



**Azure Dev Day**  
**Start: 11 AM (EST)**  
**Week of Jan 16<sup>th</sup>, 2023**



Azure Dev Day



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Devs

# Agenda (11:00 AM EST)



Day 1: 16 JAN



Azure introduction & fundamentals



Web-based solutions (Presentation & Lab)

Day 2: 17 JAN



Serverless, event-driven solutions  
(Presentation & Lab)

Day 3: 19 JAN



Azure Kubernetes Services (Presentation & Lab)

Day 4: 20 JAN



DevOps for deploying solutions



[Kahoot Trivia](#) – Microsoft SWAG

# Day 2:

## Prologue



## Day 1: Azure App Service notes & discussion

- Azure geography, regions & availability zones
- Well architected framework assessments
- Azure Service Level Agreements
- Azure Pricing Calculator
- Azure Portal navigation, quotas & resource providers

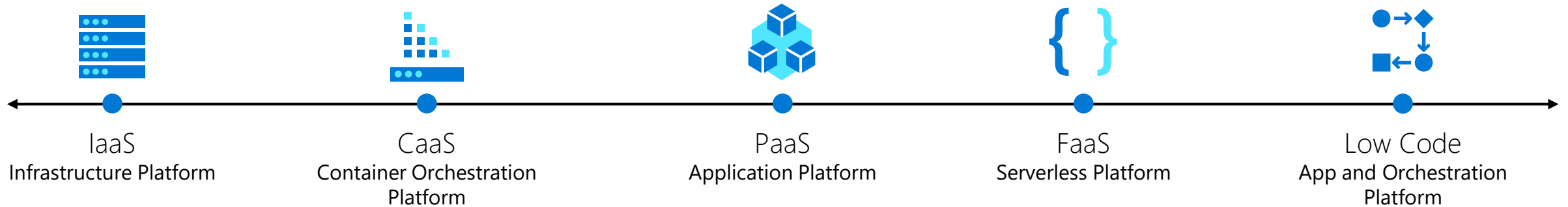
# Serverless Solutions

Building highly-scalable, event-driven applications.





# Application hosting continuum



Virtual Machines



Azure Kubernetes Service



Azure Container Apps



Azure Spring Apps



Azure App Service



Azure Functions



Azure Logic Apps



Power Apps

More Control of execution environment

Less Control of execution environment

Less Agile development & deployment

More Agile development & deployment

# "Serverless" benefits



## No server management

Developers can just focus on their code—there are no distractions around server management, capacity planning, or availability.



## Event-driven processing

Application components react to events and triggers in real-time.



