



Manulife supercharges development and reduces costs by 50 percent with Microsoft Azure

Manulife has been helping customers make smarter financial choices for the past 134 years. The Toronto-based insurance and financial services company has a thriving global presence with operations in Canada, the United States, and Asia because it never compromises on delivering value for its customers.

It's in this spirit of customer-centricity that Manulife has evolved from simply having a digital strategy to having digital as its primary strategy. The company understands that improving customers' lives means fostering the innovation and collaboration that drives game-changing products and services. To this end, Manulife is reimagining the insurance and financial services industry, and it's doing that with Microsoft Azure.

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**Aaron Minkovich: Chief Technology Officer
Manulife**

INNOVATION IN THE CLOUD

Historically, Manulife's global infrastructure was managed by different on-premises datacenter providers. This multivendor approach led to inconsistency and posed challenges for new development projects because of lengthy process and acquisition times. To position itself for greater innovation, the company determined that it needed a single cloud platform. "We want to focus on making decisions easier and lives better for our customers, not on managing infrastructure," says Aaron Minkovich, Chief Technology Officer at Manulife. "We need an infrastructure provider with a global presence who understands our industry, and that provider is Microsoft."

Manulife's initial cloud migration began a little over two years ago with the shifting of applications from on-premises datacenters to Pivotal Cloud Foundry on Azure infrastructure as a service. However, not wanting to manage infrastructure internally, the company soon shifted to Azure Kubernetes Service (AKS). Manulife's US business, John Hancock, its Asia business, and all of its central corporate functions are all now fully deployed on AKS, and it's also in the process of migrating its global Wealth and Asset Management and Canadian businesses to be fully cloud native by the end of 2023.

To date, Manulife has globally deployed a load-balanced, multi-region AKS environment with more than 250 clusters running and approximately 3,000 applications and microservices made accessible through APIs. In addition to its AKS environment, the company is strategically taking advantage of almost everything the Azure platform has to offer, boasting a cloud catalog of 75 different products and services. John Hancock, for example, has the distinction of being the first US financial firm to entirely shut down its mainframe environment by migrating its database to Azure SQL Managed Instance.

Says Len van Greuning, Chief Information Officer at John Hancock, "When I talk to my peers in the industry about our cloud posture, they're astonished to learn we're 100 percent in the cloud."




HALF THE COST



30% REDUCTION IN DEVELOPMENT TIME



50% MORE SERVICES



The transition to AKS clears the path for faster, more secure developments and helps drive Manulife’s philosophy of empowering development teams. With managed infrastructure, the company can shift resources away from specialist engineers and allocate them toward bringing innovation to market. Says Minkovich, “With Azure, we can deploy, maintain, and upgrade in a true DevOps fashion so we can be less expensive, get to market faster, and respond to customer demands more readily.”

Most importantly, Manulife can give its developers autonomy while helping ensure the security and compliance of its environments, which is essential for a company that’s driving innovation in a heavily regulated industry. “Operating in 14 different countries, we have a lot of different regulations,” states Minkovich. “The global presence of Azure helps us achieve this balance and stay compliant in every region.”

PUTTING AI IN INSURANCE

Moving to Azure has also positioned Manulife to take advantage of the full breadth of Azure AI services Microsoft has to offer, such as Azure Machine Learning and Azure Cognitive Services. The company has shifted from using Apache Hadoop to Azure Databricks as its exchange platform for getting data into its database. By eliminating data silos and having the right foundation in place, Manulife can develop advanced customer solution offerings with faster time to market. “Just securing an environment for new developments used to take upwards of six months, but our data scientists can now set up an environment, get data into it, and start iterating in only a few days,” observes Minkovich. One example of this is how the company is using Azure Machine Learning and Azure Form Recognizer to help with document analytics to address fraud detection. “Insurance companies can lose hundreds of millions a year to fraud, and our ability to use Azure Machine Learning to identify correlations in the data and proactively tackle fraud has massive potential,” Minkovich says.

Additionally, John Hancock worked with Microsoft to develop an insights hub using Azure Synapse Analytics. The environment provides advanced analytics teams with more mature capabilities so they can run machine learning models on bigger datasets. Using these large datasets helps the company enhance processes and build better customer experiences. “With Azure, our customers can submit more documentation online, and we can then use document analysis to extract information and conduct processing to accelerate workflows, ensure accuracy, and improve user experiences,” says Van Greuning.



Manulife

Manulife is increasingly developing machine learning models to support key functions like underwriting and decisioning. “With the combination of Azure Kubernetes Service, Azure Synapse Analytics, and Azure Machine Learning, we can take full advantage of the innovation that Microsoft already has in place to really deliver value for our customers,” says Minkovich. “Our relationship with Microsoft lets us take advantage of these tools, develop our own solutions, and then deploy and secure these developments.”





A PLATFORM AS A SERVICE PARTNER

With its Azure deployment, Manulife can focus less on infrastructure management and more on getting valuable solutions, like document analytics to support long-term care claims into the hands of employees and customers. “Our development time is 30 percent lower now, and our cost savings are in the 50 percent range with our Azure Kubernetes Service environment,” states Minkovich, noting the significant cost reductions that have accompanied the company’s reduced development times. Through its use of Azure, the company is doing more with less. For John Hancock alone, adds Van Greuning, “We’re running at least 50 percent more services in Azure Kubernetes Service than we were in Pivotal Cloud Foundry, and we’re running at about 65 to 70 percent of the original cost of that environment.”

Migrating to Azure is also helping Manulife deliver on its sustainability commitments. The company has worked hard to realize net zero emission in its operations, and deploying to the cloud helps further expand those efforts. “We’re getting the most energy efficient compute possible by using shared equipment and taking advantage of Microsoft’s own sustainability efforts,” says Minkovich.

That kind of symbiotic relationship is perhaps what Manulife values most from its cloud migration. The company can truly focus on development and delivering value to customers while trusting Azure to do the heavy lifting on security, compliance, and infrastructure management. “One of the most important characteristics of our Microsoft collaboration is mutual benefit,” says Van Greuning. “Whether that comes from us sharing details about our challenges and the value we identify in the cloud or Microsoft providing access to specialized skills, resources, and programs, we both benefit. To date, that’s been really amazing.” Minkovich concurs. “Our relationship with Microsoft enables us to build highly secure environments that meet our world-class risk and compliance standards and set us up to innovate responsibly,” he concludes. “Building the products our customers want and making our customers’ lives easier are key values for us.”



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***Len van Greuning: Chief Information Officer
John Hancock***

