



Why Organizations Are Switching to Google Cloud

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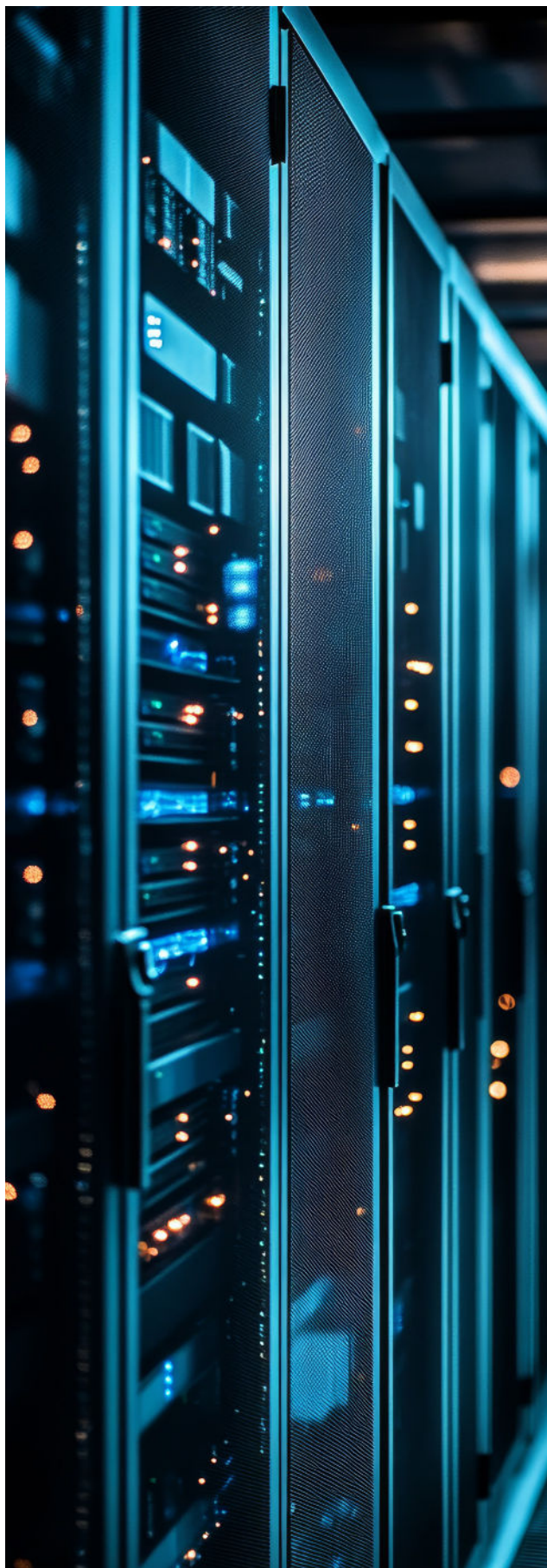
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Executive Summary

The Futurum Group embarked on a series of interviews with organizations to better understand their decision-making and rationale for transitioning from Azure to Google Cloud. From the interviews, we uncovered the top drivers for making the switch to Google Cloud from Azure linked directly to gaining and ensuring advantages such as superior security capabilities, uninterrupted reliability, and improved cost optimization.

Through our interviews with the Google Cloud customers, we identified and established that Google Cloud outperformed Azure across five key selection criteria for cloud services: security, reliability, scalability, cost savings, and cloud tools. In summary, these key customers demonstrated why they selected Google Cloud due to the platform's ability to excel in meeting the main selection criteria. As a result, we produced recommendations for key cloud decision-makers such as CxOs and IT decision-makers (ITDMs) in guiding their evaluation of cloud services.

Key Considerations in Selecting a Strategic Cloud Provider

Today, organizations must prioritize the most important factors when selecting their strategic cloud partner. The Futurum Group conducted interviews with Google Cloud customers that switched from Azure, fully confirming that the selection process takes on critical importance as organizations fulfill strategic demands such as company-wide AI implementations and digital transformation as well as adapt to major market trends related to cloud technologies. We identify the top considerations in assessing a strategic cloud solution as consisting of:



Security:

Organizations must examine the cloud provider's track record of security vulnerabilities (especially Critical/High), encryption practices, access controls, and compliance processes to ensure robust security measures and compliance with industry-specific regulatory standards.



Reliability:

Reliability is paramount when selecting a cloud provider because outages can lead to lost productivity, revenue, and customer trust.