## Consumption billing

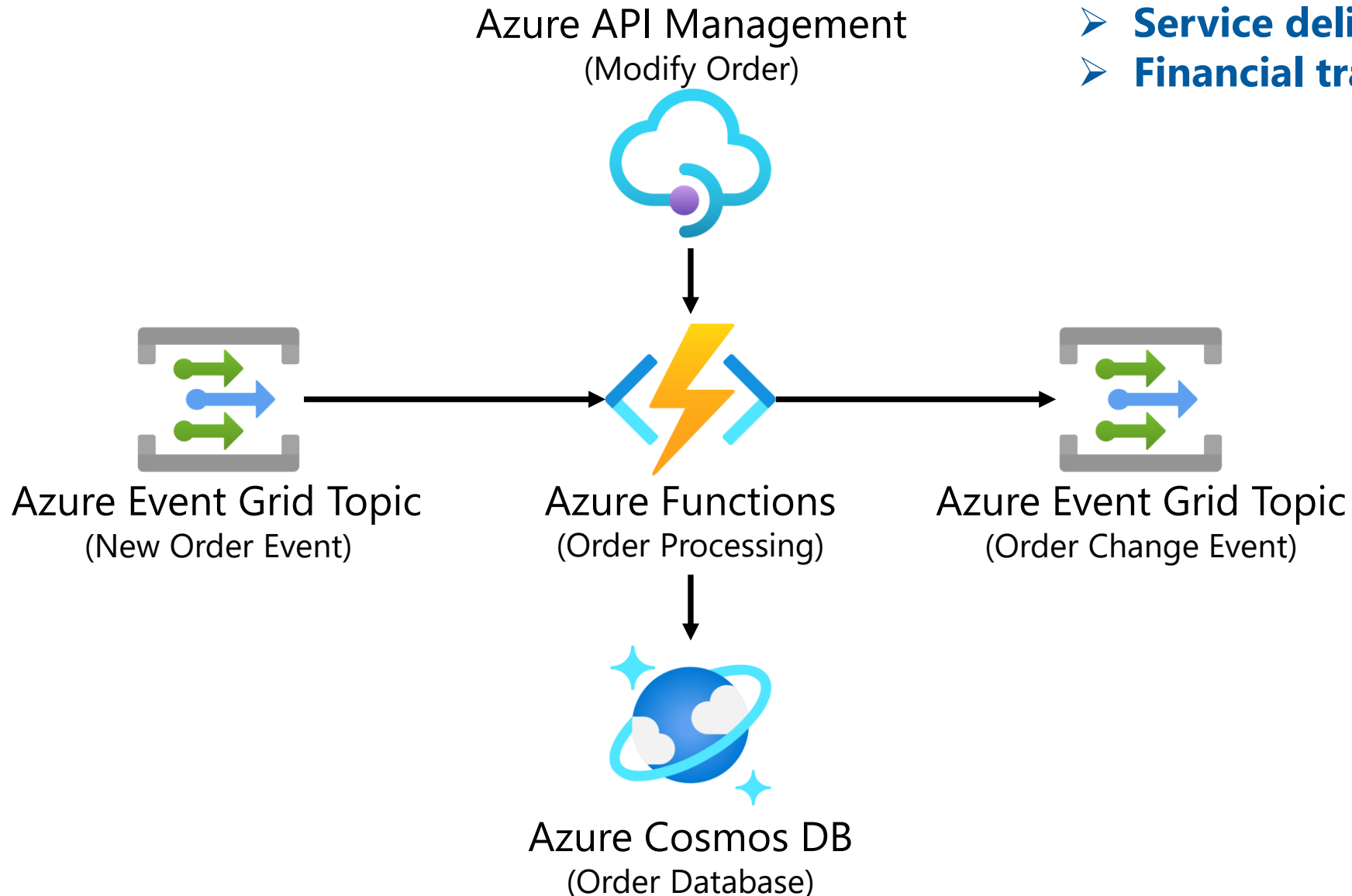
Only pay for what you use by automatically scaling up and down based on system usage and throughput.



