more at the speed of digital natives?
Jeanne Ross: I do not think they can move as fast as newer, smaller companies. But I do not think that is a big handicap because they bring different strengths to the table. That said, they do need to move faster than they have historically. But they have a base of capital—and an ability to scale—that the fledgling digital companies do not have yet.

For a big, established company the question is how do we derive enough value from our heft? How do we draw advantage from our size, our experience, and our relationships? Simultaneously, how do we get a lot faster than we are?

TCS: *What are the biggest roadblocks for these companies once they decide to get faster?*
Ross: The number one limiting factor is they have not fully become IT-enabled. They have not automated to the extent they can. They still have legacy processes that hold them back.

For a well-managed company that has automated, the new challenge is to make digital innovation happen all over the company. These companies' tradition is focused innovation, often in an innovation unit. In a digital world, you want as many people innovating as you can. You start distributing innovation to more people, in more places, at more levels of the organization. In the course of doing their jobs, they introduce innovations that lead to better outcomes. A lot of the big old companies do not have a culture or governance process that would allow this, without chaos.

TCS: *Do digital businesses take a fundamentally faster approach to building–and improving as necessary–their operational backbone, their mission critical systems?*
Ross: Frankly, most digital start-ups are not thinking about their operational backbone. They are focused on building digital products and services, and they build a digital services backbone for that purpose. But as they grow, they will struggle with scale, completing transactions, and back office processes. The exceptions to that rule are companies like Amazon, Facebook, and Google. As they have grown, they have built an operational backbone, and it has facilitated their growth. But even those companies have turned out a little different than they imagined when they started.

Digitally born companies had an advantage because they did not have some of the older systems, but they definitely have faced the challenge of speed–creating inefficiencies and challenges to building an operational platform.

First, you are moving so fast you cannot fix things that did not fit. You can create chaos in your systems and processes. Second, you are incredibly profitable, which makes it less important to introduce the efficiencies that your operational backbone offers. When you are older and your growth slows, you have a financial incentive to focus on efficiency and processes.

TCS: *You note the value of ongoing organizational redesign to a digital business. What strategies can leaders of companies not born digital use to build team support for this idea?*
Ross: The more you introduce an environment in which jobs are continually changing, the better. I think of USAA [the Fortune 500 financial services company]: every time you talk to them, people's jobs have changed. What that starts to do, is give people

a much broader sense of what the company is trying to accomplish. People are constantly learning and they are constantly challenged.

The idea is 'We are going to change tomorrow. Come in expecting to change.' That is the culture you want to foster–and it is not typical.

Move people around a lot, and then give them clear assignments and a clear idea of what the business needs to accomplish. In an environment like that, people do not worry about job security because this is the norm. It is important to get accountability and empowerment right if you want to succeed in establishing a culture of change.

TCS: *That is a big leap of faith for employees to make, it is it not? How do the companies pull it off?*
Ross: Yes. The hardest part is where to start. The first few people you tap, you pick people who are not risk averse and have energy for this kind of thing. If you have had a stable environment, this

will be disarming for people. You want senior executives saying "We need to do this", and asking "what do we not know." What do we not know about a given customer, product or technology and how do we learn it?

That is the kind of culture companies will have to adopt. It is what startups do without realizing it. As people grow, their jobs change, and it is very natural. You are trying to create excitement for identifying the next opportunity. That will be hard. Start with a few people you have confidence in, and it will grow.

As a rule, companies are not good at this, but you have to keep trying.

TCS: *In the digital business age, the traditional 'divide and conquer' approach to organizational design is being replaced with more horizontal teams, where processes and roles flow across business units. Is this a 'nice to have' or a 'must have' for companies seeking speed?*

Ross: It is a must have. The thing that is causing the biggest problem is the need to integrate data. You cannot just put a fancy front end on something and go. Mobility is so critical to digital. If the data is not integrated, people must insert themselves into what ought to be automated processes.

