



cutting through complexity

Innovation in the Midst of Disruptive Technology

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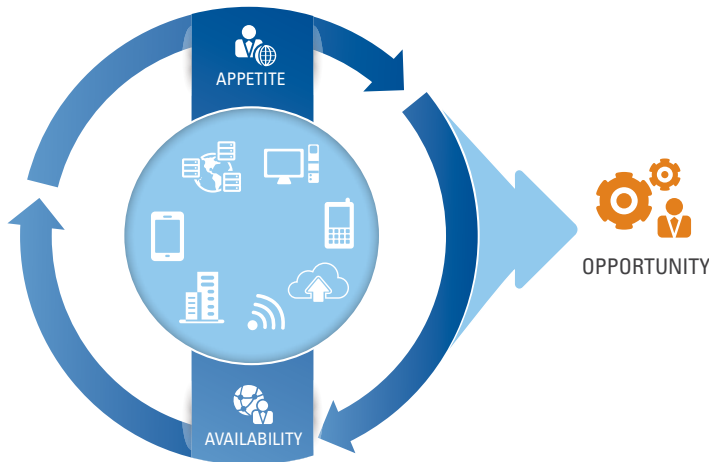
Innovation in the Midst of Disruptive Technology

*“Never try to catch up to the wave, you will miss it.
Position yourself to catch the wave.”*

– Jeff Bezos, Amazon

Today’s businesses have an increasing appetite for change and process innovation, matched by unprecedented access to enabling technologies that disrupt the status quo. In this new world of technology disruption, solution providers are pushing out enabling technologies while business leaders are pulling them in – to increase their agility, improve customer experience, innovate business processes, and leverage increasing amounts of data.

Figure 1



This highly complementary cycle of both pushes and pulls has become a vehicle for significant enterprise opportunity.

“Disruptive technology” can take many forms—Mobile, Social Collaboration, Analytics, Cloud, etc.—and they are changing the business landscape of today. These technologies are defined by a common set of attributes regardless of the ultimate form. These attributes include:

- Rapid deployment relative to traditional technologies
- Immediate satisfaction of business needs
- Market-driven evolution
- Device and/or platform agnostic functionality
- Simple, more homogenous user experience
- Accessible anywhere, empowering the virtual workforce and mobile customer.

In short, the convergence of business and technology is driving new ways of acquiring and implementing technology-enabled business solutions. To be successful, businesses need to collaborate with IT to understand and leverage these technologies to achieve strategic goals and objectives. Today’s market leaders recognize that the mobile enablement of processes and technologies is not just a vehicle for innovation but a necessity for business relevance.



Market trends supporting business opportunities

In a study of over 2,000 CIOs by an independent analysis firm, 70 percent of respondents claimed that mobile computing will have a significant impact in the long term. The same expectation was expressed by 54 percent of respondents for social collaboration tools, and 51 percent for cloud.

Paradoxically, only 43 percent of these respondents were confident their organizations are able to achieve the business potential offered by new technology. Nevertheless, analysts and industry observers agree that cloud, mobile, and social collaboration and access to information and knowledge are critical to the future of business.

Disruptive technologies will have an increasingly greater role in helping businesses consume, store, and analyze data. IDC* estimates that by 2022 the amount of data managed by an enterprise will grow by a factor of 50. More data means an opportunity to mine more information that can empower an organization with meaningful analytics focused internally

as well as on the competitive landscape. New technology can help manage this data as it becomes more diverse especially in instances where unstructured data from sources such as social media, blogs, e-mail, and call centers need to be factored into the analytics equation.

As businesses struggle to collaborate and manage knowledge with a one-to-one communication tool such as e-mail, collaboration platforms are beginning to augment e-mail as a way to improve communication inside the enterprise. Notably in late 2011, the CEO of Atos began a transition to a 'no company e-mail' policy to eliminate the knowledge management silo and reserved e-mail only for client communications. Demographic trends show that most Generation Y technology users prefer instant messaging, social collaboration, and text messaging to e-mail. As these users will be the next generation of corporate America, in ten years, it is entirely possible these social collaboration platforms could fully replace e-mail.

