Moving traditional microservice to Service Mesh

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Agenda

- What is a traditional microservice?
- What is service mesh?
- How do we convert the microservice to use service mesh?

What is a traditional microservice?

High Cohesion

Observable

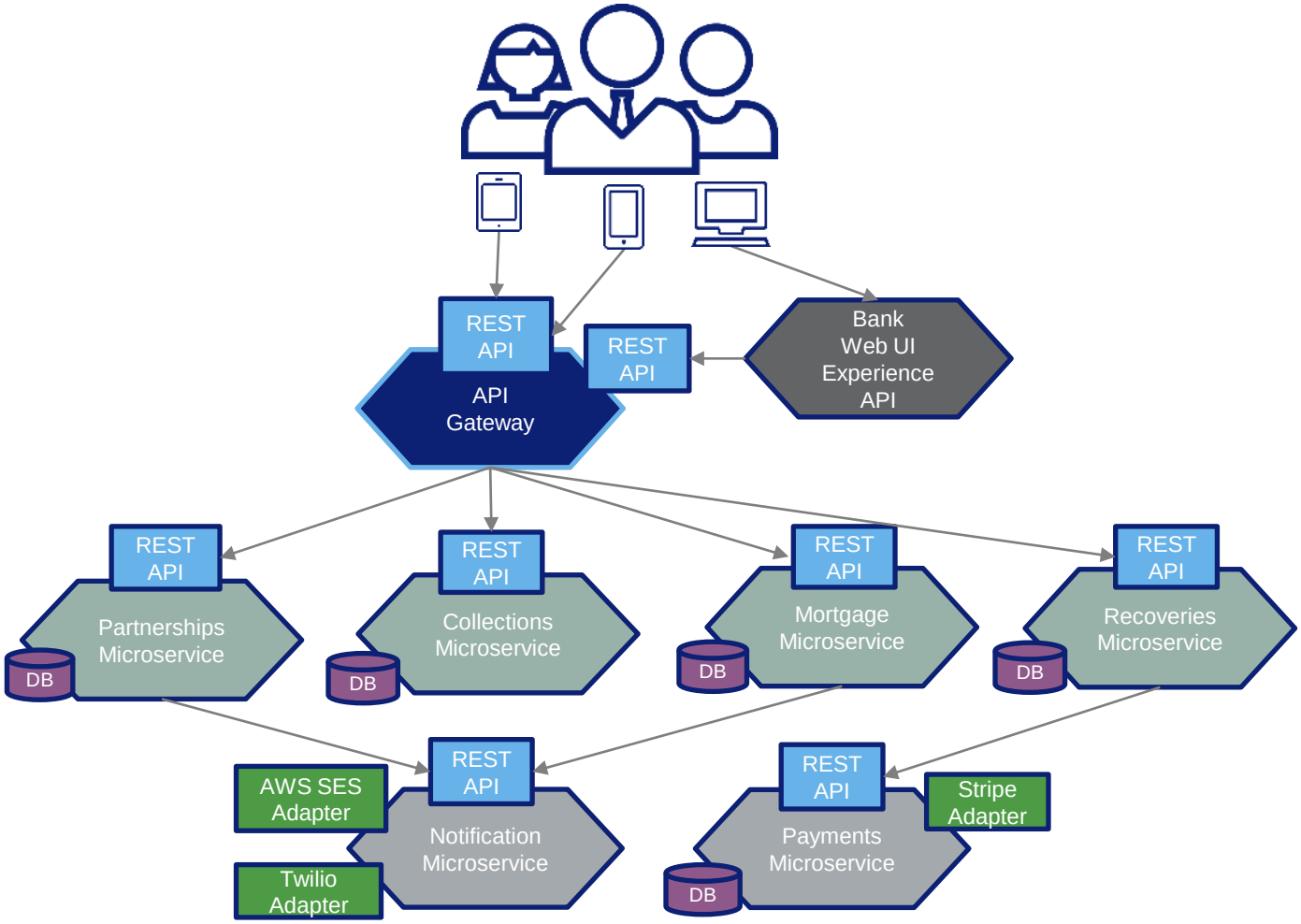
Business Domain

Autonomous

