



Azure Dev Day



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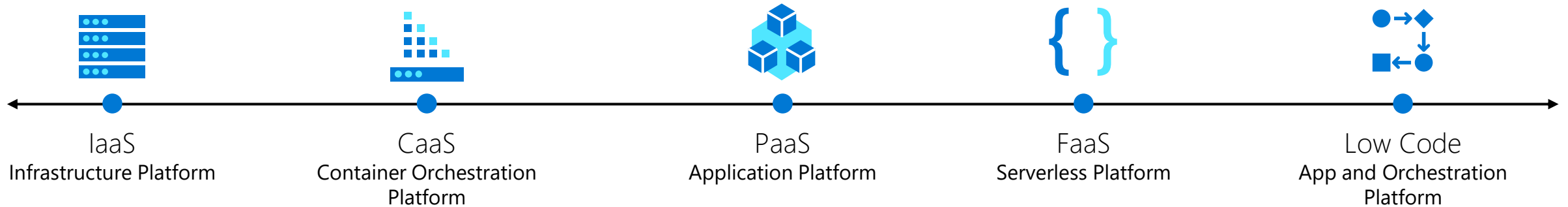
<https://github.com/garyciampa>

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.



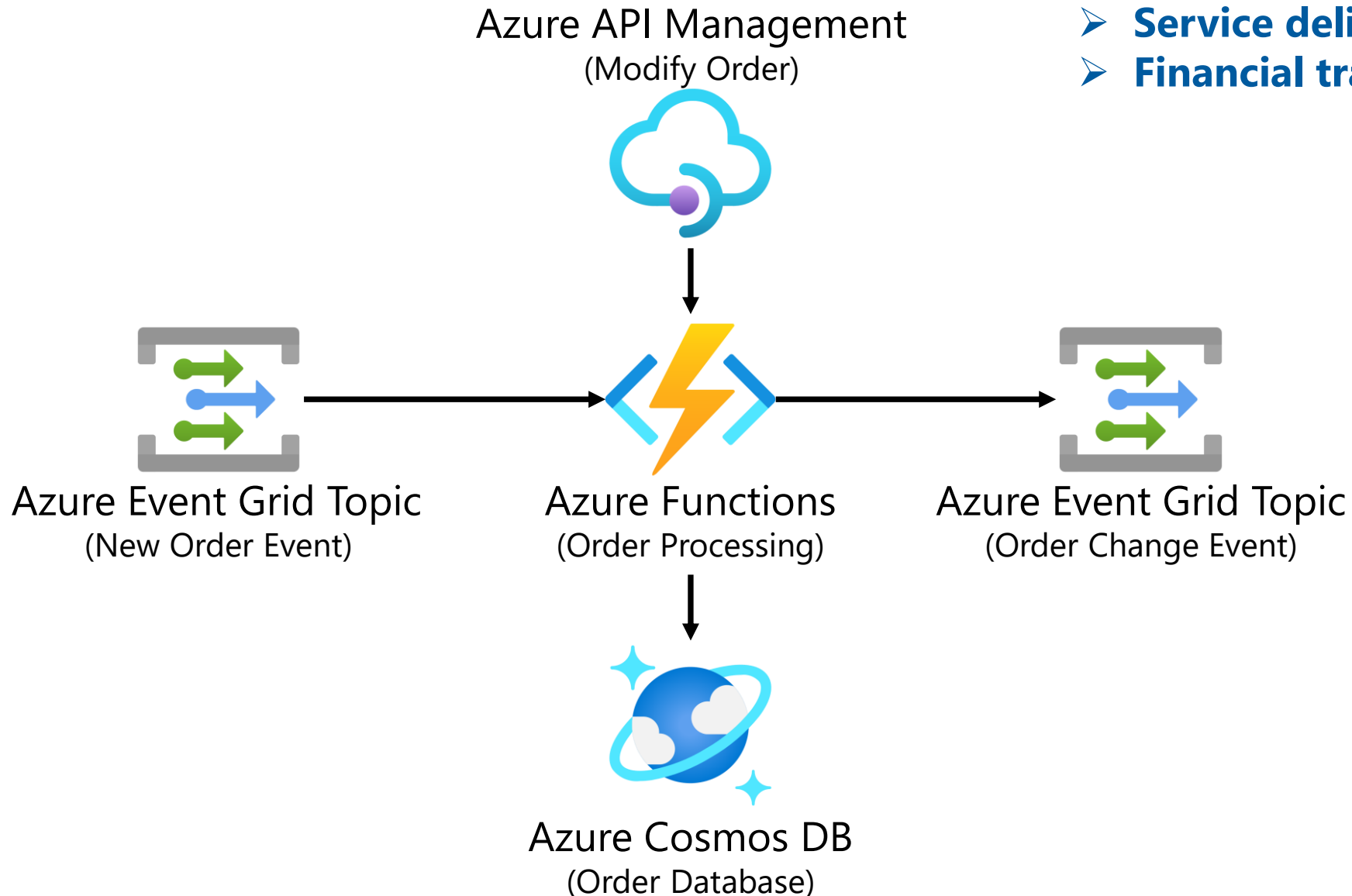
Microsoft Azure Well-Architected Framework

