



*What will the software industry look like in 3, 5, even 10 years from now?*

The software industry has gone through a series of cycles over the past 50 years or so that successively involved greater empowerment of end users. From mainframes which served only a few specialized corporate users, to the desktop PC that improved the productivity of millions of people and businesses, to the Internet which connects hundreds of millions of people to each other and to information across the world, and now we have the mobile revolution which is empowering billions of people. None of this could have ever taken place without the creative energies of software developers for these successive computing platforms. The next exciting revolution is the cloud, where users get transparent access to information and entertainment in a way that does away with traditional notions of computing platforms.

Technically, what this means is that we carry virtualization to its logical end-point. Over time virtualization has allowed for operating systems, storage and networks to transcend different computers and different systems. Putting an additional virtualization layer that hides the complexity of various software applications in the cloud will free up end-users to focus on the things that really matter.

This trend towards increased virtualization and transparency is also being reflected on the business side with the shift towards SaaS pricing models and away from the idea of buying or

licensing software or data storage. And it all results in greater empowerment of the end user and provides businesses with more flexibility and increased efficiencies.

So in the future there will be a significant difference in the way people will perceive, interact with and purchase technology products and services. Those products and services will be more transparent, they will be easier to use, the user experience will be better, and there will be a profound evolution in how pricing is approached, going from a license-based model to more of a transaction and usage based model. We're seeing the early stages of this today, but all these trends will continue to pick up steam going forward.

*And what customer demands and business trends will drive changes in software products, how they're developed, and the industry that provides them?*

One of the things that has driven our industry in the past decade has been the shift from business computing to consumer computing. In the early days of the technology industry, a large part of what was being built was to make businesses more productive. But starting with the Internet, we have been shifting to a world where technology is not just about touching people in their professional lives, but also in their personal lives.

Most innovative information technology that has been introduced recently has been in the area of helping consumers. People are demanding tools that make their life easier, and get them more connected with each other and with information sources worldwide. At the same time, the walls between people's professional lives and their personal lives are coming down. Companies like AOL were some of the first to recognize this shift even before the Internet went mainstream. And then over time, we have had powerful new consumer-oriented technology companies successively enter the industry such as Yahoo! and Google, Amazon and eBay, and now Facebook and Groupon. All these entities represent a huge shift from the world of business computing to consumer computing.

At Keynote, we recognize that with this shift it has become critically important to ensure the best possible user experience. The more information that is provided from the cloud, the more consumers get empowered through different devices and interfaces, and the more applications that emerge for these new platforms, the more complexity there will be. And with increased complexity comes increased challenges in delivering a user experience that keeps customers engaged and loyal. With our advanced and continuously expanding global test and measurement infrastructure for Internet and mobile cloud monitoring, Keynote is able to provide

enterprises and service providers with the kind of neutral, unbiased and accurate data that they can use to mitigate performance issues and optimize the user experience. No two users access a website, e-business application, or mobile content in the same way. There are different backbone and cellular networks in different geographies, and different devices, browsers, apps and access speeds. Keynote takes all these variables into account in order to provide the most accurate and authentic real time portrayal of the end user experience. Going forward, it will be those companies that have figured out how to deliver a consistently pleasing and trouble-free online experience that will become the leaders in this new cloud-based economy.

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