Case Study

Finastra accelerates development and delivery of world-leading solutions through self-service DevOps platform

Finastra's FusionOperate platform increases developer velocity across the organization enhancing its ability to deliver robust services at speed

> *"FusionOperate, Finastra's own DevOps platform, is the driving force behind FusionFabric.cloud, Finastra's open innovation platform and app marketplace."*

About FusionOperate

250 developers with 6,000+ commits per month

99.95% -- percentage of uptime for FusionOperate

100+ applications deployed into production every month

400-1000% productivity gain

www.FusionFabric.cloud

About Finastra

Finastra is building an open platform that accelerates collaboration and innovation in financial services, creating better experiences for people, businesses and communities. Supported by the broadest and deepest portfolio of financial services software, Finastra delivers this vitally important technology to financial institutions of all sizes across the globe, including 90 of the world's top100 banks. Our open architecture approach brings together a number of partners and innovators. Together we are leading the way in which applications are written, deployed and consumed in financial services to evolve with the changing needs of customers. Learn more at **finastra.com**

The challenge

Finastra commits to accelerating development and delivery of its market leading financial services solutions through increased DevOps adoption.

The core proposition of any software provider is to accelerate innovation while delivering solutions at pace. When Finastra formed with the merger of D+H and Misys in 2017, it sought to establish a new business model that would enable faster delivery of its market leading products and services.

To achieve this, Finastra's executive leadership team came together with technical leads across the business to understand how best to align technology adoption and talent with core business objectives. The first and most significant challenge identified was to overcome traditional methods of software development and delivery.

Harbinder Kang, Global Head of Developer Operations, says, "At its inception, and thanks to the collective pedigree of D+H and Misys, Finastra was already one of the pre-eminent and most extensive providers of financial technology in the world. The core challenge we faced back then lay in how we orchestrated development and delivery. Put simply, large teams across the software development lifecycle worked in silos, developing and delivering products and applications separately."

To bring about a more holistic approach to software development, Finastra had to instil a new mindset and system of orchestration to move from siloed product teams delivering applications independently under a waterfall approach, to autonomous, agile service teams with total ownership of development and delivery.

Refocusing the organization in this way would lead to the creation of FusionOperate, Finastra's own DevOps platform, which is now the driving force behind FusionFabric.cloud, Finastra's open innovation platform and app marketplace.

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Harbinder Kang
Senior Director, Developer Operations, Finastra

| The challenge | The solution | The journey | The result |

The solution

Finastra scales DevOps across the organization with FusionOperate – it's DevOps platform.

Ensuring customer satisfaction, retention, and acquisition in the modern financial services landscape requires firms to not only deliver trusted applications faster and more securely, but to do so at scale.

Enabling this model relies on adopting technology and practices that allow applications, traditionally delivered as products, to be broken down into smaller value streams, delivered as independent services via the cloud. This was the foundational vision that led Finastra to embark on scaling DevOps across the organization with the FusionOperate platform.

Through FusionOperate, and adoption of the Scaled Agile Framework (SAFe), Finastra has dramatically improved developer velocity and productivity, and reduced lead times for new deployments and subsequent iterations. Rather than a single deployment every few months, service teams across the organization now deploy on demand, multiple times during a single agile sprint, making rapid adjustments in live conditions.

These outcomes were made possible by targeting key DevOps practices and tools and building them into the platform. Now, through FusionOperate, Finastra's developers can consume resources via APIs and provision the resources their applications require without needing to interact with dedicated teams, such as security and testing specialists or disaster recovery engineers.

Standard templates provided by FusionOperate enable teams to build their servers without requiring infrastructure knowledge and operational expertise.

This is in stark contrast to the traditional waterfall model of software development, in which siloed teams build applications in their own environments with bespoke technologies, leading to increased integration overheads, inefficiencies and bottlenecks. Crucially, under this waterfall approach, teams across the software development lifecycle hand off responsibility for how an application performs in the customer environment because they do not have ownership of the entire development pipeline, from conception to deployment.

