Trade toil for innovation.

IT leaders’ guide to leveling-up your infrastructure

How to optimize your infrastructure strategy for business results and employee productivity
IT staff with on-premises infrastructure have a tough gig. In fact, IT staff have the lowest intent to stay in their jobs compared to all corporate functions, according to Gartner®.

If you manage the infrastructure in your organization, then you’ve probably gotten pretty good at juggling a whole heap of competing priorities. And, like any good juggler, you can’t afford to drop any balls.

Moving to the cloud, on the other hand, frees up your time and staff to build and deploy solutions faster. You gain the freedom to pursue high-velocity innovation that makes the impossible possible and the possible easy.

In this playbook we’ll walk you through the steps of a successful migration, so you can get the most from your infrastructure—the Google way.

1. Build your business case
2. Plan what to move and when
3. Get support from Google or tap into our broad ecosystem of partners
IT staff are under massive pressure right now. They’re being asked to modernize the IT landscape, reduce their costs, and help internal teams innovate. All while keeping the proverbial lights on and secure.

No wonder so many feel burnt out. A recent study found that two in five tech workers are at high risk of burnout, prompted by longer hours, more demanding workloads and conflicts in work-life balance.

And things don’t appear to be slowing down following the disruption of recent years. Forrester found that 71% of IT decision makers feel they work harder now than they did before the pandemic. More worryingly, 67% agree or strongly agree that their mental health suffered because of the pandemic and related challenges.

These are alarming statistics. The good news? For many, these feelings of burnout and overwork could be addressed—at least, in part—by re-thinking IT.

The Forrester study found that those who have migrated from on-premises infrastructure to cloud are less likely to feel overworked and less likely to say their mental health has suffered due to work-related challenges. And, as so many Google Cloud customers tell us, cloud lessens the burden on IT staff and paves the way for positive change.

In this guide, we’ll explore how migrating to Google Cloud helps make life easier for IT staff. It’s all about freeing up time, enabling faster innovation, tapping into powerful new compute and AI tools, reducing risk, and saving money. By moving to the cloud, organizations can get ahead.

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2. ZDNET, 2022
3. Forrester’s Workforce Survey, 2022
4. Foundry, 2022
Time to play: Who wins the game of infrastructure?

To understand the impact of infrastructure on the working lives of IT staff, let’s take a look at a day in the life of an on-premises infrastructure owner versus someone whose organization has already moved to the cloud.

Meet On-Prem Pete and Cloud Carrie

On-Prem Pete and Cloud Carrie are VPs of infrastructure at Fortune 500 eCommerce companies. They both know what it feels like to experience massive spikes in traffic during sales events like Black Friday, and they both know what it takes to win new customers in today’s highly competitive retail landscape.

Yet their days look very different.

On-Prem Pete is tired. Stressed. Sick of sending late-night emails, marked ‘Urgent’, to his team. With peak shopping season around the corner, he’s losing sleep thinking about how his infrastructure will cope, or if it will buckle under the pressure. And he wishes he had more time to spend building new solutions to enhance the shopping experience.

Cloud Carrie, on the other hand, is pretty energized right now. Having already recouped the cost of last year’s migration to cloud, her team is racing ahead. They’ve just added support chat and are experimenting with intelligent shopping recommendations. Oh, and they’re up for a sustainability award.

Let’s see how a typical day plays out for Pete and Carrie.
The game of Infrastructure Management

Start → On-premises

Cloud →

CX success
You’ve just tested Contact Center AI and customers love it.
Move ahead 3 spaces.

Peak performance
You turn on predictive autoscaling to handle Black Friday traffic.
Roll again.

Record-breaking load times
With data centres close to your customers, you get faster load times and fewer abandoned carts.
Collect $$. 

Hardware refresh
You spend hours planning an upcoming refresh.
Miss a turn.

Performance alert
Customers complain about how slow your website is.
Move back 3 spaces.

Staff shortage
Your team’s stretched so thin, there’s no time to innovate.
Pay $$ to hire more.

Hack attack
It’s on you to protect your data and, uh-oh, you’ve just been hacked.
Move back 3 spaces.

Idle resources
Your infrastructure’s stacked for peak periods, yet it’s now sitting idle.
Pay $$ for unused infrastructure.

ESG reporting
You’ve been asked to report on your data center’s energy bills. Ouch.
Miss a turn.

Team think-tank
Less infrastructure maintenance means more time to innovate.

