

Manage Multi-Cloud Complexity by Keeping Dev and Ops in Synch

Sanjeev Kamboj, Chief Evangelist of Cloud, Data and DX at Fujitsu

As Chief Evangelist of Cloud, Data, DX at Fujitsu, Sanjeev Kamboj is responsible for helping customers transform their businesses to extract the most possible benefit from digital transformation. Here he covers how businesses can effectively leverage a multi-cloud strategy to drive their post-COVID recovery with agility and the ability to evolve at pace.

As I discussed in a [recent post](#), speed is the name of the game for businesses to keep up with changing market and customer demands. Over the last year or so, the rapid pivots and fast rollouts needed to keep business operations on track demonstrated the benefits of removing bureaucracy and empowering people to get things done. Leveraging multi-cloud has taken them far, but now, to remain competitive, businesses must maintain the pace of change in their development and rollout of applications and features – and for that, they need a high degree of agility.

However, despite the need to drive rapid innovation cycles, this can't be at the expense of precision and good business practices. You must bake agility into your corporate culture and operations, so it doesn't negatively affect security, drive up costs or result in uncoordinated customer service. And that means getting your DevOps ducks in a row.

Many businesses could take a leaf out of the books of the hyperscalers for their top-level DevOps strategy. Microsoft and AWS have been astonishingly prolific in app development. They have achieved this by essentially deconstructing their development into multiple bite-sized chunks, automating everything they can, and standardizing the tool stack. Then they wrap governance, compliance, and security around all their processes and issue multiple iterative updates.

However, it would be a mistake to think that this is about technology deployment, although the right choices certainly play a significant role. Instead, it's about having an organization in the right shape to maximize the impact of any implemented technology. My last post talked about avoiding the pitfalls of Conway's Law – which broadly says that any systems developed (or indeed implemented) by an organization could be doomed to mirror that company's inherent legacy structures.

But it's not inevitable – there's a way to avoid this happening – known as the 'Reverse Conway Maneuver'. This involves evolving and shaping your teams and organizational structure to promote and grow the architecture you want for the new markets you serve.

Effective DevOps is the very embodiment of the Reverse Conway maneuver. That's because DevOps is (or at least should be) a way of thinking, innovating, and working that is focused on customer outcomes, and one which boosts the enterprise's efficiency on a continual and iterative basis.

Tame your containers for improved DevOps

Today, most DevOps are built on containerization, the rapidly growing technology that supports this agile way of working. Its uptake is so fast that analyst firm Gartner says the containerized application market is expected to grow at a compounded annual rate of 34% to cross \$1 billion by 2025¹.

That's because enterprises investing in cloud technologies want to increase the speed of developing and deploying cloud-native software. What's more, they want to create applications that can scale easily and that are resilient. The use of containers created using open-source Kubernetes is also extending to the network edge for IoT applications, thanks to 5G networks enabling connectivity. In addition, the capabilities are also deployed in all public cloud hyperscaler solutions where their cloud-native tooling helps take customers on their journey of cloud-native service adoption. Now that multi-cloud deployments are commonplace, businesses have different expectations for their application environments and are keen to avoid being locked in to any one cloud provider.

But that's not to say that containers are necessarily easy to deploy. The level of complexity means a learning curve for deployment and ongoing management. This encompasses not just integrating into your infrastructure but also the intricacies of balancing costs, as the time to value can be significant. Ensuring that appropriate governance, compliance, and security are all in place also requires a high degree of expertise.

