CONTINO

ENABLING DEVOPS TO SCALE WITH A FEDERATED MODEL

CLIENT PROFILE

Industry: Global publishing organization

Company: Established 100+ year heritage with global brands

Location: Worldwide

Employees: 5,000+

TOOLBOX/TECHNOLOGIES

amazon webservices™

BUSINESS

- Global publishing company with world-famous brands

- Both an established technology and market leader

- Multiple IT teams using diverse technologies around the globe

CHALLENGE

- Constant pressure to innovate to remain competitive

- Corporate mandate to move to Amazon Web Services

- Siloed practices across the United States, Europe and Asia

- Centralized DevOps team created bottlenecks

- Lack of visibility of future workload and ever-changing priorities

SOLUTION

- DevOps Maturity Assessment to establish improvement areas

- Migration to DevOps federated team model

- Skills transfer from center to local offices

- Creation of a Site Reliability Engineering (SRE) team

BENEFITS

- Regional teams empowered and more agile

- DevOps best practices adoption

- Team capacity increased through smarter ways of working

- Increased market competitiveness

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BUSINESS

Contino's client is a market leader in publishing, with various globally recognized brands. It publishes a series of high profile consumer and enterprise financial products, some of which have come into the company as a result of acquisitions over its long history. Whilst historically a publishing name, it has successfully transformed itself into a technology company embracing modern IT practices and cloud infrastructure technology to consolidate its leadership position.

Recent significant events had created institutional silos across the technology team and, as a result, multiple technical, organizational and geographical barriers spanning various regions and time zones. In addition, various business units across these locations were not integrated into the company's core infrastructure.

In 2014, the CTO started a DevOps initiative that would see a centralization of common operations tasks, led by a newly created DevOps team. However, due to internal changes, this team had limited resources to meet newly created responsibilities, and became a bottleneck due to limitations it faced with staffing, prioritization, leadership and overall funding. Adding to this dynamic was a mandate to move 75% of data center resources to the cloud (Amazon Web Services), across all companies in the group. Given an absence of expertise, there was a risk that this migration would be a "lift and shift", without any strategic overview or considerations.

CHALLENGE

Contino was asked to make an evaluation of the situation, and bring an independent perspective to a politically complex environment. It recommended applying the rigor and structure of the company's "DevOps Maturity Assessment", which has 9 categories and 220 individual areas relating to how software is designed, developed and operated.

At the end of July 2015, Contino consultants conducted a series of interviews and observations during a two-week period in multiple locations (New York, South Brunswick and Minneapolis) to establish practices and differentials between each team. For example, it captured anomalies between groups working on the Amazon Web Services (AWS) implementation; some were experiencing great success whilst others were struggling. Significant differences in the levels of agile and

operational maturity were found; for example, some teams only used basic testing practices whilst others were advanced with agile development approaches.

Specific barriers to progress that were identified included:

- Replatforming to AWS without adequate foundations, or architectural/ operational strategies in place.
- Technology-only adoption of agile.
- Institutional silos within the technology group.
- Renaming operations to DevOps.

Overall, the assessment identified 10 themes that required investment to ensure that the company could grow and continue to be a technology leader in the financial publishing sector.

SOLUTION

Contino completed a comprehensive analysis and reported back to the company's CTO, who valued the view of a third-party expert. One of the core Contino recommendations was that of transitioning the DevOps group to a federated DevOps model. This proposal was a result of observations made during the Maturity Assessment, which revealed that the existing highly centralized DevOps team structure was seen as too "command and control", was inflexible to meet ever-changing requirements, and was creating bottlenecks as a result. Contino proposed the creation of a federated tooling and services team that would serve technology by championing, evangelizing and governing the shared and desired development and operational outcomes of each business unit.

This would be achieved by creating Centres of Excellence across DevOps disciplines, leveraging Open Source tools and ways of working extensively, to create DevOps assets, and templates for reuse across technology.

The concept of "Trust but Verify" was put forward, in which dev teams are given appropriate tooling and access to do their job, but their work is verified to ensure they are operating within established boundaries, with complete visibility and transparency built into each team's work for risk mitigation.

The company's CTO welcomed the federated concept, and the company embarked on this new approach with Contino instrumental in the project. Contino consultants were embedded in the new regional teams to upskill them and ensure a smooth transition to the federated model.

In parallel, the CTO asked Contino to determine if a Site Reliability Engineering (SRE) function would support the increasing demands placed on the company's engineering community, who were firefighting multiple requests from different business units with no visibility of what was coming downstream to them.

Contino oversaw the introduction of a Tooling and Services Operating Model Framework that ensured policy, process and validation would be baked into the company's toolset from the outset. As a result, anyone using the tools would be following policy. Meanwhile, SRE would give operations a more robust capability and ensure that releases were of the highest quality. Platforms would be continually pushed to their limits, with improved performance engineering. Efficiencies resulting from the introduction of fundamental agile project management principles freed up the time of almost two FTE resources.

BENEFITS

Adoption of a federated DevOps team model would bring a number of advantages, including:

- A central team ensures that application infrastructure and application configuration meets the basic needs of all business units, thus eliminating redundant technologies and driving consistency across tooling and implementation.

- Opportunities to leverage innovation are generated from project-based work and re-purposed across all business units.

- Overall Continuous Delivery capability and maturity of teams enhanced, through targeting Subject Matter Expert (SME) secondment.

It was forecast that an SRE function would have a positive impact in a number of areas, such as:

- An improvement in the overall quality of the product produced, by encouraging engineering excellence from the delivery team.

- A reduction in the time taken to resolve production issues by cutting the time taken to identify and fix bugs.

- Continual demand and capacity planning helps ensure that the product can continually scale to meet future needs.

ABOUT US

Contino is a technology and services company specializing in DevOps, Continuous Delivery, and transformational programs. The company's Rapid Prototyping and DevOps Acceleration services help organizations speed time-to-market for high quality new and re-tooled applications. From strategy and operations to culture and technology, Contino helps business and technology leaders identify and address opportunities for growth and profitability. Contino provides training, development, deployment and optimization services for the full stack of DevOps and Agile technologies including application lifecycle management (ALM), modern development and Continuous Delivery tools, micro-services architecture, containerization, security, analytics, testing and cloud infrastructure platforms.

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