



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

In 2010, use of the Cloud and Software as a Service (SaaS) products moved into the mainstream, but did not yet dominate the mainstream. In the next 3-5 years, the majority of products will become SaaS products and by the end of 10 years, on-premise software products will be mostly a thing of the past. It would be my hope that also in 10 years, SaaS software products will be exchanging information via standard, secure interfaces in the cloud. In other words, we will truly be seeing an interconnected and secure information technology world. An Enterprise could use a CRM from one vendor, an ERP from another vendor (or even functions from more than ERP vendor), and a social media system from another vendor all freely and securely exchanging information via a combination of private and public clouds and storing information in a secure, customized database in the cloud for each Enterprise.

In the next ten years the use of social media will move from unmanageable information generation (akin to the Tower of Babel) to intelligent use of and management of generated information. The use of social media has become quite popular for personal use, particularly by the younger generation. In the next 3-5 years, the use of social media by businesses to market their products, communicate with customers, communicate with partners and vendors, and communicate internally will mature and become a “normal” way of doing business. We are already seeing that with features such as “chatter” in Salesforce.com. This will also require the software industry to standardize around the use of social media functions in software products.

The next major shift in the next 3-5 years will be the “rise of the smart mobile devices”, such as smart phones, tablets, smart devices in hospitals, cars/trucks, manufacturing facilities, and even in homes. Connectivity to smart mobile devices will be ubiquitous, and in most cases, will be the only way users will use technology in their work environment and personal lives. In 10 years, most users will be interfacing to their work and personal environments only through a smart mobile device of some kind and will be able to do so wherever they are (at their desk, at home, while on a trip, etc).

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

In the first question above, I described a truly interconnected and secure information technology world. Customers and businesses will demand this as they move their IT environments into the cloud. But, a lot has to happen to make this world come true. First and foremost, Independent Software Vendors (ISVs) must develop or migrate their software products to a SaaS model, designing them in way to ensure secure access, privacy of information, and compliance to security requirements. Secondly, standards must emerge to allow secure and accurate exchange of information between SaaS software products used in an Enterprise. Thirdly, access to business information and processes as well as to personal networks must be 100% available from anywhere in the world.

The use of various forms of smart mobile devices will require changes to user interfaces to accommodate smaller touch screens with small or touch keyboards, changes to the way data is stored and transferred while being used by the mobile device, and innovation in how to truly multi-task on a mobile device. In other words, by users demanding to use smart mobile devices, the software industry must re-think and re-design how to effectively and efficiently give users the interfaces they need at the speed they need it whether they are at their desk or on the road using a smart mobile device.

As the use of social media matures throughout the business world, the software industry will need to address the question of how can all the information flying around be harnessed. That means there will need to be some way to sort through all the blogs, tweets, status updates, live feeds, comments, etc, etc, etc. and find the information that is truly useful to a business or to an individual. Otherwise, it will just turn into a lot of white noise out there.

In my opinion, the biggest demand on the software industry will be on the resources it will take to achieve a truly interconnected and secure information technology world. This will require a lot of new product development, migration and refactoring of current products, standardization, and solving some interesting technical issues. Successful ISVs will be the ones who can intelligently harness resources globally to develop and deliver this truly interconnected and secure information technology world.

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