

# Drive digital transformation for your business with Microsoft Azure Virtual Machines



# Solve your business IT challenges

Digital transformation is key to staying competitive. Small and mid-sized businesses (SMBs) struggle to keep up. When technology is moving forward, but your budget is static, it's even harder to get ahead. Discover solutions that change this trend.

## You're concerned about:



### Security and compliance

Virus and malware threats are on the rise. Keeping data safe with a small budget is a challenge. That's why SMBs are a big target for cybercriminals.



### Customer demands

Customers want to engage with you through multiple channels. You can't just have a website or Facebook page.

Without a physical storefront, it's not immediately clear to customers what size business you are. They expect the same level of service from a smaller business as they do from a larger one.

Technology is the key that helps you look like a much larger enterprise.



### Legacy technology

Almost every SMB has physical machines that run core processes. These aging machines may be taking more time and money to support than makes sense for your business.

And given their limitations, they can't support business growth. What's the alternative?

## You need more:



### Time

There's always too little time and not enough resources. When will you find the time to create new services to keep up with the competition? Innovation is often pushed aside for the here and now.



### Flexibility

You need options. You might need a hybrid cloud. Or cloud only. Or you might want to use Windows or Linux, or both. You might need a lot of compute power one day, and none the next. Some options should get high priority and some not so much. It's all about choice.



### Scalability

Your applications have different levels of demand. There's no one size fits all. And you can't predict demand with spot-on accuracy. If you depend on physical servers, managing these changes can be impossible without overspending.



### Resources

The plan is to have your business grow and keep up with changes. To innovate when it makes sense. But it can be difficult to manage innovation with resource constraints.

If your budget and headcount resources are limited, what's the alternative?

# Azure Virtual Machines and Infrastructure as a Service (IaaS)

No two businesses are the same. Each has its own challenges and opportunities and its own route to digital transformation. Your organization will have unique security and compliance needs. Plus, your budget and resources will drive your business model.

And if your business changes tomorrow, it's easy to change the scale and scope of your Azure Virtual Machine solution.

## What is a virtual machine in the cloud?

Most businesses have moved some of their technology to the cloud. Small and mid-sized businesses may not have taken the leap from physical servers to cloud servers.

But Azure Virtual Machines can take your business to new levels. Suddenly, you can have the compute power equal to a large enterprise. You aren't constrained by lack of resources to use technology to grow or create your business in the cloud.

Azure Virtual Machines deliver more productivity. More flexibility. More scalability. And they're easier to manage, configure, and support. An Azure Virtual Machine can be set up in 7-10 minutes. Yes, in minutes, not days.

Virtual machines can save you money on infrastructure: real estate to house the server, power to cool the servers, and staff to support them. Have you ever told someone to turn off the lights to save on electricity costs? With a virtual server in the cloud, you can turn off the machine at night and back on in the morning. Azure puts you in control of your budget decisions.

## The physical made virtual

Azure Virtual Machines are ideal for extending or replacing part of your server estate. You can use a virtual machine to run business-critical applications or as a development and testing platform.

A virtual machine can have CPU cores, an operating system, memory, disks (for both data and the operating system), an IP address, networking functionality, and more.



### Choice

Azure Virtual Machines can be Linux or Windows. They can be in the cloud or part of a hybrid solution with on-premises servers.

You can choose your own virtual machine image or download a certified pre-configured image from the Azure marketplace.

### Saving money

Azure Virtual Machines are priced on a per-hour basis, but billed on a per-minute basis. You only pay for the compute time you use. What's more, Bring Your Own License means if you already hold Windows Server licenses and you've signed up to Software Assurance, you can use those without having to pay again.

### Scalability

You can scale up or down with Azure Virtual Machines. If you need more capacity for a new campaign or seasonal use of your application, it's easy to match your use with your budget.

### Dev/Test

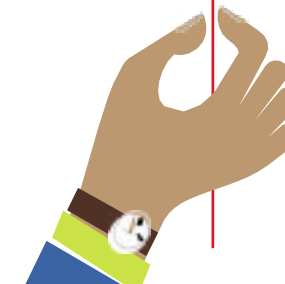
Azure Virtual Machines are a great place to set up a dev/test environment. In addition to Microsoft technologies, including Windows Server and Windows 10, it supports Linux and other open source providers. You can develop and test mobile apps across iOS and Android with Xamarin.

### Security

Azure Virtual Machines can be protected from viruses and malware. Network traffic can be secured and sensitive data encrypted. You can have affordable, enterprise-grade security that's monitored 24/7. Azure is tested regularly to protect against cyberattacks.

### High availability and fast recovery

Distributing loads across virtual machines ensures redundancy as well as high availability and durability of apps and data. If a server fails, data can be migrated instantly to another platform—and it's built into the cost.



“If you can fathom it, you can build it”

Late-stage startup accelerates business by switching to Microsoft Azure

[READ CASE STUDY >>](#)

## Building business with flexible cloud services

Although most businesses today know about the value of data and IoT solutions, they're often less certain about how to get started with their implementation. Connecting devices, creating an analytics platform, and then surfacing data for users can be a daunting project for even large organizations.

Launched in 2009 with a goal of simplifying software design, Fathym soon turned to the IoT space with a similar agenda: breaking down barriers to technology adoption. “The idea behind Fathym is that if you can fathom it, you can build it,” says Christy Szoke, the company's Chief Marketing Officer and Co-Founder. “We wanted to create a platform that would be able to address multiple verticals using the same basic toolset, but allow for customization as our customers require.”

Fathym decided to create a portfolio of microservices that could be mixed and matched to meet different requirements. After creating a user interface that customers could modify without coding, the company needed a back-end platform with similar ease and flexibility. Fathym began by working with Amazon Web Services, but as it prepared to launch its IoT offerings, the company realized that the Azure platform was a better choice for meeting its goals.

