How change managers become change enablers
Exponential growth in the rate of DevOps changes must be met with automation

It’s not easy running change management in IT today. The role is one of the most critical that exists: protecting and maintaining a secure, stable, high performing technology platform that is the lifeblood of any business while managing the effective and efficient upgrades that are a part of everyday life. Change managers are accountable not only to the business and to IT, but also to auditors and regulators to provide evidence of a well-managed and controlled environment. And they’re also accountable to developers, ensuring that a developer’s hard work can start to deliver benefit and value to the business as soon as possible.

If the role of change manager is tough already, it’s only getting harder. The growing adoption of DevOps is increasing the rate of change and putting even more pressure on change managers to adapt and evolve.
Change Management and DevOps—an uneasy partnership?

The goal of DevOps is to streamline the process of getting products and enhancements from the developers to the customers—delivering speed, efficiency, and ultimately value. Historically, when change managers hear that a change needs to be deployed faster, the alarm bells go off. That’s always been a recipe for cutting corners, increasing risks, and jeopardizing the very platforms that change managers work so hard to keep safe.

But it doesn’t have to be that way. In fact, in today’s world it can’t be that way. Change managers must embrace the speed of DevOps. However, that doesn’t mean they have to allow themselves to be overrun, or to compromise those values. Recent improvements around change standardization have helped, but developers are moving to environments that can allow for multiple changes per day. These changes, by definition, are not always standard, so how to keep up? The key is to implement DevOps in the right way. This means developers working with change managers, not around them. Dev and Ops truly joining forces.

Automation and Insight—the pillars of success

To effectively and efficiently embrace DevOps, change managers need two key elements—automation and insight.

• Automation allows them to streamline the necessary processes, controls, and approvals without compromising on the governance that protects the business.

• Insight needs to be simple to implement and provide visibility into what is happening in a context that is meaningful, that facilitates communication with developers, auditors, and the business, and that supports the right decisions.

Let’s look at those factors in more detail.

Automation

When organizations first embrace DevOps their immediate focus is on speed—faster deployments, less time from ideation to delivery, and the elimination of any delays in the release process. Work is broken into smaller steps that iterate more rapidly. But the pursuit of speed is a tough balancing act. Go too slowly and you impact the business and risk losing out to competitors. Go too quickly and you risk impacting the reliability of the technology environment with potentially dire consequences.

Change managers have made great strides with standard changes and other improvements to speed up the change process. But standard changes are not flexible enough to meet the needs of a rapidly-evolving product organization and can still lead to failures in production.

“Perhaps the biggest lesson we have taken away from our experience is that this sort of ‘cultural change’ is not something that can be imposed or enforced. It has to be a collaboration between teams.”

– Anne Kristine Næss, Enterprise Architect, DNB
Automation founded in sophisticated but easy-to-implement policies allows change managers to go further to accelerate the release management process to the speed required by DevOps without risking the stability and security of the infrastructure. To be effective, change managers need automation that encompasses:

• Planning, scheduling and approvals, so that an integrated, cohesive release management plan can be maintained across the entire organization

• Checks and validations that ensure all regulatory, compliance, impact, audit, and performance safeguards are met

• Automatic data capture of all product and infrastructure configuration changes and updates for effective ongoing management

• Multiple connected checkpoints and gates that act as barriers to unapproved changes and enable recovery points for problems

Automating a change ticket creation and automating the change approval requires sophisticated policy that can encompass nuances like currently open incidents that relate to the service under change. In addition, change managers must be able to adjust deployment procedures as needed for unique releases or for riskier changes that require greater levels of oversight.

Implemented well, change automation can seamlessly integrate the role of change manager into the DevOps release process and give developers rapid and completely automatic access to deploying code into production. But on its own it isn’t enough.
Insight

Change managers are guardians of the technology infrastructure. By extension, that also makes them guardians of the business. No matter how well configured and implemented, the automation of much of their work risks a loss of the change manager’s ability to act as that guardian by removing some of the hands-on visibility that is traditionally associated with their work.

To compensate for this, change managers need tools that integrate easily with the development process and the live environment and provide them with that visibility, but it’s not enough to simply provide them with a report of activities. Instead, change managers need the ability to study and analyze what is happening, turning that information into refinements to the process, further enhancing both the efficiency and effectiveness of automated change management. They need access to that information with the minimal impact on the developers that are pushing work through the process.

To achieve that requires insight into the entire value stream—reporting with context. Not just a record of what happened, but a record of what happened as viewed through the lens of a change manager. There must be the ability to analyze the change management environment to understand a wide variety of interconnected variables, such as:

- Where and when delays and bottlenecks occur and the type of change that is most likely to trigger them. This will inform the ability to further reduce time in the process.
- The number, type and location of defects and problems and the connection from those problems to the changes that caused them—even all the way back to what planning action kicked off the work. This allows for root causes to be pursued and corrected.
- The timing of requests, approvals and deployments and the variances across platforms and business areas. This will drive understanding of potential risks and allow for process refinements.
- The systems and platforms that are most likely to experience outages, delays or instability through change management. This will allow for additional focus on those parts of the technology infrastructure to improve performance and to refine automation policies.
- A comprehensively connected view of the entire value stream from initial ideation and planning through to performance in production; i.e. tying the idea to the story, to the code that was changed, to the tests that were run, to the change request, to incidents and other performance information. This simplifies the management of incidents and speeds up remediation and can make a significant improvement in handling audit activities.

In addition to these change management-focused layers of insight, there must be similar visibility to auditors and regulators. Implemented well, change automation combined with effective analytics will provide unprecedented levels of reliable audit data that will eliminate any concerns that processes and controls are not being managed appropriately. Many roles gain from these kinds of insights with capabilities that are also known as Value Stream Management.¹

A springboard, not a destination

Change managers can be enablers of scaling DevOps in its early days in an organization. When they are satisfied that automation and insight are combining to facilitate faster speed while still controlling system integrity (and in fact improving that integrity), they will quickly become champions of the concept. But being a catalyst for the need for speed isn't enough. DevOps isn't just about deploying faster, it's about driving value, and that has to be the next logical step.

The latest State of DevOps report revealed the dramatic connection between the level of evolution of DevOps in a company and the effectiveness of their change management. Firms whose employees believe their change management is effective are three times more likely to automate testing and deployment than firms where confidence in change management performance is low. Also, firms that have high employee involvement in the change management process are more than five times as likely to have highly effective change management than firms with low employee involvement.

Norwegian Bank DNB have applied the end-to-end approach to managing the pace of DevOps and building cooperation between the DevOps teams and Change Managers. You can read more about their journey in their blog.

The bottom line

If you’re a change manager then you know that you have a duty to help the business achieve its goals as quickly as possible. But you also know you have a duty of care to ensure the business isn’t exposed to unacceptable levels of risk. You need to ensure you aren’t a bottleneck to innovation, you need visibility to confirm that, and you need to be an enabler of long-term value.

Find out more at servicenow.com/devops.html

“Previously, projects or tasks were thrown over the wall between teams. Today, we have one technology platform that brings together the entire process, and all the elements in the chain of delivery.”

– Marcel van de Lustgraaf, CIO, VIVAT

3 See https://blogs.servicenow.com/2020/from-clash-of-cultures-to-happy-coexistence.html