



# Accelerating digital transformation across Israel



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# Welcome

Today, Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally.

Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—are using AWS to lower costs, become more agile, and innovate faster.

AWS enables business formation and supports business growth. Access to cloud computing lowers the cost of starting new businesses, encourages innovation and the development of new technologies, attracts more funding for startups, and stimulates further economic growth.

Learn more about cloud computing on AWS.

**Let's get started.**



# What is cloud computing?

Cloud computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centers and servers, you can access technology services, such as computing power, storage, and databases on an as-needed basis from a cloud provider like AWS.

Whether your application supports business-critical operations or enables people to share photos, the cloud gives you access to vast IT resources, flexibly and cost effectively. You can access the resources you need instantly, and you only pay for what you use.

# Six advantages of cloud computing

## 1. Improve speed and agility

With the cloud, you can deploy technology services in minutes and get from idea to implementation several orders of magnitude faster than before. This gives you the freedom to experiment, test new ideas to differentiate user experiences, and transform your organization more quickly and cost-effectively.

## 2. Pay for what you use

When you invest in a big data center and physical servers, you need to plan for maximum usage—and you have no certainty as to how much of that resource you will actually use. With cloud computing, you only pay for resources when you use them.

## 3. Cost effective

Not only do you move to a model based on variable expenses, but economies of scale mean those variable expenses are much lower. By combining the total usage of hundreds of thousands of users, cloud providers like AWS give you access to low-cost, pay-as-you-go prices than you can access individually.



#### 4. Eliminate guesswork when it comes to capacity needs

With cloud computing, you don't have to over-provision resources upfront to handle peak levels of activity in the future. Instead, you provision the resources you actually need. You can scale up or down to instantly grow and shrink capacity as your needs change.

#### 5. Deploy globally in minutes

You can expand to new geographic regions in minutes. For example, AWS has infrastructure all over the world so you can deploy your application in multiple physical locations with just a few clicks. Putting applications in closer proximity to end users reduces latency and improves their experience.

#### 6. Redirect resources to focus on generating value from data

When you use cloud, you free up time previously spent provisioning and maintaining your server infrastructure. You can then focus on developing and deploying projects that benefit your organization and users.



# What you need to know about digital transformation

Digital transformation isn't just about digitizing data. It's about moving from a rigid information technology (IT) system to a more flexible one that enables organizations to adapt in rapidly changing environments. Organizations must also drive changes to policies, procurement, human resources, and culture to take full advantage of technology. You need a trusted partner to help you establish an IT environment that covers all these areas so the organization can quickly scale its adoption of innovation.



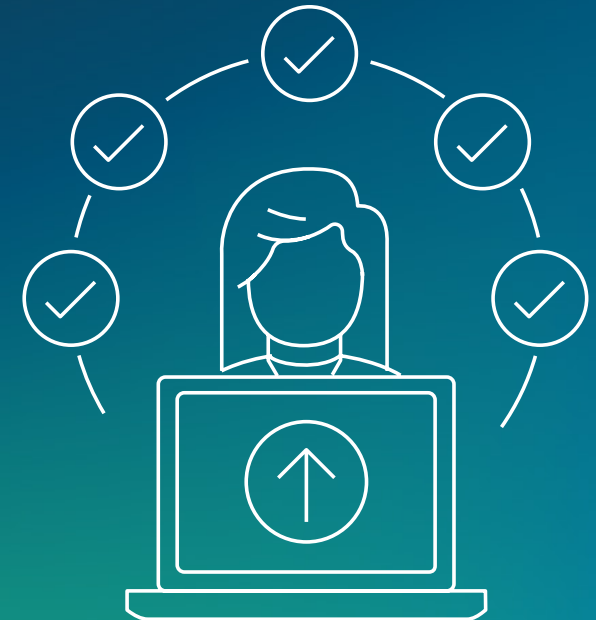
# Three main benefits of digital transformation

## Innovate faster

Even if your organization has a large data center, you might not be able to capitalize on your vast data assets. Cloud-based transformation gives you the ability to do this. Even if you have a legacy IT estate, the cloud gives you access to the newest technology and the ability to develop sophisticated applications. Importantly, using trusted cloud-based services gives you the agility to seize opportunities quickly. You're in a stronger position to make ideas happen, cutting time to market for new products and services.

