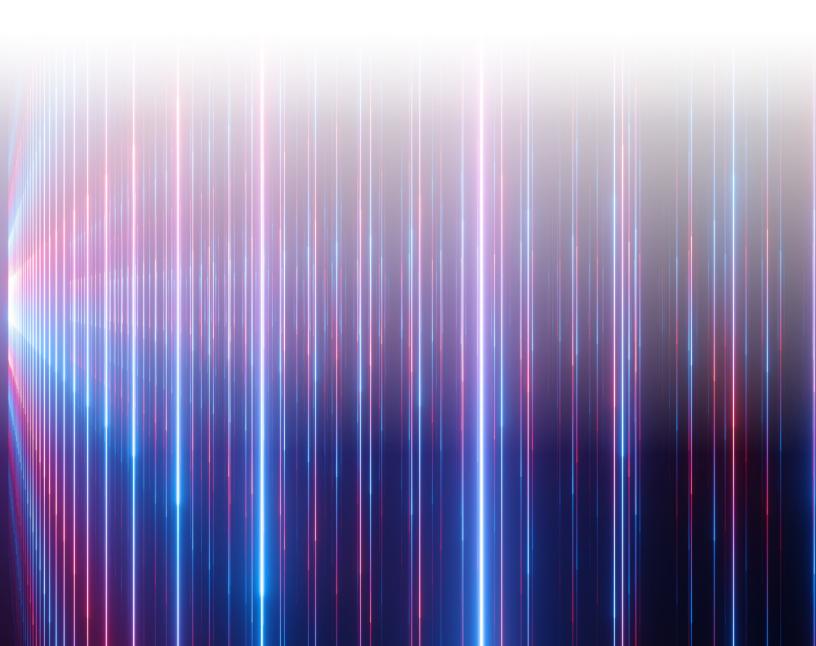
# The Business Value of AWS Cloud Governance Services



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# **Executive Summary**

Cloud services transform the way applications are developed, secured, and managed. Organizations of every type, size, and industry are using the cloud to automate operations, deliver rich customer experiences, and bring new products and services to market with higher velocity.

As the usage of cloud services has increased, so has the need to programmatically apply controls to ensure that environments can rapidly scale with consistency and maintain compliance with external regulations and internal governance policies.

IDC spoke with AWS customers using AWS Cloud Governance services to understand the impact on their ability to govern, manage, and optimize their AWS environments as compared with their previous methods of governance. Study participants reported that implementing AWS Cloud Governance services has enabled them to establish more cost-effective, automated, secure, efficient, and lower-risk AWS environments.

Based on interviews with current AWS customers, IDC calculates that they will realize cross-organizational benefits that include reduced risk, governance at scale, and smoother business operations. These benefits drive financial value in lower infrastructure costs, staff efficiencies, employee productivity gains, and higher revenue that IDC calculates will be worth an annual average of \$134,300 per 100 AWS EC2 instances (\$6.56 million per organization).

## Interviews show that customers will achieve these benefits through use of AWS Cloud Governance services by:

- Providing seamless identity and access management and streamlining migrations to AWS environments
- **Rightsizing AWS environments** through improved resource use understanding and cost attribution
- Requiring less staff time for day-to-day management and security through improved governance and policy application
- **Increasing developer efficiency** by automating governance, deployment, and change management activities
- **Instilling more robust governance practices,** thereby enabling more efficient auditing and compliance activities and reducing overall risk

### Click highlights for related content in this document.

#### BUSINESS VALUE HIGHLIGHTS

### **396%**

three-year return on investment

#### **46**%

faster to complete application migration to AWS

#### 37%

more efficient management of AWS environments

#### 7-month

payback on investment



## Situation Overview

The cloud has become a cornerstone of modern business, enabling agility, scalability, and cost reduction. But this capability requires responsibility. The need to scale rapidly with consistency while maintaining compliance with external regulatory requirements and internal governance policies is critical to the success of any business.

Cloud governance is the framework of policies, processes, and tools that guide an organization's use of cloud computing. It is a set of controls that organizations can use to improve security, compliance, efficiency, resilience, and cost-effectiveness in the cloud environment.

## There are several reasons why companies implement a cloud governance strategy:

#### • Security:

Cybersecurity challenges continue to evolve, and organizations are looking to best practices and processes that will help provide higher assurance in the security of the cloud. Cloud governance helps mitigate these risks by establishing access controls, data encryption protocols, and incident response plans.

#### Compliance:

Many industries have strict regulations regarding data privacy and security. Cloud governance ensures that your cloud activities adhere to these regulations, avoiding hefty fines and reputational damage.

#### Cost Optimization:

Cloud governance helps you define resource allocation policies, evaluate resource usage, and rightsize cloud spending.

