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Reinventing Information Technology in the Digital Enterprise

PwC's New IT Platform: Achieve High Velocity IT in a Digital World

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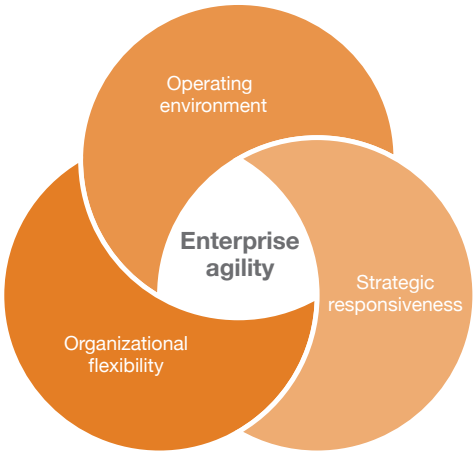
Overview

Business volatility, innovation, globalization and increased competition are among the trends forcing business leaders to step back and look at all aspects of their businesses. In particular, the proliferation of cloud, mobile, social, and analytics technologies demands ongoing adaptation of business and operating models as well as organizational structure as companies increasingly evolve to digital models. High on the agenda of the C-suite is transforming the IT organization to meet the needs of businesses today.

In our fast-moving world, the winners will be companies that can sense change and respond accordingly. But while the pace of business increases, many leaders are unhappy with their ability to execute due to a lack of enterprise agility. New approaches are needed to drive flexibility and responsiveness in a digital world.

Organizations striving to become more agile need to think in terms of three key drivers of change:

- The operating environment that might radically reshape the business environment;



> *IT will move from a centralized authority to an advisor, broker and orchestrator of business services.*
>
> *Michael Pearl*
> *Advisory Principal, PwC*

- Strategic responsiveness or the soft levers organizations can pull in response;
- The organizational flexibility that affects the capacity to respond quickly.

Central to greater enterprise agility is sweeping IT transformation. In this digital age, IT needs to transition from a centralized authority into an orchestrator of business services—one that empowers all employees with technology to increase responsiveness and drive business value. But IT needs to think well beyond the enterprise alone, and consider the entire ecosystem of employees, customers, partners and suppliers—all with different processes and systems. IT increasingly will be chartered with ensuring seamless and real-time interconnectivity across the entire ecosystem in the midst of rapid change.

As the pace of business increases, IT also needs to optimize for speed, without compromising on stakeholder expectations around experience, quality, security and control. Beyond technology, traditional organizational constructs and culture, delivery methodologies, governance models, and automation strategies need to adapt to improve responsiveness.

These are daunting challenges. At the same time, the gap between business and IT is growing. Business units, facing fast-changing demands, often go around IT to get their own solutions—leading to an uncoordinated approach that can increase cost and risk and create data silos.

Meanwhile, IT's ability to respond to just-in-time requests is plagued by outdated approaches and inflexible IT architectures that can't cope with rapid change. Simply spending more time and money stoking the legacy IT furnace won't work. The days of "big IT"are gone. Yet, that's not to say IT doesn't matter. Quite the opposite, in fact.

Successful IT organizations will be those that carefully evaluate new technologies to help solve the organization's most important business problems. IT will create and maintain an "Integration Fabric" that delivers seamless, secure and flexible interoperability across a diverse and distributed ecosystem. IT will also transform development approaches to accelerate throughput from idea to market, while delivering on stakeholder expectations of service quality, security, experience and control.

This shift requires change far greater than technology alone. It requires a new mindset and a strong focus on collaboration, innovation and "outside-in" thinking with a customer-centric point of view.

Market and Technology Disruption Continues to Challenge Leaders

To reimagine the organizational IT capability, we need to step back and look closely at the problems we are trying to solve, both from a market and organizational perspective. Analyzing the technology capabilities needed to tackle the business challenges of today and tomorrow will help us identify the core capabilities necessary for our new model.