Guiding tenet, framework and best practices
Reliability, Security, Cost, Operational and Performance

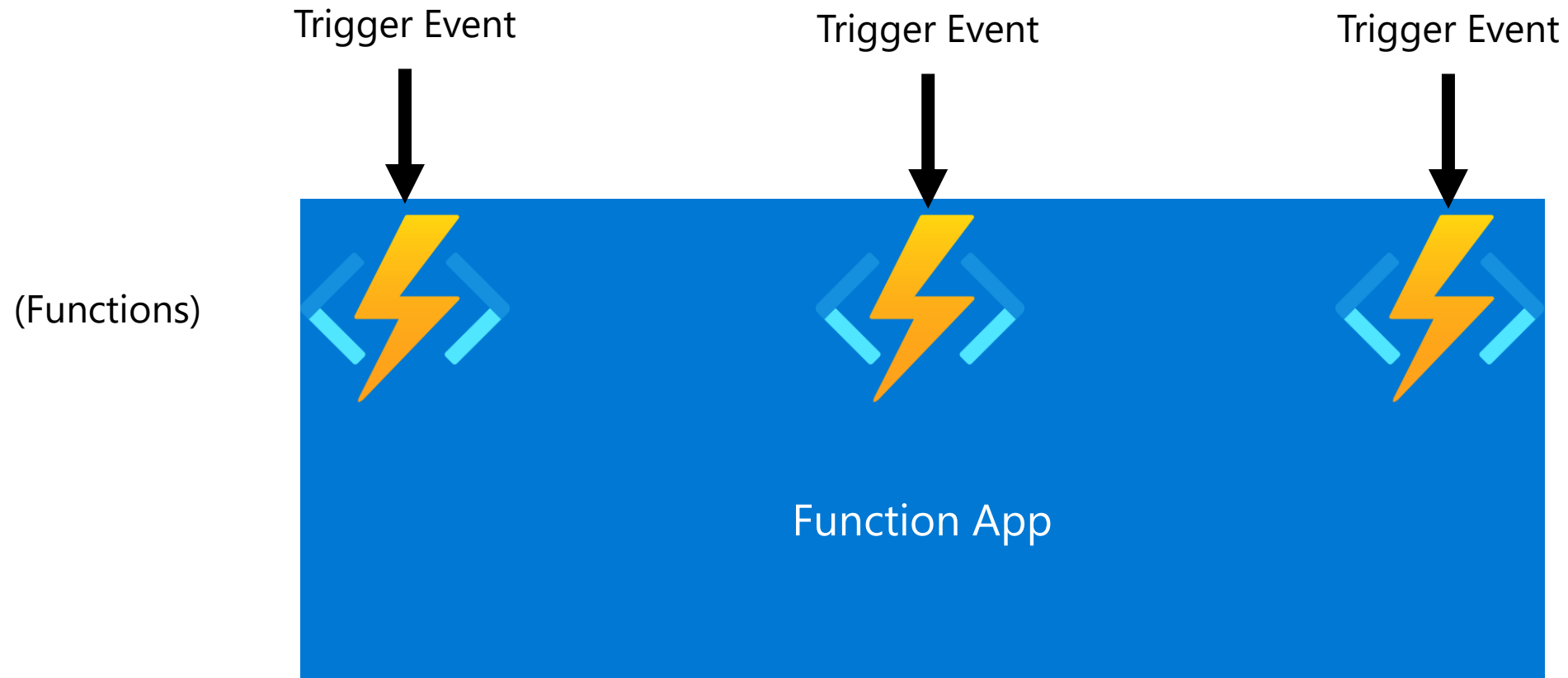
Serverless architecture

Use case(s) and patterns

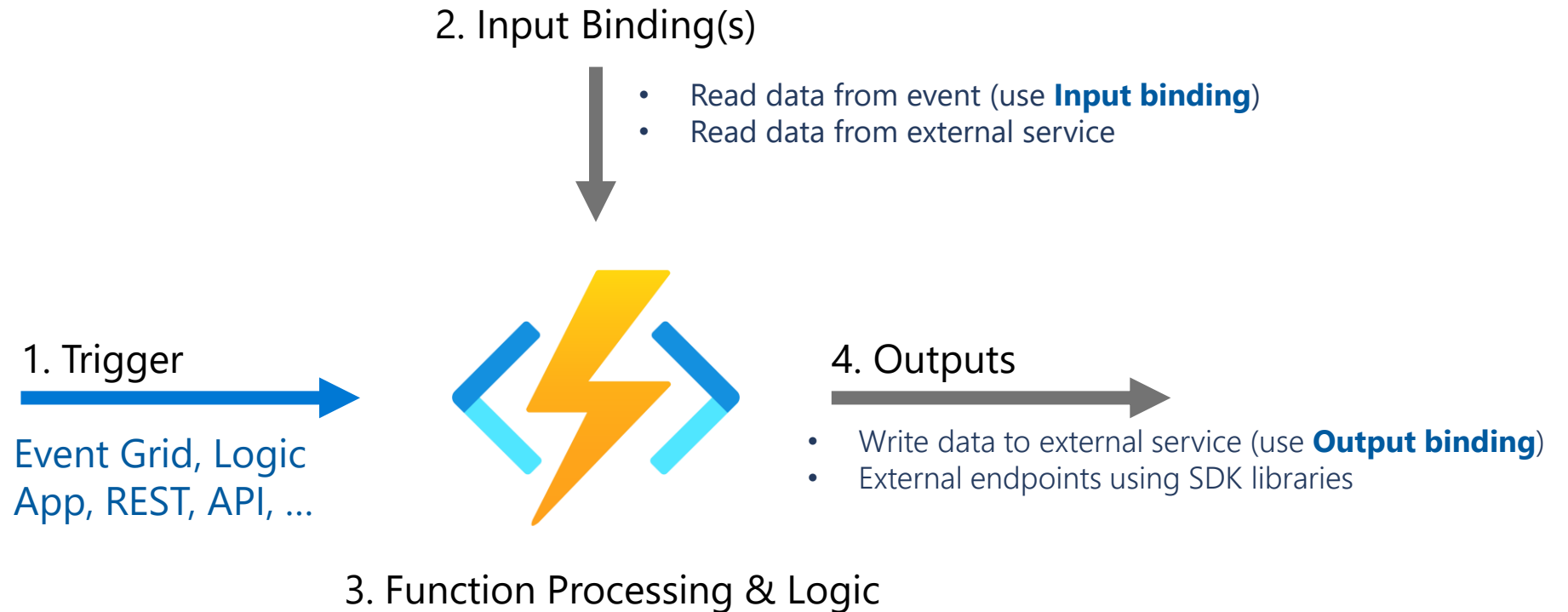
- **Order management**
- **Service delivery**
- **Financial transactions**



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



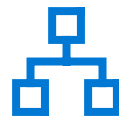
Stateless

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

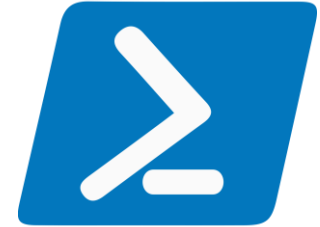
Code, test and debug locally using your preferred editor or the easy-to-use web-based interface including monitoring



Hosting options flexibility

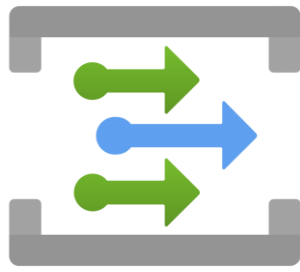
Choose the deployment model that better fits your business needs without compromising development experience

First-class Functions languages



Custom Handlers

Events and messaging



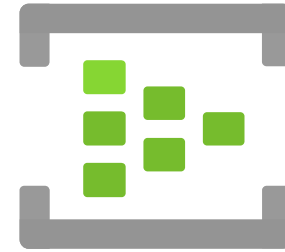
Event Grid

Modern event-based reactive systems
(subscription)