*2011 IDC Digital Universe sponsored by EMC



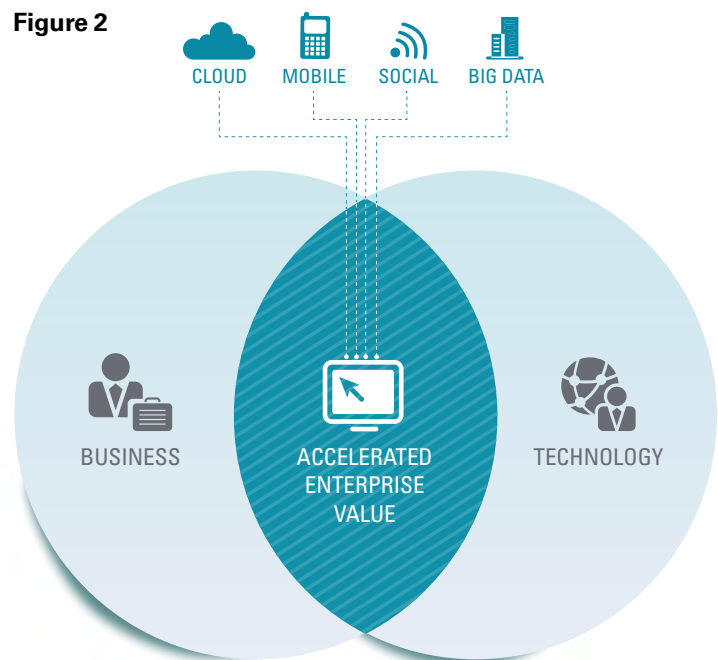
Technology embedded in the business yields innovation

The consumerization and ubiquity of technology has shifted the expectations of what business users expect from technology and IT departments. Current and emerging technologies give tech-savvy business users the ability to implement relevant, scalable solutions that provide a better user experience with zero or minimal IT support. This empowerment potentially leads to rogue behavior, a constant struggle cited by many IT leaders. This practice could result in new security threats, weakened standards, and compliance risks for an enterprise. Ideally though, these enabling technologies would create new opportunities for IT organizations to empower the business lines they support, as true business innovation occurs the closer technology is to the business.

The explosion of data mentioned above has expanded the computing, storage, and analytical needs of enterprise IT. In the face of these developments, IT departments are struggling to match capacity with demand, often implementing disparate technologies to support their needs. Though these issues can be addressed through other means, cloud-based solutions will continue to provide increased cost shifting opportunities and/or efficiencies through fluid capacity scaling, reduced capital investments, and quick-to-deploy capabilities. The appeal here of cloud solutions is the speed with which teams can begin leveraging data as opposed to building infrastructure.

Marketplace demands, financial pressures, and the consumerization of IT are driving the realization by business units and IT departments that they can no longer operate in silos – a combination of collaboration and convergence is essential. This paradigm shift is causing the lines between business and IT to blur with increasing intensity and if properly managed could lead to unprecedented innovation. (See figure 2.)

