



**The Organization of the Future,  
and its Impact on IT**

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## Introduction

The business world is undergoing massive changes as factors, both internal and external, change forever the environment within which organizations operate. These changes, while delivering massive benefits in terms of agility, economics and competitiveness, also require a massive shift in the way IT operations are run and challenge our existing thoughts around what IT should focus on.

The changes we detail in this report result in an IT department that is marginalized and often at odds with other business units. This underlying IT friction is borne out through unprecedented levels of dissatisfaction at what IT is delivering to the business. As a result we’re seeing huge levels of so called “Rogue IT” where the business, frustrated at a lack of IT agility, seizes the opportunity that modern software and infrastructure offers to circumvent IT and procure their own technology solutions.

In light of this escalating friction between IT and the business, organizations have no options but to rapidly move to new models of IT delivery to guarantee their very survival. In the fact of highly agile and nimble competitors, an IT department that is an impediment to agile technology use is an unacceptable barrier to change. This is in fact occurring, IT departments are increasingly realize that it is only through enabling business units to achieve the technology outcomes they needs, that the business will, as a whole, achieve its objectives.

In this paper we aim to set out the underlying changes which are impacting upon business, extrapolate where these changes will take organizations in the mid–term future, and suggest ways in which IT can remain a relevant, valuable and strategic part of the business.

## Part One – Change on an Unprecedented Level

Organizations of today are facing an unprecedented series of changes which impact upon how they do business and the very nature of their organization. We contend that these changes, while discrete, have the combined impact on radically changing the foundation upon which business sits and hence what individual business units will look like into the future.

In order to understand what the future looks like, it is important to understand these discrete underlying trends. Taken together, these key trends we will investigate leads to the reinvention of what an organization is and how it works. In a later section we will suggest what the organization of the future will look like.

### *The Global Financial Collapse, Capital Constraints and Global Competition*

The Global Financial Collapse (GFC) was just one symptom of the massive economic changes occurring globally over the past decade. With the wholesale move to global production and global markets, and a corresponding shift of wealth away from traditional industries, we're seeing a resetting of the economic norms. One needs only to look at the list of the most valuable companies on earth<sup>1</sup> to see that many are in non-traditional industries – technology and design has replaced manufacturing and resources as the route to wealth. These statistics are even more stark when looking at the world's most valuable brands<sup>2</sup> where non-traditional technology brands make up more than half of the top of the list.

With this immense value-shift from traditional industries to new-industry, we see a corresponding reduction in the need for massive capital requirements for growth. Scaling a Google, a Microsoft or an Apple, while still expensive, is far cheaper than scaling a company that drills for oil, builds railways or mines minerals. This reduced requirement for capital is fortunate since the GFC has also massively reduced the free availability of easy capital. As organizations are constrained in terms of the capital they can acquire to pay for expansion, they increasingly look for non-capital means to growth. One of these means is through hyper-scalable intellectual property based initiatives, another is the move away from capital expenditure and a corresponding focus on tying expedite closely to revenue.

At the same time as organizations are constrained by their access to capital, they face corresponding competition from new entrants. A well-resourced and focused China is increasingly building companies that leverage the 20 or so years' experience in engineering and manufacturing that the country has, and adding in the research and development that a massive focus on tertiary education fuels. These two things together produce some seemingly insurmountable challenges for traditional businesses.

### *A Demand for Agility*

Partly because of the massive economic challenges detailed above, and partly because of a competitive landscape more difficult than ever before, organizations are increasingly focused on being ever-more agile.

Enterprises are looking past their status quo and looking for ways to unshackle themselves from traditional large-enterprise bureaucracy and process to unlock innovation and hence help them to compete. One of the best known case studies of this move from process and construct to agility and flexibility is that of Proctor and Gamble. In a 2006 paper<sup>3</sup> which focused on P&G's approach to innovation, it was pointed out that:

“By 2000, it was clear to us that our invent-it-ourselves model was not capable of sustaining high levels of top-line growth. The explosion of new technologies was putting ever more pressure on our innovation budgets. Our R&D productivity had levelled off, and our innovation success rate—the percentage of new products that met financial objectives—had stagnated at about 35 percent... The world's innovation landscape had changed, yet we hadn't changed our own innovation model since the late 1980s...

We discovered that important innovation was increasingly being done at small and midsize entrepreneurial companies. Even individuals were eager to license and sell their intellectual property. The Internet had opened up access to talent markets throughout the world. And a few forward-looking companies like IBM and Eli Lilly were beginning to experiment with the new concept of open innovation, leveraging one

another's (even competitors') innovation assets—products, intellectual property, and people.”

P&G set the aim of acquiring at least 50 percent of its innovations from outside the company. This isn't a reflection on innovation per se, rather it is a tacit admission that it is the lack of agility, created by regimented and hierarchical workplaces, that often limits the growth and profitability opportunities for organizations.