Service Bus

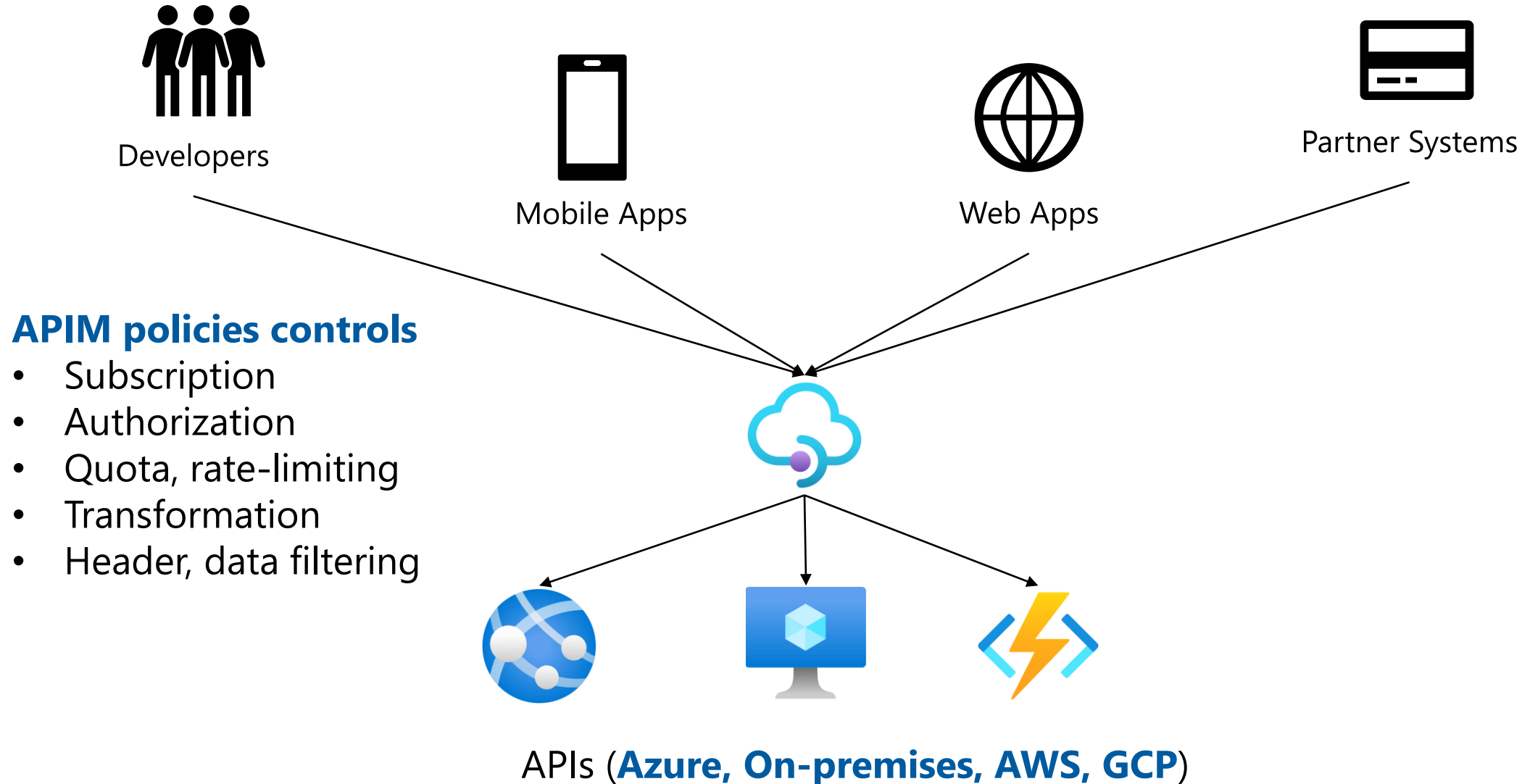
Queue or topic;
Publish, subscribe model;
1-to-1, or 1-to-many



Event Hubs

High throughput event ingestion
(streaming, IoT)