#### • Efficiency and Agility:

A well-defined cloud governance strategy streamlines cloud operations by automating tasks, standardizing workflows, and promoting self-service provisioning for authorized users.

The need for a cloud governance strategy becomes even more important as businesses begin to integrate AI technologies into applications and process workflows. IDC predicts that by 2025, 70% of enterprises will form strategic ties to cloud providers for Generative AI platforms, developer tools, and infrastructure, requiring new corporate controls for governance.



# Overview of AWS Cloud Governance Services

AWS Cloud Governance is a set of rules, processes, and reports that helps customers align AWS cloud use toward defined business objectives. It is intended to address these top customer needs:

- Scaling securely by maintaining security despite changes to the business, including mergers and acquisitions, divestitures, or exits
- · Accelerating innovation by balancing governance and agility for developers
- Operating in a dynamic regulatory environment by complying with regulatory and corporate standards, such as PCI DSS and NIST 800-53
- Maintaining resilience with the ability to provide continuous service in the face of constant change

AWS's vision for governance seeks to maximize key elements of compliance, agility, and innovation. AWS Cloud Governance services are built to manage highly dynamic cloud resources on a global scale. The services can reduce complexity by offering a single control plane for customers to manage and govern their resources on AWS.

### **AWS Control Tower**

AWS Control Tower offers a simple and efficient way to set up and govern a secure, multi-account AWS environment. It establishes a landing zone that is based on best-practices blueprints, and it enables governance using controls from a prepackaged list. The landing zone is a well-architected, multi-account baseline that follows AWS best practices. Controls implement governance rules for security, compliance, and operations. AWS Control Tower reduces the heavy burden of defining, mapping, and managing the controls required to meet the most common control objectives and regulations.



### **AWS Organizations**

AWS Organizations offers policy-based management for multiple AWS accounts with consolidated billing that serves as a security boundary for resources. This allows customers to centrally manage their environments as they scale usage. AWS Organizations makes it possible to follow cloud security best practices by isolating workloads across multiple accounts and managing them centrally. With accounts within an organization, it is possible to allocate resources, create new accounts, and apply governance policies.

### **AWS Config**

AWS Config continuously assesses, audits, and evaluates the configuration and relationships of resources on AWS, on premises, and across multiple accounts. The service is used by customers to streamline operational troubleshooting and change management, to deploy compliance-as-code frameworks, and to audit resource configurations for potential vulnerabilities. It simplifies administrative activities through the use of conformance packs that makes it easier to deploy multiple rules and remediations across an account or AWS region.

### **AWS Audit Manager**

AWS Audit Manager maps compliance requirements to AWS usage data with prebuilt and custom frameworks, including SOC 2, NIST 800-53, HIPAA, and the Best Practices for Generative AI. The service automates evidence collection for in-scope accounts and services, allowing customers to focus on confirming that controls are working properly. This helps identify root causes of noncompliance and generate audit-ready assessment reports. AWS Audit Manager can also leverage Config and other AWS services for automatic testing of controls.

Other AWS Cloud Governance services include AWS Service Catalog, AWS Trusted Advisor, AWS Artifact, and AWS Cost Explorer. Together, these services help customers create the optimal cloud foundation, centrally control risk, and establish consistent governance across the entire IT estate. It also enables developers to shift left by incorporating cloud security and governance policies earlier in the development process.



# The Business Value of AWS Cloud Governance Services

### **Study Firmographics**

IDC assessed the impact for organizations of implementing and using AWS Cloud Governance services to understand the financial, operational, and business impact. Interviews were in-depth in nature and designed to understand the quantitative and qualitative impact of using AWS Cloud Governance services.

Table 1 provides information about the firmographics of interviewed AWS customers.As shown, they had an enterprise profile, with 20,313 employees and annual revenue of\$6.99 billion on average (medians of 6,250 employees and \$2.08 billion in annual revenue).The AWS customer sample had diverse geographic representation, with organizations fromNorth America; Latin America; Europe, the Middle East, Africa (EMEA); and Asia/Pacific (APAC).Interviewed organizations also spoke about experiences of varied industry verticals, with thefinancial services (2), advertising, cybersecurity, education, government, media and events,and software sectors represented. For additional details about study participants, pleasesee Table 1.

#### TABLE 1

#### **Firmographics of Interviewed Organizations**

	Average	Median	
Number of employees	20,313	6,250	
Number of IT staff	2,656	600	
Number of business applications	808	500	
Annual revenue	\$6.99B	\$2.08B	
Countries	United States (4), Australia, Canada, Brazil, United Kingdom		
Industries	Financial services (2), advertising, cybersecurity, education, government, media and events, software		

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024



### Choice and Use of AWS Cloud Governance Services

Interviewed organizations cited common IT and business challenges that led them to choose to use AWS Cloud Governance services, including needing greater control over their AWS environments and needing to improve their capabilities in areas such as logging, auditing, governance, compliance, and spend management. Study participants also mentioned the complexities of managing architecture standards, network segregation, and consistent policies as significant concerns. In some cases, interviewed customers wanted to leverage AWS's Cloud Governance services to replicate their established and effective on-premises governance approaches in the cloud, thereby simplifying governance of complex environments, enhancing regulatory compliance, and improving reliability and redundancy in a cost-effective manner.

