



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

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

### **Private, public and/or hybrid clouds**

Over the next three to five year period, a couple things are going to start happening. The first is that people are going to be learning more about what works within both public clouds and application stacks. This turns the concept of hybrid into a growth area. People will begin to set-up hybrid environments because they currently don't know enough about what their entire application needs and how to best set up an architecture to run in two different types of clouds simultaneously. Within these next three years it will become commonplace for people to understand their application architecture needs, including how they can have the whole thing orchestrated in a hybrid fashion to get the best of both worlds.

Between the next five and 10 years, people are going to expect to have a refined level of insight into the needs of each application, what it's consuming, and what their options are. On an on-demand basis, they will expect to run their application in not just hybrid, but federated clouds.

Maturity of tools and processes is needed to come together to give timely and relevant information to the user about what their application needs, when it needs it, and the lowest cost of how it can run. The marketplace is driving to this. However, if all the capabilities were here today, I don't know if people could get their head around it. That's why I think the evolution is hybrid cloud usage over the next three years. Five to 10 years out is where it goes beyond hybrid into federation where people basically need to have complete use of visibility so they're empowered to make on-demand, automated decisions.

- **Platforms, infrastructure, and/or migration**

Everything will need to have the ability to be extremely integrated. People will need to follow open standards and expose how information comes in and out of various places. Not just regarding data, but also how the entire application stack can be much more open and at the same time be able to have the right level of insights to know why and when it makes sense to implement changes.

What's expected of the software industry is to increase the visibility of what's going on so people can make better decisions and change easier. That's counterintuitive to the history of the software industry, where there's been more vendor lock-in. But customers are demanding change, and will not allow themselves to get locked in. If this increased visibility doesn't happen, it will kill or stunt the growth of the industry.

We come from an industry where some very large companies have tried to be an end-to-end player of whatever mainstream solution is at hand. I do believe that moving forward it's not going to be about one or two big winners that offer it all themselves, but more so an updated ecosystem. Innovation needs to keep up so we can have a cloud platform, a cloud infrastructure environment, and a cloud migration path. With all of that, it's the ecosystem that enables the win and not any one player. It will take an industry movement and a large group of us together to make the vision a reality for the users.

The sum of the entire ecosystem is more important than any one of the individual companies since no one company will be able to do it all. For the ISV's, it will be important to plan on how they see solutions plugging into theirs and to identify which solutions they should connect into.

Due to the complexity and volume of individual solutions that make up this new ecosystem,

there is a large opportunity for regional to global service providers to consult, architect, and design both horizontal and vertical solutions. They will be able to deliver the end-to-end solution to not only provide guidance but to also accelerate the adoption and deployment of both hybrid and eventually cloud solutions.

- **Social Media**

When we think of social media, we think of Facebook, LinkedIn, and other various networks coming about that are horizontal connecting points for all of us to keep in touch with each other. Social media is turning into a great opportunity to become pervasive across everything. Places like Server Fault, which are basically very populated discussion areas where people can post technical questions and look for help amongst their peers, are great because it fosters meaningful and relevant dialogue.

In the upcoming years, social media will become more integrated with the work we do everyday. When you bring social media together with the concept of big data, it becomes extremely timely and relevant. You can solve things proactively and faster. Instead of looking for a tool that's supposed to just magically give me answers, the magic becomes more about the facilitation of how we assist each other as people with similar interests and living similar challenges.

Social tools have become a natural extension of not just college, but of every level of education. The younger generation has mobile devices and a social media construct naturally extended from their thumbs. Because we look towards the younger generation to see where things are headed, it makes sense that social media will be a major driving force for future solutions as they are built.

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