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> *FusionOperate profoundly changed the way we approached software development. The self-service model not only unlocks the full creative potential of Finastra's service teams, it allows them to start new applications and services through fully orchestrated pipelines for NoOps delivery in a matter of hours. It is this agility that has ensured Finastra maintains its position of leadership in the competitive world of financial services.*"

Leigh Brackley
VP of Development Engineering, Finastra

The challenge	The solution	The journey	The result

> **"**
> *Each technology was carefully selected based on how well it facilitated integration, avoiding needless complexity, which slows down development and delivery."*

Tim Sutherland
Senior Director, Cloud Enablement, Finastra

Selecting best-in-class tools and technologies for FusionOperate, Finastra's DevOps engineers create seamless developer experience.

Finastra's first move towards DevOps adoption began with the implementation of a center of excellence, which focused on partnering product teams, and the adoption and implementation of DevOps tools and practices.

Using a combination of DevOps and Microsoft Azure services, Finastra's product teams began to collaborate and break down monolithic applications into smaller cloud-native services, enabling rapid innovation, iteration, and delivery. It was this success, and the desire to replicate it across the organization, that led to the creation of FusionOperate.

The key challenge for DevOps engineers when orchestrating such a platform is to ensure interoperability of technologies, which is why FusionOperate's systems, networks, application architectures, operations tools and technology stacks, are built using standards to enable integration.

Tim Sutherland, Systems Engineering Director, says, "In a DevOps environment, a shared platform must be purposely designed to deliver an agile infrastructure from which multiple product teams can consume resources on a self-service basis.

For FusionOperate, we chose best-of-breed, interoperable tools over bespoke technologies that demand dedicated engineers for implementation and maintenance.

Each technology was carefully selected based on how well it facilitated integration, avoiding needless complexity, which slows down development and delivery."

FusionOperate not only provides developers with the tools to build their solutions, it also enables deeper insight into their performance. Advanced telemetry tools and monitoring solutions, such as Azure Monitor, enable visibility into the consumption and analytics of Finastra's cloud services, allowing service teams to understand the performance of their applications and iterate accordingly, providing ever more robust services to Finastra's customers.

| The challenge | The solution | The journey | The result |

The result

Extending innovative capabilities of FusionOperate to wider financial services and fintech ecosystem with FusionFabric.cloud – Finastra's open innovation platform and app marketplace.

Through FusionOperate's software factory, which orchestrates delivery from dev to production using best-in-class tools, such as those provided by Azure DevOps, applications can be deployed on a continuous basis.

Standardized routes enable service teams to consistently automate functional, security, and performance verifications with Quality Gates for rapid feedback, providing assurance for product owners that any application or change released into customer-facing environments meets quality standards.

Harbinder Kang says, "The FusionOperate platform takes the cognitive load off service teams. Scalable and flexible cloud solutions, consumed via the self-service platform, can be implemented without prior experience, reducing the risks of employee churn and internal movement of technical personnel.

Furthermore, tools such as Microsoft Power BI allow teams to create dashboards that expose additional telemetry around developer velocity, productivity, and how each tool works within an environment, surfacing key insights that enable optimization of processes and products.

"Further to protecting consistency of delivery, FusionOperate empowers service teams to not only learn and develop as they work through prescribed development and delivery pipelines, it allows them to focus on writing code and improving the performance of their applications."

With FusionOperate, Finastra has accelerated innovation and delivery of its services through increasing the agility of service teams. Now, through FusionFabric.cloud Finastra has opened up the innovative potential of the platform to financial services and fintech firms across the globe by exposing its core technologies via APIs.

Leigh Brackley says, "When consuming solutions via FusionFabric.cloud, financial institution, fintechs and their customers can rest assured that these solutions will meet security, regulatory and auditory standards, wherever they are deployed, as the tools and technologies used to create them are the same as our own. Using our core technologies and low code tools, firms can increase their agility and provide cutting edge solutions for customers without overhauling their own core infrastructures. We did the work, so they don't have to."

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Contact us

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