# The Power of the Cloud

**Azure for Accelerated Growth** 

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### **Azure Background**

Microsoft Azure, was born out of the development initiative known as "Project Red Dog," and was officially announced in October 2008. The comprehensive cloud computing platform launched officially on February 1, 2010. Azure was designed to support global-scale applications across various programming languages and operating systems, and quickly became a major player in the cloud computing industry.

### What is cloud computing?

Cloud computing is a technology that enables access to computing resources, such as servers, storage, and databases, over the internet. Instead of relying on local servers or personal devices to handle applications and store data, users can leverage remote servers hosted in data centers. This facilitates scalable and flexible computing power, allowing users to pay for resources on a consumption basis and access services from anywhere with an internet connection.

## Benefits of Implementing Cloud solutions

**Agility:** Using cloud based tools enables quick adaptation to changing market conditions and facilitates rapid deployment of applications.

**Scalability:** Cloud solutions offer flexible adjustment of computing resources based on demand, optimizing resource utilization and handling variable workloads efficiently.

**Cost-Effectiveness:** Azure and other cloud platforms feature a pay-as-you-go model, this reducing upfront capital expenditures and makes advanced computing capabilities accessible to businesses without significant upfront costs.

### **Core Services**

#### Data base services:

- Cosmos DB for globally distributed, multi-model databases
- Azure SQL Database for relational databases

#### Al and Machine Learning:

- Azure Machine Learning for building, training, and deploying models
- Cognitive Services for adding AI capabilities to apps

#### **IOT (Internet of Things)**

- Azure IoT Hub for secure, scalable IoT messaging
- Azure IoT Edge for extending cloud intelligence to edge devices

## **Getting Started with Azure**

- Go to <u>www.portal.azure.com</u>
- 2. Select a subscription
- 3. Browse the platform
- 4. Create a Resource Group
- Create Virtual Machines as needed
- 6. Boost your computing potential with the cloud!