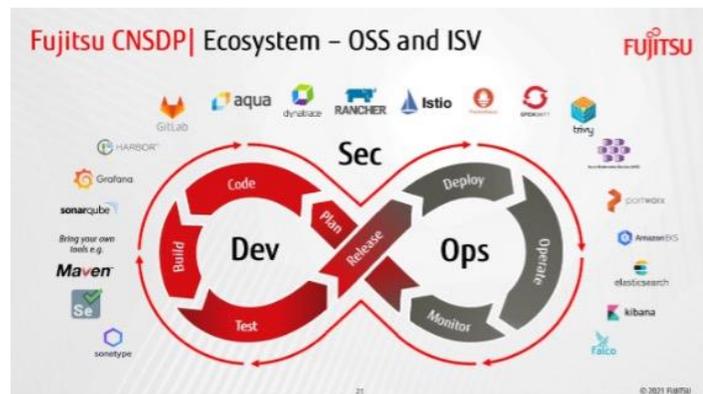
Introducing Fujitsu's Cloud Native Service Delivery Platform

End-to-end software management is a crucial component of extracting the maximum value from an application environment. Consequently, to help businesses create an end-to-end, fully automated cloud-agnostic environment that streamlines app development, Fujitsu has introduced what we're calling the Cloud Native Service Delivery Platform (CNSDP).

The premise behind the CNSDP is to allow everyone focused on app development and delivery to focus on doing what they do best in a ready-to-use platform that eliminates any risk of lock-in. The CNSDP features verified tools that ensure that governance, risk management, and control are built-in – and removes the need for applications developers and operators to manage administration, the integration of software components or security – instead concentrating on faster, more efficient software delivery.

Fujitsu's CNSDP is available in two versions – basic and extended. Both are validated and integrated software solutions by Fujitsu. The basic version comprises an OSS stack to enable customers to build and manage their software delivery environments. The extended option combines OSS and ISV in a managed services option that gives them peace of mind and the freedom to implement fast, efficient software practices without needing to address issues such as security or evergreening software. Both options can be deployed in any Kubernetes distribution running on the Public cloud providers or Private cloud.

Fujitsu has baked 30 integrated and validated components into CNSDP. These are designed for use not just by developers but also by operations and release teams and encompass the full spectrum of dev management to runtime and application management tools.



Additionally, CNSDP is very tightly aligned to Kubernetes native services delivery – and covers aspects including networking, service mesh, cloud-native storage, container databases, tools management, operations management, and app performance.

Managing Multi-cloud Organizational Plasticity

One key strategic trend for 2021 predicted by Gartner is the need for 'organizational plasticity', to adapt rapidly in the face of evolving customer demands and volatile market conditions. The key to achieving this in the face of multi-cloud complexity is taming DevOps and using containers to leverage them effectively and extract the most benefit.

Fujitsu's pre-integrated stack contributes by reducing development time and enabling developers to focus purely on app development, saving potentially months in ramp up and deployment time. It also manages cost. Thanks to leveraging Fujitsu's MSP discounts and relationships with partners, developers can use what they need when they need it, charged using a flexible pay-as-you-grow model.

Furthermore, Fujitsu's CNSDP fully supports any businesses wanting to pull an 'Reverse Conway Maneuver' by enabling the agility they need to adapt to rapidly changing market conditions with fast iterations and roll out of applications and features. It ensures that DevOps drives continual cycles of evaluation, learning, and change that encompass people, practices, and tools. And before you know it, that approach will spread across your entire organization.

For more information about Fujitsu's CNSDP and how it can help unleash the potential of your DevOps and both internal culture change and new customer experiences – visit: [FUJITSU Cloud Native Service Delivery Platform \(fastware.com\)](https://www.fujitsu.com/usa/cloud-native-service-delivery-platform)

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Sanjeev focuses on understanding a customer's business drivers and using technical excellence to identify, design and deliver web-scale architectures, strategies and specific multi cloud solutions that address these business drivers and add value to a customer's business. He has a deep technical knowledge and proven track record in leading sales teams and Cloud Enterprise Architects in delivering complex solutions, working with key Fujitsu partners such as AWS, Microsoft, Oracle, VMware, and Google.



¹ Source: Gartner Market Guide for Container Management, published February 18, 2021, by Dennis Smith and Wataru Katsurashima.