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# NOVA Chemicals builds resiliency and agility with SAP on Azure



## Executive summary

NOVA Chemicals, a chemicals and plastic resins manufacturer headquartered in Calgary, Alberta, makes products used in food and electronics packaging, industrial materials, appliances, and consumer goods. With a focus on innovation and shaping a world where the plastic products vital to our health and happiness are better tomorrow than they are today, NOVA Chemicals prides itself on taking a responsible approach to the plastics manufacturing process and setting itself apart in the market with world-class products, best-in-class technical expertise, and exceptional customer service. To do all of that successfully, it needs resilient, highly secure technology that can keep up with its business needs and goals.

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Devon Smibert, Chief Information Officer, NOVA Chemicals

## Building better resiliency and agility

"Multiple industry benchmarks show that the heavy manufacturing industry tends to lag in the adoption of digital solutions and processes, so we turned that weakness into an opportunity," says Devon Smibert, Chief Information Officer at NOVA Chemicals. "Starting with a 'greenfield' cloud platform allowed us to maximize our use of automation and orchestration to effectively leap-frog many early adopters in security, resiliency, and total cost of ownership."

For NOVA Chemicals to remain a leader in the industry, it knew it had to build flexibility and agility through its technology.

"We've seen macroeconomic conditions shift very quickly in the last few years," Smibert says. "Providing our leaders with automated reporting and near real-time KPIs has freed them up to focus on developing models and scenarios that will help us adapt to fast-changing market conditions and create more value for the company."

To stay ahead in the turbulent business landscape, NOVA Chemicals began to consider moving its SAP environment to the cloud. The company already ran production, quality assurance, development, and technology landscapes on its SAP S/4HANA database platform. It managed the whole business, from buying, selling, and quality control to shipping, through SAP. For this key reason, NOVA Chemicals wanted to ensure its SAP stayed up and running around the clock with no interruptions in the migration to the cloud.

Inspired by an eagerness to embrace a cloud-first strategy and get out of the datacenter business, NOVA Chemicals saw a critical window of opportunity, since the infrastructure that underpinned its SAP environment was at the end of its life.

## Modernizing and migrating to Azure

NOVA Chemicals went through a request for solution process with Microsoft, Google, and Amazon, asking each of them to design an SAP landscape of the future. Microsoft Azure won out in heavy competition against Google Cloud Platform and Amazon Web Services.

NOVA Chemicals ultimately selected Microsoft for its unparalleled ecosystem of support, including the Global Black Belt Team and FastTrack Team, along with KochaSoft, a Microsoft Partner Network member. KochaSoft is also a Microsoft Gold partner and an SAP on Azure Advanced Specialization Partner.

The company's alignment with Microsoft on environmental, social, and governance commitments also stood out to NOVA Chemicals. With Microsoft's aspirations of achieving a carbon negative status by 2030, moving NOVA Chemicals' cloud workloads to Azure supported its commitment to reducing GHG emissions from its operations. Running workloads in Azure typically has a lower carbon footprint than running the same workloads in an on-premises datacenter.

NOVA Chemicals had recently moved to SAP S/4HANA, so KochaSoft helped to migrate this platform to Azure. NOVA Chemicals, Microsoft, and KochaSoft formed a three-legged stool, with everyone bringing something to the table. Microsoft brought expertise in the Azure environment, and KochaSoft brought thought leadership and helped NOVA Chemicals execute. NOVA Chemicals worked with several Microsoft teams and programs, including the sales team, the SAP on Azure specialists, FastTrack, the End Customer Investment Fund, the Global Black Belt Team, and the Azure Migration and Modernization Program.

## Optimizing efficiency, scalability, and performance

Rather than just doing a "lift and shift" of SAP S/4HANA from an on-premises environment to Azure, NOVA Chemicals took the opportunity to modernize several features during the migration. The migration upgraded the operating system to the latest version of the SUSE Linux Enterprise Server for SAP, and it strengthened NOVA Chemicals' security posture by segregating developer and production landscapes based on the Azure architecture.

The new platform for NOVA Chemicals includes Azure DevOps, Azure Backup, Azure Site Recovery, and around 100 M-Series virtual machines. With Azure, NOVA Chemicals has the performance, scalability, and agility that it couldn't get with on-premises services. It has also reduced time to install and refresh systems due to scripting automations that it lacked with its SAP systems.

“The flexibility, scalability, and agility to rapidly deploy new solutions and respond to changing conditions on Azure are key for us,” Smibert says. “We can experiment and ‘fail fast’ with minimal risk and cost thanks to the hyper-automation we have built into our Azure environment.”

NOVA Chemicals’ move to Azure included a focus on backup and disaster recovery to support its business continuity and build resiliency. The company simplified its disaster recovery into a more cost-effective environment built for purpose. Where previously it had a large disaster recovery environment for each of its systems, NOVA Chemicals optimized using Azure Backup and Azure Site Recovery.

NOVA Chemicals’ business data, metrics, and insights on processes like supply chain financial management improved with Azure, too. Previously, its analysts would spend hours upon hours manually extracting data from systems and spreadsheets, then manipulating those spreadsheets to generate reports that were reviewed three to six weeks after the actual activities happened. Now, with Microsoft Power BI and the Azure cloud platform, NOVA Chemicals has near real-time dashboards for monitoring performance and deriving insights.

## Reducing costs and elevating the workforce

NOVA Chemicals found additional efficiencies with its move to Azure that support its broader business goals. By moving away from on-premises workloads, NOVA Chemicals can now close its largest datacenter in September 2022, resulting in lower fixed costs and sustaining capital related to maintenance of servers and other infrastructure.

“With the move to SAP on Azure, NOVA Chemicals has reduced both the human capital and fixed costs on the effort required to maintain an on-premises datacenter,” says Jason Manchester, IT Leader of Infrastructure and Operations at NOVA Chemicals.

## Finding insights through cloud analytics

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“Part of our digital strategy is to elevate our workforce,” adds Smibert. “As we shift services to the cloud and automate more processes with Azure, Power BI, and Power Automate, we can spend less time on manual, repetitive tasks. We can instead focus our workforce’s talent on efforts that are more meaningful to them and create more value for NOVA Chemicals.”



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