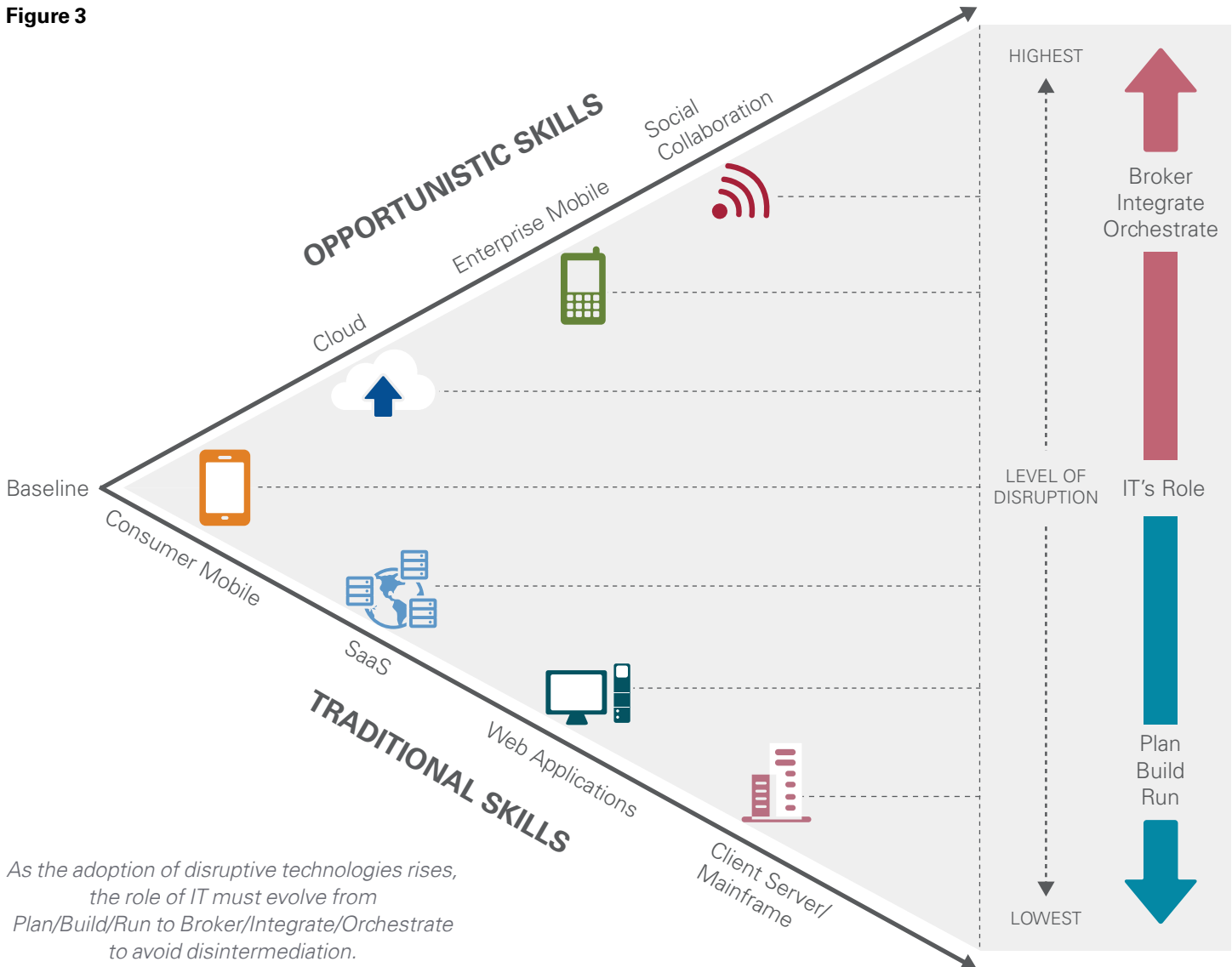
Figure 2



The confluence of disruptive technologies coupled with the integration of business and technology organizations can lead to unprecedented innovation.

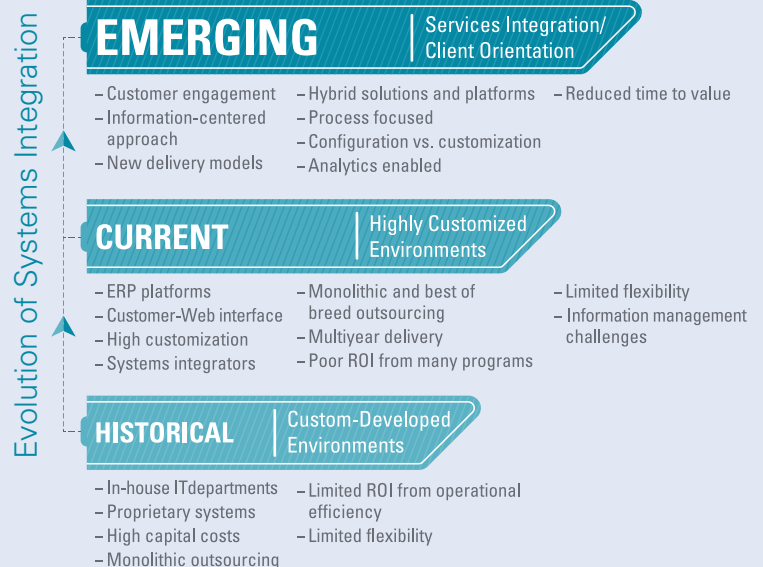
Rather than resisting this paradigm shift, forward-thinking IT departments will embrace this movement and offer to support the business through the analysis of options and implementation of these technologies. In this new enablement role, IT resources must move from development and hardware engineers into business, configuration, and integration specialists, as the historical model of Plan, Build, and Run is replaced by Broker, Integrate, and Orchestrate, thereby increasing the value received by the business. (See figure 3.)

Figure 3



These technologies are maturing and gaining acceptance into the enterprise stack of technology services at a rapid pace. We've seen the high-cost tightly controlled, custom-developed environments of yesterday transition into the highly customized environments of today. As we look to the future, we're seeing a far quicker movement to a service integration model where solutions have a user focus and minimal or zero technology infrastructure is required.