Soar to the finish and celebrate
Put simply, our customers tell us Google Cloud makes life easier for IT staff and developers. Our infrastructure is designed for operational ease and radical simplicity, at scale. In fact, you can deploy workloads 2.7 times faster on Google Cloud compared to AWS. And, with proactive actionable recommendations, intuitive migration tools, and a focus on automation, there’s less toil—which means you can spend more time supporting experiences your customers love.

But it’s not just about making your life easier. It’s about giving your organization peace of mind with reduced risk, and your developers the freedom to build on the cloud they love.

Let’s take a look at why.

More performance, less effort

You gain access to planet-scale (and planet-friendly), distributed infrastructure that’s easy to optimize based on your specific workloads or industry needs—whether you’re looking for more performance, cost savings, or a balance of both.

For example, when Bitly moved to Google Cloud, the link-shortening behemoth experienced huge performance gains. These improvements include up to 50% decrease in latency from the client to a service for resolve time, connection time, and download time.

“"Our migration has translated to faster time to market to support higher revenues. We can also scale to support more work and have increased completed units of work monthly by 4x thanks to the Google Cloud ecosystem.”

Rick Cirigliano,
SVP of Cloud Operations, Mitel

5. User Research International, 2022
Google Cloud helps you reduce infrastructure management costs while unlocking new value for your business. For example, instead of channeling budget into running on-premises IT, which can often sit idle, you can reinvest it into the things that deliver better ROI—such as innovative AI/ML solutions.

What’s more, Google Cloud is one of the most cost-competitive clouds on the planet. For example, Tau VMs offer 42% better price performance over comparable VMs from other leading clouds. And Google Cloud Networking has a 50% lower cost of administration compared to other cloud providers.  

“At OpenX, our ad-exchange services over 200 billion requests every day. Getting the best combination of performance and price from the infrastructure is critically important for us. Running Google Cloud’s Tau VMs with GKE has enabled over 40% better price-performance and 62% latency reduction for our application as compared to the prior generation family.”

Paul T. Ryan, CTO, OpenX

6. ESG, 2020
We know that powerful AI and ML capabilities improve decision-making and customer experiences. With Google Cloud, you run your business on the same infrastructure that powers Google products like Maps, YouTube, and Workspace. The same infrastructure that runs 9 billion user applications powered by machine learning. The same that’s been named a leader by Forrester in its AI infrastructure evaluation. 

Train and run machine learning models faster. Take for example, Nuro’s self-driving delivery vehicles. Its engineering team taps into petabytes of data from edge environments to make better decisions about its fleet of robotic vehicles. 

"Forrester recognized Google as having the strongest current offering in the market for AI architecture, training, data throughput, and latency." 

Forrester
The Forrester Wave™: AI Infrastructure, 2021

"Every change we make must have a clear customer impact. To serve everyone, we need to understand everyone, and that’s only possible if we leverage our data the right way. Google Cloud combines a unique customer focus with the right data and infrastructure solutions, making it a perfect match for Carrefour."

Nicolas Forgues,
Chief Technology Officer, Carrefour France

7. The Forrester Wave™: AI Infrastructure, Q4 2021
More security, less risk

Easily defend your data and apps using the same security technology that blocked the largest DDoS attack ever. For example, in June 2022 a Google Cloud customer was targeted with the largest DDoS attack ever reported. It peaked at a whopping 46 million requests per second—but thanks to the swift response from Cloud Armor, no real damage was done.

Our team of security experts make sure everything you run in Google Cloud is safe and secure, with automatic patches and security updates running in the background to keep it all up-to-date. That, with a zero-trust security model, protect your data from even the biggest attacks.

The largest DDoS attack ever reported was swiftly resolved with Cloud Armor

More reach and resiliency

Getting infrastructure in seconds without having to make heavy investments is amazing. Our developments now only need very small investments and we can scale as we need more resources.”

Enrique Giraud de Haro,
General Director, Fujifilm de México

Google Cloud reaches everyone on the Internet and helps customers build resilience into their apps and data automatically. Our planet-scale reach includes a presence in 200+ countries connected by 20 subsea cables. We have 33 cloud regions, 100 zones, and 146 network edge locations. And our network delivers around one-fifth of the world’s Internet traffic.

It’s all geared towards helping you handle the most demanding and data-intensive workloads with ease.
This collaboration with Google Cloud will take us to the next level in sustainable sourcing. We will now be able to process and combine complex sets of data like never before. The combination of these sustainability insights with our commercial sourcing information is a significant step-change in transparency, which is crucial to better protect and regenerate nature.”  

