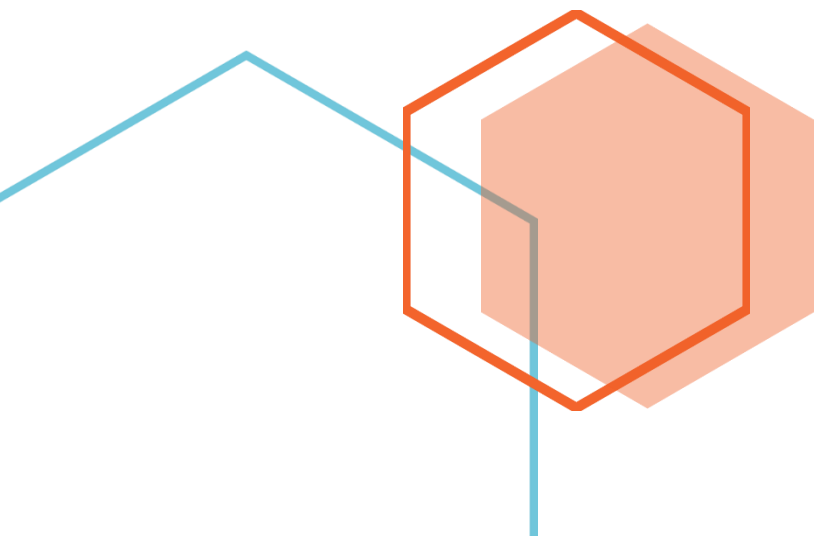




Legacy Application Modernization with Microsoft Azure

It talks about benefits and needs to upgrade the legacy application to azure cloud. Its impact of business and development





Contents

Key Benefits	2
Business Use Cases	5
Microsoft Azure Overcomes the Challenges of Legacy System.....	7
The Path to the Cloud for Legacy Application Modernization	8

Legacy Application Modernization with Microsoft Azure

Key Benefits

Engage Customers

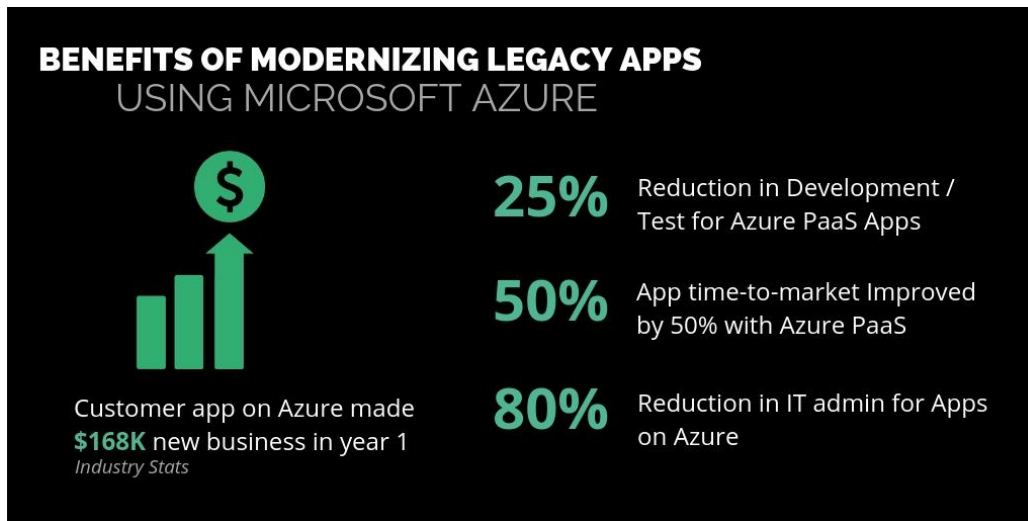
Go from Idea to Production Faster – Customers expect more personalized and connected experiences. Moving Legacy Applications to Microsoft Azure enables you to deliver value faster and respond to changes driven by customer demands. By using flexible resources like PaaS and serverless architecture, **Microsoft Azure** helps you deliver nimble solutions, thereby increasing customer value and focusing on the functionality that will provide value today.

Customer Feedback – As part of your App Modernization strategy, you can implement functionalities that help you figure out how your customer uses your application, which enables you to deliver better experiences faster. Give your customer input into your backlog by applying instrumentation and logging an App Modernization strategy that helps you understand how your applications are used, and helps you to quickly react to changes in behaviour.

