# Digital IQ **2013 Top 10 Technology Trends for Business**

Digital Delivery of Products & Services

Public Cloud Infrastructure

Gamification

Cyber Security

Private Cloud

Pervasive Computing

Big Data Mining & Analysis

Data Visualization

Enterprise Social Networking

Simulation & Scenario Modeling

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Emerging and disruptive technologies are reshaping strategies, business models and enterprise investments. Each of these technologies has the potential to be a key driver in an organization's business agenda. We hope you find some new insights and ideas, and look forward to exploring them with you in person.

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### Pervasive Computing

Pervasive computing is the ability to digitally engage and interact (via your mobile device) with enabled objects around you. It's much more than the Internet of Things. Pervasive computing will require that we change how we find the needle in the haystack. Instead of users being forced to ferret out relevant mobile apps from the hundreds of thousands available, mobile apps will automatically surface based on situations. In other words, the app finds the user rather than the user finding the app.

### Cyber Security

Cyber security continues to be a pressing issue, as technology enabled processes increasingly underpin and fuel the global economy. Our nations, economies, corporations and citizens around the world are connected, and consequently, are easily exploited by cyber capability. We expect to see the following: more large scale attacks, increased focus on cyber security at the highest levels of organizations, heated debate in the U.S. among divergent groups about legislative approaches to fortifying security, and continued concern about cyber security on a number of critical sectors.

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## Big Data Mining & Analysis

Big Data is more than managing dizzying amounts of data faster and cheaper. Big Data is about making better business decisions. Maximizing Big Data's full potential requires using advanced analytics to cull and leverage data from inside and outside the organization. Big Data will grow more pervasive as pilot projects prove Big Data's value as a tool for transformation. Companies will foster data-driven decision making cultures, including seeking more data scientists, to harvest and harness Big Data.

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## Private Cloud

Due to security and regulatory concerns, larger enterprises have been primarily operating in a trial mode of Private/Hybrid Clouds. That will change in 2013. Consumers of IT are demanding greater value from IT services. Furthermore, enterprises are requiring their IT organizations to deliver high quality services that enable their business to grow on demand, to decrease their time-to-market and to utilize the most cost-effective technologies. Moreover, Private Cloud technologies are readily available that address the security and regulatory concerns as well as licensing, management and orchestration. Organizations that do not pursue Private/Hybrid Cloud in the near-term will run the risk of ballooning infrastructure costs and missed business expectations.

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## Enterprise Social Networking

Enterprise social networking is becoming a core tool for the new social workforce. The key insight for organizations succeeding in building value from this technology is social business processes redesign. When organizations rethink processes, enormous co-creative value is unlocked. In 2013, we will reach a tipping point in the global workforce where the majority of workers are familiar and comfortable with social networking, and for most businesses, there is a growing expectation that these tools will be used in a business context. Furthermore, there are now proven models for driving adoption and achieving value through the deployment of enterprise social networks. Companies that succeed in becoming social organizations will achieve tremendous advantages over their competitors.

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## Digital Delivery of Products & Services

Customers are driving companies of all shapes and sizes to develop new, technology-based ways of delivering value. The digital delivery of products and services can open tremendous new pathways for growth, but companies must shift their underlying business operations to support this new business model. In 2013, smart executives will evaluate digital transformation's impact on business strategy, customer engagement channels, operating models, organization transformation, systems, and tax and accounting.

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## Public Cloud Infrastructure

In 2013, cloud adoption will continue to mature with hybrid cloud architecture becoming the mainstay as companies of all sizes leverage public cloud services. Desire for reduction in the management complexity of hybrid cloud architectures will lead to demand for service intelligence capabilities in the short-term, cloud platforms in the mid-term and cloud interoperability standards in the long-term. In addition, some highly visible public cloud service lapses in 2012 will likely lead to cloud adopters beefing up risk mitigation processes and selecting vendors with more enterprise-grade security, service levels and indemnification clauses.

## Data Visualization

In this digital world, a picture is worth much more than a thousand words. We expect that leading edge companies will explore dynamic visualization techniques (e.g., virtual reality, augmented reality) and advanced display devices (e.g., arrayed 4K screens or 'walls', 3D goggles, haptics and gesture based interfaces) to navigate through multiple dimensions (3D, time, space) of data. Advanced visualization will provide companies with a huge 'dashboard' to layer and manipulate multiple sources of information on gigantic floor-to-ceiling HD monitors to analyze past events and explore future scenarios (e.g., economic, competitive, technology or customer adoption scenarios).

## Simulation & Scenario Modeling

Organizations are increasingly focusing on simulation models that enable executives to envision the potential impact of their choices before making investments. Through simulations, organizations can move from 'dashboards' that capture insights from historical data to 'cockpits' that empower organizations to anticipate the future under various scenarios including economic, competitive or customer adoption. Recent research indicates that simulation modeling was rated as the second most important analytical technique (behind data visualization) that organizations are implementing. The concept of simulation is being used by management teams to evaluate scenarios as a group and make better collective decisions faster.

## Gamification

"Gamification" is worth the hype. With its combination of game mechanics, social networking, interactive media and behavioral analytics, gamification can transform a business. In 2013, smart companies will use gamification to deepen connections with customers and enhance employee experiences. In fact, gaming mechanics will become so broadly adopted and integrated that we'll stop calling it gamification. The measurement capabilities of gamification platforms will mature and provide real-time metrics and behavioral data that will enable companies to respond more nimbly in virtually every aspect of their businesses. Finally, leading edge companies will extend the gaming experience offline and onto mobile devices, in multiple locales and at every touchpoint.

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