

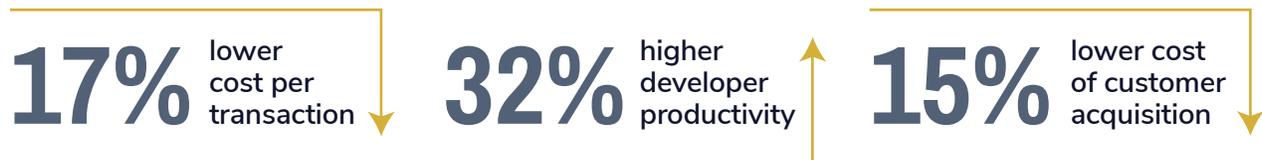
The Business Value of Amazon Web Services (AWS) for Independent Software Vendors

EXECUTIVE SUMMARY

In today's SaaS and platform-driven marketplace, independent software vendors (ISVs) increasingly depend on cloud technology infrastructure to develop and deploy their revenue-generating products and services. To find out more about cloud business values for ISVs, GLG conducted a survey of 100 IT and business decision makers at ISVs. This panel indicated that their organizations saw improvements in key metrics stemming from their adoption of AWS for the development and deployment of their products and services. Findings included:

- 17% decrease in cost per transaction
- 32% increase in productivity of individual developers
- 15% decrease in cost of customer acquisition
- 22% decrease in frequency of security incidents
- 16% decrease in time required to develop new product features

Migrating to AWS resulted in:



ABOUT THE RESEARCH

GLG, the world's insight network, brings decision makers the insight it takes to get ahead, providing meaningful connections through a network of 1 million experts, the world's largest and most varied source of first-hand expertise. In September 2022, AWS engaged GLG to conduct an online survey of 100 full-time ISV professionals in IT, product development or operations roles in the United States, leveraging GLG's network to provide independent perspectives on the business value of AWS cloud services to ISVs. GLG conducted the study in a double-masked manner to ensure objectivity in the study. Survey respondents in this study had decision-making authority over the selection of cloud infrastructure services, and their organizations had at least 60% of their current cloud services provided by AWS.

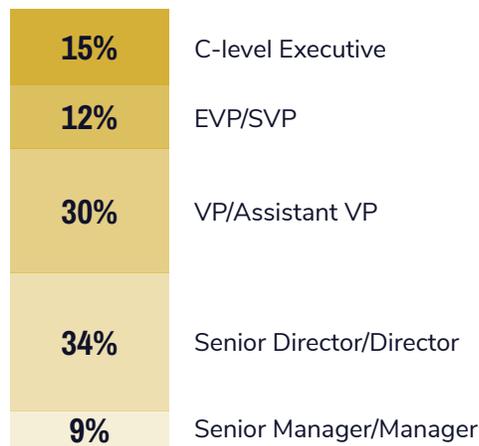
GLG conducted this research to understand the business value realized by ISVs' adoption of AWS services. The key goals were to:

- Identify the areas of business performance impacted by cloud infrastructure
- Quantify the improvement to key performance indicators (KPIs)
- Provide anecdotes on how some successful companies achieve these benefits

The figures below indicate respondents' level of seniority, their companies' annual revenue, and types of software produced. The length of time on AWS differed among the 100 professionals we surveyed. Seventy percent of respondents migrated from on-premises environments to cloud infrastructure and were asked to compare their business metrics before and after that migration, while 30% of our respondents' companies were "born on the cloud" and were asked to provide comparisons between their metrics today versus five years ago. Comparison of responses between survey participants from "born in the cloud" companies and those with an on-premises legacy did not reveal statistically significant differences in the benefits they obtained from using cloud infrastructure services. To assist in interpretation of the survey findings, GLG conducted in-depth, qualitative interviews (IDIs) with experts possessing similar profiles to our survey respondents.

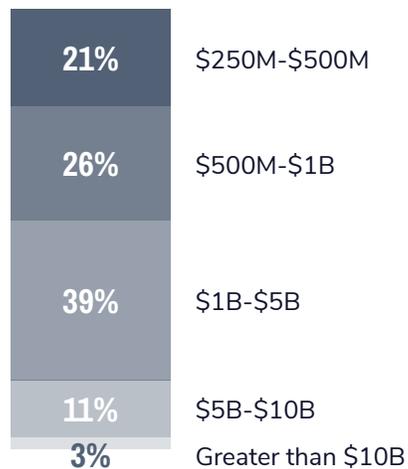
Role

(% Selecting Among Total Respondents)



