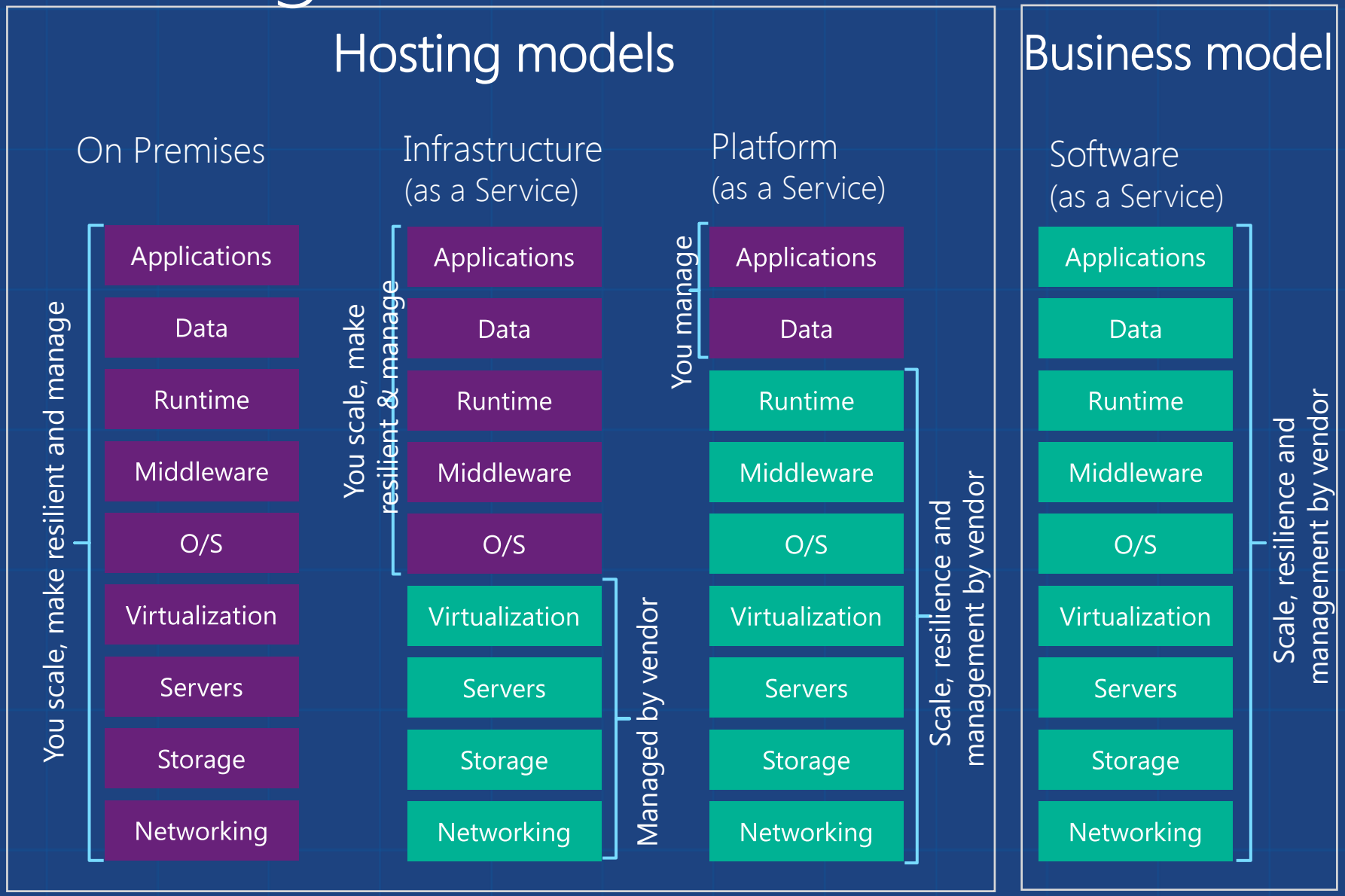
Azure Basics

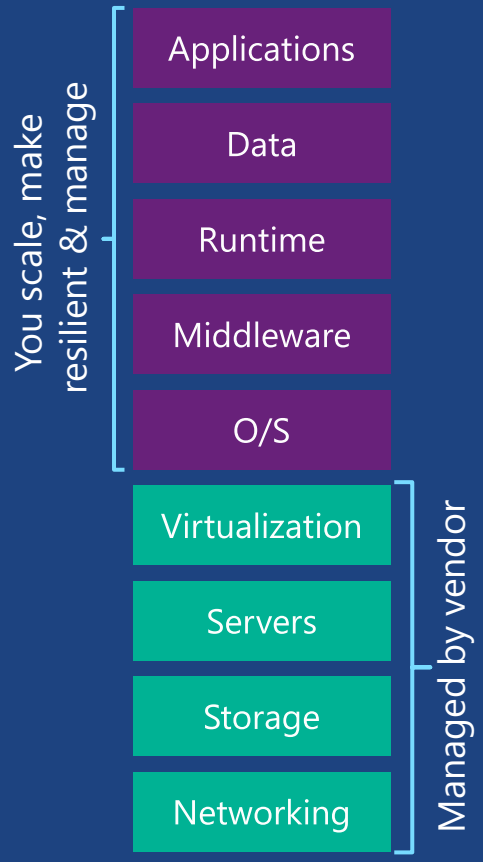
Hosting Models



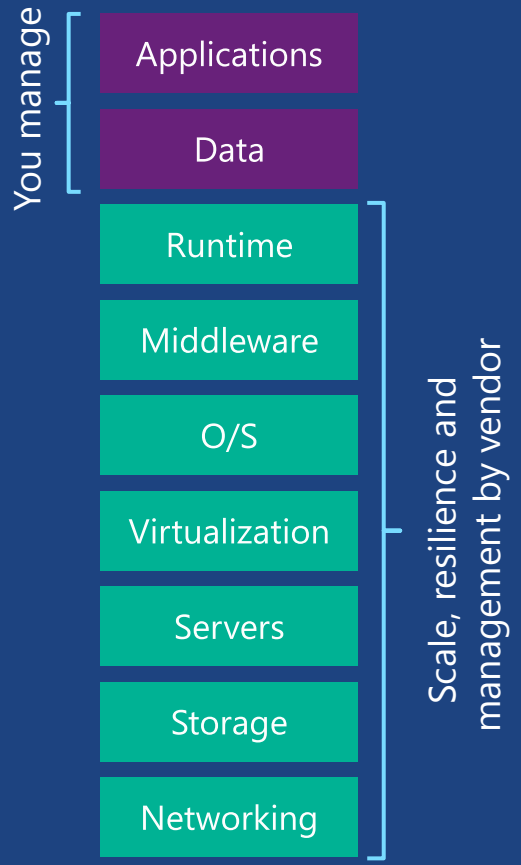
Azure

Hosting models

Infrastructure (as a Service)

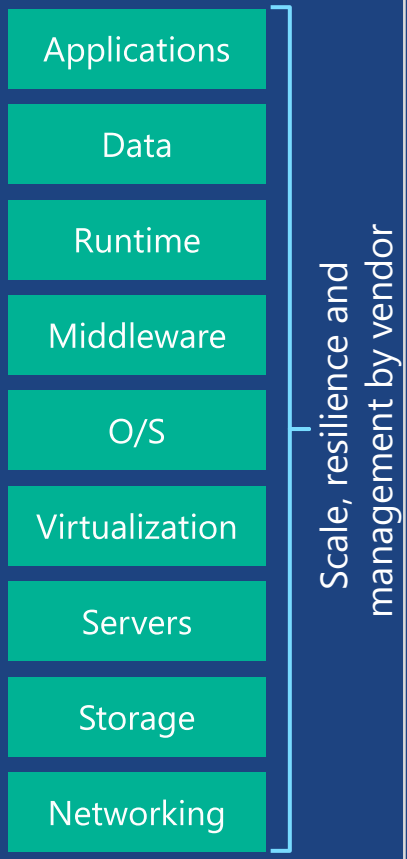


Platform (as a Service)



