

## **Forrester Research, Inc.: Tech Changes to Expect in Next 3 Years**

According to Forrester Research, Inc.'s report on enterprise technology trends, Business Intelligence (BI) tools, mobile apps, and cloud application platforms are areas that will evolve and create significantly more business value between today and 2014. "The only constant is change," said the great science-fiction author and biochemist Isaac Asimov. And few industries change as rapidly as the technology space.

On the enterprise side, where slimmed-down IT budgets, economic downturns and traditional thinking can stifle change, evolving technologies and the necessary strategies to address those changes still persist at a rapid clip. In a recent Forrester report entitled "The Top 10 Technology Trends Enterprise Architects (EA) Should Watch: 2012 To 2014," the research firm gauged 208 Information Technology (IT) executives with knowledge of their companies' technology strategies to see what areas they expect to change most during the next three years. The survey also asked about the areas in which these IT executives expect to see the most business value in the next three years. BI tools, mobile apps, and application platforms won out as the top three areas for change and increased business value. Other leading areas where change is on the horizon are Enterprise Application Integration (EAI) and Infrastructure-as-a-Service (IaaS), i.e. cloud computing. Here are two key observations Forrester culled from its research on upcoming changes in enterprise IT.

### **Business Intelligence Is the Biggest Changer, But Is IT Taking it Too Lightly?**

In a related 2010 Forrester survey, BI was ranked as the third technology that is expected to change the most. This is the year that BI is number one, with 44% of respondents expecting it to change the most and 50% expecting it to generate big business value as data mining and reporting tools become more sophisticated and move to a cloud model. BI is on the minds of IT executives and Chief Information Officers (CIO) more and more as advanced metrics and analysis of raw data is used to improve manufacturing workflow, cut costs, and discovers new sales opportunities.

Forrester states that in a tight economy, BI allows CIOs to justify business decisions using hard numbers rather than gut feelings. The top BI vendors continue to be Oracle, SAP, IBM, and Microsoft and the various BI companies that they all acquire. Yet there is a contradiction at play in the Forrester survey. Respondents did not indicate plans to change the back-end data warehouse infrastructure that most BI apps depend on. "The enterprise data warehousing category ranked 19 out of 25 in terms of expectations for change," writes report author and Forrester analyst Brian Hopkins. "EAs should reconsider this in light of the significant technology changes that next-generation BI and big data are driving."

### **Mobile Apps and Cloud Platforms Merging to Create the App Internet**

It should come as no surprise that mobile apps and application platforms were ranked number two and three respectively, with high ranks for expected change and increased value. Thirty-six percent of respondents see mobile apps for Smartphones and Tablets as a top changer and 32% believe mobile apps will deliver the most business value.

## **Mobile Apps and Cloud Platforms Merging to Create the App Internet (continued)**

Clearly, the proliferation of mobile apps will call for IT to support at least the BlackBerry, iOS (Apple's mobile operating system), and Android platforms, as well as increased acceptance of personal — and potentially corporate-liable — devices that connect to enterprise resources.

As Hopkins states, the good news is that mobile apps are relatively inexpensive, and they are improving as context-aware technologies via sensors, location services, and better security and battery management.

The application platforms category, which refers to development of "elastic" applications for cloud services such as IaaS and PaaS (Platform-as-a-Service), is seen as a top changer by 34% of respondents and 28% believe application platforms will deliver business value. Mobile apps and cloud platforms will offer lower TCO (total cost of ownership) and CIOs should plan to capitalize on that over the next few years, writes Forrester's Hopkins, who also recommends that enterprise IT be prepared to manage apps on many devices and develop mobile and desktop apps that use new technologies such as HTML5 (HyperText Markup Language) and PaaS for platform compatibility.

In the coming years, Forrester predicts that mobile apps and cloud services will merge to form what the company calls the "App Internet," where specialized apps will use the storage and processing power of personal computers (PC), Smartphones and Tablets and the scale and flexibility of the cloud, to allow applications to communicate with other apps and devices.

According to the Forrester report, if it plays out, the App Internet would mark the end of the website as we know it and the dawn of the mobile app era. It is also certain to change how developers and enterprises create apps and manage the devices that run them. "This type of interaction requires a new architecture, and it is not one that most companies currently support," writes Hopkins.