Enable Employees

Encourage Experimentation – Microsoft Azure enables new ideas, products, and services. It allows your teams to use hypothesis-driven development techniques to experiment different business models and workflows, iterate quickly, and deliver innovation through Legacy Application Modernization tools.

Better decision making – Through Legacy Application Modernization using Microsoft Azure, teams can create new efficiencies and get quick and easy access to data that will empower them to make decisions about the business and your customers. Microsoft Azure enables your team to stay on top of the latest technologies, and have the satisfaction of seeing how their work impacts customers.



+ Transform your Products

Deliver fast and deliver value – App Modernization with Microsoft Azure helps you leverage micro services, serverless architecture, and containers to remove huge dependencies within your products and create smaller and independently deployable components. These leaner and quickly – evolving applications will lead the way to a new business model that evolves expeditiously and helps you gain a competitive edge. Application Modernization using Microsoft Azure also allows you to get to market quicker and with greater agility with 13x more software releases and innovate faster to solve customer problems sooner.

Customized experience – Legacy Application Modernization using Microsoft Azure enables your customers to get a more personalized experience from your products, take absolute control of the usage of the product, and get quick access to options not easily implemented with older, monolithic applications.

+ Optimize your Operations

Operational Insights – Microsoft Azure-based App Modernization approach helps you understand how your application runs and how it is used, and quickly respond to changes in behaviour. Microsoft Azure’s integrated analytics helps your team find problems before your customers do.

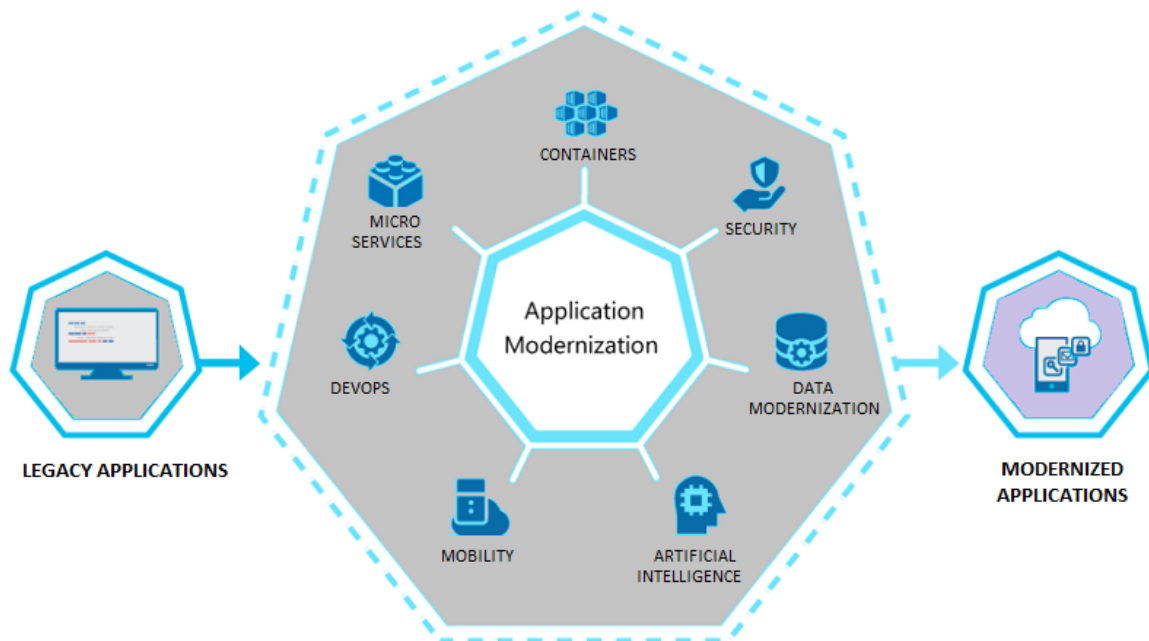
Elastic Resources – This next-gen Application Modernization approach enables you to expand or decrease resource usage to meet changing demands without worrying



about capacity planning and engineering for peak usage. Use monitoring tools built into Microsoft Azure to allocate additional resources without disrupting operations and reduce scale times to minutes and seconds.

