AWS Cloud Economics

Leading organizations understand that the value of using AWS is not limited to cost savings.

AWS customers also experience significant improvements in areas including staff productivity, operational resilience, business agility, and sustainability. By adopting Cloud Economics strategies, customers can understand, quantify, and accelerate value realization when migrating to, or building on, AWS. Read this eBook to explore these foundational approaches to achieving business value.

Understanding the Transformative Power of the Cloud.

To fully understand the transformative power of cloud computing, consider how the power-grid revolution modernized manufacturing. Before the development of widespread electrical utilities, companies had to buy and run their own generators for electrical power to operate their machines. This required significant investment upfront, as well as ongoing repair, maintenance, and replacement costs. As a result, many companies were less resilient, agile, and productive.

Eventually, utilities began producing electricity centrally and selling it to businesses through the power grid. Not only could businesses reduce costs using utility-provided power, but they could also focus their energy and investments on improving product quality, developing better manufacturing processes, and better serving their customers.

Just as the power grid enabled companies to get electricity from a centralized utility, today the internet provides a way to access centralized computing resources such as AWS. This allows companies to avoid large, upfront hardware investments and pay only for what they use, as with an electric utility. In addition to reducing costs, these companies can also focus their employees on differentiating and value-added work, improve the reliability and security of their IT infrastructure and be more agile and responsive to their customers.

Read on to learn more about how AWS can help organizations realize business outcomes on AWS.

A Virtuous Cycle

AWS Cloud Economics helps companies understand and optimize the value of AWS—at the lowest possible cost. AWS CE has two focus areas: Business value (BV) and cloud financial management (CFM). Business value helps companies understand what business impact they can expect to achieve by migrating to, or building on, AWS.

Cloud financial management helps companies develop the skills and tools necessary to realize the full economic benefit of the cloud throughout their AWS journey. We think of Cloud Economics as a virtuous cycle, with business value as a point-in-time initiative and cloud financial management as an ongoing process throughout the company's cloud journey (see the figure below).

Cloud buyer's journey

Customer journey	Discover	Evaluate	Buy	Use	Expand	Renew
Key customer questions	How can AWS Cloud add value in my industry and busines context?	• What differentiates AWS? • How can I justify moving to AWS? • I was thinking about other cloud solutions, or possibly creating my own on-premises system. • Why should I consider AWS instead?		How can we accelerate value realization and achieve business outcomes at the lowest possible cost?	• What value have we realized by using AWS? • What other business outcomes can AWS help accelerate for other workloads? • How can AWS help our company maximize the value we're already getting from AWS?	

Understand and quantify cloud business value with the Cloud Value Framework

Cost Savings

Staff Productivity

Operational Resilience

Business Agility

Sustainability

Once you've embarked on your cloud journey, you'll need to find a way to track your progress to fully understand the business value of moving to AWS. The AWS Cloud Value Framework enables organizations to build a comprehensive business case for cloud computing by measuring and tracking their progress across five dimensions of value. AWS Cloud Economics developed the Cloud Value Framework by working with more than 100 of our enterprise customers and analyzing over 1,500 public AWS case studies. The results show five main areas in which AWS customers are realizing business value by moving to cloud computing:

Cost Savings

At AWS, we refer to total cost of ownership (TCO) as cost savings. Companies can realize cost savings in many ways. For example by avoiding large fixed spend for on-premises infrastructure.

Staff Productivity

When much of a team's previous tactical work is no longer needed, staff productivity increases.

Operational Resilience

Operational resilience is achieved by enhanced availability, increased security, and less downtime.

Business Agility

Businesses are more agile when they can deploy new features and applications faster and reduce errors.

Sustainability

Sustainability initiatives minimize the environmental impact of business operations.

20% reduction

in total technology infrastructure costs (The Global 100 Benchmark)

38% increase

in developer productivity associated with database-related tasks (The Business Value of Adopting AWS Managed Databases)

22% reduction

in security incidents (The Business Value of AWS for ISVs)

35% reduction

in time to insight (The Business Value of Cloud Modernization)

9% decrease

in greenhouse gas emissions (Business Impact of Cloud Adoption for Industrial Manufacturers)

LIFEOMIC

LifeOmic achieves up to 50% cost savings after building serverless architecture on AWS.

DENSO
Crafting the Core

DENSO reduced time spent on data management by 55% and time spent on repeat work by 66%.

ATLASSIAN

Atlassian achieved 99.99% uptime and 40% reduction in latency.

Vanguard

Vanguard increased their speed to market from 3 months to 24 hours.

cropx

CropX helps its farming customers contribute to increased sustainability by using less energy and fewer resources.

Achieve business value through AWS

A 2022 IDC whitepaper (commissioned by AWS) indicates that AWS customers achieve strong value by optimizing the economics of providing IT resources to their businesses, while improving their ability to provide high-quality, timely, and resilient services and applications to customers and employees.

