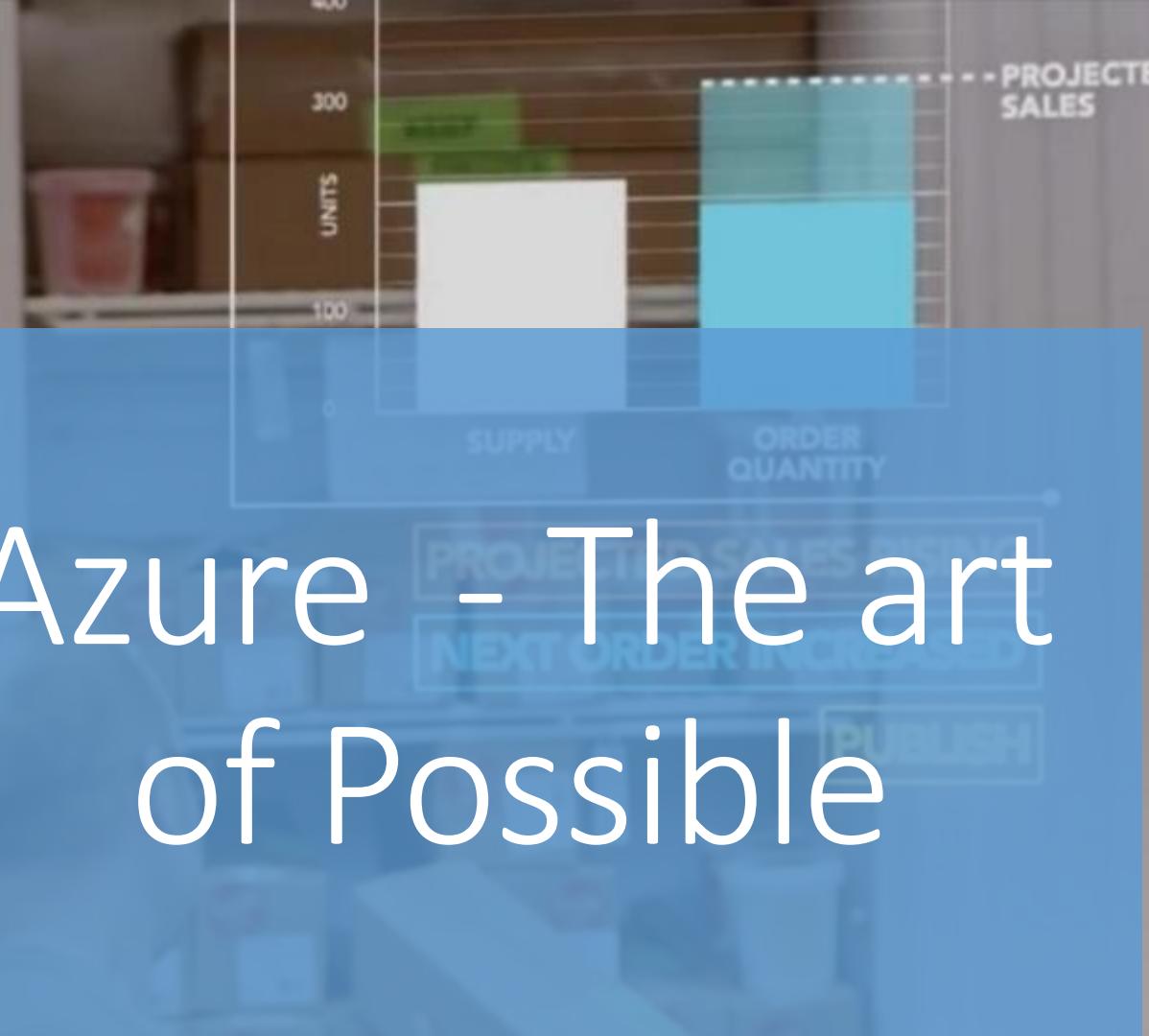


# Azure - The art of Possible

Abdul Rasheed Feroz Khan  
Microsoft MVP – Azure  
Director - CodeSizzler



# About the Instructor

- Microsoft Most Valuable Professional – Azure
- C# Corner Most Valuable Professional
- Microsoft Certified Trainer
- 8 years of experience as Cloud Consultant
- Azure – AWS – GCP – IoT – Machine Learning – Cognitive Services  
– Bot – Xamarin – Big Data
- Consultant for Accenture, Adobe, Boeing, Deloitte., Infosys,  
Johnson Controls, Microsoft, Wipro, etc.,