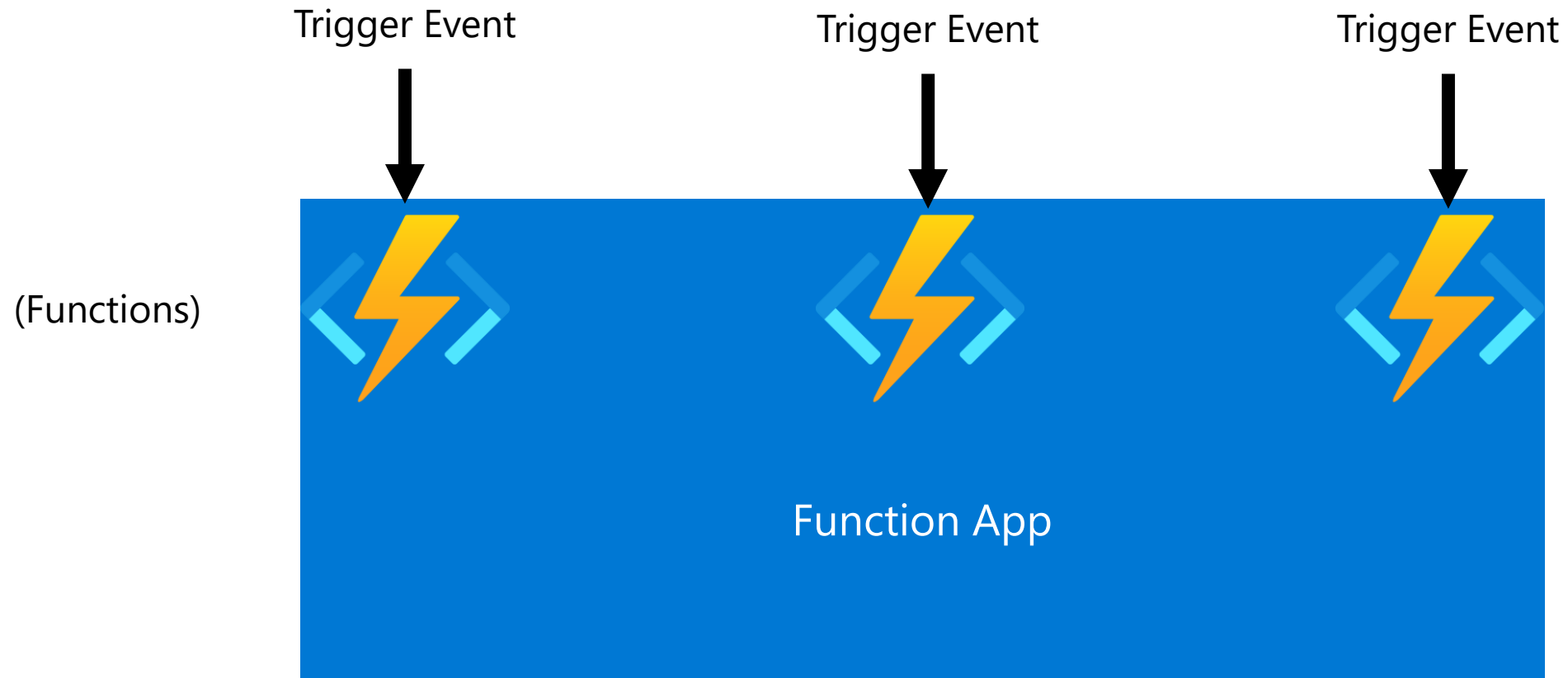
# Serverless architecture

Use case(s) and patterns

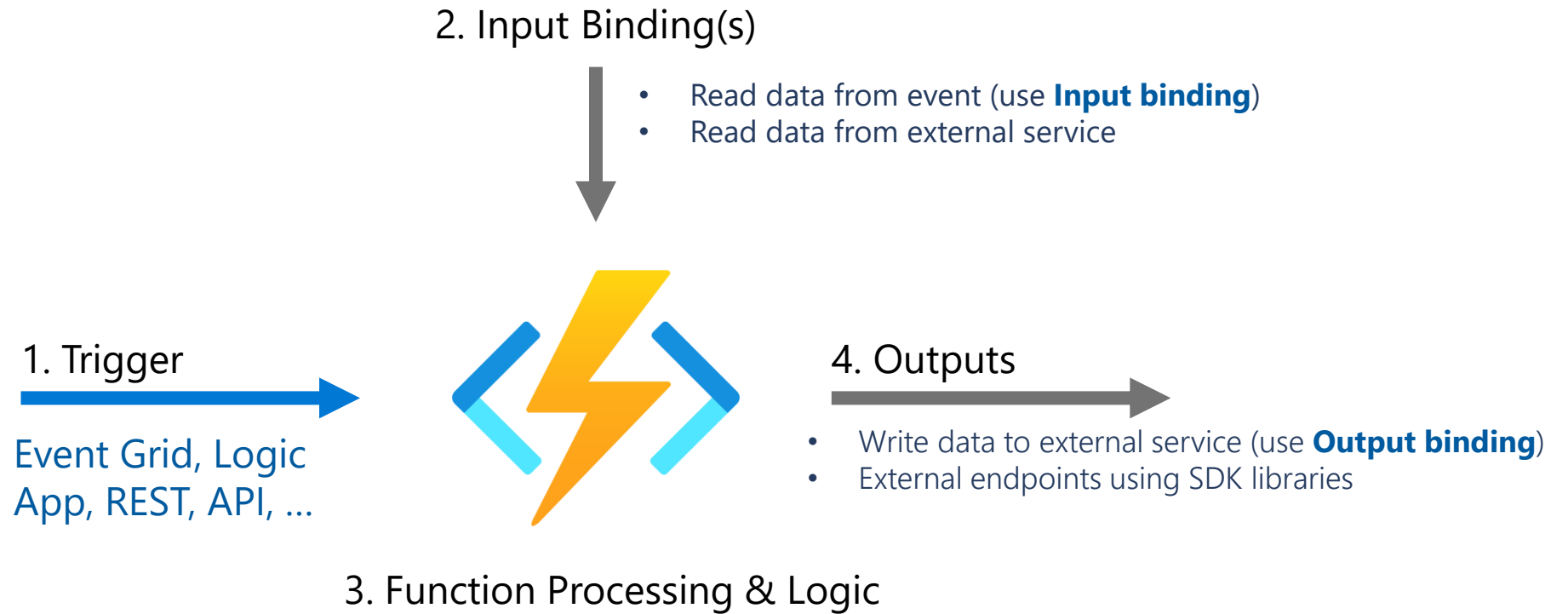
- **Order management**
- **Service delivery**
- **Financial transactions**