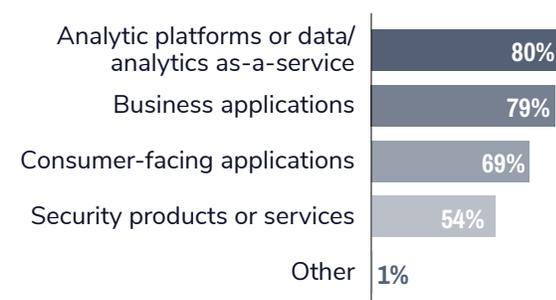
Revenue

(% Selecting Among Total Respondents)



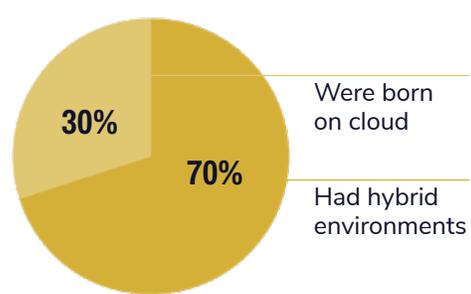
Products/Services

(% Selecting Among Total Respondents)



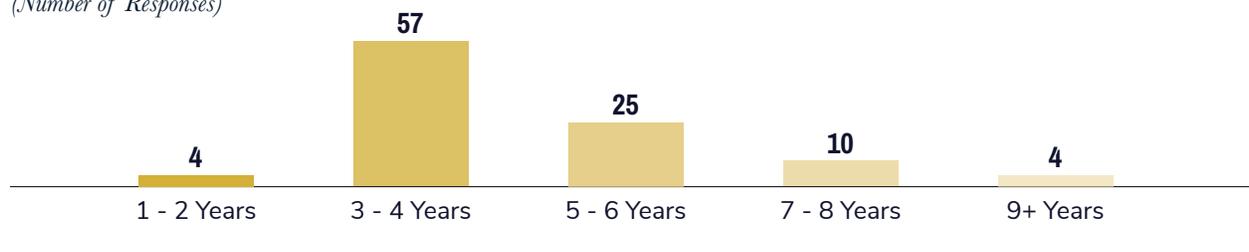
Cloud History

(% Selecting Among Total Respondents)



Length of Tenure with AWS

(Number of Responses)



PATTERNS OF CLOUD INFRASTRUCTURE USAGE AMONG ISVS

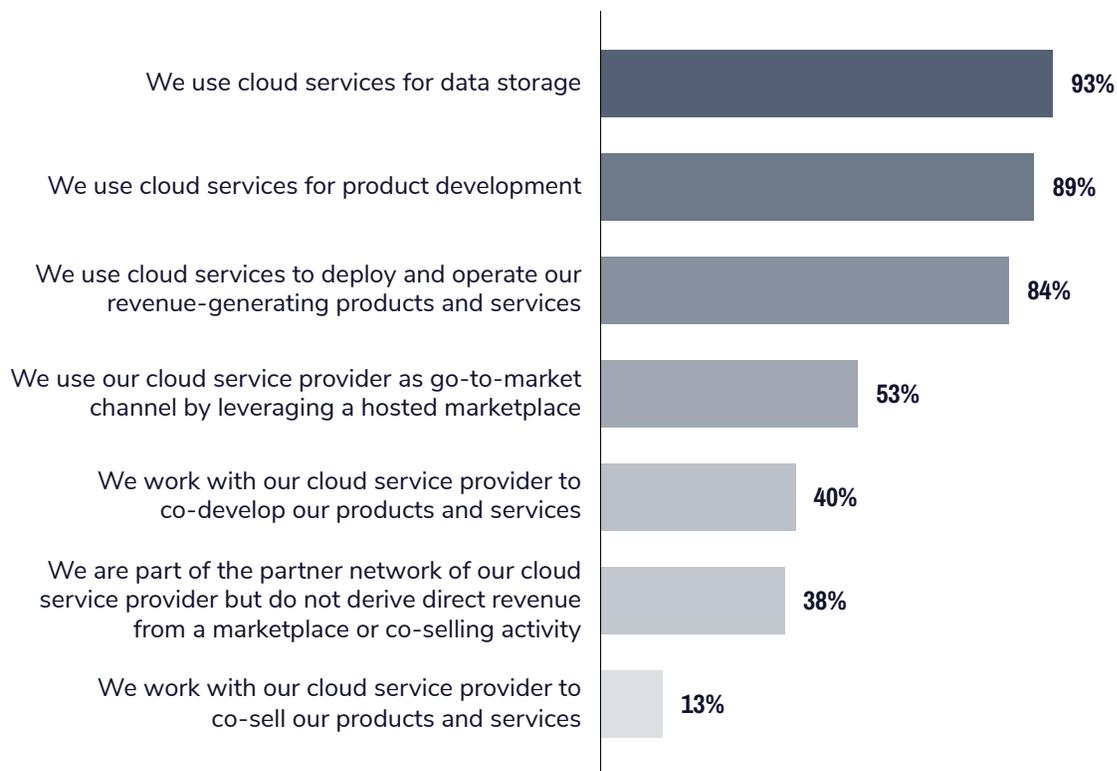
GLG's research indicated that ISVs use cloud infrastructure services for a variety of purposes, both to support their internal operations and to provide products and services to their customers.

