Balancing Innovation With Governance
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Overview

Are IT innovation and governance at odds with one another? On the surface, the answer seems to be “yes.” After all, the rapid pace of delivery and iteration possible through Agile and DevOps creates challenges within governance models designed for slower Waterfall-like projects.

Yet there’s no turning back the clock on these modern methodologies. A hybrid governance strategy is essential for harnessing both the cloud and on-premise data centers as vehicles for delivering applications and services without going over budget or creating new accountability issues.

With no governance in place, initiatives like DevOps-driven development will fail. In fact, Gartner estimates that 75% of all DevOps projects break down due to issues like poor change management when trying to scale out a key service, for example.¹ The right processes and technologies can help avoid these situations and reconcile innovation with governance.

Product Teams in the Agile and DevOps World

Thanks to adoption of Agile scrum and related DevOps practices (e.g. kanban), product owners, managers and developers can now move faster than ever. By their nature, these models allow project teams to maintain high release quality and sustain focus on current project priorities. The use of cloud IaaS and PaaS can accelerate their pace via synergistic capabilities including:

- **Self-service:** Instead of relying on others, DevOps teams can leverage a self-service portal to discover and provision what they need from public clouds.

- **Orchestration:** Instance types, configurations, identity and access management roles can be orchestrated into one cloud API call.

- **Application portability:** Technologies such as containerization allow for quick movement of applications between environments with minimal overhead.

Agile, DevOps and cloud all fit together like pieces in a puzzle of convenience and cost-effectiveness, benefitting both IT and the business. The growth of multicloud environments is a natural progression of commitment to fast-paced innovation among project teams, which requires the fastest, most flexible combination of cloud services available. Today, more than 80% of public cloud users select multiple providers.²

To keep pace with development, operations teams have turned to automation in the form of solutions like Infrastructure-as-Code (IaC). IaC standardizes key processes for provisioning and deployment and automates them to better support DevOps teams. Meanwhile, DevOps no longer has to complete as many time-consuming, error-prone manual tasks.

IaC sustains testing, staging and production environments. It can also pair with containers to keep the continuous integration/delivery pipeline flowing. Nonetheless, the highspeed of DevOps can create governance challenges, such as overspending or complexity related to staying on top of numerous privileged accounts and tools.3

Governance is necessary to set guardrails that will prevent such risks from spiraling out of control. However, the best practices in question need optimization for the unique characteristics of today’s DevOps cultures and multicloud environments. In these cases, traditional governance is not always a good fit.

3 e3zine.com/2018/12/21/devops-security-risks/
Why Innovation and Governance Can Clash

In a typical DevOps organization, projects progress through many quick increments. In this scenario, it’s easy for project tasks to bypass the very oversight processes meant to ensure that they don’t exceed budgets or become disconnected from business goals or architectures.

Think of the once-popular Silicon Valley mantra “move fast and break things.” In this case, it’s an organization’s ability to keep accelerated projects on track while sustaining cloud investments that may break.

The OpEx business model of cloud service providers can make it difficult to contain expenses. Indeed, almost 60% of IT decision-makers report having exceeded their cloud budgets at some point.4

In general, breakneck innovation can create issues in:

- **Accountability:** With everything moving so fast, who owns individual applications and workloads, their associated costs and security responsibilities?

- **Decision-making:** Is there a standardized, non-siloed process for deciding which architecture to use and how to track consumption?

- **Optimization:** Are cloud resources being rightsized on a regular basis? Are they managed in accordance with a standard policy?

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Another way to understand the tension between IT innovation and governance is to think about how an Agile project, for instance, might pass through the different checkpoints of a traditional governance model.

Let’s say the scrum team for this project had decided not to select a specific architecture at the outset. Instead, they’ve let one emerge as requirements evolved. This decision will likely run up against an immediate barrier, as proper project governance would mandate verifying the architecture in the early stages.

Moreover, the Agile approach, which adds iteration cycles to fix bugs and resolve technical debt, means that work is often planned without adequate accounting for its time and costs. This results in budgetary surprises.

There’s a big gap between organizations that have streamlined their Agile and DevOps practices to avoid these types of risks and those who haven’t. Proper governance is one big reason. Elite DevOps companies have a 14% better chance of avoiding change-related failure than non-elite counterparts. But they also deploy 208 times more often.5

5 devops.com/the-state-of-devops-report-2019-is-out/
What are the Keys to Better Governance?

Building a governance model that implements real guardrails but doesn’t compromise the speed of innovation isn’t a pipe dream. It begins with defining the relevant risks in the environment and then establishing agreed-upon processes for who will manage them, and how.

A successful governance model will answer:

- Who are the specific risk owners in each context?
- Who will monitor it, and with what tools?
- Who will create and update relevant policies?
- What controls and security measures are in place?

Processes like scrum provide a good framework for discussing and reinforcing these guidelines in everyday practice. Specific actions might include requiring multiple reviewers for major changes or setting clear rules for who may stand up, monitor and retire a workload. The latter step alone can save tens of thousands of dollars that would otherwise be wasted on idle or mis-sized resources.⁶

Effective governance also requires the right technologies for translating principles into reality. For example, containers help increase portability. Automation platforms give product and ops teams greater reliability, speed and scalability at every stage of an Agile/DevOps workflow.

There’s no shortage of DevOps-specific tools for automating everything from configuration management to version control. Better still, these solutions can be used alongside others, such as cloud management platforms, that streamline the discovery and provisioning of cloud resources, as well as the automated enforcement of defined security policies.

The end result is real accountability and control of costs, even in fast-paced environments that are constantly responding to changing business requirements. In this way, governance serves as a form of futureproofing, since it helps control costs and maintain security as IT development and operations evolve.
Conclusion

IT innovation and proper governance are reconcilable. Organizations can take advantage of the capabilities of Hybrid Multicloud environments and follow Agile and DevOps principles without exposing themselves to undue risk from cost overruns, security breaches and technical mishaps.

Harmonizing innovation with governance is easier with the help of an experienced managed service provider. Learn more about how Softchoice can help you strike the right balance between the two by contacting our team.