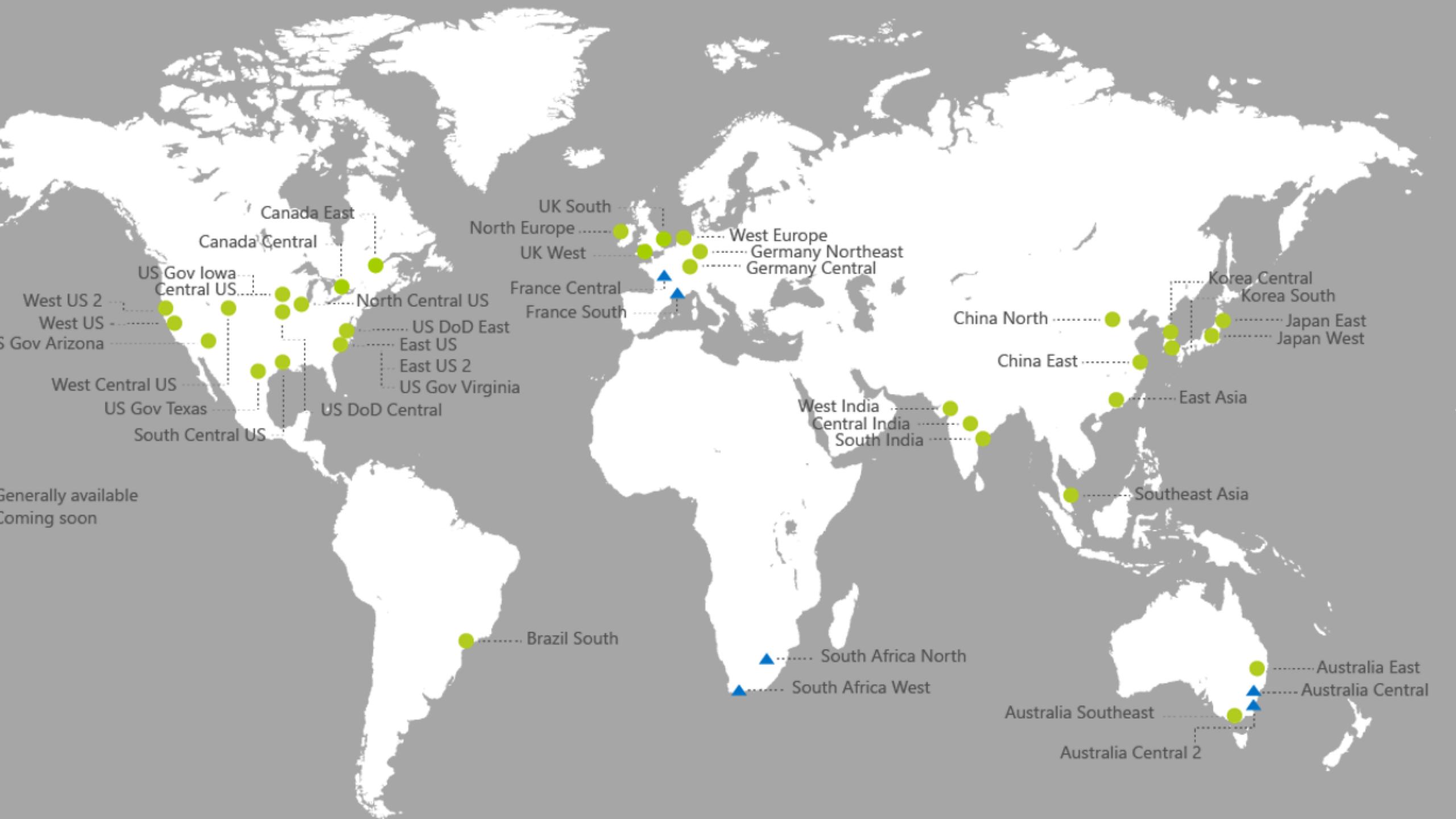
# Agenda Walk-Thru

Topics	Time	Day 1
Azure.. The Art of Possible	30 minutes	
The Power of Computing with Linux & Windows Server Machines	30 minutes	
The Secret Sauce of Azure Storage	30 minutes	
App Development & DevOps – Microsoft Azure	30 minutes	
Questions & Discussions	30 minutes	Day 2