Cost Savings:

Unpacking potential infrastructure cost savings and evaluating flexible pricing models is critical.



Scalability:

The ability to flexibly scale resources to match dynamic workload demands and business goals alongside maintaining high performance, including evaluating the provider's infrastructure, service-level agreements (SLAs), and uptime guarantees.



Cloud Tools:

Delivering flexibility, efficiency, and cost benefits are key to improving business outcomes and gaining competitive advantages.

Primarily through applying such selection criteria, organizations can confidently choose the cloud provider that is the best collaboration fit for advancing their digital transformation and AI optimization goals. This can ensure avoiding subpar experiences that undermine improving business outcomes and driving innovation.

To sharpen our understanding of Google Cloud capabilities and why organizations decide to select its platforms over key rival Azure, we conducted interviews with Google Cloud customers that made the switch. These organizations included:

- A major high-tech firm that provides solutions for data centers, networking, software, broadband, wireless, storage, and industrial markets.
- A global medical technology company that specializes in manufacturing medical devices.
- A financial technology company that provides technology solutions and payment processing services primarily to community banks and credit unions.



Why Organizations Are Switching to Google Cloud from Azure

The customer interviews we conducted helped to provide direct insights into customer needs and preferences in selecting their strategic cloud provider and answering the question, “Why Google Cloud?” The interview process resulted in identifying the topmost pain points and areas for improvement as well as the most important features that aligned with meeting their demands, driving the decision-making to select Google Cloud.

Security Factors

Consistently through our interviews, customers emphasized the security advantages that Google Cloud delivers over Azure. Google Cloud's implementation of an IAM single access control interface for all services streamlines management and helps decrease the learning curve for administrators. Google Cloud's KMS implementation assured improved response times for cloud-based encryption requests. Through Google Cloud, customers emphasized the improvement in their security posture, simplified access management, and overall data protection assurances.

It is important to note that the specific Azure security concerns expressed by the interviewed organizations included the background of Azure's recently documented security shortfalls. In July 2024, for instance, a DDoS attack caused a nearly 10-hour Azure outage, affecting services such as Azure App Services, Application Insights, and the Azure portal. The impact was amplified due to a configuration error in Microsoft's DDoS defense. Previously, in July 2023, Tenable researchers discovered a critical vulnerability in Azure that could enable unauthorized access to data and applications belonging to other customers. From our point of view, criticism directed at Microsoft for its slow response in addressing this issue was warranted.

A senior manager at Google Cloud's global medical devices maker customer reported that Google Cloud provides the best cloud security based on their annual security operation center (SOC) reports. Specifically, he observed:

“So I think from that perspective, we do not have any issues with the SOC reports that do come out every year. I think...that comparatively has been less issues on the Google one compared to...(previously) I had issues. There were some violations that were happening on the data center side of it, with compromised access into some, but Google never. We never had that impact on our data, data at rest and data transit.”

In sum, prior to switching to Google Cloud from Azure, there were some violations that were happening on the data center side of it. With Google Cloud, they have not experienced any issues with compromised access, including our data in use, data at rest, and data in transit. Moreover, when it comes to personnel and infrastructure, including hardware assets and cloud encryption performance, Google Cloud delivered a decisive edge from their perspective.

Google Cloud's global high-tech customer viewed data protection and integrity as vital to its competitive success, besides maintaining customer relationships. In relation to Azure, Google Cloud's culture of transparency provided confidence that the best steps are taken to improve the overall cloud experience for its workforce, partners, and customers.

To that end, for security, Google Cloud offers a comprehensive set of built-in security tools and credentials to protect cloud resources and data including:

	Identity and access management (IAM) enables granular access control to Google Cloud resources, enforcing the principle of least privilege.
	Cloud key management service (KMS) provides creation and management of encryption keys for data protection.
	Security Command Center is Google Cloud's native solution for cloud security posture management, helping detect and respond to vulnerabilities and threats.
	Virtual private cloud (VPC) service controls create a security perimeter to protect cloud data and resources from unauthorized access and data exfiltration.

Reliability Factors

Throughout our interviews, Google Cloud's implementation of live migration, geographical redundancy, and replication of data and services across multiple locations proved to be a major selling point to customers that migrated from Azure to Google. Live migration capabilities allow Google to perform maintenance without interrupting workloads, ensuring continuous service even during host system events.

By distributing resources across geographically separated regions, Google Cloud mitigates the impact of localized outages, providing uninterrupted service delivery even if one location goes offline. Also, the use of hardware redundancy and data replication across multiple zones within a region further enhanced reliability in alignment with specific customer needs.

