Achieve Continuous Delivery for Financial Services

E-BOOK

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Let’s Talk Continuous Delivery

As DevOps has become mainstream the practice of continuous delivery is arguably the one that has gained the most traction as it plays a key role in accelerating the delivery of applications that also must maintain a high quality.

This ebook shines a light on adoption barriers, implementation needs, and the success companies experience when they flip the switch to Continuous Delivery. For all financial service organizations and insurers, Continuous Delivery can transform internal processes and end-user experiences that drive improved efficiencies and brand dedication.

A Lightbulb Moment: Aiming for Efficiency & Profitability

DevOps, Continuous Delivery and quite possibly every other change since the dawn of humankind for that matter, have been met with skepticism. DevOps as a movement initially had its skeptics but the business outcomes DevOps practices have enabled across multiple industries has made it mainstream.

That special moment when financial services organizations realize how much-end-to-end efficiency and profitability are possible with Continuous Delivery is the moment thins really take off. Disciplines like DevOps and DataOps, along with the adoption of cloud, are allowing developers to truly focus on building applications that drive business value versus spending time on settin up and configuring the plumbing behind applications, data and infrastructure.

> “Automation has played a major role in reducing low-value repetitive work, but the real value is driven from collaboration driving greater efficiency and effectiveness.”
>
> **Stephen Thair**
> Co-Founder of DevOpsGroup
> (formerly DevOpsGuys)

Closing the Continuous Delivery Circuit with Company-wide Buy-in

The number of DevOps tools available for everything from source control to security and monitoring now range in the hundreds. While there is no shortage of tools in any category of the SDLC the big barrier to DevOps lift off is organizational culture. Changing the culture requires cohesive and company-wide vision and focus which needs to be led and espoused by the C-suite. Simply put, you must lay the right cultural circuitry before you can successfully flip the switch on Continuous Delivery.

While the impetus for change must come from leadership, buy-in from the broader team is an essential step in the process. It is important to articulate to the teams who will be executing the change the "what's in it for me" aspects. DevOps is still often more driven by Dev than Ops. Most DevOps conferences acknowledge this trend in their keynotes. Given this scenario it is important that the value Ops will bring in the new model is clearly spelled out.

There will always be developers and team members that fear the changes Continuous Delivery may bring. Help technical staff realize that the time they gain back with automation will enable them to execute more innovative projects, and cut their losses on dull, repetitive tasks. Once that lightbulb goes on, adoption of Continuous Delivery can start to feel as easy as flipping a switch.

Finding the Right Toolset for Flipping the Switch

Business needs are evolving, requiring more innovation faster, which is putting immense pressure on operations.

Consider the following statistics from IDC Research[1]:

- **Average cost** of unplanned application downtime per year for Fortune **1000** companies is **$1.25** billion to **$2.5** billion
- **Average hourly** cost of infrastructure failure is **$100,000** per hour
- **Average cost** of a critical application failure per hour is **$500,000** to **$1** million

To avoid the cost of these failures and at the same time serve the rapidly changing needs of the business DevOps practices start making a lot sense. Have people collaborate early and often and strive to automate as many phases of the SDLC as possible.

FinServ organizations seeking to improve upon modern application release processes should loot at agile methodologies, such as Continuous Delivery. Obviously, finding the right combination of tools for flipping the switch on Continuous Delivery doesn’t happen overnight.

[1] https://devops.com/real-cost-downtime

A critical function in running applications in production is application workflow orchestration. This ensures that business workflows spanning disparate applications can be run at scale ideally from a single pane of glass. Primarily this function has been managed by operations but, as DevOps is adopted, it provides the opportunity to allow application development teams to incorporate production capabilities into their development process earlier to ensure that their applications are release ready at any time. Choosing tools that allow teams to work fast and avoid friction starts with an assessment of both tools and expertise that currently exist in-house.

> “Continuous Delivery is a shift that touches the entire organization so before the shift can be made, there must be buy-in from the entire organization on what it means for them, the desired outcome, and how to measure. There should be a complete assessment of current talent and tools. Only then can the Dev and IT team work together to determine what tools will help facilitate the shift to Continuous Delivery.”
>
> **T. Devon Artis**
> WS Cloud Devops Consultant
> at Blue Cross and Blue Shield of North Carolina

Blowing a Fuse: Embrace Failure for True Efficiency

DevOps has gained mainstream momentum, but a variety of opinions still exist about the effectiveness of DevOps initiatives. Creating a new and siloed DevOps department is a sign that DevOps has fundamentally failed in its core mission: breaking down the silos and barriers that exist between Development and Operations. DevOps is not a department, and methodologies like Continuous Delivery backfire when treated in a siloed fashion. Rather, DevOps is a philosophy that acts as a bridge between departments.