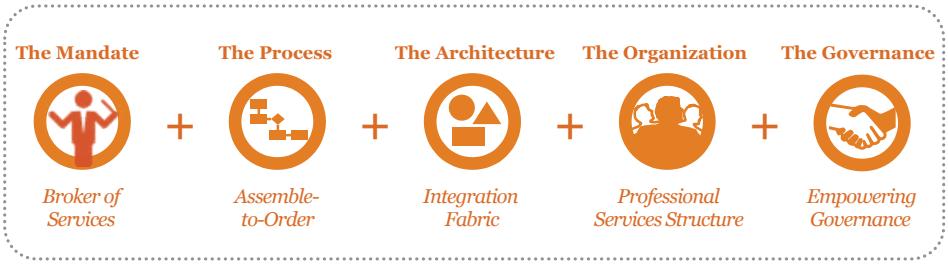
Business, technology and competitive forces are creating the need for a New IT Platform.

These influencing trends…	*Require organizations to…*
Economic volatility continues CEOs are less hopeful than they were a year ago about global economic growth prospects. According to PwC's 2015 Global CEO Survey, 37% think the outlook will improve over the next 12 months, compared with 44% last year. 17%—more than twice as many as last year—think the outlook will worsen.	Anticipate which markets offer the best opportunity for growth. Continue to prepare for organizational disruptions, such as M&A activity, and the need for rapid adaptations around processes, organizations, information and technology. Develop and understand current and emerging global marketplace trends based on analytics-based modeling.
CEOs fully embrace digital technologies CEOs have fully embraced digital technology. Almost all see it improving operations, but the value goes deeper. 88% of CEOs globally (84% in the US) say that digital technologies deliver 'quite high' or 'very high' value in operational efficiency gains.	Transform the IT organization to meet the needs of today's fast-paced, digital climate. Consider changes across all aspects of the organization including the IT mandate; processes; architecture; organization; and governance.
Companies go beyond their industries to innovate CEOs are seeing more competitors coming from industries outside of their own. At the same time, many CEOs are entering different industries—or at least making plans to do so. According to PwC's 2015 Global CEO Survey, 61% of CEOs worldwide think the increase in the number of their significant direct and indirect competitors threatens to disrupt their industries during the next five years.	Cultivate a diversity of talents and a strong sense of the direction of digital transformation. Be open to change, new types of thinking, new types of people. Become comfortable with disruption because if you really think differently, you can allow some level of disruption in your organization.
Data dominates CEOs are seeing the value in unlocking data possibilities through digital technologies, but more needs to be done, especially around decision-making., 84% of CEOs globally (89% in the US) say digital technologies were creating high value through data and data analytics.	Prioritize technologies for collecting, mining, and safeguarding data from customers—and the Internet of Things.
Reset needed for talent and HR CEOs know they need to increase their organizations' ability to learn and innovate. They're looking for a broader range of skills and finding talent in more places. According to PwC's 2015 Global CEO Survey, 81% are looking for a much broader range of skills when hiring than they did in the past (81% of CEOs globally).	Use tech-savvy talent strategies; foster innovation-friendly cultures; value diversity differently; and pair Producers (the ideas people) with Performers (those who convert good ideas to good business).

These dynamics radically change the game. They require a shift from building and protecting what's inside the four walls of the enterprise, to an outside-in approach that thoughtfully blends the best innovations that the market has to offer with the organization's core capabilities.

PwC's New IT Platform

The New IT Platform encompasses transformation across the organization.



= *New IT Platform*

PwC's New IT Platform is a strategic point of view that aligns IT's capabilities to the dynamic needs of the business, and empowers the entire organization with technology. One thing the New IT Platform is not: an attempt to simply "fix" pre-existing IT organizations.

PwC's New IT Platform spans all aspects of the organization. The centerpiece of the new model is the CIO, who serves as a catalyst for digital conversations across the enterprise. When it comes to Digital IQ, we know that strong relationships among senior executives are essential to success. But what was notable in 2014, according to PwC's 6th Annual Digital IQ Survey, is just how critical the CIO-CMO relationship has become: 70% of top performing companies say they have a strong CIO-CMO relationship, compared with just 45% for non top performers.

While moving to the New IT Platform requires significant change across all aspects of the business, it's helpful to look at the central areas requiring a new mindset and new ways to approach problems.