# Anatomy of a Function App



# Anatomy of a Function



# Thinking about Functions



## Single responsibility

Functions are single-purposed, reusable pieces of code that process an input and return a result



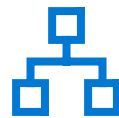
## Stateless

Functions don't hold any persistent state and don't rely on the state of any other processes



## Short lived

Functions don't stick around when finished executing, freeing up resources for further executions



## Event driven & scalable

Functions respond to predefined events, and can scale out to handle high-load scenarios



## Integrated programming model

Use built-in triggers and bindings to define when a function is invoked and to what data it connects



## Enhanced development experience

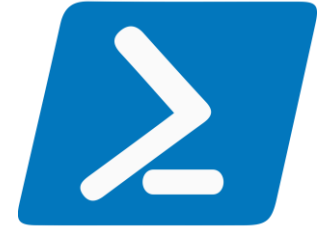
Code, test and debug locally using your preferred editor or the easy-to-use web-based interface including monitoring



## Hosting options flexibility

Choose the deployment model that better fits your business needs without compromising development experience

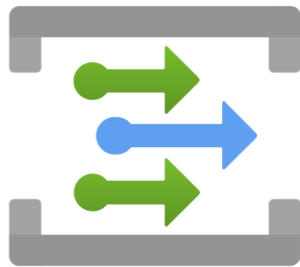
# First-class Functions languages



Custom Handlers



# Events and messaging



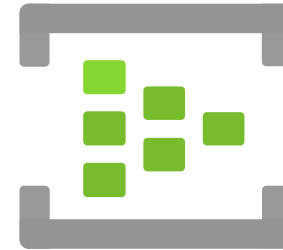
## Event Grid

Modern event-based reactive systems  
(subscription)