#### Interviewed customers provided specific examples of their considerations in deciding to implement and use various AWS Cloud Governance services:

#### Simplify governance of complex environment:

"We're mainly using AWS Cloud Governance services to simplify our governance of a complex environment ... It helps us make sure we're applying the right controls, doing the right things at the right times in the right places. Overall, it makes it easier to do the right thing and harder to do the wrong thing."

#### Need for standards and understanding of AWS spend:

"We were challenged by a lack of overall ownership and accountability and not having centralized logging, auditing, governance, and compliance. We had a limited understanding of our overall AWS spend. We also lacked general standards around architecture, including segregation and segmentation."

#### Manage cost, adhere to best practices:

"As our cloud maturity increased, it became necessary to manage and separate and delineate the use of services by different departments and teams and to track cost. Also, we wanted to be able to set policies and assess whether our constituents were following required best practices and be able to follow up when not."

#### Translate governance to the cloud:

"We established our modernization strategy with AWS and had to define our governance or replicate as much as possible from our on-premises governance and translate that to the cloud. We worked with AWS to establish a strategy to leverage AWS Cloud Governance services to do this."



#### Prefer native AWS solutions with integration:

"We knew how to host systems on premises but not how to do so for systems that sit in AWS. There were two options: going native, using AWS tools that are provided for this purpose, versus using third-party governance controls ... We felt that using the native AWS tools would be a better option because they would be better integrated."

Table 2 details the AWS environments of study participants supported by AWS Cloud Governanceservices that included use of AWS Organizations (all eight interviewed customers), AWS Config(seven of eight), and AWS Control Tower (six of eight), among others. As shown in Table 2,these AWS Cloud Governance environments are significant, with an average of 4,883 AWS EC2instances, well over 1.5PBs of data (1,693TBs on average), and an average of 16,143 employeesusing applications running on AWS. Further, study participants linked over 70% of theirorganizations' revenue to their AWS Cloud Governance environments, underscoring the criticalityto their overall business outcomes.

#### TABLE 2

#### AWS Cloud Governance Use by Interviewed Organizations

AWS Cloud Governance Environments	Average	Median
Number of AWS EC2 instances (VMs)	4,883	1,750
Number of TBs	1,693	800
Number of business applications	190	45
Number of sites supported	34	7
Number of internal users	16,413	4,750
Percentage of revenue supported	71%	85%

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

### Business Value and Quantified Benefits of AWS Cloud Governance Services

Interviewed AWS customers provided compelling feedback about how they use AWS Cloud Governance services, including AWS Organizations, AWS Control Tower, AWS Config, and AWS Audit Manager, to centralize and automate governance and policy across their AWS environments.



This has allowed them to be significantly more agile in extending access to and effectuating migrations to AWS, require less staff time to support day-to-day operations, enable development efforts, and reduce risk related to audits and regulatory compliance requirements.

AWS customers also described how gains in implementing and adhering to governance and policy with AWS Cloud Governance services have driven broader benefits across their organizations:

#### Improve consistency and limit potential for risk through robust controls:

"With AWS Cloud Governance services, we now have consistency and controls across very different environments — i.e., development, quality assurance, and cloud environments ... The guardrails allow business operations to respond to the risk and security issues they don't have to worry about managing those guardrails or putting workloads in a risky situation."

#### Governance at scale:

"AWS Cloud Governance services provide us with governance and compliance through automation at scale ... Also, for our developer and DevOps community, they can build quickly, which facilitates innovation and makes it much faster."

#### Infrastructure as code and auditability:

"The biggest benefits to us of AWS Cloud Governance services are providing infrastructure as code and having granular change management. As we make changes, we have a change log that better secures our cloud infrastructure and our backups. It provides the auditing and visibility in who's accessing what in our infrastructure."

#### Streamline business operations through IT benefits:

"Our business benefits from use of AWS Cloud Governance services through lower overall costs and the value of lower churn and a better-configured environment ... Also, we provide better insight to the business users around the individual cost to run the applications."

Based on interviews with organizations currently using AWS Cloud Governance services, IDC calculates that they will realize benefits worth \$134,300 per 100 AWS EC2 instances (\$6.56 million per organization on average) in the following areas:

#### • Developers' productivity gains:

Developers must overcome less friction related to the requesting and provisioning of AWS resources for testing, deployment, and other activities. As a result, they can move faster to deliver high-quality software functionality to their organizations. IDC puts the value of higher developer productivity at an annual average of \$67,300 per 100 AWS EC2 instances (\$3.29 million per organization).