According to Google's major finance tech customer, reliability factors played a prominent role in establishing a strategic relationship with a cloud provider. The company selected Google Cloud as they were looking for a strategic partnership, not just a transactional relationship. This customer prioritized reliability alongside scale. Of key importance, Google Cloud proved superior in handling multi-tenancy, especially as they have thousands of financial information systems (FIS) running in a single, multi-tenant system supporting multiple cases. Google Cloud supported this capability comprehensively, enabling the customer to avoid diverting valuable engineering resources to make it work correctly. A big part of it was also reliability.

One of the key metrics of this customer is tracking internally unannounced VM restarts. The customer frequently experienced this whenever Azure had a problem with the hardware host, which resulted in Azure restarting the VM without notice. As a result, they wanted more performance and reliability than the company was getting. Specifically, the company's head of engineering stressed:



"We had one month in Azure where we had six unannounced virtual machine (VM) reboots...usually during business hours that cause direct customer impact. That's always going to happen, but that was too high of a number. In the past 10 months, since we have had major workloads live in Google Cloud, I've had two in 10 months, as opposed to six in one month (with) Azure. So just...how stable and reliable their systems have been a stark contrast."

Google Cloud's high-tech customer also emphasized that reliability is a major factor in why Google Cloud has proven competitively advantageous. In meeting the company's strategic requirements, reliability proves especially important in working with its largest software-as-a-service (SaaS) customers as its SaaS solutions are used by over 19,000 organizations worldwide, including many of the largest enterprises. These customers trust the company's cloud implementations to ensure consistent availability and performance of mission-critical software.

For its medical device manufacturer customer, the Google Cloud service guarantees alongside the SLA commitments proved superior. For three years plus now, the response within Google Cloud has proven most reliable as the response time for service support was faster on at least a twofold basis. The senior manager of the company specified:



"We got feedback that (the) service guarantee and the SLA commitment (proved) far better on Google Cloud (GCP)... Instead of the 30-minute response times in 1-2 hours that we used to get, we have someone on call within a span of like 15 minutes, which kind of caters to our business, which runs 24/7, our manufacturing is so critical that our SLAs are like people."

This response time advantage is vital to their manufacturing operations, which must be run on a 24x7 basis. As a result, any outage needs to be solved within a very short time span. So, getting someone from the infrastructure side on call in 15 minutes or less was predominantly a very important thing.

In sum, Google Cloud's comprehensive approach to reliability and resilience is particularly important for customers with mission-critical applications, as it minimizes downtime, reduces the risk of data loss, and ensures business continuity in the face of various potential disruptions.

To ensure reliability, Google Cloud emphasizes portfolio development across various mechanisms designed to avoid disruptions and optimize server upgrade processes such as follows:



During planned infrastructure maintenance, only Google Cloud employs live migration techniques. For instance, Compute Engine VMs can be moved to another host in the same zone without interrupting the running instances. This capability allows for server upgrades and maintenance without causing downtime for customer workloads.



Google Cloud provides redundancy by using geographically separated regions to mitigate the effects of localized outages on global services as well as natural disasters. This approach has proven most reliable that if one region experiences issues, others continually operate, maintaining service availability.



To avoid single points of failure, Google Cloud implements hardware redundancy and replication. This approach helps to ensure that if one piece of hardware fails, another can take over seamlessly, minimizing the risk of service interruptions.



Google Cloud provides continuous monitoring and reporting capabilities through the Google Cloud Service Health Dashboard allowing users to view the status of services in every location, enabling quick identification and response to any potential issues.



Cost Optimization and Savings Factors

During our interviews, all the businesses we talked with had varying cloud usage patterns and requirements. All of them emphasized that Google Cloud's flexible pricing model and billing practices enabled them to optimize their cost outcomes and savings in comparison to Azure.

According to the interview with the global high-tech customer, having more transparency in pricing was the top driver for what they were seeking in a cloud provider and as a result making the switch to Google Cloud. This includes assessing how data centers are distributed across the regions that enable fiber aggregation and optimization that save costs. Also, developer support and its costs were the next most important factors that drove their decision-making.

A key takeaway is how Google Cloud charges for compute and CPU usage is clearer than Azure's more complicated billing and bill explanation. For the company, the public cloud is a technical and business extension of their existing data center implementations that need to add-on services in a simple and efficiently managed way. This would help to support a wide range of product needs including SaaS and hardware.