Divide and conquer allows people to operate in silos. Each function or line of business figures out what must be done and divides up the necessary tasks to achieve that. To integrate across those silos, you rely on hierarchy—push issues up and instructions and information will trickle back down. With digital, there is no time for that.

TCS: *What traits prove important for leaders of 'fast' digital companies?*
Ross: The single most important thing is they can shut out the noise. They say "What is our biggest issue today and let us get it resolved". I am thinking about the CEO of Lego. In 2004 he recognized that their biggest problem was supply chain, and he formed cross-functional teams to solve it. Within a year, it made a difference. Within three years, it was really good, and the company's performance had turned around.

These leaders understand that this is our biggest problem, and solving that problem will facilitate immediate improvements and long-term capabilities. Meanwhile, other things will not get fixed. The important thing is to get started, to create capability that leads to more capabilities. It is about being able to leverage multiple parts of your organization. Get on the road. Once you get going, it is easy to pick up speed. The way you are reducing the noise is focusing on the more fundamental problem and going after it.

TCS: *Why is a digital services backbone–a technology infrastructure area where companies can develop digital offerings that may be highly valuable for only short periods of time—key to speed?*

Ross: The digital services backbone is what makes you fast. It lets you try something and then say "skip that, I have a better idea". It is not an upgrade to your operational backbone. Think about the app store model here. There are many apps that are not any good; the bad ones go away organically. With your digital services backbone, you really can say "We are going to do this app or UI today, and if we come up with a better one tomorrow, the old one goes away".

Lately we have been talking about the digital services backbone as a coral reef. It builds and builds, mostly through small organic additions. Little parts decay.

This digital services backbone lets you grow in unpredictable ways. Lego was the first one that described this to me. Lego's goal, its vision, is to inspire and develop the builders of tomorrow. That means they want Lego fans to collaborate with anyone who is building. So Lego decided, "We should let them design their own interface. There are so many ways to engage Lego fans and builders. We want these ideas to grow organically."

TCS: *You have noted that a digital service backbone and the teams designing and using it will require new skills–some of which are not clear yet. How do smart companies address this tough talent challenge?*
Ross: They are really struggling with that. What we have learned so far is that people are probably overreacting to the talent concern. I would focus first on how we equip and develop the people we have.

It is absolutely true that the kind of talent we need is changing. But we should not panic and hire people with fancy titles without a clear understanding of what we need them to do. Start by making your people more evidence-based. Give them problems to solve and make them figure out what they need to solve them. Be sure you know what problem you are solving before you hire people to solve it. It is easy to hire a chief digital officer, for example. But it is hard for that person to succeed if the company has not been explicit about its digital strategy and convinced everyone to get on board with the transformation.

Start by looking at your operations: Are metrics clear? Are business rules clear? Can we test them? It is about assigning new accountabilities. Break things up so people know what they are accountable for, and have what they need to pull it off. If you start at the bottom of the company, it is very doable. We are seeing some companies that have got their heads around this. They are dividing an end-to-end process into services. They look for constant improvements as a result.

The talent issue is a bit of a red herring. We have not designed our companies to make the most of talent and develop it.

TCS: *That sounds like it will require big changes in the hiring process. Are companies capable of doing it?*
Ross: It is very addressable. Only a few people have to really understand this.

For example, Google talks about people operations not HR. In a lot of the startups, you have a manager and a coach. Those kinds of things are being adopted. I imagine it moves into recruiting pretty quickly. How long will it take and how good at it will companies get? Good question.

TCS: *Are many companies still too focused on operational backbone, to the detriment of their digital services backbone?*
Ross: A lot of companies talk about, "We built our platform for supply chain, but now we have to have a platform for manufacturing". And they go on and on with these platforms. Those platforms can add value to a company but they lead to incremental improvements to the operational backbone, which only offers efficiency not innovation.

You do not help the company grow if you focus only on your operational backbone because you grow through innovation. There is a risk of just doing more of what you are good at. It will generate diminishing returns. It must be complimented by a digital services backbone. That has been a real issue for big companies that like control and order. It is not that they will not get value, but it does not take them into the digital economy.