This lack of agility is now well recognized and organizations globally are searching for ways to enable agility to occur across the organization. This drive for agility is well demonstrated by the unprecedented levels of individual employees and business—units making their own technology decisions. This so-called “Rogue IT” or “Shadow IT” is occurring across industries. A recent survey<sup>4</sup> has suggested that one in five business users surveyed admitted to using Dropbox, an example of one of the lightweight tools being brought into organizations without IT department mandate. Even more worryingly, of those who confirmed that they use Dropbox, fully half do so despite knowing that it is against company policy.

Given that Dropbox claims a user base of 100 million individuals, and that many of these users are reportedly within enterprise settings, it is not difficult to extrapolate the survey results and conclude that IT is being circumvented on an unprecedented scale – in part because of its failure to deliver what the business needs.

### *The Rise of the Millennials*

Much has been written about the rise of the Millennials, those people born around the 1980–2000 timeframe. While there is some argument about the specific time–period the term “Millennials” relates to, what all researchers do agree on is that this group represents an incredibly large portion of the population in all markets across the globe.

In the seminal work<sup>5</sup> describing who the Millennials are, Claire Raines opined that:

“They’re sociable, optimistic, talented, well–educated, collaborative, open–minded, influential, and achievement oriented. They’ve always felt sought after, needed, indispensable. They are arriving in the workplace with higher expectations than any generation before them — and they’re so well connected that, if an employer doesn’t match those expectations, they can tell thousands of their cohorts with one click of the mouse. They’re the Millennial Generation... nearly as large as the Baby Boom, and they’re charged with potential. They’re variously called the Internet Generation, Echo Boomers, the Boomlet, Nexters, Generation Y, the Nintendo Generation, the Digital Generation...”

These Millennials have grown up with a very different understanding of the workplace, and their world in general. The first generation to grow up with the regular use of digital media, and the global ease of communication it brings, this generation puts particular requirements on organizations as they enter the workforce. These Millennials don’t regard technology so much as a tool, but rather as an extension of themselves. As author Don Tapscott wrote in his book *Growing Up Digital: The Rise of the Net Generation*<sup>6</sup>

“Computers and other digital technologies, such as digital cameras, are commonplace to N–Gen members. They work with them at home, in school, and they use them for entertainment. Increasingly these technologies are connected to the Internet... Constantly surrounded by technology, today’s kids are accustomed to its strong presence in their lives. Today’s kids are so bathed in bits that they are no more intimidated by digital technology than a VCR or a toaster. And it is through their use of the digital media that N–Gen will develop and superimpose its culture on the rest of society. Boomers stand back. Already these kids are learning, playing, communicating, working, and creating communities very differently than their parents.”

The catchy phrase relating to Millennials (or N-Gen members as Taspcott called them) was that they grew up “bathed in bits”. This factor alone indicates the expectations of this generation when they enter the workforce, and the unique challenges that this generational shift introduces.

### *Technology Democratization*

The need for agility, the demands of Millennials and technological improvements have led to a wholesale democratization of IT. If we think back to only a few decades ago, technology was in the hands of a very select few technicians who generally worked in cold, dark basements. The rise of the personal computer changed that and resulted in the ability for an organization to put a “computer on every desk”.

This spreading of technology was just the very start of the trend, and it has been the growth of mobile access, smart devices and cloud computing that has led to a point where data can be put in the hands of any employee, anywhere in the world nearly instantaneously.

Cloud Computing has also had an impact by moving the buying decision for technology products from centralized IT to individual business units. In the past a technology purchase – be it hardware or software – generally required capital expenditure and hence a rigorous approvals process. The rise of Infrastructure as a Service (IaaS) means that organizations can acquire technology infrastructure on a utility basis. A business unit has the ability to build itself a virtual data centre, just by using a cloud provider and a credit card.

Similarly software has been democratized. The rise of Software as a Service (SaaS) vendors such as Salesforce and Netsuite has resulted in business units making their own software buying decisions and acquiring SaaS outside of the purview of central IT.

Finally the provision of individual interfaces to technology has been democratized. The rise of “Bring Your Own Device” BYOD, has led to a deluge of individual employees within organizations having the ability to buy, run and manage their own hardware (laptop, smartphone etc). This democratization is positive in that it drives choice for consumers, but it is also difficult as it challenges the traditional approach towards IT.

We have already detailed the massive uptake of one example of democratized technology, Dropbox – we only need to extrapolate this across the plethora of new and readily accessible technology offerings in the marketplace to see how large an effect the democratization of technology has on the technology landscape.