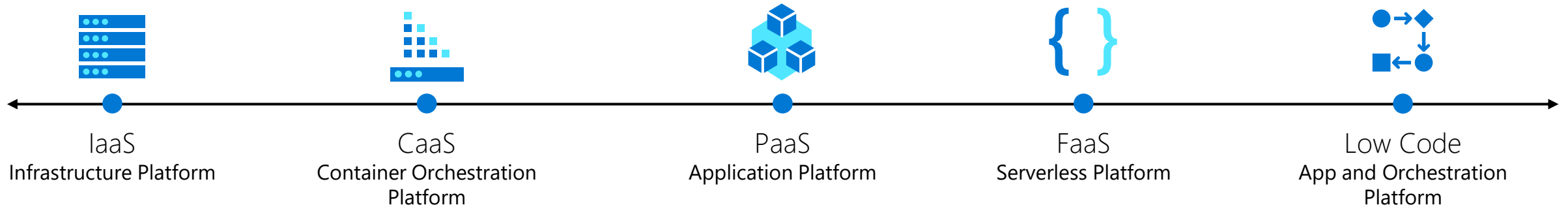
API Management



Cosmos DB



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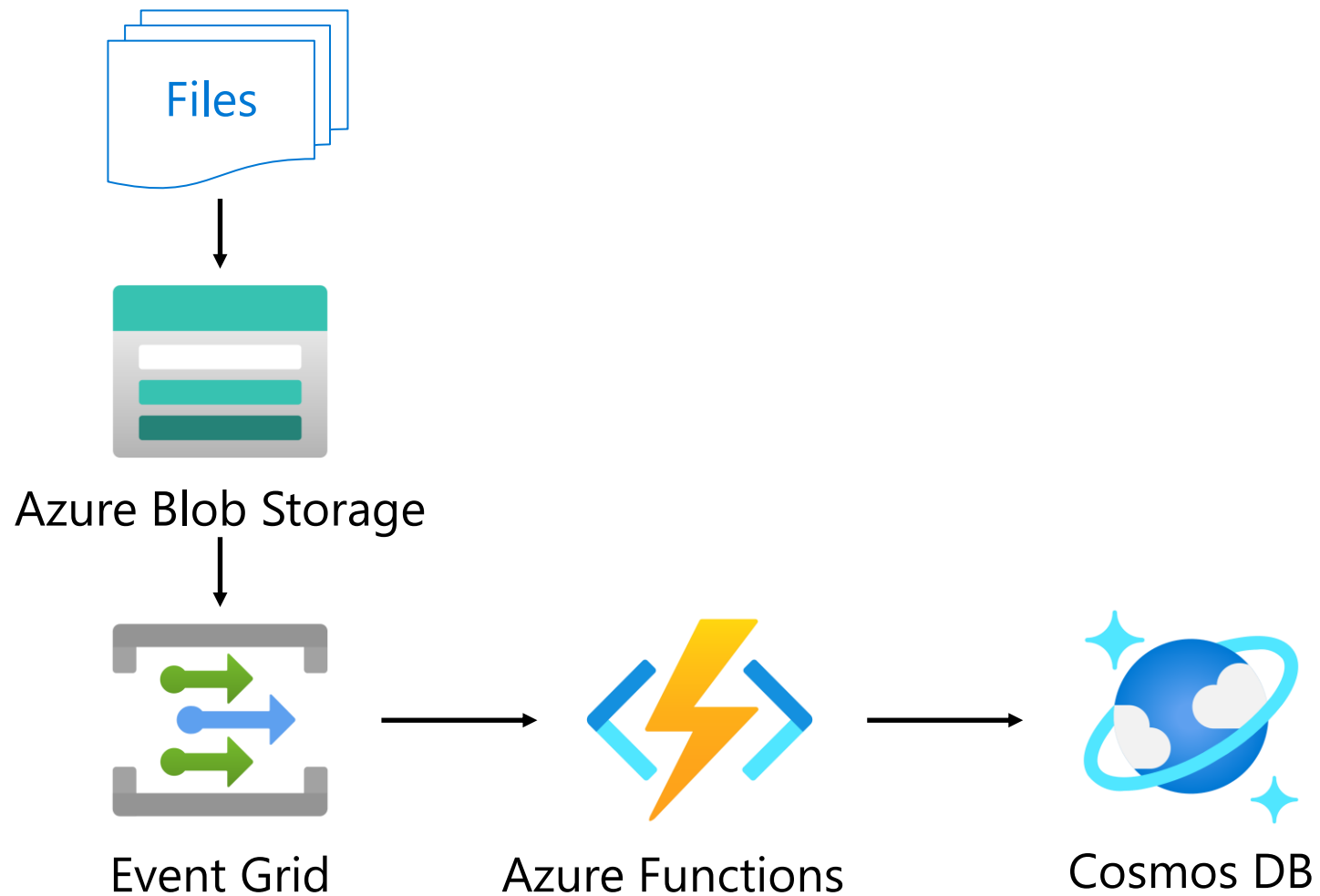
Learn what you want, when you want, how you want. Resources include in-person hands-on workshops, free, interactive online training and sandbox environments.



Serverless Solutions Lab



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aka.ms/azuredevdaylabs/serverless