Technology Maturity Model





Defining and responding to disruptive technologies

Brokers of technology products, integrators of cross-platform functionality, and orchestrators of an ever-growing number of cloud and on-premise solutions are the new breed of IT professionals. When paired with business leaders, they bring solutions to the enterprise that accelerate business value and provide process improvements, while leveraging existing investments.

These solutions are inherently Web- and mobile-ready, provide social collaboration features, offer scalable licensing terms, deliver facile integration capabilities, and have high-availability service level agreements (SLAs). Leveraging skilled, objective resources can help an organization make appropriate decisions.

Enterprise Mobility: Work anywhere, evolve your business

Mobilizing the workforce is top of mind for business leaders. In a survey recently conducted by KPMG and CFO.com, over 80 percent of respondents are focused on mobility applications for customer-facing operations and the mobile enablement of their own workforce. According to a third-party analyst, 77 percent of IT organizations see anytime/anywhere access to business data as core to their IT investment strategy; therefore, the development of a comprehensive enterprise mobility strategy is a key asset for any organization.

The Appcelerator/IDC Mobile Enterprise Report for Q1 2013 cites that 66 percent of Enterprise CIOs plan to deploy employee-facing mobile applications in 2013, yet less than half the companies surveyed have a comprehensive mobile strategy. Respondents recognize the transformative power of mobile with 80 percent of enterprise leaders predicting that mobile-first companies will disrupt mature industries in 2013. In addition, 55 percent of companies rank mobility at the top or near the top of their list of strategic priorities.

Business and IT leaders must examine their enterprise mobility strategy from three angles: (1) mobile enablement of enterprise applications, (2) mobile enablement of processes, and (3) mobile enablement of the workforce.

Core business processes and key information have traditionally been locked down to desktop applications, largely requiring anchored transactions, handoffs, and/or time-shifted responses. With the rapid growth of smartphone owners in the world and cost-effective BYOD strategies, processes can now be optimized to take advantage of robust mobile capabilities changing how business is done and creating a new untapped value chain.

Eliminating the boundaries of where work can be done—lifting it out of the office and enabling business to be done virtually anywhere—has enormous upside potential. Enterprise mobility will create a pseudo industrial revolution where processes are reimaged, significant efficiencies are gained, and margins greatly improved.

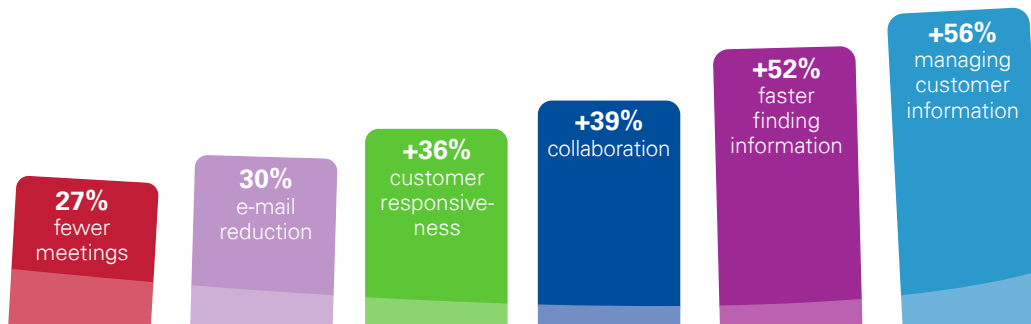
Social Collaboration: Increased teaming often yields innovation

The mainstream approach to collaborating on business matters often involves e-mail threads, meetings, report generation, and knowledge hunts; while collaborating on personal matters commonly takes place on one or more social collaboration sites such as Twitter, Facebook, LinkedIn, or Pinterest.

For businesses, a social collaboration strategy is made up of three components. (1) communication shift (2) activity feed enablement (3) cloud productivity tools.