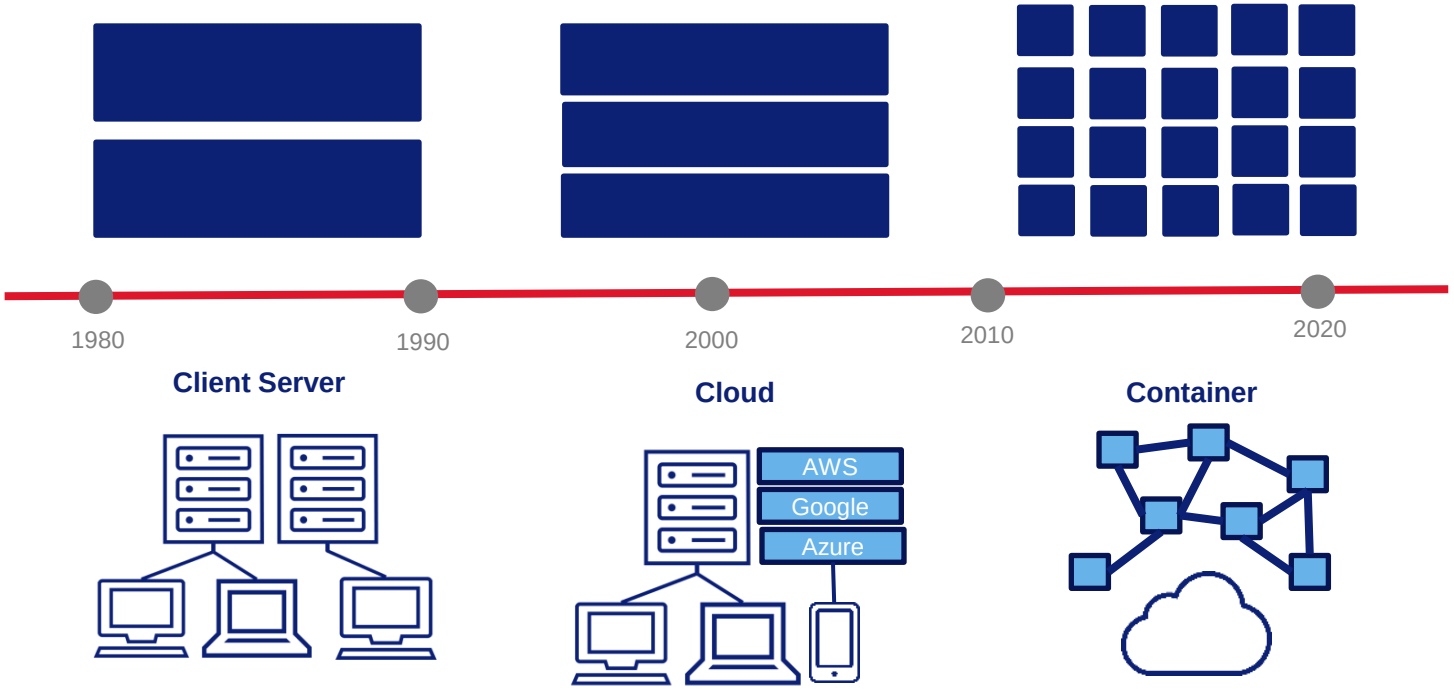
Automation

Resiliency

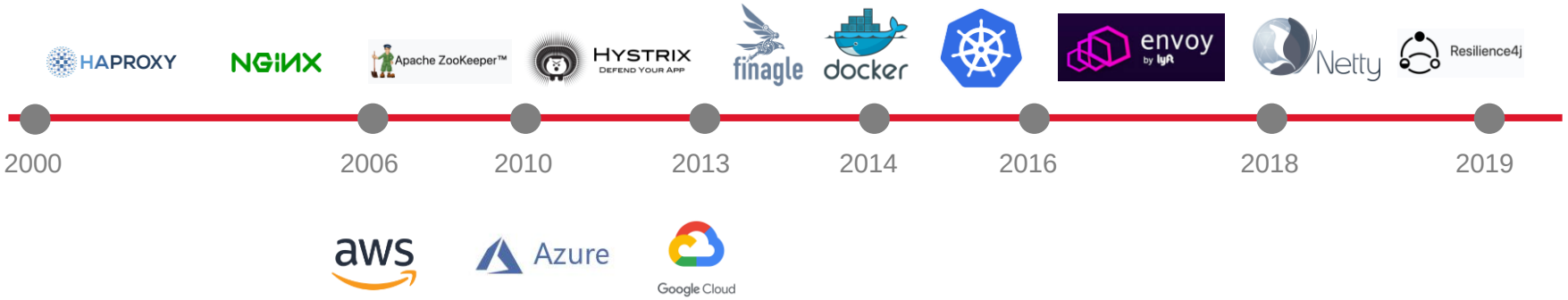
Traditional Microservices



Infrastructure Landscape Journey



Technology Landscape Journey



Traditional Services Deployment Pattern

Load Balancer

- Layer 4 (TCP) load balancing
- Path-based routing
- Port-based routing
- SSL/TLS termination