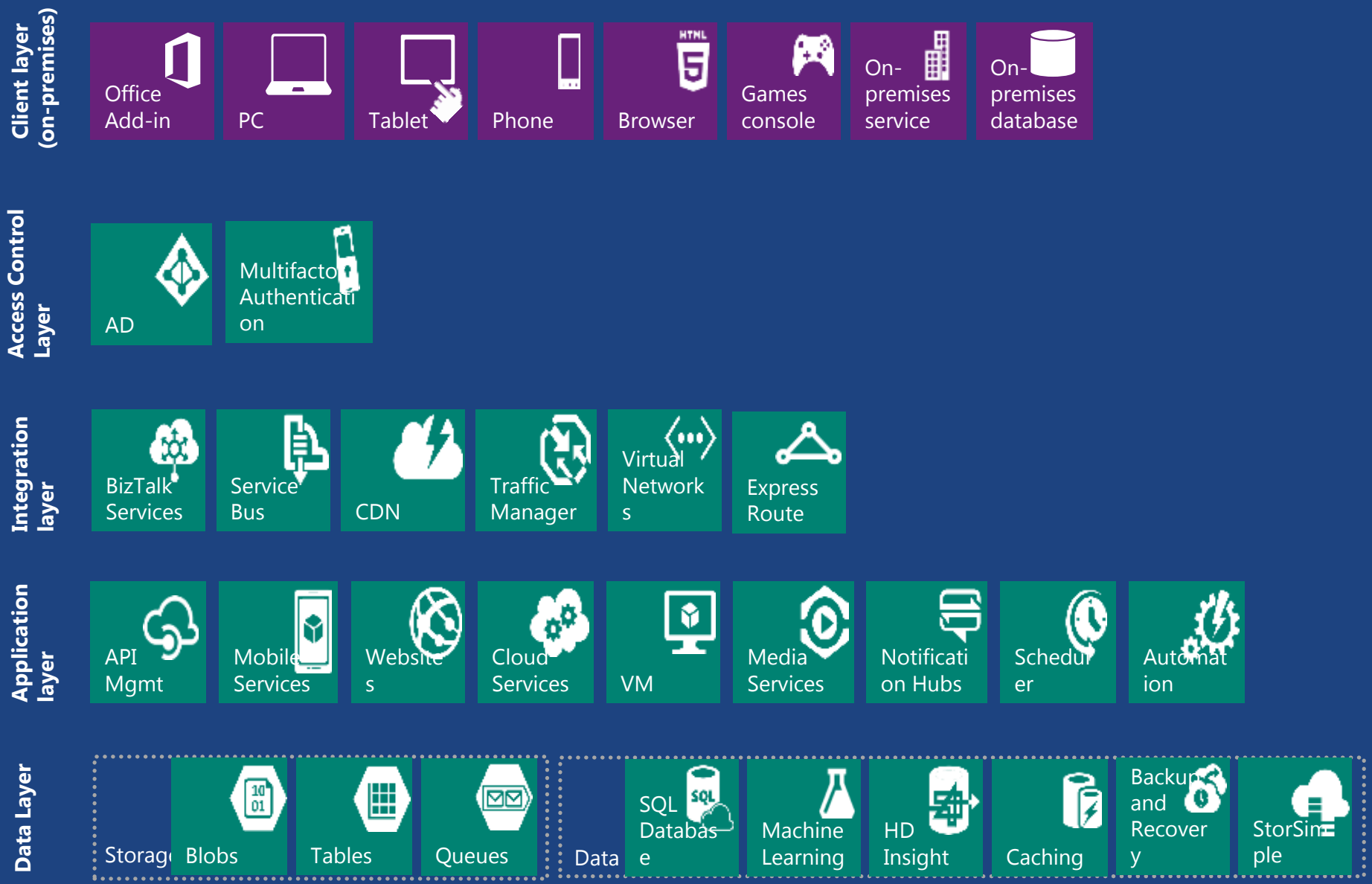
Business model

Software (as a Service)



20 regions worldwide in 2015

Microsoft Azure Services



Identity & Access Management

- Azure Active Directory
  - Synchronize on-premises directories and enable single sign-on
- Azure Active Directory B2C
  - Consumer identity and access management in the cloud
- Multi-Factor Authentication
  - Safeguard access to your data and apps with an extra level of authentication