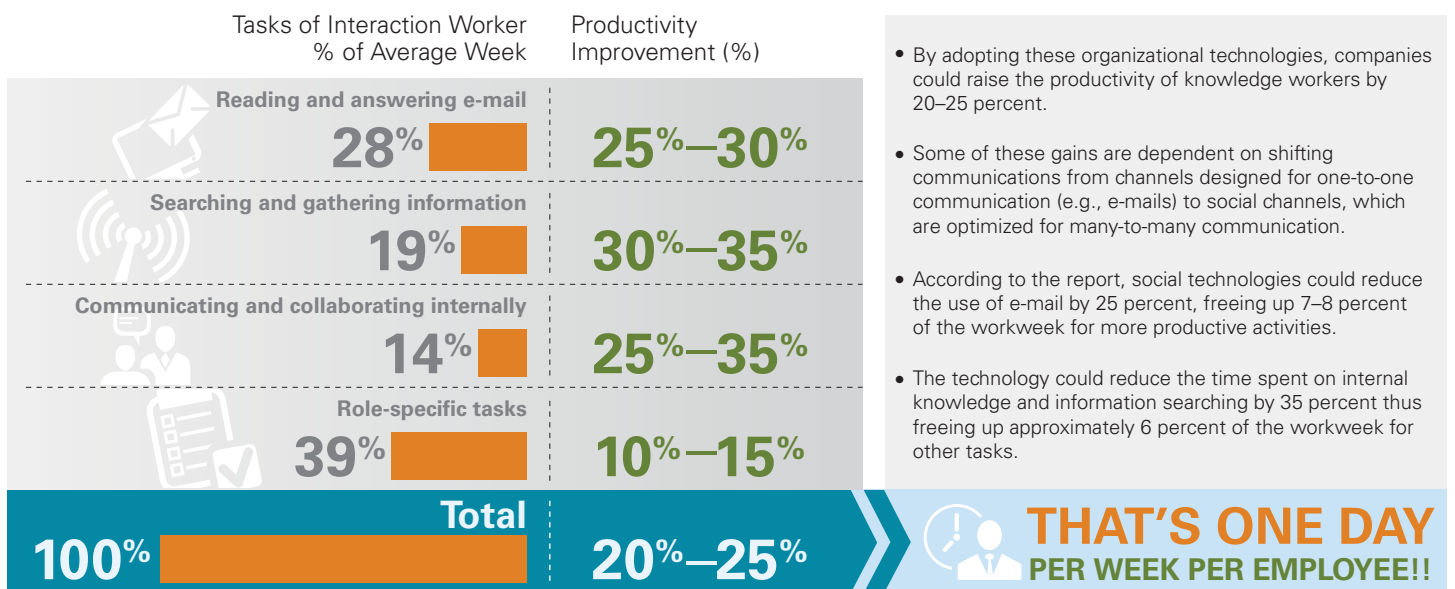
Shifting the primary business communication channel from a one-to-one model (e.g., e-mail) to a many-to-many model (e.g., social) coupled with activity feed enablement, whereby enterprise applications share business events without having to run reports, take screenshots, or compose e-mails and providing staff with powerful cloud-based productivity tools to collaborate simultaneously on documents, spreadsheets, presentations, etc., from any device has the potential to drive efficiencies upwards of one day per week per interaction worker.

According to a survey of more than 5,000 Salesforce.com Chatter users, social collaboration of this type yields:



According to a report by McKinsey, two-thirds of the value creation opportunity afforded by social technologies lies in improving intra or inter organizational collaboration and communication. This function alone could contribute between \$600 billion to \$867 billion in value.

Improved Communication and Collaboration through Social Technologies Could Raise Productivity By **20%–25%**



Source: International Datat Corporation (IDC); McKinsey Global Institute analysis

Data and Analytics: Knowledge opportunity

Consumer technologies are increasingly interactive – mobile and collaboration tools are prime examples. At home watching TV, or on the go with a mobile device, we are checking into stores and restaurants, posting statuses or tweets, interacting with brands, conversing via text messaging, and generally interacting like we have never done before—and these interactions are creating large amounts of data (Big Data) that can be mined, analyzed, and used to draw conclusions and gain business intelligence.

Consider this: A major automotive manufacturer utilized machine learning algorithms to better understand what kind of infotainment technology their customers wanted. Leveraging Big Data analytics, a KPMG project team was able to poll the unstructured data of blogs, forums, and social networks to unveil innovative product specific insight from real customers causing the manufacturer to completely rethink their infotainment investment strategy. This analysis was completed and presented within 36 hours as opposed to 36 days.

Business leaders must be looking at data as an untapped asset with potentially the most valuable data not even being in conventional locations or easily analyzed structures. Business and technology organizations need to collaborate to develop pragmatic, repeatable, and cost-effective data analytic strategies that drive effective decision making while business leaders need to determine what kind of data might contain new insights when coupled with greater analytic capabilities.