#### • IT staff productivity and efficiency benefits:

IT teams responsible for migrating to, managing, and securing their organizations' AWS environments benefit from automated governance and processes. IDC estimates that study participants will realize IT team efficiencies worth an annual average of \$45,300 per 100 AWS EC2 instances (\$2.21 million per organization).

#### IT infrastructure cost reductions:

Study participants have better visibility into infrastructure resource use and better link usage to specific teams. This helps them optimize use of AWS compute, storage, and other resources, which will result in average savings of \$17,600 per 100 AWS EC2 instances per year (\$860,900 per organization).

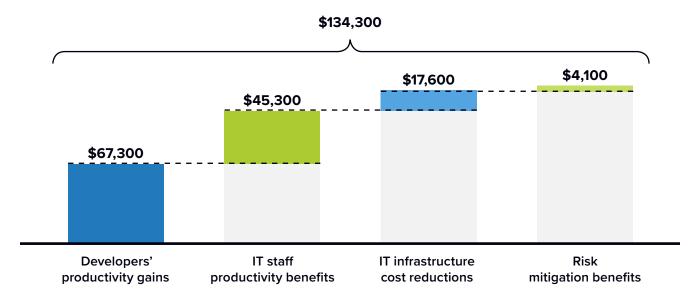
#### Risk mitigation benefits:

Teams responsible for IT auditing and compliance activities gain from enhanced visibility and consistent application of governance protocols across their AWS environments, which allows them to more effectively meet auditing and compliance requirements and minimize related risk. IDC calculates that these teams will see efficiencies and time savings worth an annual average of \$4,100 per 100 AWS EC2 instances (\$198,700 per organization).

#### **FIGURE 1**

### Average Annual Benefits per 100 AWS EC2 Instances

(\$ per 100 AWS EC2 instances per year)



n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

For an accessible version of the data in this figure, see Figure 1 Supplemental Data in Appendix 3.



#### Identity, Access, and Migration Benefits

Organizations' ability to leverage the AWS Cloud in support of their business operations depends on their ability to efficiently migrate and run applications. In turn, this requires the ability to easily provide user access to AWS services without incurring potentially harmful security risks. Interviewed AWS customers reported that AWS Cloud Governance services, especially AWS Config and AWS Organizations, significantly reduce friction related to these processes while keeping risk related to identity verification and access to a minimum.

Study participants spoke consistently about being able to set up AWS accounts and implement controls and policies for these accounts significantly faster with AWS Cloud Governance services. They explained that AWS Cloud Governance services provide them with the visibility and core functionality needed to perform these activities fast and at scale.

#### Interviewed AWS customers described how they have benefited:

#### Meet control requirements while still establishing accounts quickly:

"AWS Cloud Governance gives us the ability to define templated policy assignments. We have controls we have to meet, and we're able to set them at a root level and have them filter down. We hit 'go' for account provisioning, and we know when everything is in place. It has enabled us to spin up accounts much faster."

#### Visibility into change history, automated tool implementation:

"AWS Config, with its resource history, enables us to establish which principal — a person or a system — made a change, and having that attribution allows us to establish root cause much more quickly. Also, automation implementation means that we do not require manual validation for deploying security tools."

#### Ease of setting permissions and policy:

"The benefit of AWS Organizations is that it allows us to partition different systems based on what unit to support, with permissions and other policy. AWS Organizations helps us to do that."

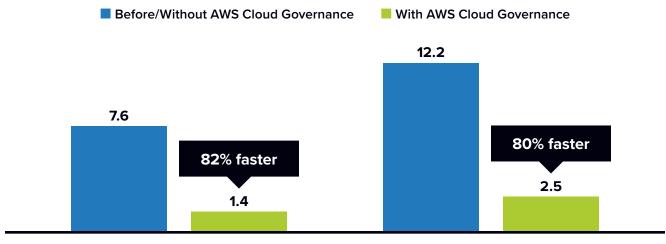
**Figure 2** (next page) shows the relative ease with which study participants set up new accounts and implement controls within those accounts with AWS Cloud Governance services. On average, they reported setting up new accounts 82% faster and delivering controls 80% faster than they could previously, which brings the average time required for these activities down to 1.4 hours and 2.5 hours, respectively. These efficiencies mean much-improved ability to access and use AWS resources and accounts for employees.



#### FIGURE 2

#### **Application Access and Control Efficiencies**

(Number of hours)



Time to set up new account

Time to set up controls

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

For an accessible version of the data in this figure, see Figure 2 Supplemental Data in Appendix 3.