Dave Ingram, Chief Procurement Officer, Unilever

Google Cloud is the cleanest cloud

- 2x more efficient than a typical enterprise data center
- 100% renewable energy for all cloud region

Your organization can run on the cleanest cloud in the industry. In fact, we’ve been 100% carbon neutral since 2007. By 2030, our goal is to run our data centers and campuses worldwide on carbon-free energy everywhere, at all times. We match 100% of the electricity that powers your cloud workloads with renewable energy, completely mitigating the annual operational carbon footprint of your digital applications and infrastructure.

Backed by the cleanest cloud, you can drive your sustainability initiative with confidence. For example, Unilever is collaborating with us on the first commercial application of Google Cloud and Google Earth Engine for sustainable commodity sourcing.
3 tips to optimize your infrastructure (and your work-life)

Hands up who wants to be more like Cloud Carrie? If you want your infrastructure to help—not hinder—innovation and business growth, then it’s time to run on Google Cloud. Sure, it might feel like a high-risk maneuver if your entire business relies on your current server stack. Yet, as so many IT leaders can attest, the risk can pay off in spades.

To help you get started in planning your cloud migration, here are our top tips. Want more detail? Use our cloud migration checklist.

1. Build your business case

Need to convince your boss that cloud is the way forward? Your first step is in defining the value. This looks different for every business, but will typically involve some combination of these four components: cost savings, innovation potential, flexibility, and security.

Consider use cases specific to your business. It might be that the cloud opens up powerful new opportunities to transform the customer experience using AI. Or that it leads to significant cost savings. Or, it simply provides the exact performance and reliability you need, in a flexible way.

In building your business case, remember this: Moving to the cloud makes life easier for all involved. With skills shortages top of mind for IT leaders, weave in the idea that cloud infrastructure could lead new opportunities to grow your team’s skill sets—helping your organization retain its top IT talent. Check out the hands on labs, learning paths, and custom trainings at cloudskillsboost.google.

“Moving to Google Cloud has made life easier for Haaretz IT staff, who no longer have to shoulder the burden of managing infrastructure.”

Inon Gershovitz, CTO, Haaretz
Work out what to move, and when

As you’ll no doubt know, it’s not possible to flick a switch to change from on-premises to cloud. If only it was. Instead, it’s likely your enterprise has hundreds or even thousands of applications to migrate, each with its own nuances and requirements. Work out which apps can move first—some will be more ‘cloud-ready’ than others—and build a clear roadmap for migration.

You’ll also need to nail down your migration strategy. Remember, migration’s not a one-size-fits-all proposition. Some applications can be easily redeployed in the cloud, while others will require significant refactoring. By taking the time to perform a thorough assessment at the outset, you’ll avoid obstacles down the tracks.

Be sure to read our detailed Migration Checklist.

Know that Google has your back

With the right team behind you, it’s possible to migrate massive workloads from on-premises to the cloud with little to no downtime—and a lot less headaches. For example, you could enlist the help of Google Cloud’s customer engineering team, renowned for supporting the seamless migration of complex workloads. You could also enlist the help of powerful migration services like Migration Center to expedite and simplify the task at hand, or tap into Google’s strong partner ecosystem.

A great place to start is with a free migration assessment from Google Cloud. We’ll help you create and execute your migration plan.
Ready to race ahead with Google Cloud?

Your journey starts here

To kick-start your journey, request a free assessment of your current infrastructure. This assessment includes:

- A detailed inventory of your virtual and physical assets
- A customized report on the TCO of moving to the cloud
- Support in creating and executing a migration plan

Request assessment

Enable your team

Customers attest, Google Cloud is easy to use. To find out for yourself, get started up-skiing with Google Cloud with a 30-day no-cost training trial on Google Cloud Skills Boost. We recommend getting started with the course: Google Cloud Fundamentals: Core Infrastructure.

Protect your team from burnout | Watch this Keynote presentation, The thing about burnout, that discusses the symptoms you can look for, actions you can take, and tips for managers.

We’re here to help

For questions about how Google Cloud will make life easier for your IT staff, please reach out to our sales team.

Contact sales

This is the first time, after three previous migrations to private and public clouds, that our users have not felt any impact and we didn’t have system outages. It was a six-hands project that worked very well.”

Eduardo Araújo, IT Manager, Rossi Residencial