- 93% use cloud infrastructure for storing data associated with their revenue-generating products and services
- 89% conduct key product development activities using cloud infrastructure
- 84% use cloud infrastructure as their primary means of deploying and operating their revenue-generating products and services

The figures below indicate that the next most commonly used service, by 53% of the organizations surveyed, are the cloud service providers' marketplaces as a go-to-market channel for the ISVs' products and services.

Interactions with Primary Cloud Service Provider

(% Selecting Among Total Respondents, Listed in Descending Order)



In selecting a cloud service provider, ISVs largely prioritize service reliability, security, and support for developers.

Factors Considered When Selecting a Cloud Service Provider

(% Selecting Among Total Respondents, Listed in Descending Order by Top 3 Responses)

1 - Most Important
 2
 3
 4
 5
 6
 7
 8
 Not Ranked

Reliability of services	22%	29%	16%	13%	6%	7%	7%
Security of platform	22%	17%	21%	11%	15%	6%	8%
Support for developers	26%	15%	10%	10%	15%	13%	9%
Maturity, depth, and breadth of services	20%	14%	15%	13%	11%	14%	13%
Developer familiarity with platform	6%	13%	18%	24%	15%	18%	6%
Cost/flexibility of pricing models	4%	8%	17%	18%	12%	25%	16%
Go-to-market support	4%	3%	11%	26%	17%	37%	
Other	4%	18%	78%				

COST SAVINGS FROM CLOUD INFRASTRUCTURE ADOPTION

As a result of adopting cloud infrastructure, respondents saw their overall infrastructure costs decrease by 13%. When asked about the cost impact on their operations related to products and services deployed to serve end customers, respondents indicated that adoption of cloud infrastructure had led to a 17% reduction in cost per user or cost per transaction depending on which was most relevant to their operating model.

On average, ISVs in this study categorized 69% of their cloud spend as cost of goods sold (primarily the deployment of revenue-generating applications); the remaining 31% of their cloud spend was categorized as operating costs (which includes development of their revenue-generating applications (R&D) and deployment of internal, non-revenue-generating applications).

Respondents indicated that gross profit margins increased as a result of adopting cloud infrastructure, with a 14% increase in margins attributed to the use of cloud infrastructure.

One of the key concerns of an ISV is the time required to become profitable or break even for new products or services. Respondents indicated a 22% reduction in time to profitability or time to break even. This corresponds to an average six-month acceleration of time to profitability. These improvements are credited to increases in productivity and business agility discussed below.

14% average increase in gross profit margins from use of cloud infrastructure

22% faster time to profitability for new products and services

Adopting cloud infrastructure allows the ISVs in this study to shift their cost from operation and maintenance toward building new product features and customer-facing services. A senior leader at a major analytics software provider explained, “One of the clear benefits of the cloud is that you can spin up and spin down capacity based on what utilization is at any point in time. If the average rate to host and service a customer is a million dollars a month, by turning things off or reducing the amount of compute used at specific points in time, we might lower that cost to \$900,000 a month.”

STAFF PRODUCTIVITY IMPACTS OF CLOUD INFRASTRUCTURE ADOPTION

Respondents also described significant impacts to staff productivity as a result of adopting cloud infrastructure. Developers were able to deliver improvements to customers more quickly, and at a higher quality, with the productivity of individual developers increasing by 32%.

Respondents indicated that the time required to develop new product features decreased by 17%. The experts we interviewed further clarified that many of these productivity gains were associated with the ability to establish comprehensive DevOps pipelines across many functions associated with product development. According to our research, ISVs who use cloud infrastructure are able to rapidly engage developers in continuous improvement activities without the limitations associated with provisioning new hardware, deploying new software, or coordinating releases across specific servers or instances.

Respondents also reported a greater ability to hire skilled resources after adopting the development tools and environments provided by AWS. Seventy-eight percent of respondents reported an increased ability to hire developers with required skills.

OPERATIONAL IMPACTS OF CLOUD INFRASTRUCTURE ADOPTION

Adoption of cloud infrastructure is correlated with an increase in an ISV’s number of users and/or transactions (55% and 51%, respectively, over the past five years or since the time the ISV migrated to the cloud). Rising demand drives ISVs to adopt cloud infrastructure to scale more rapidly or manage cost of operations more efficiently. Respondents also reported an average of 93% growth in data volume.