A core benefit of faster access and control setup is the ability to migrate applications to the AWS Cloud more readily and with shorter lead times. An interviewed AWS customer, explained: *"The value of AWS Cloud Governance services is really about time savings, when it comes to lighting up new accounts, and using AWS CloudFormation extensively to automate different environments. Also, when we go to upgrade applications, we can quickly deploy a new virtual private cloud and test application upgrades before we do it in production. That's a big bonus with AWS Control Tower and CloudFormation."* Study participants reported benefits both in terms of migration time, needing 46% less time on average to migrate an application to AWS, and staff time required to carry out application migrations and modernization efforts, for which they reported 28% average efficiencies (see **Table 3**, next page).



#### TABLE 3

#### **Application Migration and Modernization Efficiencies**

Efficiencies, FTEs per organization	Before/Without AWS Cloud Governance	With AWS Cloud Governance	Difference	Benefit
Average time to migrate application, months	1.6	0.8	0.8	46%
Equivalent FTEs required for same workloads	52.3	37.7	14.6	28%
Value of equivalent FTE time required (\$ per organization per year)	\$5.23M	\$3.77M	\$1.46M	28%

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

#### **Cost and Operational Benefits**

Study participants linked more consistent and automated governance with AWS Cloud Governance services to greater cost efficiency. On the cost side, they explained that AWS Cloud Governance services have helped them isolate and understand drivers of AWS consumption and thus to take steps to optimize costs.

#### Interviewed AWS customers provided examples of how they better manage and attribute costs with AWS Cloud Governance services:

#### Improved cost allocation and financial planning

#### (Cloud Solutions Architect, Cloud Engineering, Atlassian):

"Our operational data feeds into our cloud FinOps processes — financial planning for the cloud. We use tags on our AWS infrastructure gathered via AWS Config for cost attribution. This allows us to calculate cost per customer, cost per tenant, and cost per monthly active user, helping us identify hotspots and assign resources to get more efficiencies and decrease costs."

#### Ensure cost-effective AWS use:

"When it comes to FinOps, we are able to identify areas where we can reduce spend with AWS Cloud Governance services and make our overall AWS footprint leaner and more efficient."



#### **Better cost attribution:**

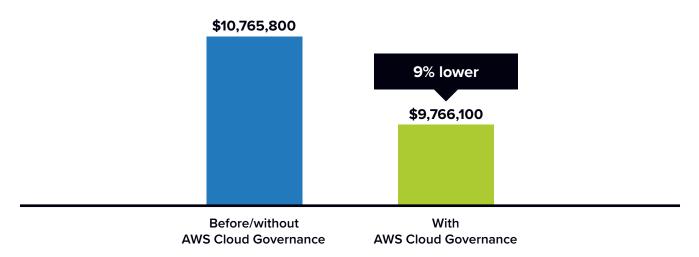
"We can track and drill down into cost and track cost per application with AWS Cloud Governance services. We're working on a model where we can pass those costs back to individual projects and internal stakeholders."

As shown in **Figure 3**, IDC calculates that interviewed organizations will reduce their total AWS spend by an average of 9% with AWS Cloud Governance services. Improved ability to rightsize the provisioning of AWS resources leads to substantial cost savings and avoidances of almost \$1 million per year per interviewed AWS customer.

#### FIGURE 3

Cost of AWS Infrastructure

(Annual cost per organization (\$/year))



n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

Study participants also reported benefiting from more consistent governance policies applied across their AWS environments with AWS Cloud Governance services. As a result, teams responsible for day-to-day management and support of their AWS ecosystems spend less time trying to overcome inconsistencies.



## Interviewed AWS customers spoke in detail about the benefit for these teams:

#### Greater consistency and speed mean less wasted staff time:

"We are faster, quicker, and more consistent with AWS Cloud Governance services, which means less troubleshooting and wasted time. Using AWS Control Tower and AWS CloudFormation has made us more efficient and helps us identify resource utilization and opportunities for rightsizing our infrastructure."

#### Staff efficiencies through visibility and automated resource allocation:

"AWS Config is our biggest contributor in terms of staff efficiencies because it allows review of changes and allocates resources according to policy, providing the visibility that can then be directly interpreted by our engineering teams."

**Table 4** shows the impact of AWS Cloud Governance services on broader teams responsible for managing AWS environments as well as those responsible for the management of infrastructure configuration and compliance. As shown, study participants reported efficiencies of 37% and 39%, respectively, for these teams in terms of time required to support equivalent activities, reflecting the extent to which AWS Cloud Governance services helps keep these teams focused on their core responsibilities and supporting growing use of AWS rather than troubleshooting and other reactive activities.