Cost Savings – Pay only for what you use and reduce your hardware costs.

Business Use Cases



Every year, businesses spend a significant amount of money maintaining legacy enterprise applications. By taking advantage of the cloud, enterprises of all sizes can move their legacy applications to a better infrastructure like Microsoft Azure, which enables faster development and can reduce IT costs significantly. Azure uses containers to help modernize applications faster and it brings together everything your business needs to run more efficiently — including products, services, and third-party applications.

Although companies' application migration strategies vary depending on their priorities and the applications they want to migrate, here are three common scenarios used to modernize legacy applications with Microsoft Azure:

✚ Cloud Infrastructure-based Applications

✚ Cloud Optimized Applications

✚ Cloud-Native Applications

Consider the following ways on how Microsoft Azure can help you modernize your applications:

- ✚ **Platform Benefits:** Microsoft Azure is a powerful and flexible foundation for existing and new apps – its full-stack cloud covers frontend, backend, data, intelligence, and DevOps.
- ✚ **Security:** Microsoft Azure provides a highly secure foundation for your infrastructure and applications providing you with built-in security services and unique intelligence to help quickly protect your workloads and stay ahead of threats.
- ✚ **Fully Managed:** Built-in auto-scaling, CI/CD, load balancing and failover and no configuration necessary.
- ✚ **Superior Tooling:** Advanced monitoring, telemetry and debugging. Plus, integration with Visual Studio, GitHub, TFS, BitBucket, Dropbox, and VSTS.
- ✚ **Familiar:** Microsoft Azure is enterprise-ready and proven; it runs your existing ASP.NET apps, allowing you to use your existing knowledge and skills.

Three key trends are driving the significance of Application Modernization – consumerization of IT and **increasing customer expectations, availability of technology at an affordable cost, cloud-native and reliable technology**. Each of these presents its own challenges, but with a strategic approach, the revolutionary benefits of Legacy Application Modernization can be achieved. With **Microsoft Azure gaining ground in the Cloud infrastructure race**.

Microsoft Azure Overcomes the Challenges of Legacy System

1. **Security** – Microsoft Azure helps cloud providers tighten their security procedures by building better security protocols into their service offerings to cover attacks and other leaks.
2. **Costs** – The Azure enables you to explore and exploit opportunities far more rapidly and at a much lower entry cost. The outsourced cloud also allows switching of the budget model from capex to opex.
3. **Compliance** – Cloud providers, like Azure, are recognizing the importance of customers achieving compliance with regulatory bodies by introducing new compliance updates and guidelines.
4. **Data** – Enterprises always store, retrieve and analyze the massive amount of data and with the emergence of IoT and big data the task is more challenging than ever. Microsoft Azure offers an extended arm for storing and retrieving the large enterprise data.
5. **Skills** – The adoption of the cloud may mean new technology, but it does not necessarily need more people as you can do more with fewer resources.

The Path to the Cloud for Legacy Application Modernization

Although there is no single or one-size-fits-all strategy to migrate the legacy applications to the cloud, the right migration strategy will depend on the organization's needs and priorities. Also, on the kind of apps they want to migrate.

Here are the different maturity levels to modernize legacy applications with Microsoft Azure:

- ✚ **Cloud Infrastructure-based Applications** – It migrates or re-hosts your existing on-premises applications to the Infrastructure as a Service (IaaS) platform. The apps will have almost the same composition as before, but they can now be able to deploy to VMs in the cloud. **This form of migration is typically known as “Lift & Shift.”**
- ✚ **Cloud Optimized Applications** – In this level, you can gain additional benefits even without altering or the significantly re-architecting the code by running your app with modern cloud technologies like containers or through other cloud-managed services. Also, you can deploy the containers on PaaS or IaaS to databases, monitoring, cache as a service, and CI/CD (continuous integration/continuous deployment) pipelines.
- ✚ **Cloud-Native Applications** – The third maturity level is the ultimate cloud goal, but it is optional for many apps. It is driven by the business needs and targets modernizing approach for mission-critical applications. In this level, you can use PaaS services to move the apps to PaaS computing platforms. New code often required to be written, especially while moving to cloud-native applications or micro service-based models. This approach helps to gain the benefits, which are hard to achieve in a consistent or on premise application environment.