## Service Bus

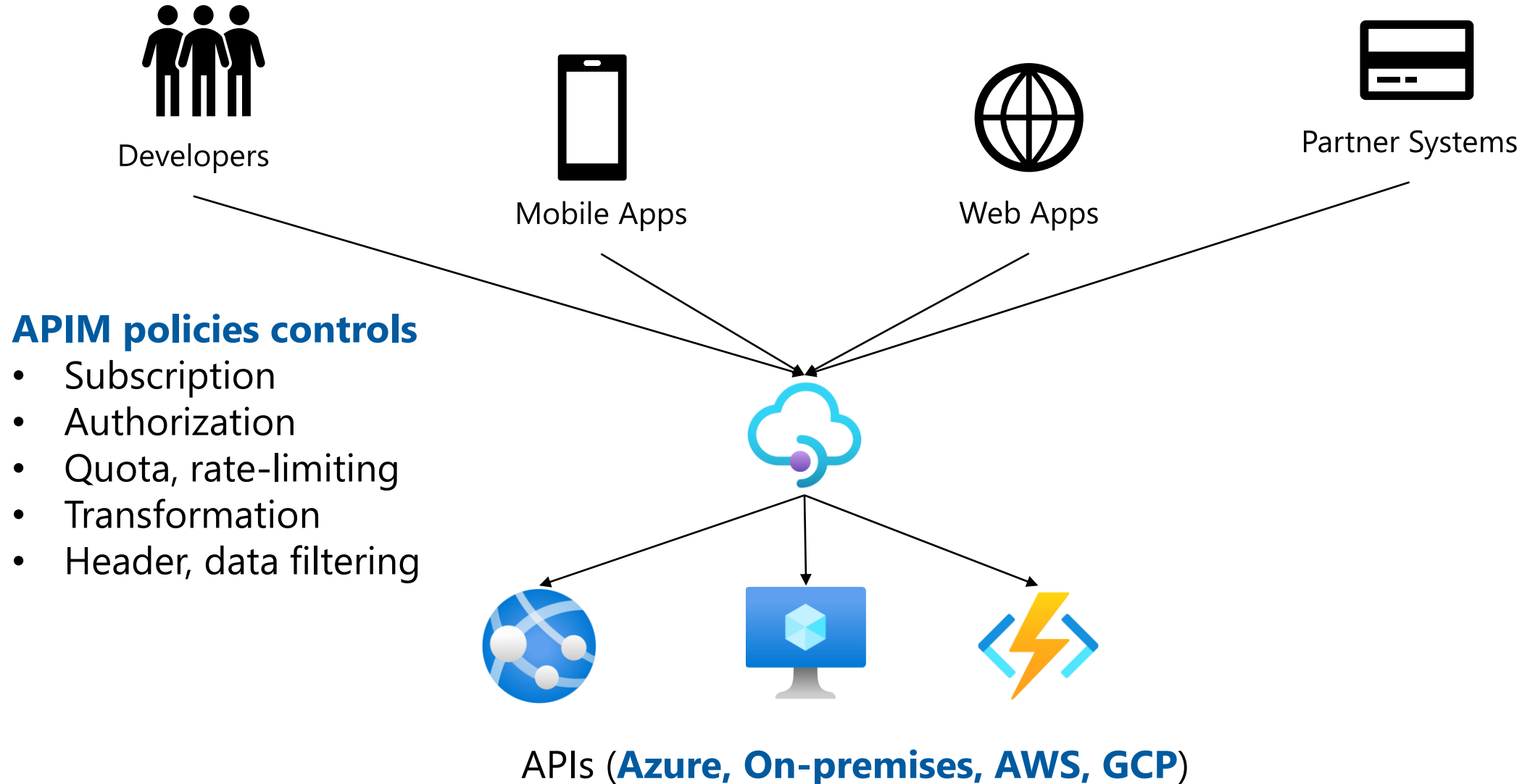
Queue or topic;  
Publish, subscribe model;  
1-to-1, or 1-to-many



## Event Hubs

High throughput event ingestion  
(streaming, IoT)