#### TABLE 4

## Impact on AWS Management and Infrastructure Configuration and Compliance Teams

Average per Organization	Before/Without AWS Cloud Governance	With AWS Cloud Governance	Difference	Benefit
Management and AWS Environm	ents			
Equivalent FTEs required for same workloads	13.0	8.2	4.8	37%
Value of equivalent FTE time required (\$ per organization per year)	\$1.30M	\$824,600	\$475,200	37%

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Average per Organization	Before/Without AWS Cloud Governance	With AWS Cloud Governance	Difference	Benefit
Management of Infrastructure Co	onfiguration and Com	pliance		
Equivalent FTEs required for same workloads	3.2	2.0	1.2	39%
Value of equivalent FTE time required (\$ per organization per year)	\$321,100	\$196,700	\$124,400	39%

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

#### **Agility and Development Benefits**

Study participants attributed significant value to AWS Cloud Governance services minimizing friction associated with steps in development processes. Their ability to effectuate agile and timely development processes depends on the ability to provision and access AWS resources as needed for testing, deployment, and other development steps. They noted the importance of AWS Cloud Governance services in providing a solid foundation not only for delivering the correct resources as needed but also for doing so in a more automated and timely manner.

#### One interviewed AWS customer commented:

"Automation of governance and standards and scale with AWS Cloud Governance have allowed us to provide more flexibility in terms of how our teams can build on the AWS platform. It's also given us the ability to provide developers and DevOps engineers to minimize time spent provisioning infrastructure modules and continuous integration/continuous delivery pipelines. We get them up and running quickly, and it establishes us as a high-performing, value-driven team in the organization."

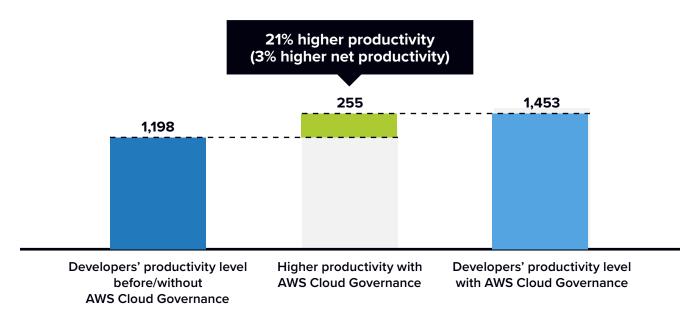
For study participants, the ability to establish more seamless and connected development environments pays off in higher development throughput and application quality. This reflects developers' increased value and higher productivity, which IDC calculates to be an average of 21% with AWS Cloud Governance services. As shown in **Figure 4** (next page) with significant development teams using AWS infrastructure and broader environments, this productivity boost is the equivalent of each interviewed organization having the additional productivity of 255 FTE developers through use of AWS Cloud Governance services.



#### FIGURE 4

#### Impact on Developers' Productivity

(Equivalent developer productivity, FTEs per organization)



n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

For an accessible version of the data in this figure, see Figure 4 Supplemental Data in Appendix 3.

#### **Risk Mitigation Benefits**

AWS Cloud Governance services have enabled study participants to establish and maintain more consistent environments with robust and effective governance policies in terms of access, expansion, and use. As a result, they can more readily provide for the security of these environments while also better responding to external demand for evidence for audits and compliance requirements.

On the security side, interviewed AWS customers reported that AWS Cloud Governance services such as AWS Control Tower help them ensure that security policies are implemented and also applied consistently. One study participant explained: "AWS Control Tower is a key control in ensuring that any drift in our security requirements will automatically be restricted or updated if there is a configuration drift. This gives us confidence that we have boundaries established from a security perspective, and if someone willfully tries to deviate from those boundaries, AWS Control Tower will help us correct it." As shown in Table 5, next page, these positive impacts of AWS Cloud Governance services drive efficiencies for security teams that IDC quantifies at an average of 27%.



#### TABLE 5

#### **Security Team Efficiencies**

Efficiencies, FTEs per organization	Before/Without AWS Cloud Governance	With AWS Cloud Governance	Difference	Benefit
Equivalent FTEs required for same workloads	19.0	13.9	5.1	27%
Value of equivalent FTE time required (\$ per organization per year)	\$1.90M	\$1.39M	\$506,800	27%

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

AWS customers want to make it easier to provide information needed for audits. One interviewed AWS customer described the impact in terms of responding to audits: "We are perpetually under audit, either internally or by the federal government or other government agencies. Audit response is now a whole lot simpler with AWS Cloud Governance — it's easier to do and results in less staff time spent responding to audits." As shown in Table 6, interviewed AWS customers reported completing audits an average of 9% faster with AWS Cloud Governance services such as AWS Audit Manager and achieving average efficiencies for their affected auditing teams of 23%.

