



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

Over the past 10+ years we have watched the outsourced, hosted application model evolve from ASP to SaaS and Cloud Based computing. The key differentiator between the hosted application service provider models of the late 1990's and early 2000's and today's SaaS applications is the coupling of subject matter and technical experts to the product. Most of us are aware of this evolution and I believe this path will continue. Along with this continued evolution will be an increased amount of commercialization with focus on leveraging Cloud based services and other SaaS foundations into user consumable products and services.

The Cloud computing models of today, namely elastic processing models and storage provide little opportunity for broad scale consumption. Over the next 3-5 years it is my prediction that the software solutions that emerge will be based on the commercialization of these models. Essentially this is the continuation of the trends we have seen in SaaS: the emergence of solution providers that couple a variety of technologies and services into useable products. In our business, for example, we couple payment processing and gateway services, electronic software distribution, Cloud based hosting and email fulfillment (among other things) with human driven process such as anti-fraud and customer support. In this manner Avangate has created a commercialization model coupling all of these services and more into a useable product for software and digital product vendors.

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

Mobile devices and platforms will continue to increase their market penetration and by doing so create significantly more customer touch points. As these touch points gain greater adoption customers will demand access to services on their terms, whether that is through a smart phone, tablet, set-top device, power /grid control or any one of the many forthcoming smart devices. Software vendors will expand their product offerings to allow access to their services via many if not all industry touch points. These access points will result in an interconnecting mesh of services while further growing data stores. The large variety of access points will also result in customer data being segregated across a number of independent data stores vs. a centralized facility or services.

The software market will respond by creating layers of technology that sit on top of each touch point and allow access to multiple data stores. An easy model to visualize this scenario is Mint, a very successful SaaS alternative to QuickBooks. Mint aggregates data from your credit card, mortgage, checking and savings accounts, gas cards, car loans, etc. into one, central application. You can see how in this model many if not dozens of data stores were required to build the complete overview. These application layers will continue to be defined allowing customers to interact how and when they need.

Another example to consider: growth in the online retail sector will require the ability to couple customer information with social network data and trends. We are starting to see the emergence of these services with operations such as Amazon integrating Facebook stores with recommendations powered by "friends" and network connections vs. artificial intelligence. Purchase recommendations driven by the social network will carry significantly more weight than those of anonymous shoppers or shopper trends.

Even though I predict the application layers will start to truly unify relevant data, the data-stores themselves will continue to be segregated if not becoming even further segregated as security concerns reinvigorate the markets love for silos. The requirements to integrate applicable social network data with consumable software services and an ever emerging number of touch points will keep software companies on their toes. Those companies who are capable of visualizing and understanding these interactions will lead the market. Product managers will be required to understand how third party systems with no current interactions to their existing product lines will be needed to drive consumption and adoption down the road. This is how I believe we will

see companies commercialize their technologies and how the customer will drive the market.

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