Fathym's core platform uses numerous Azure services, including Azure IoT Hub for ingesting data from sensors, Azure Blob Storage, Azure SQL Database, and Azure App Service.

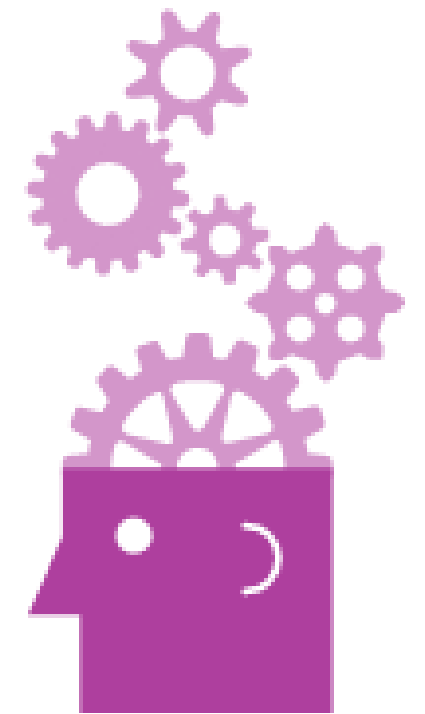
The company is also using Azure Virtual Machines to host servers and to easily configure and deploy solutions for customers.

In addition, Fathym currently uses Azure Stream Analytics to support real-time analytics and looks forward to using Azure Machine Learning. The company is exploring Power BI for data visualization as well.

Now, Fathym can rapidly create end-to-end solutions customized for individual industries and customers, whether they're schools, trucking companies, restaurants, or state transportation departments.

“Using Azure has really enabled us to spread our wings and get new customers,” says Szoke. “And we can get someone on board in a matter of hours.”

[Let's talk](#) about how Microsoft Azure can help your business grow with technology.



# Reinventing the world from keys to light switches, startups grow their businesses on Microsoft technology

[READ CASE STUDY >>](#)

## From startup to pioneer in five years

In the span of five years, UniKey has grown from a tiny startup to a pioneer in the smart lock industry. Its founder and president, Phil Dumas, has gone from a budding Florida entrepreneur who appeared on “Shark Tank” to the head of a company that’s raised \$14.3 million.

UniKey now powers a leading smart lock on the market with partner Kwikset, the largest residential lock manufacturer in the U.S. and one of the largest in the world.

“We basically set out to replace your entire keychain with your phone,” says Dumas. “As long as you have your phone on you or in your pocket or purse, all you have to do is walk up and touch the door and it magically unlocks.” In other words, no fumbling for your keys—or your phone to open an app.

UniKey is one of many successful startups around the world to grow and raise funding with the help of Microsoft programs and tools.

“I’ve never been a fan of traditional keys,” says UniKey founder Dumas, an electrical engineer with a background in biometrics security. “Keys literally, in their current form, have more or less been around for 1,100 years, and I just felt a passion for unlocking things in new and unique ways.”

In April, UniKey raised \$10 million in a Series A round of venture capital funding to propel additional products to market. That was nearly two years after UniKey and its first residential lock partner, Kwikset, launched Kevo. Kevo is a secure, one-step,

Bluetooth-enabled smart lock, now available for resale in five countries.

“That one step is touching your door, which is about as simple as it gets,” says Dumas.

The company uses Azure Cloud Services, Service Bus, Redis and Linux Virtual Machines, which hosts UniKey’s Ruby on Rails MyKevo.com site.

“Microsoft Azure affords UniKey the information and flexibility to immediately respond to ever-growing customer demand,” says Dumas.

Why not see what Azure Virtual Machines can do for your business? [Contact us to find out more.](#)



# Security and privacy are built into the Azure platform



## Focus on secure solutions

In today's complex and regulated environment, businesses need to focus on building more secure solutions that deliver value to their customers, partners, and shareholders—both in the cloud and on-premises.

Microsoft has decades-long experience building enterprise software and running some of the largest online services in the world. They use this experience to implement and continuously improve security-aware software development, operational management, and threat-mitigation practices that are essential to the strong protection of services and data.

## What is Azure Security Center?

Security Center helps you prevent, detect, and respond to threats with increased visibility into and control over the security of your Azure resources.

It provides integrated security monitoring and policy management across your Azure subscriptions, helps detect threats that might otherwise go unnoticed, and works with a broad ecosystem of security solutions.

### Azure Security Center:

- Monitors the security state of your Azure resources
- Defines policies for Azure based on your security requirements, the types of applications that you use, and the sensitivity of your data
- Rapidly deploys security services and appliances from Microsoft and partners

- Automatically collects and analyzes security data from your Azure resources, the network, and partner solutions like antimalware programs and firewalls
- Applies advanced analytics, including machine learning and behavioral analysis
- Provides prioritized security incidents/alerts
- Suggests ways to stop attacks and help prevent future attacks

Azure uses industry-standard protocols to encrypt data in transit as it travels between devices and Microsoft datacenters or as it moves within datacenters and data at rest in Azure Storage.

### Capabilities include:

- Protection for data in transit and at rest, including encryption for data, files, applications, services, communications, and drives.
- Support for and use of numerous encryption mechanisms, including SSL/TLS, IPsec, and AES.
- Configuration support for BitLocker Drive Encryption on VHDs that contain sensitive information.
- Access to data by Azure support personnel requires your explicit permission and is granted on a "just in time" basis that is logged and audited.

Microsoft Azure and Azure Virtual Machines can help protect your business data.

[Contact us to learn more.](#)

[info@pei.com](mailto:info@pei.com)  
303-974-6881

5435 Airport Blvd, Suite 106  
Boulder, CO 80301