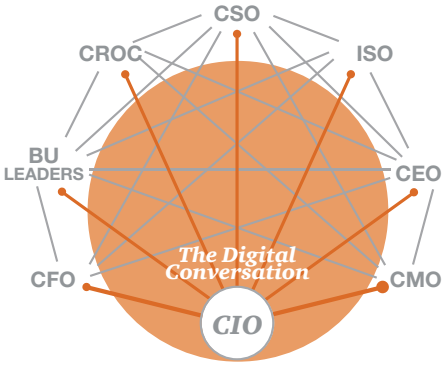
The Mandate: broker of services

In the past, IT has largely been the de facto provider of all IT services, leading to mismatches between expectation and delivery. In a critical shift, IT needs to change this posture and assume the role of broker or orchestrator of business services and technology innovation. As use of third parties increases, IT will shed more mundane tasks, and assume a strong internal consulting capability, evaluating digital technologies and marketplace innovations through the lens of business value.

Savvy organizations will embrace, integrate and support technology capabilities wherever they reside. In fact, the term shadow IT will become obsolete, as IT transitions more responsibilities to power users across the enterprise. At the same time, IT will provide guidelines to mitigate risks, control costs, and standardize data.

Source: PwC's 6th Annual Digital IQ Survey

IT will embrace a fluid, iterative assemble-to-order approach that emphasizes flexibility, collaboration and innovation.



Collaboration between IT and business units will be critical. Ongoing digital conversations will be constant, as IT works to map technology investments to business objectives and to solving problems. The new IT mandate will be one of innovation, transformation and business value.

The Process: assemble-to-order and DevOps

Today's enterprises are becoming increasingly digitized in how they engage employees, partners, and customers. As such, they are leveraging software platforms to fundamentally transform their business models.

In this fast-paced, digital world, IT needs to achieve High Velocity IT without compromising on stakeholder expectations around experience, security, quality, and control.

Today's organizations are moving away from the traditional model where a small group of stakeholders dictates direction for custom-built products. Instead, IT will embrace a fluid, iterative assemble-to-order approach that emphasizes flexibility, collaboration and innovation.

Savvy businesses are turning to an emerging movement—called DevOps—to achieve High Velocity IT. Under DevOps, operations and development collaborate throughout the entire service lifecycle, from ideation through design, development and support.

Ideas will come from cross-functional communities of employees, customers and partners, through a structured innovation and design process based on social and collaborative technologies. The emphasis will shift from pleasing an internal audience to satisfying the customer.

Traditional organizational constructs and culture, delivery methodologies, governance models, and automation strategies will need to adapt to improve responsiveness.

The Architecture: a secure integration fabric

IT is increasingly tasked with securely integrating "any data from any source in any format at any time" and making it easier for any stakeholder, internal or external, to plug into the enterprise with reduced dependence on IT. In light of this, companies need a holistic and enhanced integration capability, which is a stark departure from the integration approach of the past.

A secure integration fabric seamlessly and securely links all endpoints (applications, processes, systems, data and user experiences) across the entire ecosystem: e.g. connecting employees and other stakeholders regardless of their device or location; orchestrating interactions and linkages between people, systems, processes and business rules; integrating disparate internal and third-party systems in real-time; and centralizing data from multiple sources to provide a comprehensive, rich repository of enterprise-wide information for analysis and insight.

While integration in and of itself is not new to IT organizations, taking a holistic view across the entire ecosystem to interconnect people, process and technology is.

The need for a secure integration fabric can be seen when looking at a major consumer products company that aggressively sourced its customer and sales applications to the cloud. This company had numerous distinct cloud services handling sales commissions, training, customer communities and customer relationship management. A sales executive sought all of the information the company had on "Samantha Jones", only to learn that there was no single source. He lost the sale.

Among its benefits, a secure integration fabric designs a single customer "view" directly into the architecture, which is especially important as enterprises acquire a greater number of disparate applications and providers with no common foundation for centralizing customer or product data. With a well-defined secure integration architecture in place, the organization's ecosystem can accommodate rapid change and adeptly handle new and emerging technologies along with established ones, while securely integrating on-premise and cloud-based services seamlessly.