Google Cloud's financial technology head of engineering confirmed:



"...so when we did the initial engagement, and it has proven true, list prices from Google turned out to be cheaper for our workloads than our discounted prices on Azure. And then after we made a deal with Google, of course, that was even cheaper than the list prices. So yes, we have seen significant cost savings when moving to Google."

For cost savings and optimization, Google Cloud offers several pricing models to provide flexibility to customers:



The Pay-as-you-go model allows customers to add and remove services as needed, paying only for what they use and is well suited for workloads with irregular demand or those that run only part of the time.



Spot VMs provide significant savings for non-critical workloads that can tolerate interruptions.



Flex agreements provide an option for customers to migrate workloads to the cloud with no up-front commitments while still accessing incentives such as cloud credits and monthly spending discounts.

Based on the perspective of the medical supplier customer, the migration credits offered between Google Cloud and Azure, Google was more aggressive and cost advantageous. This proved especially true when it came to more flexibility in terms of accommodating their specific financial planning and budget.

Scalability Factors

Throughout the course of our interviews, customers stressed the integral role Google Cloud's scaling differentiators played in selecting its cloud platform. By automatically adjusting resources based on real-time demand, Google Cloud autoscaling delivered optimal application performance even during traffic spikes. The medical device customer's senior manager stated: "Another consideration was the scale capabilities...The bare bone solution, bare metal solution, was much better in Google Cloud. That kind of gave us ramps because we...were thinking we wanted to go...global that basically requires whatever data volume that we have and whatever business process that we are running it had, it's going to scale 10 times. So, we were making sure that we deployed a solution where we can go and talk to our other entities globally and say, we have the technology behind to back it up and so that you can join us." As such, Google Cloud's global network and autoscaling as well as overall scaling agility maintained service availability during unexpected traffic surges or outages.

For Google Cloud's financial tech customer, the ability to run a very large Kubernetes cluster at scale was essential. The company's head of engineering emphasized:



"We run a very large Kubernetes cluster, at least on Azure we were one of the largest ones they had. And we kept having weird technical issues, and we could tell we were just hitting scale points and things that just didn't work quite right. When we moved to Google, they had Kubernetes clusters for companies that are so much larger than ours, we are no longer in that largest camp, and things just work a lot smoother. We never wanted to be the largest, that's just a painful place to be. And so, as Google continues to grow as we grow, they continue to be so far ahead of us in scale and size wise, that that really helps."

Google Cloud's global medical manufacturing customer indicated that a key consideration was the scaling capabilities. For example, the bare bone solution, bare metal solution, was very much better in Google Cloud compared to Azure. That gave the company the ramps they required and fully aligned with their global scaling strategy. In addition to offering a global footprint, Google Cloud specifically fulfilled the company's requirement whatever the data volume and whatever business process that it had been running, including the need to scale tenfold on demand. As a result, the customer had to make sure that we deployed a solution where we can go and talk to our other entities globally and say, we have the technology behind to back it up so that you can join us.

In meeting rapidly growing scalability demands, Google Cloud delivers scalability assurances through several key features and services:



Autoscaling capabilities that automatically adjust computing resources based on demand ensure that applications can handle traffic spikes without sacrificing performance or availability.



The autoscaler capability can add or remove VM instances from a managed instance group based on various factors such as central processing unit (CPU) utilization, schedules, and cloud monitoring metrics.



Support for server-side load balancing to distribute incoming traffic across multiple VM instances.

We found that Google Cloud scalability is competitively advantageous for customers because it enables resources to be rapidly scaled up or down to fulfill business demands, optimizing resource allocation and cost efficiencies.



Cloud Tool Agility Factors

According to Google Cloud's financial tech customer, because it works in the highly regulated financial space, reliability and resiliency are top of mind. Multiple data centers are a requirement for the company making Google's Cloud Spanner essential for enabling a horizontally scalable database, including support for active-active multi-region implementations while still upholding ACID compliance. In a nutshell, Google's customers can use a transactional database like a normal transactional database. Behind the scenes, Spanner makes sure that it works, even if the traffic is split across multiple disparate regions. And that's a huge advantage, because the engineering needed to overcome that with other resources is non-trivial. There's a lot of work to do without Spanner. So, Spanner makes that way easier for them, knowing that Spanner scales because it powers Google's mainline products.