# Why Microsoft Azure?

# Open Source on Azure



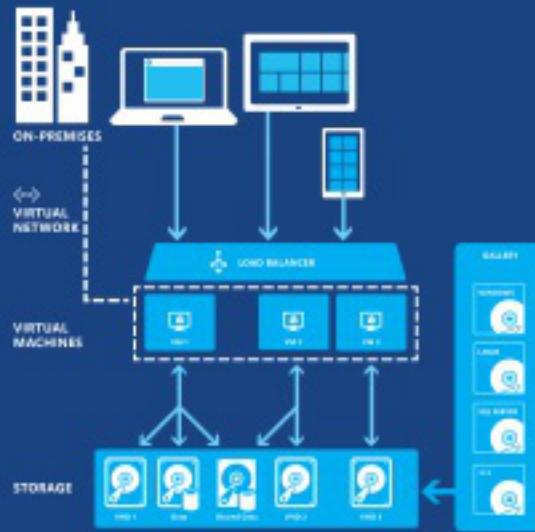


# Powerful Services of Azure

# What is Microsoft Azure?

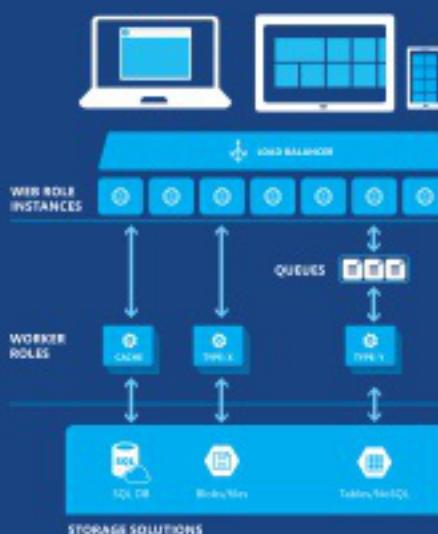
## Virtual Machines

VMs are bare cloud building blocks. Get full control over a virtual machine with virtual hard disks. Install and run software yourself. Configure multiple instances with different roles to create complex solutions. VMs are highly identical to conventional VM servers, and are the easiest way to move existing workloads to the cloud.



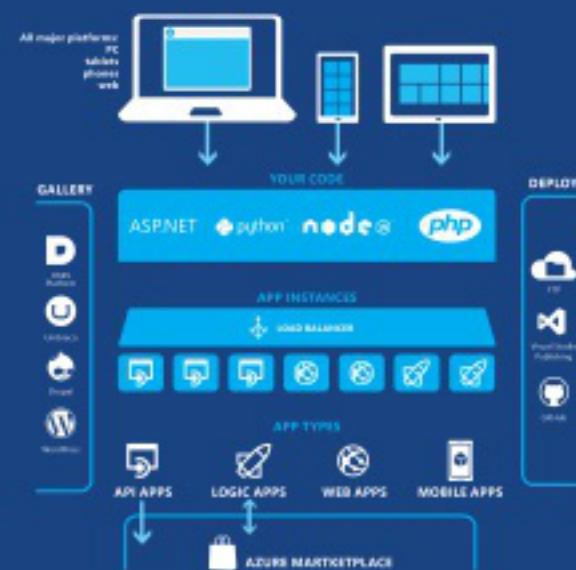
## Cloud Services

Easily access and manage these general-purpose VMs, the machines you choose for each VM as needed with system updates. You configure the VMs as needed, and scale out as many copies as needed. One type of VMs, worker roles and only code-execution roles are made for computing and running services. The role is to simply a worker role with already installed and configured.



## App Service

With App Service, it's a high-productivity solution for developers who need to create enterprise-grade web and mobile app experiences. App Service provides a complete platform as a service solution that enables you to deploy and automatically scale applications in the cloud and seamlessly integrate them with on-premises resources and cloud-based applications.



# Microsoft Azure

Microsoft Azure is a flexible, open, and secure public cloud built for business. Access a broad collection of integrated services that accommodate many languages and operating systems. Use world-class tools to accelerate a wide variety of app development and delivery capabilities.