Under the New IT Platform, organizations will be able to integrate "any data from any source in any format at any time." Any stakeholder, internal or external, will be able to plug in to the enterprise with reduced dependence on IT.

The Organization: professional services structure

A number of organizational changes are important within the New IT Platform. Among the most important will be the transformation of IT into more of a professional services organization. This will require new digital keystone skills (see breakout box). Under the new model, distinctions between IT and business will blur. As IT begins to look more like a consulting organization, required skills will shift to experienced problem solvers and enablers of the business. Employees with multi-disciplinary technology expertise, deep business domain knowledge, and an ability to evaluate the impact of decisions across the enterprise will be most critical. Architects will play a leading role.

While new technology skills will be difficult to maintain in-house, core marketplace knowledge, business judgment and prototype design and management belong inside.

Digital Keystone Skills

- Enterprise and Technology Architecture
- Project and Program Management
- Business Requirements Management
- Quality Assurance
- Vendor Management
- Prototyping
- User Experience Design
- Security

The central control of IT needs to give way to a more free market oriented form of governance, enabling greater freedom but within boundaries.

The Governance Model: empowering governance

As the redistribution of responsibilities takes place, the governance model needs to change. We can draw parallels when looking at socialist economies *"…in which the production and distribution of goods and services are administered primarily by the government rather than by private enterprise,*[1]*"* as they transform into market economies where resources are *"…allocated by the interplay of supply and demand in free markets, largely unhampered by government rationing, price-fixing or other coercive interference.*[2]*"*

The central control of IT needs to give way to a more free market oriented form of governance, enabling greater freedom but within boundaries. Rather than constraining, this move is liberating, providing necessary guidance while empowering and entrusting others to act in their own interests. What will this look like?

First, a minimal set of critical standards and guidance will be published, letting others take control. For example, data and interface standards may be published so that business units can directly engage with cloud service providers.

Second, standards, policies and enforcement will be defined by a more collaborative approach. Possibly led by IT, a minimal set of standards will be jointly identified by constituents from the broader enterprise. Pragmatic assessment of need will dictate what standards are needed, always with a view towards empowerment over restriction.

Third, governance will become less overt and more intrinsic. As more processes are automated, for example, business rules and policies will be 'baked in' and become less obvious. For example, the assemble-to-order process provides a range of allowable building blocks that can be utilized in any number of ways; a flag is raised only if one of the guardrails is violated (e.g. a non-standard interface is defined). Ultimately, there will be certain standards for which decision rights will continue to rest squarely on the shoulders of IT. Security would be among this limited set.

1 "Socialism: A Glossary of Political Economy Terms—Dr. Paul M. Johnson," accessed January 9, 2013, *http://www.auburn.edu/~johnspm/gloss/socialism.*

2 Market Economy: A Glossary of Political Economy Terms—Dr. Paul M. Johnson," accessed January 9, 2013, http://www.auburn.edu/~johnspm/gloss/market_economy.

How does this impact your business?

Moving to the New IT Platform

While change itself is not new for IT organizations, the velocity of change and associated complexity is unprecedented and disruptions will only become greater. Organizations unable or unwilling to move away from the traditional IT paradigm will quickly find themselves at a competitive disadvantage. Realizing this vision requires strong executive sponsorship, leadership and C-suite collaboration. Leaders will exhibit common traits as they move to the New IT Platform (see break-out box).

Those who strategically transform their IT organizations can seize new opportunities and become a customer-driven organization. Hallmarks include an ability to constantly innovate, rapidly adapt to change, lower costs and risk—and ultimately achieve greater competitive advantage.

PwC's New IT Platform key considerations:

- Empower, not control, embracing technology capabilities wherever they are
- Adopt an outside in approach—filtering innovations through the lens of customer experience and business value
- Engage in ongoing digital conversations to ensure technology investments map to business needs
- Move to assemble to order enabled by a DevOps approach that is driven first and foremost by customer feedback
- Integrate the right technologies and innovations at the right time into the fabric of the organization
- Acquire requisite digital keystone skills and move to a professional services structure
- Provide parameters to mitigate risk and reduce cost

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