This technology democratization delivers agility and flexibility, but it also introduces new challenges to organizations. It highlights the increasingly obvious friction that occurs between IT and the business and speaks to a fast-approaching watershed moment when business users finally revolt en masse in reaction to the perceived reluctance of enterprise IT to deliver what they need.



## Part Two – The Organization of the Future

If we take these concurrently occurring trends together: a rapid shifting of the economic landscape, a huge demand for organizational agility, the rise of a new generation of workers and the dual aspects of technology democratizations and IT friction, we see the creation of organizations unlike those ever seen before.

In the mid-term future, organizations will make far higher use of external parties for discrete parts of their business – yesterday that took the form of the outsourcing of production. Today we’re seeing greater levels of outsourced R&D. The future will see organizations that, in their very essence are organic, that morph and change on a project-by-project basis.

This trend will see a huge increase in the number of people who work remotely, who work for an organization on an ad-hoc basis, and who use a wide variety of work tools and techniques to achieve their desired outcomes.

Many of these tools will be technology based and hence this shift will place unique challenges on the already sometimes strained IT/business relationship. While in the past IT has been responsible for managing a relatively stable and constrained workplace, it will suddenly be tasked with managing a workplace that has limited physical bounds, a very fluid definition of employee, a plethora of different technologies in use, and an ever increasing demand for the flexibility to meet all those drivers.

## Part Three – The Future of the IT/Business Relationship

Given the changes that organizations are facing, and the four trends impacting upon the modern workplace, it's not hard to comprehend that existing relationships within an organization are put under even greater stresses. This is borne out particularly strongly in the relationship between the IT department within an organization, and the business units that rely on the IT departments to deliver the tools they need to perform.

The IT/business relationship is arguably more strained than it ever has been before – and in striving for an understanding of how this is so, and how it appears within the organization, it is important to understand the perspective of both of these groups. As with all relationships, it is an understanding of the motivations, the drivers and the perspective of the other party that can best lead to solutions that meet all needs.

### *The IT Perspective – Safety First*

Corporate IT is tasked with ensuring the safety and security of some of the most valuable assets an organization has – its organization data. As such, the role of IT has often been adversarial – this is unsurprising when you consider that corporate IT faces regular threats, either perceived or actual, from both outside and within the organization. External hackers, rogue employees, industrial espionage, inadvertent security breaches – these are all situations that corporate IT has to think about, plan for and guard against. It is little wonder then that corporate IT tends towards a safety-first approach and is often suspicious of any suggestion to open up corporate systems and data.

If we look at the majority of management tools in use within an IT department, we can see that the majority look to limit what business users can do. Blocking certain sites, locking down content, vetoing the use of lightweight social tools are all examples of corporate IT command and control and, while the reasons for this approach are often valid, as we will see it is problematic from a business agility perspective.

## *The Business Perspective – Enablement First*

The business however has different drivers. It is tasked with meeting the strategic objectives of the organization. As we have already seen, these objectives are likely best delivered through agility, openness and a freeing up of systems. A somewhat apocryphal example is of the corporate marketing department who, having waited interminably for IT to requisition some servers for a specific marketing campaign, simply goes out and sets up some servers with their local cloud computing vendor, all paid for on a credit card. It is no wonder, when looking at it from the business perspective, that significant frustration exists about IT's seeming unwillingness to do anything.

When met with an IT department that seems to always say “no”, the business could be excused for doing things for themselves and introducing so-called “shadow IT”. It is interesting to note that recent research found that 80% of organizations were using cloud in some way. The same research however found that only 48% of organizations actually allowed cloud within their organization. Thus 32% of organizations have some use of cloud, outside of the purview, responsibility and visibility of the IT department.

## *Clash of the Titans – IT Friction of Unprecedented Levels*

Two distinct interest groups – IT and business units – are thrust into a situation where neither believes the other understands priorities not delivers what the other requires. IT bemoans the businesses’ lack of respect for security, process and robustness while the businesses is incredulous that IT seems reluctant to deliver what it needs and continuously blocks innovations that would deliver agility.

Two groups speaking two distinct languages and communicating at cross purposes results in a situation that is damaging to both parties and, most importantly, does nothing to deliver what an organization needs. To survive in the new world of business, organizations will need to find a way to reconcile the requirements of these two very different groups.

## Part Four – Finding a Third Way – Balancing IT Control with Business Agility

As we move forward organizations will, in reaction to the unique pressures they are under by the four previously defined changes, need to find a path which balances maximum agility with a base level of control, visibility and security for corporate IT. They need to find a way to break the IT friction that occurs across most organizations, and find a path that meets everyone's needs.