Cloud: Agility and speed opportunities

Cloud is the big enabler of Data and Analytics, Enterprise Mobility, and Social Collaboration. Of these, CIOs see their greatest disruptive power coming in combination, rather than in isolation, in other words describing the confluence from figure 2.

Industry forecasts anticipate the cloud market to grow at an annual rate of 20 percent to 25 percent between 2012 and 2016. A total of 59 percent of providers say cloud is driving innovations in customers' products and services, while 54 percent feel cloud is driving innovation in processes.

Besides cost reductions, organizational agility and expedited time to market, a well-executed cloud strategy allows an organization to focus on developing their core products and solutions, increase their time available to interact with clients, and to explore new catalysts for business growth. While each strategy can represent a targeted end-state, the goal is to develop a business and technology road map that drives the greatest value for an organization and falls within an acceptable risk tolerance. KPMG observes the hybrid cloud as the most common model, but finds many executives challenging their teams to evaluate 'what's possible' with cloud before issuing definitive guidance on a model.

In another example, according to the American Society of Clinical Oncology (ASCO) only 3% of patients who participate in clinical trials are able to contribute to advances in cancer treatment. Using Big Data analytics, scientists and physicians are able to aggregate data from more than 100,000 breast cancer patients from dozens of oncology practices using different electronic health record (EHR) systems to determine the best treatments for particular kinds of patients; thereby enabling every patient to be a cancer knowledge donor.



Using the Cloud to Enable New Businesses

KPMG recently collaborated with Qualcomm to reduce the costs associated with starting up new businesses and increasing time-to-market speed. In a situation that called for break-through thinking, KPMG helped Qualcomm develop a transformative business model. By removing the burden of building an internal support organization to support its new businesses, KPMG enabled teams to focus on strategy, markets, and growth. The vision for a 100 percent cloud-based Software as a Service (SaaS) architecture encompassed hundreds of core business processes that are now helping the company effectively incubate its start-up firms, empowering them to enter the market faster and at a lower cost.



An unprecedented opportunity

The disruptive qualities of these enabling technologies provide business leaders with an unprecedented opportunity to innovate. Forward-thinking businesses that take the time to understand and embrace the power of mobile, social collaboration, analytics, and cloud technologies stand to gain great strategic advantage over their competitors and the market.

In most cases, the very nature of these technologies requires the control of key enterprise products or platforms be shifted to or shared with a third party and enable cross-platform portability allowing ubiquitous access from any device. For change leaders, collaborating with IT and/or working with an objective third party is a prudent strategy to ensure these disruptive yet enabling technologies do not have a negative impact on day-to-day business.

Like any major investment or strategic decision, adopting organizations should do their homework and understand the full picture of their potential future state; the benefits, the risks, and their new business partners.

When implemented in conjunction with a business technology road map and in collaboration with IT leadership, disruptive technologies can accelerate business value and cut through the complexities often found when implementing traditional solutions. These technologies have enormous potential for innovation and can be the backbone of an enterprise or the extra push a transformational program needs to deliver strong results.





Talk with KPMG

Accepting that anything happening at the consumer level is likely going to manifest itself within the enterprise is key to successfully adopting these technologies, especially as more tech savvy consumers become employees.

There are more than one billion smartphones and tablets in the market today and nearly one million more being activated on a daily basis. KPMG Research with IDG indicates respondents felt that while mobility created the #1 opportunity for businesses, it was cited as the #2 challenge. Is your organization prepared for the challenge? Talk with us. We can help you understand the impact and make it the right priority for your organization.

A great way to start thinking about how these technologies could positively impact your business is through the development of a comprehensive business technology road map, an exercise supported by an assessment of business requirements, objectives, potential benefits, and risk tolerance against what is available or emerging in the market.

In the short-term, decision makers can begin a discussion about these enabling technologies by asking questions such as the following:

- Do I have business processes that could benefit from mobile access and how so?
- Where could I adopt cloud technologies to gain clarity and refocus my staff on developing new unique capabilities as opposed to supporting highly customized on-premise tools?
- What processes would benefit from enterprise social collaboration?
- Am I sitting on untapped business intelligence because I don't have a plan or the capabilities to analyze large volumes of unstructured data?

Contact your KPMG representative for more information about the increased business value that can be driven by today's disruptive yet enabling technologies.



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