## Experiment cost effectively

Cloud-based products and services encourage you to experiment because you're not restricted by your existing infrastructure and applications. With the cloud, you can develop and test new ideas cost effectively. The low cost of failure means you can learn and iterate quickly.





## Make data-driven decisions

In most organizations, departments collect and store data separately, which creates siloes where they struggle to access each other's data. This makes it difficult to conduct thorough analyses to inform decision making. The cloud helps overcome these siloes, giving faster access to deeper insight. As a result, you get a more holistic understanding of threats and opportunities—and can make more data-driven decisions.

**For society**, digital transformation makes everyday life simpler and more convenient. It's the ease of ordering a taxi through an app instead of hailing one from the street. It's the efficiency of conducting a video call instead of travelling to a face-to-face meeting. Digitalization means that, with the tap of a screen, customers can order food and shop. And there are deeper benefits, as we saw during the pandemic, when digital technology protected people by enabling them to learn and work from home.

**For companies of all sizes**, digital transformation centralizes the provision of technology services. This has strategic benefits, and those at the forefront of adoption will have a competitive advantage.

**For governments**, a smooth digital transformation enables public sector organizations to provide more flexible, proactive, efficient, and effective public services. These benefits come from access to better technology through enhanced procurement processes, as well as eliminating data siloes, which enables strategic decision making.

