



Numerix looks to the cloud for Oneview's future

Numerix won the best agile initiative category in the 2021 American Financial Technology Awards, thanks to the rapid adoption and maturity of its agile, cloud-native delivery model for Oneview. Victor Anderson chats to Steve O'Hanlon and Satyam Kancharla about the initiative.

Evangelists of the agile development methodology will tell you that agile is not a means of developing software, but the only means of developing software. While that argument might be somewhat facile and ignore recent trends in software methodologies and engineering, it is difficult to fault when compared with the traditional waterfall methodology and its well-documented shortcomings. Agile is all about delivering quick, regular iterations to its consumers, although it is an interesting phenomenon in that it is not binary in the sense that you either do it or you don't. Rather, it is a spectrum or continuum along which firms place themselves and move, driven by their requirements, industry trends, and those of their users at any given time. Therefore, irrespective of whether firms are strict agile adherents following a clearly defined development roadmap or might have inadvertently incorporated some principles of the model into their day-to-day development functions, both qualify as agile organizations.

Numerix, a New York-based risk specialist, won its AFTA thanks largely to its development work around scaling the cloud-native delivery of its Oneview platform, which is deployed on AWS and delivered as a service. According to Satyam Kancharla, executive vice president and chief product officer at Numerix, the bulk of the engineering and organizational work underpinning the SaaS delivery initiative is a blend of agile, microservices and DevOps. The guiding principle should be a relentless focus on customer value, as opposed to fixating on the various organizational and engineering processes used to arrive at that end goal. "Agile as a concept was initially applied more on the engineering side where you have the usual rituals like scrum and increasing the cadence of the functional increments you are working on, but the real transformational element is achieving business agility, where you connect the dots all the way to the customer," he explains. "We measure outcomes as opposed to output and activities, and we have introduced a lot of change in terms of the way we work and align across teams. On the engineering front, microservices is an architectural choice and is instrumental because it involves small, autonomous applications that support agility by allowing different teams to work on different sets of microservices, as opposed to everybody working on everything at the same time."

Independence

Kancharla explains that Numerix limits the number of developers working on each microservice to between six to eight people, allowing each microservice to be clearly owned, while also providing independence for each team so that they can move at their own pace. He describes DevOps as a "crucial ingredient" in Numerix's particular flavor of agile, because it allows teams to develop at their own pace and provides the automation needed for them to deploy and test new applications, a central tenet of DevOps. "The rapid pace of change relies on the maturity of the DevOps infrastructure—if it is not mature, teams will be worried about deploying releases, but if it is, you get faster and faster release cycles," he says.

According to Steve O'Hanlon, CEO of Numerix, the firm has divided its target market into two core "theaters" of capability: pricing and risk. Traditionally, Numerix was a tool-based software vendor designed to sit within Excel and provide its users with embedded software development toolkits that they would implement. That all changed with the advent of the Oneview platform, which for the first time incorporated both risk and pricing functionality, allowing Numerix to offer its tools-based clients access to a microservices-based platform featuring all the underlying analytics found within its cross-asset tools. "This allows us to get to the same price regardless of whether it is pre- or post-trade," O'Hanlon explains. "Therefore, everything about the future of the company and the innovations we've implemented around the cloud is so that our pricing and risk products are all cloud-native and enable us to be consumed by clients through AWS and in some cases also complimented by the data relationships we've established over the last 18 months."



Steve O'Hanlon
Numerix



Satyam Kancharla
Numerix

Benefits

The cloud model has a number of benefits compared with on-premises-deployed applications, not least of which is its ability to cater to each user-firm's specific modeling or analytic configurations at any given time, determined not by service providers and vendors but by end-users themselves. From Numerix's perspective, this means that each client gets the benefit of cloud elasticity, resilience and stability while preserving the configurability that enterprise customers require. This is enabled by its iterative approach to development, testing and releasing, but also due to the discrete modularity of its entire product offering, a point O'Hanlon is at pains to emphasize. "We have clients in three core areas—the Americas, Emea and Asia-Pacific—and each of those areas has different levels of cloud adoption," he explains. "In the Americas, we are seeing more rapid cloud adoption compared with Emea and Greater China, for example, although we're seeing an uptick in Singapore and other parts of Asia outside of China."

Clearly, Numerix is well placed to cater to this growing demand from across both sides of the industry, a move that will in time see all its clients consume all its functionality as a service. Naturally, some regions will make that move earlier than others, but that is the beauty of agile and the cloud—vendors can tailor their support for each individual client, irrespective of where they are functionally, geographically and culturally. [WT](#)