#### TABLE 6

#### **Auditing Team Efficiencies**

Efficiencies, FTEs per organization	Before/Without AWS Cloud Governance	With AWS Cloud Governance	Difference	Benefit
Equivalent FTEs required for same workloads	13.3	10.2	3.1	23%
Value of equivalent FTE time required (\$ per organization per year)	\$930,400	\$713,300	\$217,100	23%
Faster to complete audits	9%			

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

#### **Business Benefits**

AWS customers found it was more challenging to quantify to their use of AWS Cloud Governance services. They noted the value of establishing and maintaining more consistent and well-governed AWS environments, which improves control and lowers operational risk, and how that fosters good business outcomes.

## Study participants provided examples of business benefits of use of AWS Cloud Governance services:

## Preemptive identification of potential issues that create outages and poor performance (Cloud Solutions Architect, Cloud Engineering, Atlassian):

"Our engineers look at information from AWS Config to identify faults and operational issues. They can set up alarms and alerts based on that data to prevent outages. Customer satisfaction increases, resulting in a significant win for us."

#### Ensure focus on business activities (Itaú Unibanco):

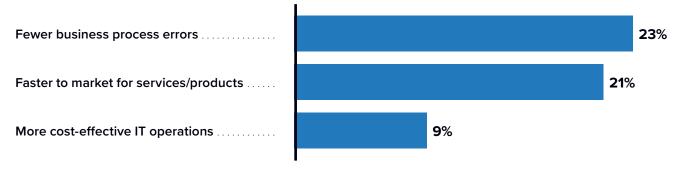
"AWS Cloud Governance helps us to allow business teams to focus on building solutions that impact customers without having to worry about the underlying cloud infrastructure."

**Figure 5** shows several business-related metrics for which study participants recognize a benefit from using AWS Cloud Governance services. For example, they reported that use has minimized the frequency of process-related errors (23% fewer) and sped up delivery of new products and services (21% faster). Additionally, as explained above, they have better aligned their AWS- and IT-related costs to business needs, which has allowed them to achieve 9% more cost-effective IT operations with AWS Cloud Governance services.

#### FIGURE 5

#### Impact on Business Key Performance Indicators

(Percentage improvement with AWS Cloud Governance)



n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

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### **ROI Summary**

**Table 7** shows IDC's analysis of the benefits and investment costs related to interviewed AWS customers' use of AWS Cloud Governance services. IDC calculates that the sample of interviewed AWS customers will realize average discounted benefits over three years in areas such as infrastructure cost savings, IT staff efficiencies, developer productivity gains, and other efficiencies worth \$15.46 million per organization (\$316,600 per 100 AWS EC2 instances). To achieve these benefits, these AWS customers will invest a discounted three-year average of \$3.12 million per organization (\$63,800 per 100 AWS EC2 instances). These levels of benefits and investment costs result in an average three-year ROI of 396% with breakeven on investment in AWS Cloud Governance services occurring in an average of seven months after beginning implementation and deployment.

#### TABLE 7

#### **Three-Year ROI Analysis**

	Per Organization	100 AWS EC2 Instances
Benefit (discounted)	\$15.46M	\$316,600
Investment (discounted)	\$3.12M	\$63,800
Net present value (NPV)	\$12.34M	\$252,800
ROI (NPV/investment)	396%	396%
Payback	7 months	7 months
Discount factor	12%	12%

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024



# **Challenges/Opportunities**

One of the largest challenges in implementing cloud governance is striking a balance between security and agility. Overly stringent policies can hinder innovation while lax controls can lead to increased vulnerabilities. Also, many businesses still maintain legacy environments, and integrating cloud governance with existing IT policies and processes can be complex, requiring careful planning and change management.

Despite the challenges, the benefits of a well-implemented cloud governance strategy are clear. It is important to recognize that cloud governance is not static; it is an ongoing process that requires continuous monitoring and adaptation. This is an area where Generative AI can have a positive impact, and AWS has been introducing AI capabilities to its governance services. The ability to generate policies based on best practices and automate the remediation of noncompliant resources can help customers balance security and agility.

## Conclusion

Cloud continues to be the preferred paradigm for building applications and deploying at scale. The ability to provision resources on demand has quickened the pace of innovation, enabling organizations to react quickly to rapidly changing business requirements. As cloud environments grow and become critical to business operations, there has been an increased focus on how to maximize the value of the cloud while balancing security, compliance, and developer agility.

IDC's research into study participants' use of AWS Cloud Governance services provides compelling evidence of their substantial business value and wide-ranging benefits, which include:

- **Optimizing AWS operations** these solutions enable more cost-effective, automated, secure, and lower-risk AWS environments.
- Contributing to the overall success and competitiveness of organizations these solutions address key IT and business challenges, enhancing productivity, reducing costs, and mitigating risks.
- Creating strong value for study participants IDC calculates that study participants will recognize an average three-year ROI of 396% with average breakeven on their investment occurring seven months after initial implementation.