Compute

- Virtual Machine
  - Provision Windows and Linux Virtual Machines and applications in minutes
- Cloud Services
  - Create highly available, infinitely scalable cloud applications and APIs
- Batch
  - Run large-scale parallel and batch compute jobs
- RemoteApp
  - Deploy Windows client apps in the cloud, run on any device

Web & Mobile

- App Service
  - Create web and mobile apps for any platform and any device
- Web Apps
  - Quickly create and deploy mission critical Web apps that scale with your business
- Mobile Apps
  - Build and host the backend for any mobile app
- Logic Apps
  - Automate the access and use of data across clouds without writing code
- API Apps
  - Easily build and consume Cloud APIs
- API Management
  - Publish APIs to developers, partners and employees securely and at scale
- Notification Hubs
  - Scalable, cross-platform push notification infrastructure
- Mobile Engagement
  - Maximize app usage, retention and monetization

Data & Storage

- SQL Database
  - Managed Relational SQL Database-as-a-service
- DocumentDB
  - Managed NoSQL document database-as-a-service
- Redis Cache
  - High throughput, low latency data access to build fast and scalable applications
- Storage: Blobs, Tables, Queues, Files and Disks
  - Durable, highly available and massively scalable cloud storage
- StorSimple
  - Hybrid cloud storage for enterprises, reduces costs and improves data security
- Azure Search
  - Fully-managed search-as-a-service
- SQL Data Warehouse
  - Elastic data warehouse-as-a-service with enterprise-class features

Networking

- Virtual Network
  - Provision private networks, optionally connect to on-premises datacenters
- ExpressRoute
  - Dedicated private network fiber connections to Azure
- Traffic Manager
  - Route incoming traffic for high performance and availability
- Load Balancer
  - Deliver high availability and network performance to your applications
- DNS
  - Host your DNS domain in Azure
- VPN Gateway
  - Establish secure, cross-premises connectivity
- Application Gateway
  - Highly scalable websites with HTTP load balancing and delivery control

Hybrid Integration

- BizTalk Services
  - Seamlessly integrate the enterprise and the cloud
- Service Bus
  - Connect across private and public cloud environments
- Backup
  - Simple and reliable server backup to the cloud
- Site Recovery
  - Orchestrate protection and recovery of private clouds

Analytics

- Data Lake
  - Batch, real-time, and interactive analytics made easy
- HDInsight
  - Provision managed Hadoop clusters
- Machine Learning
  - Powerful cloud-based predictive analytics
- Stream Analytics
  - Real-time stream processing
- Data Factory
  - Orchestrate and manage data transformation and movement
- Event Hubs
  - Ingest, persist, and process millions of events per second
- SQL Data Warehouse
  - Elastic data warehouse-as-a-service with enterprise-class features
- Data Catalog
  - Data source discovery to get more value from existing enterprise data assets

Media & CDN

- Media Services
  - Encode, store, and stream video and audio at scale
- Encoding
  - Studio Grade encoding at Cloud Scale
- Azure Media Player
  - A single player for all your playback needs
- Media Intelligence
  - Enhance discoverability and accessibility of media
- Content Protection
  - Securely deliver content using AES or PlayReady
- Live and On-Demand Streaming
  - Deliver your content to virtually all devices with the scale to meet your business needs
- CDN
  - Deliver content to end-users through a robust network of global data centers

Internet of Things

- IoT Suite
  - Capture and analyze untapped data to improve business results
- IoT Hub
  - Connect, monitor, and control millions of IoT assets
- Event Hubs
  - Receive telemetry from millions of devices
- Stream Analytics
  - Real-time data stream processing from millions of IoT devices
- Machine Learning
  - Powerful cloud based predictive analytics tool to enable predictive maintenance
- Notification Hubs
  - A scalable, push notification engine for quickly sending millions of messages

Developer Services

- Visual Studio Online
  - Services for teams to share code, track work, and ship software – for any language
- Visual Studio Application Insights
  - Diagnose problems and track usage to improve web and mobile apps

Management

- Microsoft Azure preview portal
  - Explore the new Microsoft Azure preview portal
- Scheduler
  - Run your jobs on simple or complex recurring schedules
- Automation
  - Simplify cloud management with process automation
- Operational Insights
  - Collect, search and visualize machine data from on-premises and cloud
- Key Vault
  - Safeguard and maintain control of keys and other secrets