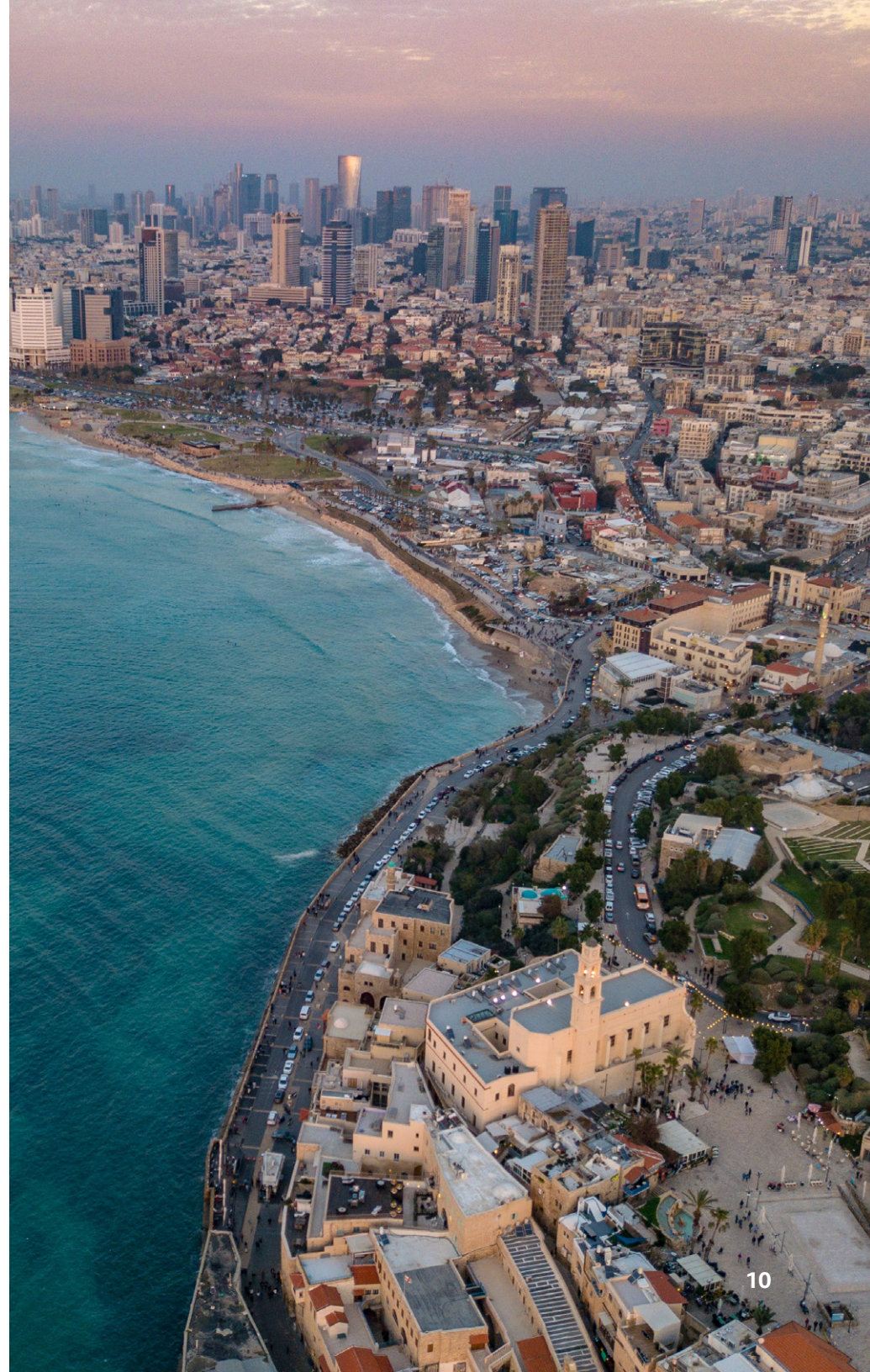




# AWS in Israel

AWS announced plans to open an infrastructure region in Israel in 2023. The AWS Israel (Tel Aviv) Region will enable even more developers, startups, and enterprises as well as government, education, and non-profits to run their applications and serve end-users from data centers located in Israel. Additionally, the government of Israel announced that it has selected AWS as its primary cloud provider as part of the “Nimbus” contract for government ministries and subsidiaries. The Nimbus framework will provide cloud services to Israeli government ministries including local municipalities, government-owned companies, and public sector organizations with the aim of helping to accelerate digital transformation. It will be instrumental in driving innovation and enabling new digital services for the citizens of Israel.

The addition of the AWS Israel (Tel Aviv) Region will enable local customers with data residency requirements to store their data in Israel with the assurance that they retain control over the location of their data. Organizations using this region will also be able to access advanced technologies from the world’s leading cloud with the broadest and deepest suite of cloud services to drive innovation including analytics, compute, database, Internet of Things (IoT), machine learning, mobile services, storage, and more.



## Investing in Israel's future

The new AWS Israel (Tel Aviv) Region continues AWS's commitment in Israel. As the number of customers in Israel has grown, so has the size of AWS's presence in the country. In 2014, AWS opened its first office in Israel to service the local market, and in the same year, Amazon established a research and development (R&D) center in the country. Since then, Amazon's R&D presence in Israel has expanded and now includes Prime Air, Alexa Shopping, and Amazon Lab126. Amazon R&D efforts also include the development of AWS-designed compute, storage, networking, security, and machine learning hardware through Annapurna Labs, which Amazon acquired in 2015. Annapurna Labs develops innovative, high-performance, AWS-designed hardware, including AWS-designed Graviton2 Arm-based processors (which provide up to 40% better price performance on general compute than current generation x86 processors), AWS Inferentia (which offers the lowest cost machine learning inference in the cloud), AWS Trainium chips (which will provide the most powerful and lowest cost machine learning training in the cloud), and the AWS Nitro System (which removes networking, storage, and security functions off the main server to provide better performance, security, and development speed).