In addition, this customer is using BigQuery and DataFlow due in large part to the Analytics Hub data exchange capabilities that enable putting all their product data from multi-tenant systems into building a single tenant view. As a result, they can share the Analytics Hub to customers directly so they can get access to their raw data in it, which previously was always difficult with Azure. Providing a single tenant view for the raw data to your customers is a really challenging problem, and BigQuery is making that simple because of that analytics hub. So we haven't seen the equivalent of something like that in any other cloud provider, and it has really proved to be a key differentiating factor.

Google Cloud's high-tech client indicated that Gemini GenAI tools have proven critical in improving customer support and are a key difference maker. A key IT decision-maker of the company specified:

"Gemini GenAI tools have proven critical in improving customer support and are a key difference maker...additional key factors such as streamlining documentation and support for the widest range of language translations helped validate our selection of Google Cloud."

Google Cloud offers cloud solutions essential to fulfilling the key requirements of today's organizations. By operating as an AI-first company, Google Cloud demonstrates its commitment to building innovative and differentiated offerings according to customer and partner demands. This approach provides the level set to cultivate the ecosystem integral to optimizing portfolio development and assuring seamless integrations.

Moreover, the company delivers an open platform across cloud solutions, intentionally avoiding vendor lock-in. Google Cloud embraces hybrid cloud solutions that foster an environment where partners can integrate their capabilities, providing customers with flexibility and choice. Across the key considerations of security, reliability, scalability, and cost savings, Google Cloud demonstrates why it delivers competitive advantages to customers.

The integration of Google tools such as BigQuery and Google Cloud Dataflow offers numerous benefits for organizations looking to streamline their data processing and analytics workflows. These tools work together within the Google Cloud ecosystem, providing a comprehensive solution for data management and analysis:



Dataflow can stream data directly into BigQuery, delivering real-time analytics and insights.



The combination of BigQuery and DataFlow creates flexible and scalable data pipelines that can handle massive datasets efficiently.



Integration with BigQuery enables complex queries and analytics on large-scale datasets, supporting both batch and streaming data processing.



BigQuery and DataFlow offer significant productivity gains through their serverless, scalable, and integrated approach to data processing and analytics.



Datasets from Google Cloud Storage or BigQuery tables can be shared with collaborators inside or outside an organization without making copies or granting database access.

Google Cloud delivers an open platform across cloud solutions, intentionally avoiding vendor lock-in. The company embraces hybrid cloud solutions that foster an environment where partners can integrate their capabilities, providing customers with flexibility and choice. Across the key considerations of security, reliability, scalability, and cost savings, Google Cloud demonstrates why it delivers competitive advantages to customers.

Conclusions & Recommendations

Taken together, the customer interviews established why major organizations are making the decisive switch from Azure to Google Cloud. Across the five top selection criteria for the best cloud service that we identified – security, reliability, scalability, cost savings, and cloud tools – all the customers established the Google Cloud offering as consistently advantageous over Azure. Google Cloud stands out as the preferred choice by excelling in the fulfillment of the five selection criteria.

As such, we make the following recommendations to the CxOs and ITDMs of organizations who are evaluating the cloud services that are best suited for their overall requirements:



Comprehensive Security:

Organizations need to prioritize the ability of the cloud provider to deliver end-to-end security as embodied in Google Cloud's comprehensive security measures. These measures include advanced IAM and KSM techniques that deliver advantageous data and application protection.



Uninterrupted Reliability:

CxOs and ITDMs should emphasize consideration of Google Cloud's proven track record of ensuring reliability through features such as multi-regional deployments alongside automated backups, thereby maintaining business continuity and minimizing downtime.



Cost Advantages:

Enterprises must explore the cost advantages their strategic cloud partner can deliver such as Google Cloud's committed use discounts and the pay-as-you-grow pricing model.



Built-in Scalability:

Organizations must ensure their strategic cloud provider can automatically meet rapidly growing and evolving scaling demands, including supporting fluctuating workload demands across key areas such as AI and enterprise applications.



Flexible Cloud Tools:

Cloud decision-makers should evaluate Google Cloud's comprehensive suite of cloud tools and services, such as BigQuery and Cloud Spanner, that enable more efficient application development, data management, and infrastructure optimization.

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Google Cloud is a suite of cloud computing services offered by Google, providing scalable infrastructure, data analytics, AI, and security solutions for businesses of all sizes. It includes products like Compute Engine for virtual machines, Kubernetes Engine for containerized applications, and BigQuery for data analysis. Google Cloud is known for its robust security, high-performance networking, and integration with open-source technologies. With a global network of data centers, it enables organizations to build, deploy, and scale applications efficiently while leveraging Google's cutting-edge AI and machine learning capabilities.

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