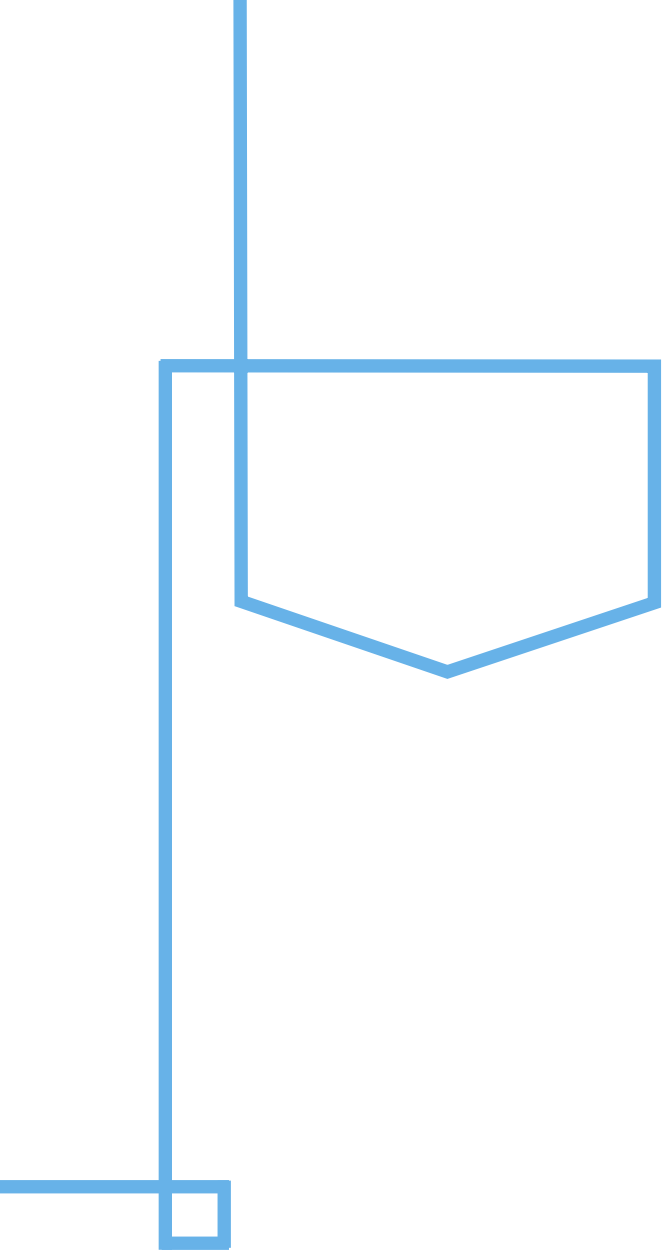
Autoscaling

- Scale virtual machines or pods
- Desired capacity/size
- Min/max size

- CPU, memory, disk, network metrics
- Health check
- Scaling policies

Microservices

- Circuit breakers
- Rate limiting
- Service registration and discovery
- Routing
- Load Balancing
- TLS/MTLS



What is Service Mesh?

