A research summary report with key highlights from “Taming the Digital Dragon: The 2014 CIO Agenda”

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In the IT industry, we have become immune to new buzzwords and constant messages about how everything is changing. But this time, everything really is. All industries in all geographies are undergoing radical digital disruption — a “digital dragon” that is potentially very powerful if tamed, but a destructive force if not. As a result, CIOs are facing all of the challenges that they have in the past, plus a torrent of digital opportunities and threats that must be addressed at the same time. In every enterprise, digitalization is raising critical questions about strategy, leadership, structure, talent, financing and almost everything else — and IT leaders have no other option than to find the answers.

How we got here

It would be tempting to think that the CIO and IT organization just need to absorb some of the new technology and societal trends into what they are doing already — to do it just a bit faster, cheaper and smarter. But if we dig deeper, we see something more fundamental going on. We are moving to a new, third era of enterprise IT (see figure below).

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The third era of enterprise IT has arrived

Focus
Capabilities
Engagement
Outputs and outcomes

We are here

IT craftsmanship

IT industrialization

Digitalization

Technology

Processes

Business models

Isolated; disengaged internally and externally

Treat colleagues as customers; unengaged with external customers

Sporadic automation and innovation; frequent issues

Treat colleagues as partners; engaged with external customers

Sporadic automation and innovation; frequent issues

Services and solutions; efficiency and effectiveness

Digital business innovation; new types of value
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“There is a growing disconnect between our increasingly nonlinear world and the linear mindsets, practices and institutions that we deploy in our work.”

John Hagel, co-chairman, Deloitte LLP Center for the Edge
“Digital is different. And I think that less than a quarter of my team is ready and able to make the transition.”

Anonymous CIO

The first era of enterprise IT

Up until about the year 2000, we were in the first era, where IT could help do new and seemingly magical things — automating operations to create massive improvements in speed and scale, and providing business leaders with management information they never had before. The downside was that the IT organization was often a little unreliable, almost like a mad inventor who could do wonderful things but was neither timely, nor dependable, nor a good communicator.

Beyond this, the IT department was normally an isolated subculture — not seen as an integral part of the business. From inside IT, the rest of the business was seen as an annoyance, a distraction from building beautiful technical architecture.

The second era of enterprise IT

All this came to a sudden end with the Y2K problem and the dot-com boom and bust. There was less tolerance for an unreliable “black box” IT organization in the business. We entered the second era of enterprise IT, and have been in it ever since. This has been an era of industrialization of enterprise IT, making it more reliable, predictable, open and transparent. It has also been an era of processes, services, standards and smart sourcing — an era of ITIL, COBIT, Prince2 and PMBOK, and of the IT organization professionalizing and treating the rest of the business as its internal customers.

This second era has been necessary and powerful, but with one casualty: disruptive innovation in end-user organizations and arguably also in the IT industry. There has been relatively little innovation in enterprise IT in the past decade or so. IT budgets have been tight, and appetite for risk has been low. The process, service and internal-customer lens has led to an internally focused, incremental-improvement view.

However, in the past few years, technological and societal trends around technology have been building and maturing, such as the Nexus of Forces (social, mobile, cloud, information and analytics), the Internet of Things (integrating sensor networks, factory networks and technology in products and consumer devices with enterprise IT), 3D printing, and new currencies and payment mechanisms.

The third era of enterprise IT

Now we are entering a third era of enterprise IT, where these new trends are not only improving what businesses do with technology to make themselves faster, cheaper and more scalable, but also are fundamentally changing businesses with information and technology, shifting the basis of competition and the portfolio of businesses that people are in, and in some cases, creating new industries altogether.
What CIOs and IT leaders must do now

In a three-part response to the digital business challenge, the IT organization must:

**Create powerful digital leadership.** Ensure that the business’s digital leadership vacuum is filled and that every business executive becomes digitally savvy and an advocate for change. It’s imperative that CIOs and IT leaders communicate a vision that excites and mobilizes the IT organization, helping colleagues and staff understand that the status quo is no longer an option.

**Renovate the core of IT.** Make sure that the “engine room” of IT — the infrastructure, operations, core applications (such as ERP), services and sourcing models — are purposed not just for the present but for a highly digitalized future that will require exponentially greater speed and scale. Emphasize information as a competitive asset, and form relationships with suppliers that encourage, rather than stifle, innovation.

**Build bimodal capability.** Resolve the age-old tension between the need to provide safe, reliable and integrated enterprise IT and the ability to exploit unexpected “business moments” — experimenting with, and capturing value from, new technologies, and societal and industrial trends at digital speed. Far more than agile software development, this requires creating separate multidisciplinary digital innovation teams, working with small businesses and startups, and adapting governance and metrics for a lightweight, second-stream capability.

“The biggest risk is not taking any risk ... In a world that is changing really quickly, the only strategy that is guaranteed to fail is not taking risks.”
Mark Zuckerberg, founder and CEO, Facebook
What “digital” means

Gartner defines “digital” as “all electronically tractable forms and uses of information and technology. It is bigger in scope than the typical company definition of ‘IT’ because it includes technology outside a company’s control: smart mobile devices (in the hands of customers, citizens and employees), social media, technology embedded in products (such as cars), the integration of IT and operational technologies (such as telecom networks, factory networks and energy grids) and the Internet of Things (physical objects becoming electronically tractable).”

Conclusion

The digital future needs your vision for change. Craft a compelling digital legacy, and factor it into your plans, operations and communications.

The combination of powerful digital and societal forces — the digital dragon — has created much broader and deeper opportunities and threats than the scope of traditional enterprise IT can possibly address. CIOs and IT leaders must act fast and act smart to protect their companies, their public-sector agencies, their IT organizations and themselves. In our current third era of enterprise IT, strategy, leadership, structure, talent, financing and almost everything else are being called into question by an influx of digital threats and opportunities. Change is inevitable, and those organizations with the vision, skills and commitment to adopt change early will secure a significant and lasting competitive advantage.

Gartner clients may download the full research report by logging into their gartner.com account and searching for “Taming the Digital Dragon: The 2014 CIO Agenda.”
This year, we offer an intensive, end-to-end exploration of what digital business means, how it works, why it matters, and the steps CIOs and IT leaders must take right now to achieve it. Gartner Symposium/ITxpo 2014 is the only IT leadership conference that views the new digital business reality through a holistic, how-to lens, giving CIOs and senior IT executives a road map that will accelerate digital transformation, uncover new opportunities, devise relevant metrics, secure digital interests and help them take their rightful place at the head of the digital business table.

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