### Free trial!

Use \$200 credit to try any combination of Azure resources:

[aka.ms/TryAzure](http://aka.ms/TryAzure)

Search [www.microsoft.com](http://www.microsoft.com), MSDN, or TechNet for keywords found in this poster

## Catalog of Services

### COMPUTE



Virtual Machines

Get full control over a server in the cloud and maintain it as your business requires.



Cloud Services

Managed virtual machines with isolated web and worker roles.



Service Fabric

Build highly scalable, reliable, stateless and stateful applications composed of microservices.



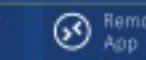
Batch

For running large-scale parallel and high-performance computing (HPC) applications.



Scheduler

Create jobs that can reliably run simple or complex calculations on nearly any type of service.



Remote App

Access Windows apps from any device and any location than run within Remote App VMs.

### NETWORKING



Virtual Network

Provision and manage IP addresses in Azure and securely link to your on-premises infrastructure.



Express Route

Connect on-premises and cloud datacenters directly through dedicated, low-latency links.



Traffic Manager

Load balances incoming global traffic across multiple services running in multiple datacenters.

### IDENTITY & ACCESS



Active Directory

Identity and access management for cloud applications and identity included in your premium Server AD.



Multi-Factor Authentication

Authenticate users to data and apps with additional physical layer of security control.

### MEDIA & CON



Media Services

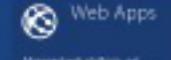
Manage video and audio assets for live and on-demand streaming workflows.



CDN

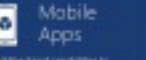
Cache content for your apps in Content Delivery Networks (CDNs) at 100+ of edge locations to improve user experience.

### WEB & MOBILE



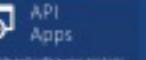
Web Apps

Manage web platforms get started fast and scale to any geo using many scales/ languages.



Mobile Apps

Add native capabilities to mobile apps, with native client support on major device platforms.



API Apps

Create and publish your own APIs as REST or off-the-shelf services and reuse in enterprise.



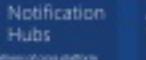
Logic Apps

Build reusable business processes by linking your own custom APIs with an API Catalogue/Marketplace.



API Management

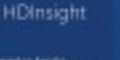
Publish and manage APIs to developers, partners and employees securely and at scale.



Notification Hubs

Deliver millions of push notifications from any application instantaneously.

### ANALYTICS



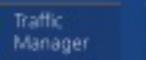
HDInsight

Big Data based on Apache Hadoop analytics that integrate easily with Microsoft Office.



Machine Learning

Move from big data with compute power to predict future trends or behavior.



Stream Analytics

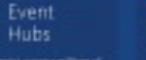
Process data streams in real time to discover and react to trends.



Data Factory

Import data from multiple sources to synchronize to a cloud-based data warehouse.

### DATA



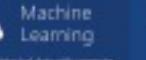
SQL Database

Managed relational database with multi-region high availability and elastic performance scaling.



DocumentDB

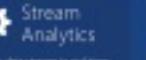
Store unstructured patterns of JSON objects in a highly available NoSQL document database.



Redis Cache

Make applications scale and the more responsive under load by keeping data closer to app logic.

### SEARCH



Search

Managed, scalable search service for your apps. Create semantic search results and ranking models.

### TABLES



Tables

Manage scale for semi-structured key-value data in this schema-less NoSQL store.

### STORAGE & BACKUP



Storage Blobs & Files

Store binary application data and file content – store for dedicated, backup, restore or archive for VMs.



Backup

Managed service that handles backup restore or restore of Windows file and shared folder data for VMs.



Import / Export

Transfer data between – drop selected data to remote cloud or local storage.



Site Recovery

Coordinates replication and disaster recovery for on-premises primary storage for backup and disaster recovery.



StorSimple

Automated policy-driven solution to extend on-premises primary storage for backup and disaster recovery.

### DATA



SQL Database

Managed relational database with multi-region high availability and elastic performance scaling.



DocumentDB

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### DEVELOPER SERVICES



Visual Studio Online

Share code, plan and track projects, build, deploy and test apps in the cloud collaboratively.



Application Insights

Analyze app usage, availability and performance to detect issues and solve problems proactively.