Additional infrastructure investments in Israel include Amazon CloudFront edge locations. Amazon CloudFront is a highly secure and programmable Content Delivery Network (CDN) that accelerates the delivery of data, videos, applications, and APIs to users worldwide with low latency and high transfer speeds. In 2020, AWS also launched AWS Outposts and AWS Direct Connect in Israel. AWS Outposts is a fully managed service that offers the same AWS infrastructure, AWS services, APIs, and tools to virtually any data center, co-location space, or on-premises facility for a truly consistent hybrid experience. AWS Direct Connect makes it easy to establish a dedicated network connection

from customers' on-premises infrastructure to AWS infrastructure. Using AWS Direct Connect, customers can establish private connectivity between AWS and their data center, office, or colocation environment, which can reduce their network costs, increase bandwidth throughput, and provide a more consistent network experience than internet-based connections.

For Israeli students and educators, the AWS Educate and AWS Academy programs are providing free resources to accelerate cloud-related learning and preparing today's students in Israel for the jobs of the future. Israeli universities and business schools already participating in the AWS Educate program include Ben Gurion University of the Negev, Reichman University, MTA - The Academic College of Tel Aviv-Yaffo, Technion-Israel Institute of Technology, Tel-Aviv University, The Hebrew University of Jerusalem, and University of Haifa. AWS also offers a full range of training and certification programs to help those interested in the latest cloud computing technologies, best practices, and architectures to advance their technical skills and further support Israeli organizations in their digital transformation.

To help grow the next generation of Israeli enterprises, AWS began supporting startups in Israel in 2013 through its AWS Activate program. This program gives startups access to guidance and one-on-one time with AWS experts as well as web-based training, self-paced labs, customer support, third-party offers, and up to \$100,000 in AWS service credits – all at no charge. This is in addition to the work that AWS already does with the venture capital community, startup accelerators, and incubators to help startups grow in the cloud. In Israel, AWS works with accelerator organizations such as 8200 EISP, F2 Venture Capital – thejunction, and TechStars as well as venture capital firms like Aleph, Pitango, TLV Partners, and Viola Ventures to support the rapid growth of their portfolio companies.



# Why cloud infrastructure matters

The AWS global infrastructure delivers a global cloud infrastructure customers can depend on—no matter their business size, changing needs, or challenges. AWS provides an extensive global footprint, designed and built to deliver the most flexible, reliable, scalable, and secure cloud computing environment with a high-performing, low-latency global network. Every AWS customer also has access to the best practices of AWS policies, architecture, certifications like the highly sought-after AWS Certified Solutions Architect – Associate Certification, and operational processes built to satisfy the requirements of the most security-sensitive customers.

To support requirements for country-specific data locality, the AWS infrastructure is organized around a geographical unit called an AWS Region. From Day 1, AWS knew that achieving true high availability meant building to withstand natural disasters like fires and floods. AWS also knew infrastructure had to support high transaction, low-latency applications that could replicate data between geographically dispersed data centers. To address these challenges, AWS created the concept of Availability Zones (AZs) which are a cluster of discrete data centers. AWS builds each Region with a minimum of three AZs. Each AZ is completely independent from other AZs in the Region with its own redundant power and network connectivity. Each AZ is separated from other AZs by a meaningful distance, which are many kilometers apart, protecting customers from events such as fires, floods, and tornados. Each AZ is carefully planned to take into account local power grids, fault zones, and other geographical considerations.



# The benefits of our global infrastructure

## Security

Security at AWS starts with our core infrastructure. Custom-built for the cloud and designed to meet the most stringent security requirements in the world, our infrastructure is monitored 24/7 to help with the confidentiality, integrity, and availability of your data.

## Availability

Cloud-based products and services encourage you to experiment because you're not restricted by your existing infrastructure and applications. With the cloud, you can develop and test new ideas cost effectively. The low cost of failure means you can learn and iterate quickly.