Source for IDC Study:

https://pages.awscloud.com/rs/112-TZM-766/images/IDC-Infographic-The-Business-Value-of-AWS-Global.pdf

https://pages.awscloud.com/IDC-Business-Value-of-AWS-GLOBAL-whitepaper-072022.html

The whitepaper reveals the following metrics reported in each Cloud Value Framework area:

Cost Savings KPIs:

39% reduction in IT infrastructure spend

Staff Productivity KPIs:

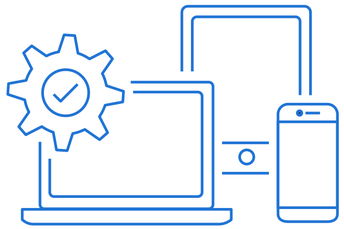
80% increase in virtual machines managed per administrator

Operational Resilience KPIs:

13% reduction in time to resolve security incidents

Business Agility KPIs:

20% reduction in time to deploy to features



Transform your business with cost transparency, control, forecasting, and optimization

At AWS, we work to create mutually beneficial, long-term relationships with organizations. To support this strategy, we created the Cloud Financial Management (CFM) framework, designed to help companies establish a baseline level of understanding about cloud cost management across stakeholder groups. Companies can refer to the framework to make cloud spend more predictable for the business and stakeholders, and to build a long-term, self-sustaining, cost-aware culture supporting all waypoints in the cloud journey.

CFM activities and capabilities are similar to what companies might already be doing for on-premises environments. But instead of performing these activities in a macro manner, organizations need to apply them at a micro level, continuously. This becomes a cyclical process, with the velocity and depth based not only on how far companies are in their cloud journey, but also on the level of importance they place on cost efficiency.

See
Measurement and accountability

Save
Cost optimization

Plan
Planning and forecasting

Run
Cloud financial operations

The pillars of a CFM framework are:

Measurement and accountability

Establish cost transparency and accountability through the necessary steps to ensure visibility into spend.

Implement an account structure and tagging dictionary. Cost and usage mapped to workloads and organizational structure.

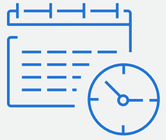
Cost optimization

Businesses optimize their costs by identifying waste, building cloud-friendly architectures that scale based on demand, and improving cost-efficiency.

Architect and design for value. Unnecessary spend avoided as early as possible.

Planning and forecasting

By gaining a better understanding of costs associated with current and future IT needs, companies can drive more accurate financial and business planning.



Budget and forecast cloud costs dynamically. Increased forecast accuracy and business predictability.

Cloud financial operations

Businesses can support cloud financial management by identifying and investing in people, processes, tools, and automation.

Secure executive sponsorship for a CFM function. Programmatic approach to cost management.

Lyft

40% cost reduction

Lyft Increases Cost Visibility to Cut Costs by 40% in 6 Months

DELHIVERY

Saved 15%

How Delhivery saved 15% of cloud infrastructure cost in 50 days

Verisk

Govern costs

Verisk leverages AWS Cloud Financial Management Services to better understand and govern costs.

ALERT LOGIC™

28% cost reduction

Alert Logic reduces cloud costs 28% by leveraging AWS financial management strategies

CFM Impact: Moving Beyond Cost Savings

AWS recently partnered with 451 Research to better understand the impact of Cloud Financial Management best practices on cloud cost, business value, and sustainability. A survey of 1,000 IT decision-makers was conducted across a wide range of industries, with respondents from 11 countries. All U.S.-based respondents were from organizations with public cloud spending of at least US$250,000 per year (US$100,000 per year for non-U.S. respondents).

In the survey, businesses implementing cloud financial management practices report that their efforts result in greater cloud adoption, higher revenue, and improved profitability. Additional key findings include:

95% of respondents agree that using cloud services reduces the total cost of ownership for IT infrastructure when compared with on-premises equivalents.

72% of current public cloud users plan to increase their spending in the coming year—more than any other category. (SaaS was second with 64% planning to spend more).

Cloud buyers are spending the money they save by moving to the cloud on new services to improve productivity and derive new revenue.

Longer-term cloud users are more likely to implement best practices for cloud financial management, and they are more likely to achieve reduced costs. In fact, **more than 60% of those with over four years of cloud usage reported achieving unit cost savings greater than 60%**.

Source for 451 Research:

https://pages.awscloud.com/rs/112-TZM-766/images/451Research-cloud-financial-management-benefits-go-beyond-_cost-savings.pdf

Conclusion and Resources

We began our discussion of cloud value by highlighting the importance of measuring the impact of cloud initiatives across the five key dimensions of value. It is equally important to communicate how and where cloud wins are delivering value to the business and accelerating value realization at the lowest possible cost.

Here are the best practices we recommend for communicating cloud value to your organization, based on our experience helping thousands of enterprises migrate successfully to AWS:

- **Start early:** Start business-case procedures early in the decision-making process.
- **Involve stakeholders:** Enlist the right stakeholders—from finance, procurement, IT, engineering, and business ops)—and build the case in multiple iterations.
- **Assign value:** Present the overall business impact (not just TCO) by assigning value to hard-to-quantify parameters such as business agility.
- **Follow the pillars of Cloud Financial Management:** Leverage the CFM pillars to drive greater cloud adoption, increase revenue, and improve profitability.

Learn more:

Self Service:

- **Browse resources to understand and quantify the business value of AWS.**
- **Build a comprehensive business case with Migration Evaluator.**
- **Explore cloud financial management solutions, services, and events.**

Contact an Account Manager to request AWS Cloud Economics support.