But this fundamental failure should be embraced and celebrated for what it is: a steppingstone towards future efficiency and learning. Because it is unavoidable in striving for technical excellence that we'll blow a fuse now and again. What really matters is whether we open up the breaker and figure out how to keep the lights on before the next circuit blows.

Flipping the Switch to Jobs-as-Code

What's Possible with Jobs-as-Code

Leading development professionals recognize the value of Jobs-as-Code in bridging the DevOps divide and achieving higher performance. But for many, there are major hurdles in aligning application development and operational deployment. And while Jobs-as-Code is one of the many processes supported within DevOps, its immense value and purpose are all too frequently overlooked. Think of it as the live wiring that connects the many phases of the development lifecycle – the circuitry that instantly connects core application code, developers, operations workflows, and job scheduling to spark immediate improvements in application quality and production speed.

Three benefits of choosing to flip the switch with a Jobs-as-Code approach:

Get to production faster

BMC clients accelerate application delivery speeds by 30%. This time and cost-savings nets huge efficiencies and frees up technical resources to focus on strategic initiatives.

Unlock productivity

Shift-left to identify issues early on, saving headaches for development and operations team members, and further aligning the broader organization for greater productivity.

Streamline change cycles & business services

Freeing up development resources means less time reacting to bugs and more time focusing on business-critical strategic initiatives.

Getting to Production Faster Without Sacrificing Quality

Jobs-as-Code helps organizations operationalize applications faster by embedding automated job scheduling into the current development and release process. But let's break this down further. Most application lifecycles contain the following components:

1. Code that implements the business logic (e.g. Java®, Python®)
2. Infrastructure that applications run on (e.g. Linux® server, web application server)
3. Everything in between (e.g. databases, or SQL statements that create tables and rebuild indexes and schedule jobs). This final category of "in betweens" contains many dependent jobs that must execute as planned, and often in a specific order for an application to function. Jobs-as-Code speeds application release and improves quality by treating these "in between" steps and jobs in the same fashion as the rest of the code, instead of as separate pieces of nebulus infrastructure.

In short, defects and errors are found earlier in the development phases of the SDLC through shift-left best practices. Instead of halting production to resolve issues at the end of the application build, Jobs-as-Code allows developers to iteratively resolve issues before code is pushed to production. Finding defects and bugs earlier in the SDLC results in:

- ✓ **Less re-work** and fewer production delay scenarios through earlier issue identification
- ✓ **Reduced costs** by moving application release schedules forward faster
- ✓ **Higher application quality** as a result of more rigorous code testing
- ✓ **Fewer errors overal**l when rolled out into production

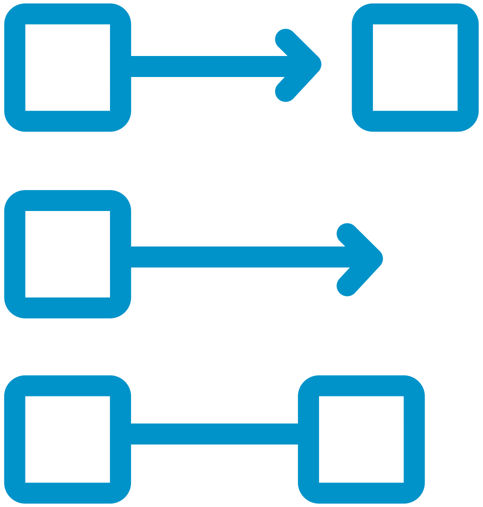
About Jobs-as-Code with Control-M

If you're ready to flip the switch on greater application quality, faster release times, and improved change deployment cycles, look at Control-M from BMC.

Adopting Jobs-as-Code with Control-M is revolutionizing the way application developers interact with operations. This approach to job scheduling provides developers with the ability to define, test and debug jobs and business automation workflows as code, making it readily available anytime, anywhere.

Simplify Complex Workflow Orchestration while meeting your Operational Standards through:

- Easy Dev, Ops and LOB user consumption
- Embedding workflow orchestration into your DevOps toolchain
- Auditing for compliance and governance
- End-to-end orchestration across multiple clouds
- Simplified, scalable data pipelines
- Integrated, traceable workflow and file transfer connectivity
- SLA management with intelligent predictive analytics
- Proven scalability and stability



For more information

To Learn more about Control-M
Try Control-M

About BMC

From core to cloud to edge, BMC delivers the software and services that enable over 10,000 global customers, including 84% of the Forbes Global 100, to thrive in their ongoing evolution to an Autonomous Digital Enterprise.

BMC—Run and Reinvent

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