## Performance

The AWS Global Infrastructure is built for performance. AWS Regions offer low latency, low packet loss, and high overall network quality. This is achieved with a fully redundant 100 GbE fiber network backbone, often providing many terabits of capacity between Regions.

## Global Footprint

AWS has the largest global infrastructure footprint of any provider, which is constantly increasing at a significant rate. When deploying your applications and workloads to the cloud, you have the flexibility in selecting a technology infrastructure that is closest to your primary target of users. You can run your workloads in the cloud that delivers the best support for the broadest set of applications, even those with the highest throughput and lowest latency requirements.

## Scalability

The AWS Global Infrastructure enables companies to be extremely flexible and take advantage of the conceptually infinite scalability of the cloud. Customers used to over provision to ensure they had enough capacity to handle their business operations at the peak level of activity.

## Flexibility

The AWS Global Infrastructure gives you the flexibility of choosing how and where you want to run your workloads, and when you do you are using the same network, control plane, API's, and AWS services. If you would like to run your applications globally you can choose from any of the AWS Regions and AZs. If you need to run your applications with single-digit millisecond latencies to mobile devices and end users, you can choose AWS Local Zones or AWS Wavelength. Or, if you would like to run your applications on premises, you can choose AWS Outposts.

[Learn more about the AWS global infrastructure >](#)



# How AWS can help

We work with you to create a digital transformation plan, implement digital initiatives, and deploy solutions that help achieve your objectives.

## A comprehensive cloud offering

AWS has more services, and more features within those services, than any other cloud provider. This makes it faster, simpler, and more cost effective to move your existing applications to the cloud and build nearly anything you can imagine.

## Helping you drive innovation

With AWS, you can leverage the latest technologies to experiment and innovate quickly. We're constantly accelerating our pace of innovation to invent entirely new technologies. We work to make sure digital transformation continually enables you to boost efficiency and provide better services.





## Enabling smart cities

Innovation in the public sector is moving faster than ever before. The cloud is revolutionizing cities worldwide, empowering citizens to access real-time information and enabling the deployment of digital public service systems. Deliver a better future for everyone with the power of Internet of Things (IoT), machine learning (ML), artificial intelligence (AI), and other technologies.

## Closing the digital skills gap

AWS helps individuals and organizations implement best practices and develop the skills needed to drive digital transformation. We also work with industries and government agencies to develop standards through training and certification. Through these comprehensive programs, AWS helps develop your talent pools, so people can use cloud solutions to address critical challenges.



## AWS Training and Certification

helps you build and validate your skills so you can get more out of the cloud. Our content is created by experts at AWS and updated regularly so you can keep your cloud skills fresh.

[Learn more >](#)



## AWS Educate

is a global initiative that provides education and learning resources for students and teachers. It prepares the next generation of cloud professionals and supports wider expertise in cloud skills.

[Learn more >](#)



## AWS Academy

provides higher education institutions with a no-cost, ready-to-teach cloud computing curriculum that prepares students for industry-recognized certifications and in-demand cloud careers.

[Learn more >](#)



# Helping organizations grow and scale

AWS can help you achieve your mission by connecting you to its global community of partners. More than 90 percent of Fortune 100 companies and the majority of Fortune 500 companies use AWS Partner solutions and services.

The AWS Partner Network (APN) is the global community of partners who leverage AWS to build solutions and services for customers. There are tens of thousands of AWS Partners across the globe who are uniquely positioned to help businesses take full advantage of all that AWS has to offer and accelerate journey to the cloud.

AWS Marketplace is a curated digital catalog that makes it simple for customers to find, buy, deploy, and manage the third-party software they need to build solutions and run their business. Procurement professionals and IT leaders can leverage AWS Marketplace to accelerate innovation and enable cloud users to rapidly and securely deploy solutions while reducing Total Cost of Ownership (TCO) and improving operational oversight.



# Start building on AWS today



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Get to know the AWS Cloud ›



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