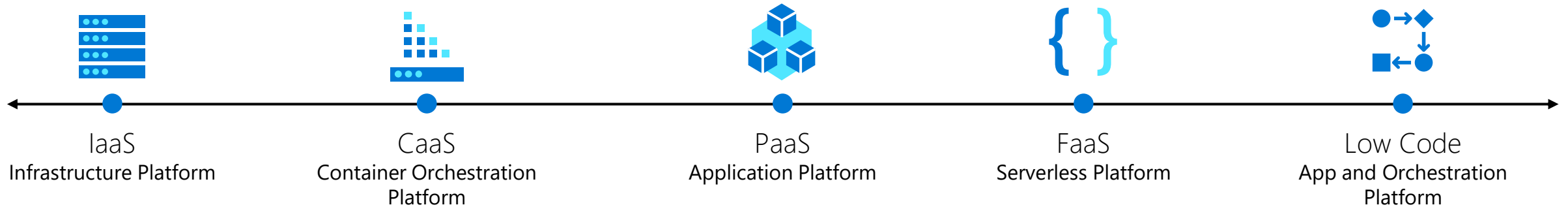
# API Management



# Cosmos DB



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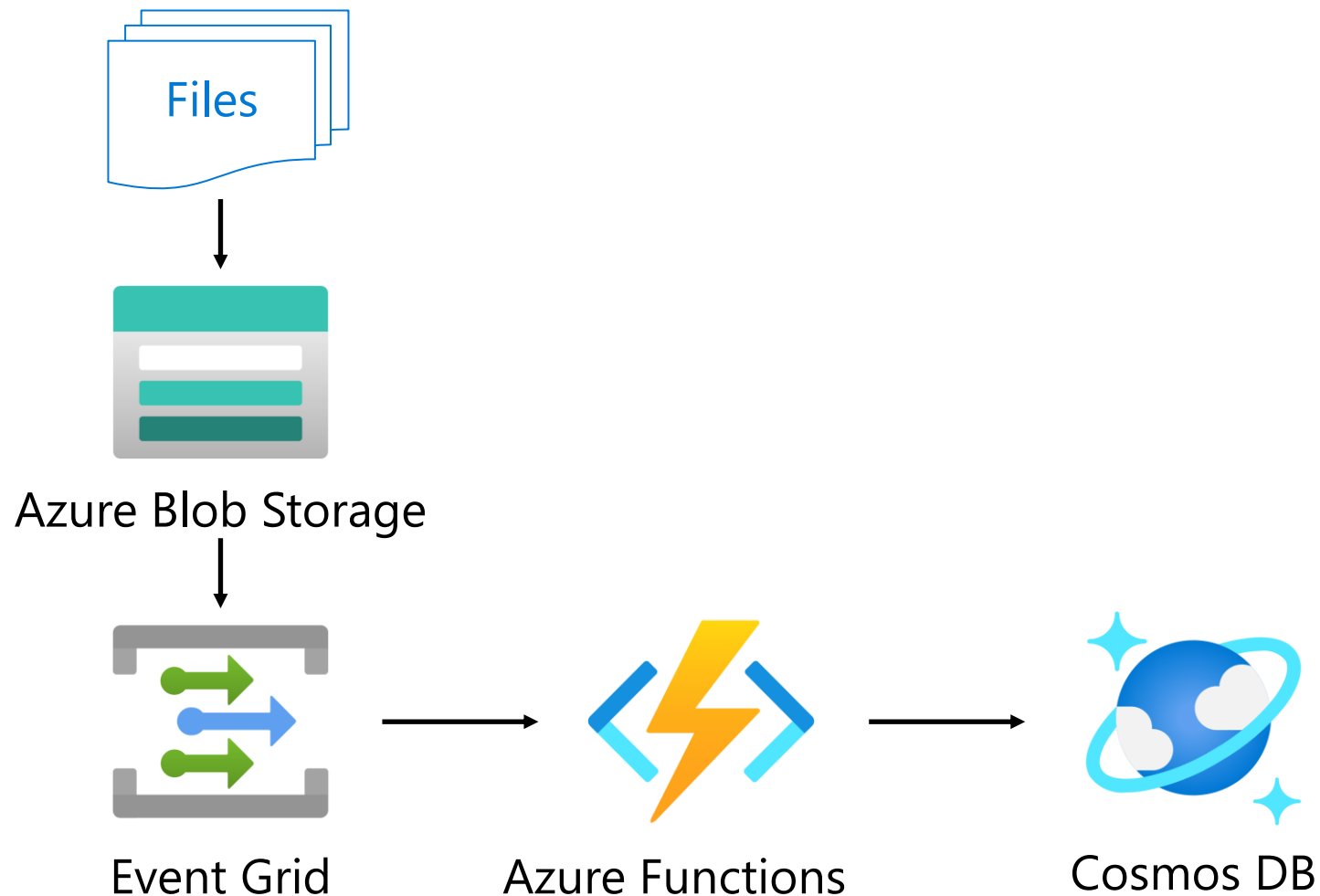
Less Agile development & deployment

More Agile development & deployment

# Serverless Solutions Lab



Azure Dev Day



[aka.ms/azuredevdaylabs/serverless](https://aka.ms/azuredevdaylabs/serverless)