Adoption of cloud infrastructure also enabled the ISVs surveyed to deliver products and services in a more robust and secure manner. Respondents reported:

- 40% increase in service reliability
- 33% reduction in defects and bugs
- 22% reduction in security incidents

A director of product management with an ISV that provides enterprise sales and marketing applications described one example of how cloud infrastructure improves resilience and reliability: “[Being on the cloud] has increased our ability to offer our managed services to more geographies than we would have been able to do otherwise. Without a cloud infrastructure provider, it’s just not feasible for a company to set up data centers in every single country from Australia to New Zealand, to Japan, and then Europe, in 20 different countries, and multiple data centers in North America. Now, we could have just hosted it in one place, but providing an

acceptable uptime SLA in that model is just not possible. The business has grown by a good 25-30% year over year, given our ability to do this.”

BUSINESS AGILITY IMPACTS OF CLOUD INFRASTRUCTURE ADOPTION

Eighty-four percent of respondents indicated that they use cloud infrastructure as the primary means to deploy and operate their organizations’ revenue-generating products and services. The availability of many capabilities within the cloud improves the rate at which ISVs can procure and deploy functionality within their environments and to their developers. Qualitative interviews surfaced several cases where the ease of acquiring new cloud services improved experimentation by developers, increasing the rate at which new features make their way to customers.

The COO of a travel solutions provider described the impact of this increase in flexibility to provision resources: “The provisioning model we had was one where we would tell our system integrator, go ahead and buy 100 servers this month and 50 next month and so on from a planning perspective. The provisioning took about three months. With the cloud, you don’t have to do this anymore; provisioning is instantaneous. This enables a continuous development process, and you can release your products at a faster, more frequent, pace.”

The shift to the cloud enables ISVs to deliver new capabilities faster and more reliably, leading to increased customer satisfactions. Respondents saw an average:

- 12% increase in customer retention rates
- 11-point increase in net promoter scores (NPS)

ISVs surveyed in this study also reported an increase in market share. Eighty-five percent of respondents indicated that their organizations saw increased market shares for their primary products and services after adopting cloud infrastructure, with share growing by 56% on average. The improvements in customer retention and NPS contribute to a reduction in the cost of customer acquisition and an increase in the lifetime value per customer (LTV):

- 15% decrease in the cost of customer acquisition
- 54% increase in LTV

USE OF CLOUD SERVICE PROVIDER MARKETPLACES

The ISVs surveyed also report using their cloud service providers as channels for selling their products and services. Fifty-three percent of respondents indicated that their organizations employ a marketplace hosted by their cloud service provider. ISVs that used AWS Marketplace increased their level of promotion and sales by an average of 43%, primarily due to lower cost of customer acquisition through that channel. A senior vice president at an ISV providing cybersecurity products explained, “You have a situation where a customer does their investigation. They find the offering on the marketplace; they go through the marketplace to get the necessary information...and then they actually procure and buy through the marketplace. It’s almost zero-touch. For the ISV, there’s a very low cost of customer acquisition related to sales and marketing.”

Respondents from ISVs that employed the AWS marketplace as a substantial part of their overall sales and marketing (deriving more than 10% of their revenue from the marketplace) reported higher metrics than those who did not use the marketplace as extensively.

Marketplace Share of Revenue	Average Change in Time to Profitability	Average Change in Cost Per User	Average Change in Customer Acquisition Cost
Less Than 10%	-17%	-14%	-12%
More Than 10%	-25%	-22%	-19%
Total Responses	-21%	-17%	-15%

CONCLUSION

GLG’s research demonstrated that ISVs increasingly rely on cloud infrastructure to develop and deploy their revenue-generating products and services. ISVs benefit from cost savings and improvements in operations after adopting cloud infrastructure, enabling them to deliver new features to their customers faster and provide a higher level of service and reliability.

What’s more, improvements in competitiveness and service quality translate into higher customer retention and satisfaction, creating the foundation for accelerated growth and improved revenue. ISVs also benefit from the marketplace and ecosystem of AWS, enabling them to reach new customers more easily and reduce their customer acquisition costs.



The survey and interview research and analysis contained in this document has been conducted by a consultant engaged by AWS through Gerson Lehrman Group's network of independent consultants and subject matter experts ("Network Members") and third-party panel providers. Network Member survey respondents and interviewees were compensated for their participation in the research. All information is as of October 13, 2022, is for informational purposes, and does not constitute legal, accounting, tax, investment or other professional advice. No representations or warranties (express or implied) are made regarding this document. Neither GLG nor any Network Member shall have any liability whatsoever in connection with the use of this document.