What sort of advancement can AI do?

LIVE



TARGET 178

DINDIGUL DRAGONS

ANIRUDH  
VIVEK\*

4 4  
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75-3  
9.1

JONES TUTI PATRIOTS

KISHORE  
BOUNDARIES: FOURS 10, SIXES 2

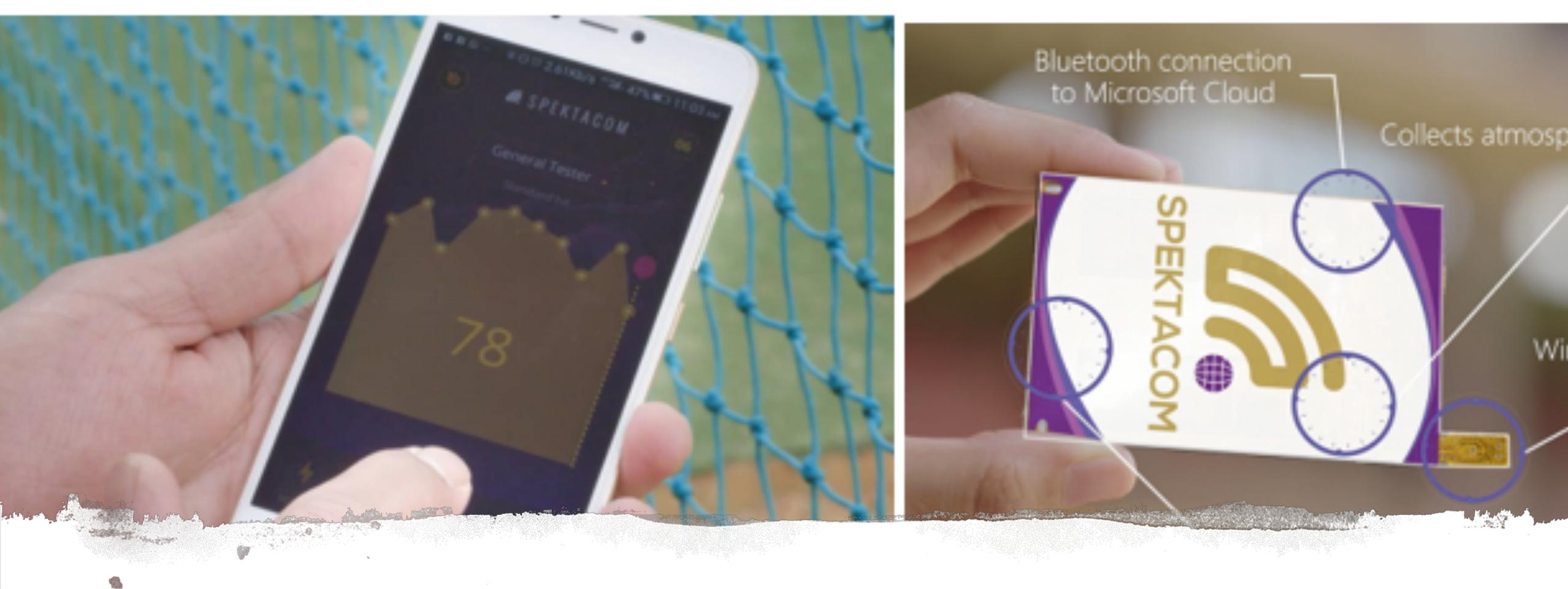
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# Services Used for Power Bat

- Azure Sphere
- Azure IoT Hub
- Azure Event Hub
- Azure Functions
- Azure Cosmos DB
- Azure ML 2.0





# The Opportunity

- Massive growth of interest on Cricket
- This lead to a new innovation with AI and Cricket bat.

# Idea Behind Power Bat

- With increase in popularity of game technologies were integrated along with it.
- Spektacom brought up Microsoft Azure AI to the cricket ground in form of Power Bat.



# Spektacom's Technology Impact on Game



Enhance the fan experience and fan engagement with the sport.



Enable broadcasters to use insights for detailed player analysis.



Allow grassroots players and aspiring cricketers to increase their technical proficiency.



Allow coaches to provide more focused guidance to individual players.



Allow professional cricketers to further enhance their performance.



# Microsoft

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