Progressive IT departments need to look for ways to rapidly roll out new services, in such a way that they enable business users to self-provision different tools and applications. A good analogy lies, albeit in the consumer space, with the app store. Consumers who take advantage of the many app stores that are available in the consumer world, do so with two key expectations and understandings;

- That the use of the app store in some way reduces the amount of work they need to do to get started. A good example is billing – users of the Apple AppStore, for example, appreciate the fact that they can purchase applications without needing to set up a billing relationship with a third party vendor. Apple, in this example, takes care of that process and the customer has one single relationship to manage
- That the app store has performed a degree of due diligence on the products within the app store. As such customers have faith that the applications they use will not create a vector for security breaches and other risks. While there have been a few high-profile examples where applications have been a front for an attack, generally speaking across the millions of apps being installed every day, users are protected from risk by this “trusted platform” approach

Corporate IT then needs to find tools that meet these two requirements, but in an appropriate context for the organization. In some cases that will be a tight integration with the identity system the organization uses, to enable end users to provision services quickly and not have to enter their personal data again and again. In other cases it will be through Single Sign On (SSO) where the platform gives users the opportunity to sign on to multiple applications at once. And in yet other examples it will be through the offering of a curated set of technology

offerings – infrastructure and applications alike – that have met the requirements of corporate IT in terms of security and robustness.

Organizations of the future will look to emulate the approach of the consumer app stores, to deliver technology as quickly and easily as possible to business users. So too will organizations see this central hub as the best place to engage with end users around the support process. It isn't a huge stretch to realize that when application and infrastructure enablement happens on a central platform, that the engagement between IT and the business around topics of technology should most appropriately happen on the same platform.

These platforms then change the relationship between IT and business from one of adversaries, to one of true partners. The platforms in use by the organization become the central hub of a business users daily life, and enable the business to meet its strategic objectives, while staying safe and secure.

## Conclusion

The organization of the future is a fundamentally different beast from the organization of the past. It is more agile, more organic in nature, more proactive to opportunities and spread far wider – both virtually and physically. As such the tools the organization will need to use in the future will be different from the ones they need today.

The trends causing organizations to change are both powerful and increasing in velocity – a rapid shifting of the economic landscape, a huge demand for organizational agility, the rise of a new generation of workers and technology democratizations all do their part to fundamentally shift the business environment going forwards.

Given these changes, it is no wonder that tensions between different parts of the organization are at an all-time high. To find a way through this IT friction, organizations need to find a common language between the protagonists, and find a way to enable both side of the IT/business divide to meet their needs, and deliver upon the needs of others.

We can look to the consumer world for approaches that make IT more agile, easier to use and much less adversarial. In the future the tools the IT department uses will look very different from those they use today and instead will look and feel much more like the app stores the consumer enjoys today.

It is only through building this bridge between IT and the business, that organizations will be able to meet the increasing challenges, and find a path through them. This bridge building, and the tools that support it, are a key requirement to maintain corporate competitiveness and profitability.

## About Diversity Limited

Diversity is a broad spectrum consultancy specializing in SaaS, Cloud Computing and business strategy. Principal and founder Ben Kepes provides various services including:

- Commentary – Ben is a noted commentator about Cloud Computing and enterprise software – he has written for a broad selection of media outlets, and is often quoted as a subject matter expert and influencer.
- Consulting – Ben is in demand with large organizations who turn to him for advice on technology starting. He spends time with both customers and vendors advising on all aspects of their strategy.
- Advisory – Ben sits on a number of boards, both formal and informal. He enjoys helping startups get to market and grow to scale.
- Investment – Ben is an investor in a number of different companies. These investments revolve around Ben's focus of delivering technology that can make a difference in how organizations work.

## About the author

### *Ben Kepes*



Ben Kepes is a technology evangelist, an entrepreneur, a commentator and a business adviser. Ben covers the convergence of technology, mobile, ubiquity and agility, all enabled by the Cloud. His areas of interest extend to enterprise software, software integration, financial/accounting software, platforms and infrastructure as well as articulating technology simply for everyday users.

He is a globally recognized subject matter expert with an extensive following across multiple channels.

His commentary has been published on ReadWriteWeb, GigaOm, The Guardian and a wide variety of publications – both print and online. Often included in lists of the most influential technology thinkers globally, Ben is also an active member of the Clouderati, a global group of Cloud thought leaders and is in demand as a speaker at conferences and events all around the world.

As organizations react to the demands for more flexible working environments, the impacts of the economic downturn and the existence of multiple form-factor devices and ubiquitous connectivity, Cloud Computing stands alone as the

technology paradigm that enables the convergence of those trends. Ben's insight into these factors has helped organizations large and small, buy-side and sell-side, to navigate a challenging path from the old paradigm to the new one.

Ben is passionate about technology as an enabler and enjoys exploring that theme in various settings.



## Endnotes

- [1] <http://www.forbes.com/sites/scottdecarlo/2011/08/11/the-worlds-25-most-valuable-companies-apple-is-now-on-top/>
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