Modern Microservice Deployment Pattern

Modern Microservices using Service Mesh

Service Discovery

Circuit Breaker

Observability

Canary Deployment

Load balancing

Traceability

Encryption

Traffic mirroring

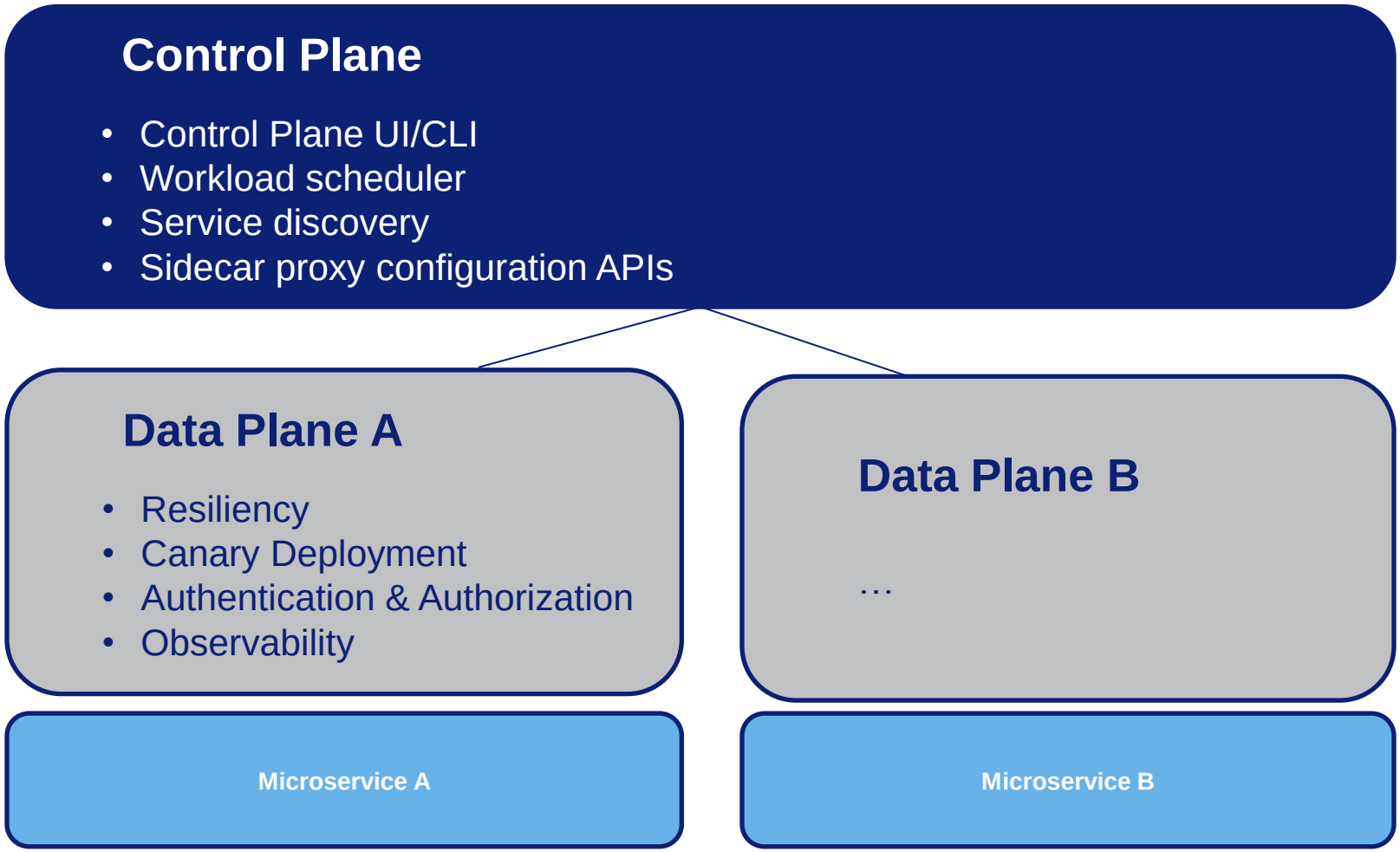
Autoscaling

Authentication & Authorization

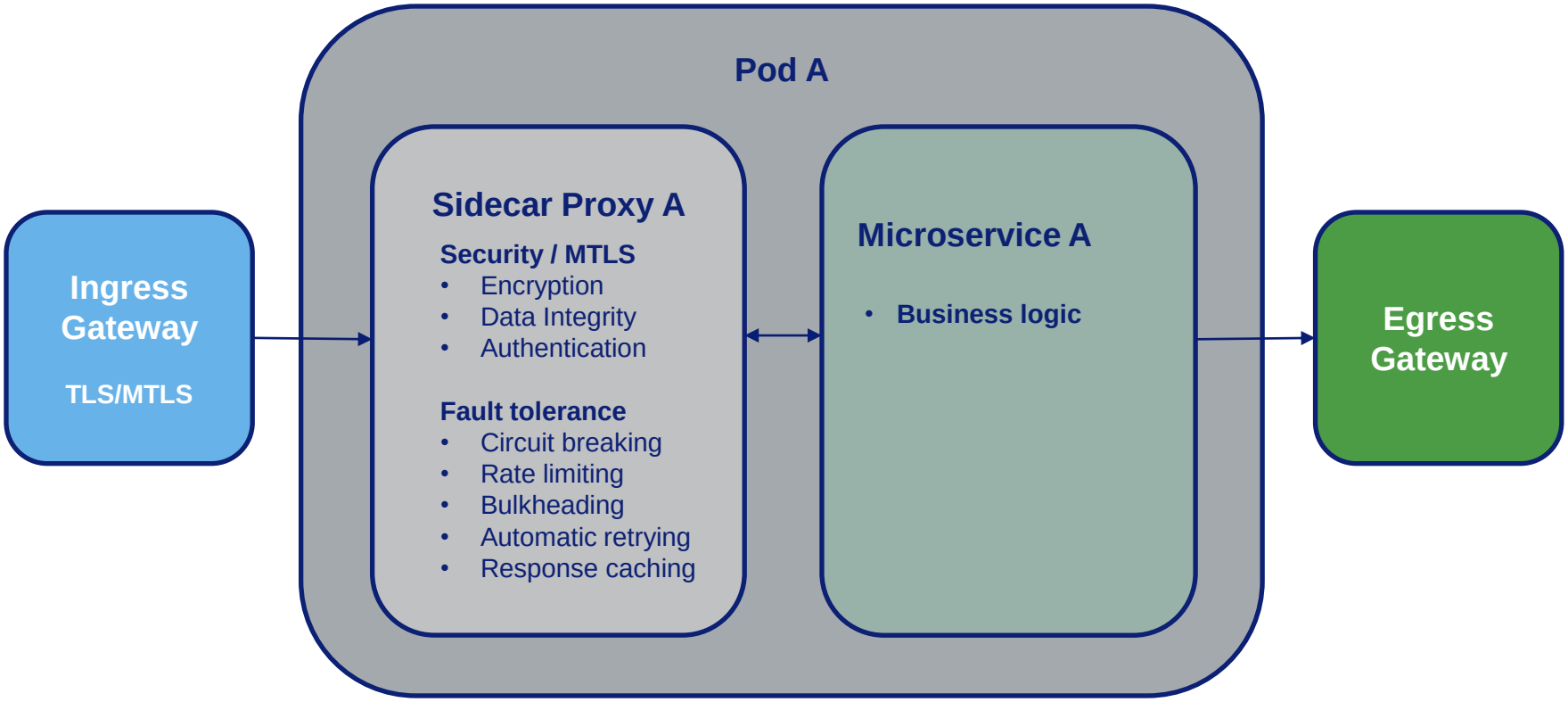
Service Mesh

Sidecar Proxy