# **Appendix 1: Methodology**

IDC's standard Business Value/ROI methodology was utilized for this project. This methodology is based on gathering data from organizations currently using AWS Cloud Governance services.

## Based on interviews with organizations using AWS Cloud Governance services, IDC performed a three-step process to calculate the ROI and payback period:

- Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using AWS Cloud Governance services. In this study, the benefits included IT infrastructure cost savings, IT staff efficiencies, user productivity gains, and higher revenue.
- 2. Created a complete investment (three-year total cost analysis) profile based on the interviews. Investments go beyond the initial and annual costs of using AWS Cloud Governance services and can include additional costs related to migrations, planning, consulting, and staff or user training.
- 3. Calculated the ROI and payback period. IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of AWS Cloud Governance services over a three-year period. ROI is the ratio of the net present value and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

## IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings. For the purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of \$100,000 per year for IT staff members and an average fully loaded salary of \$70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.
- Because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All dollar figures in this White Paper are in \$ USD.

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# Appendix 2: Quantified Benefits of Use of AWS Cloud Governance

**Table 8** provides a summary of specific benefit calculations resulting from study participants' implementation and use of AWS Cloud Governance services. In the aggregate, this amounts to \$6.56 million in total annual benefits per interviewed organization.

#### TABLE 8

#### Specific Calculations: Benefits from Use of AWS Cloud Governance

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value*
IT infrastructure cost savings, AWS environments	9% fewer VMs required, saving \$999,700 per year	\$860,900
Application migration team efficiencies	28% average efficiency worth 14.6 FTEs, \$100,000 salary assumption	\$1.26M
AWS environment management team efficiencies	37% average efficiency worth 4.8 FTEs, \$100,000 salary assumption	\$409,200
Security team efficiencies	27% average efficiency worth 5.1 FTEs, \$100,000 salary assumption	\$436,400
Infrastructure change management and compliance team efficiencies	39% average efficiency worth 1.2 FTEs, \$100,000 salary assumption	\$107,100
Developers' productivity gains	21% higher productivity worth 255 FTEs, \$100,000 salary, 15% margin assumption applied	\$3.29M
Auditing team efficiencies	23% average efficiency worth 3.1 FTEs, \$70,000 salary assumption	\$186,900

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Category of Value	Average Quantitative Benefit	Calculated Average Annual Value*
Compliance team efficiencies	19% average efficiency worth 0.2 FTEs, \$70,000 salary assumption	\$11,700
Total annual benefits, use of AWS Cloud Governance services	n/a	\$6.56M

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

\* Data includes 5.0 months' average deployment time in year 1)

Note: All numbers in this document may not be exact due to rounding.

## **Appendix 3: Supplemental Data**

This appendix provides an accessible version of the data for the complex figures in this document. Click "Return to original figure" below each table to get back to the original data figure.

#### FIGURE 1 SUPPLEMENTAL DATA

#### Average Annual Benefits per 100 AWS EC2 Instances

	Amount
Developers' productivity gains	\$67,300
IT staff productivity benefits	\$45,300
IT infrastructure cost reductions	\$17,600
Risk mitigation benefits	\$4,100
Total	\$134,300

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024 Return to original figure



#### Appendix 3: Supplemental Data (continued)

#### **FIGURE 2 SUPPLEMENTAL DATA**

#### **Application Access and Control Efficiencies**

	Before/Without AWS Cloud Governance	With AWS Cloud Governance
Time to set up new account	7.6	1.4
Time to set up controls	12.2	2.5
Difference	82% faster	80% faster

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024

Return to original figure

#### FIGURE 4 SUPPLEMENTAL DATA

#### Impact on Developers' Productivity

	Equivalent Developer Productivity, FTEs per Organization
Developers' productivity level before/without AWS Cloud Governance	1,198
Developers' productivity level with AWS Cloud Governance	1,453
Higher productivity with AWS Cloud Governance	255 1% higher productivity (3% higher net productivity)

n = 8; Source: IDC Business Value In-Depth Interviews, April 2024 Return to original figure



# About the IDC Analysts



#### Dave McCarthy

Research Vice President, Cloud and Edge Infrastructure Services, IDC

Dave McCarthy is a vice president within IDC's worldwide infrastructure practice,where he leads a team of analysts covering shared (public) cloud, dedicated (private) cloud, and edge strategies. Benefiting both technology suppliers and IT decision makers, Dave's insights delve into how hybrid and distributed cloud platforms provide the foundation for next-generation workloads, enabling organizations to innovate faster, automate operations, and achieve digital resiliency. His research is available via syndicated research programs (subscription services), data products (IDC Trackers), and custom engagements.

More about Dave McCarthy



#### Matthew Marden Research Vice President, Business Value Strategy Practice, IDC

Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

More about Matthew Marden



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