MAR, 24, 2023 | CIO.COM

FEATURE Industry clouds prove their business value

By Paula Rooney Senior Writer, CIO

Born of partnerships and ecosystemcentric by their nature, cloud solutions aimed at specific verticals are taking root, forming a complex, rapidly evolving market CIOs must be strategic about entering.

Bearded IT Specialist in Glasses is Working on Laptop in Data Center while Standing Near Server Rack. Running Diagnostics, Doing Maintenance Work. Emergency Red Light from Side Illuminating Specialist

Companies across nearly every vertical are finding a transformational lifeline in industry clouds. Swiss biopharmaceutical Idorsia is one such company, having embraced a partnership with industry cloud provider Veeva to survive.

In June 2017, Idorsia had a lot on its plate, namely a new company to stand up, with 650 scientists and employees, a robust discovery pipeline, early-stage clinical assets, and plans to launch commercial products within five years.

More challenging, its spin-off from Actelion following Johnson & Johnson's acquisition meant there were no systems or technology platforms. Idorsia needed a partner to help it move through the arduous scientific process and multiplenation regulatory processes that accompany drug launches.

"We started with a blank page. I actually had no other choice than going for the cloud at that time," says Joseph Bejjani, CIO of Idorsia, who selected Veeva, an industry cloud for life sciences. "Veeva covers a large scope of our environment from clinical development to quality regulatory affairs from a user experience in one interface."



Credit: Gorodenkoff / Shutterstock

That's just one of the benefits of an industry cloud, he says. Veeva's life sciences cloud, for example, not only handles ldorsia's regulatory, sustainability, and commercial processes but also provides predefined FDA formatting.

Perhaps most important, Idorsia taps into Veeva's evolving knowledge base, which encompasses data from other customers such as major pharmaceuticals giants Merck, Bayer, and Boehringer Ingelheim, the CIO says. And that is a major gain for a startup — getting the know-how and experience of Veeva's entire customer base, he says.

"Compliance is key for us, but industry knowledge is extremely important for a relatively small company. We get the collective knowledge of our industry," he says, noting that Idorsia also relies on Veeva to navigate regulatory issues that vary in each nation. "Veeva cloud solution provides us with industry best practices."

Going vertical

Hundreds of "industry clouds" tailored to specific verticals have been developed by a range of vendors, from hypervisors that sponsor vertical solutions to consulting firms that have built custom clouds for select clients.

These clouds are also often distinguished by the underlying partnership that resulted in the solution or the underlying platform on which the cloud runs. Veeva, for example, runs on Salesforce CRM.

Idorsia's Bejjani says there are two components to the biopharmaceutical's Veeva cloud: one for R&D and another for commercial requirements. Idorsia chose Veeva when it was in the last phase of a clinical study of its first commercial insomnia drug. The company had only nine months to complete the process before submitting its application to the FDA.

Veeva's solution captures all the management and technology checkpoints the structure, output, and terminology, Bejjani says, adding that it then "integrates with another fundamental tool in our clinical operations. This file captures all the data that we use to submit our procedure. It's pre-defined with standard chapters. When you submit to the FDA, you must have clearly defined chapters."

Idorsia could build its own Salesforcebased solution but the value Veeva adds is immeasurable, its CIO notes. "It's better to go with an industry cloud because you inherit what research work the industry cloud provider has," he says.

Idorsia currently has two products launched commercially. The insomnia solution launched in the US, Italy, and Germany. Last year, the company launched another product in Japan and currently has 10 products in clinical development, roughly half of which are in the late stages.

"The configuration we have today has been extremely beneficial because I do have the vendor's attention. I have a unique setup. I have a large scope of functionality and systems," Bejjani says, noting his strategy and speed, simplicity and sustainability needs led him to choose a cloud platform based solution from a preferred vendor with strong industry knowledge and presence."

Making sense of a complex market

Given the variety of approaches and solutions, the industry cloud market has grown vast and complex. Consulting firms such as KPMG and Accenture agree there is no clear definition of what an industry cloud is, and its components, services, and technology stacks are still evolving.

"It's a term that is still forming, but we would all agree on now is that it's using cloud technology to solve problems specific to an industry sector," says Marcus Murph, KPMG's US leader for cloud.

Murph points out, for example, that Microsoft has a financial solutions industry cloud yet many enterprises use IBM for financial services in the cloud and still other financial companies have developed a high-end solution in conjunction



Joseph Bejjani, CIO, Idorsia, Credit: Idorsia

with NASDAQ that includes analytics and machine learning models.

Much of the focus of industry clouds to date has been on foundational aspects of doing business in the cloud, such as which workloads to migrate to the cloud, whether to lift and shift those workloads directly to the cloud, or redesign them from scratch into cloud-native applications. But as Idorsia's use of Veeva shows, some industry clouds also offer industry-based tooling, such as "solutions that address regulatory challenges and controls in different sectors, as well as data models specific to different vertical sectors," Murph says.

Due to their nature, industry clouds likely will remain collaborative affairs. "The industry-based cloud has to be an ecosystem that stitches different technologies together and solves different problems," Murph says. "I don't know that you'll ever see one company dominate an industry cloud on its own."

CIOs must think strategically before selecting an existing industry cloud solution or building a custom industry cloud with a partner, says Ashley Skyrme, global cloud first strategy and consulting lead at Accenture.

This involves "rewiring their value chain" of products, solutions, and services, namely rethinking their tech stack more strategically, orchestrating multiple data assets and unlocking data from many sources.

Skyrme pointed to Volkswagen as a great example of an enterprise that built an auto-

motive cloud platform by opening up and collaborating across different industries to bring its supply chain together.

"It's not a pre-formulated kit," Skyrme says about defining the industry cloud. "We think of it as much more exhaustive across the cloud continuum. It's an evolving ecosystem of standardized, reusable, and interoperable digital assets. That's the holy grail of the industry cloud. Driving differentiation and growth ... new products, new platforms, and new experiences."

As for Idorsia, embracing an early but established life sciences industry cloud has no doubt enabled the startup to turn its R&D into a profitable business which can be more challenging than the science itself. And Bejjani is one CIO who is glad he didn't try to tackle it alone.

"We could do it, but it would be very time consuming and expensive," he says. "Veeva already created the vertical for the pharmaceutical industry and the workflows and terminologies of the industry are pre-configured and embedded in their product."

For enterprises like Idorsia whose tech stacks aren't their key differentiator, the value proposition of industry clouds is compelling.

Paula Rooney is a senior writer at CIO.com