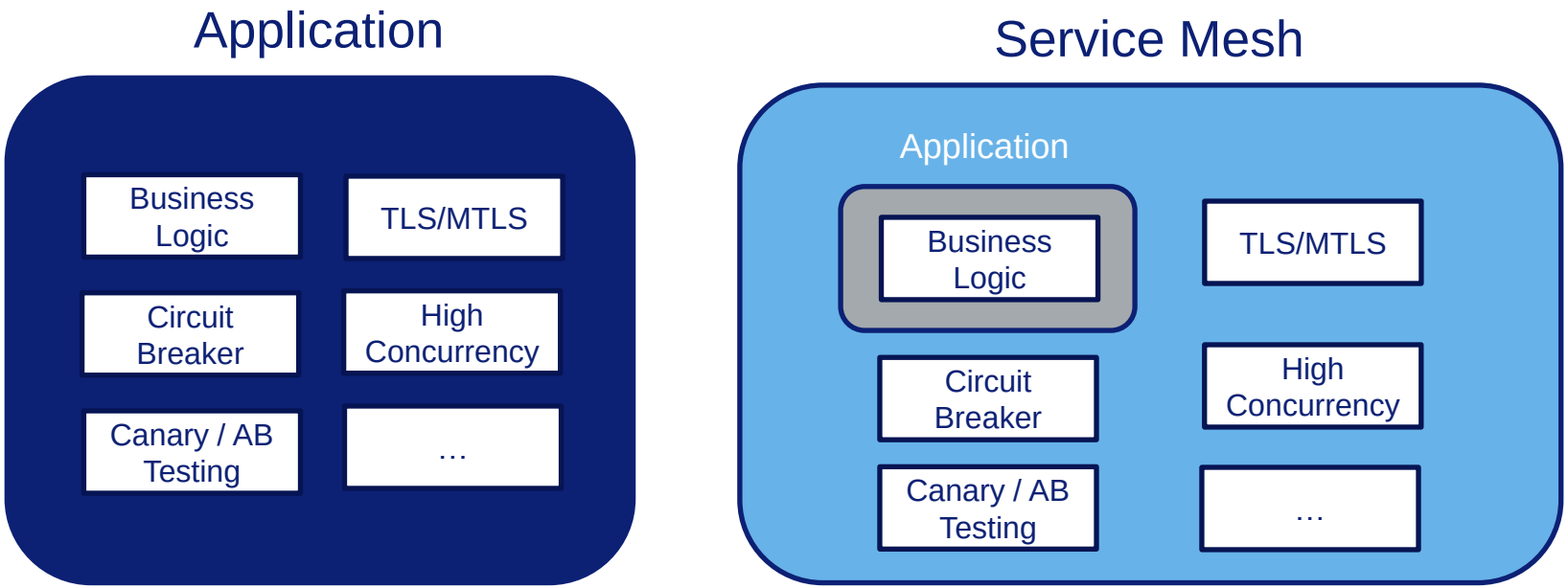
Service Mesh



Service Mesh using Istio & Kubernetes

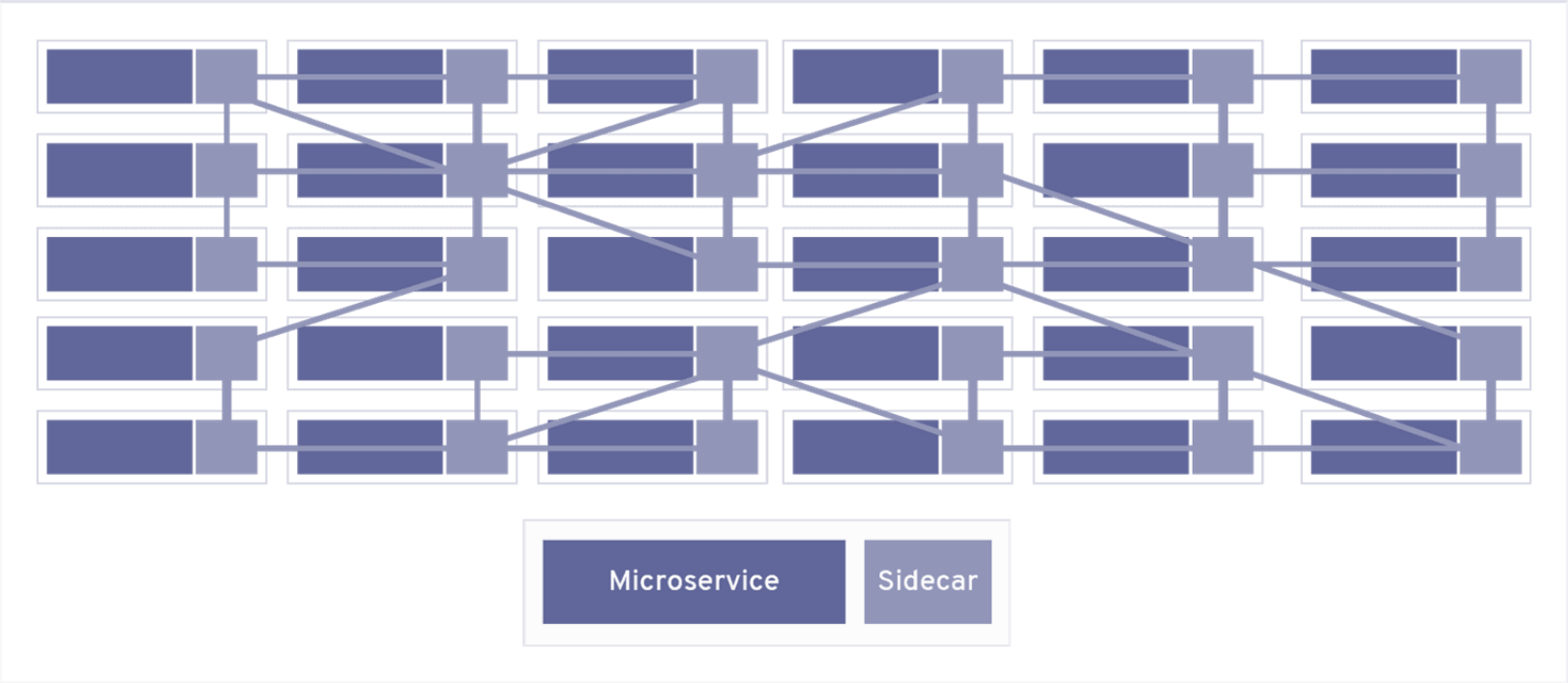


Code vs deployment configuration

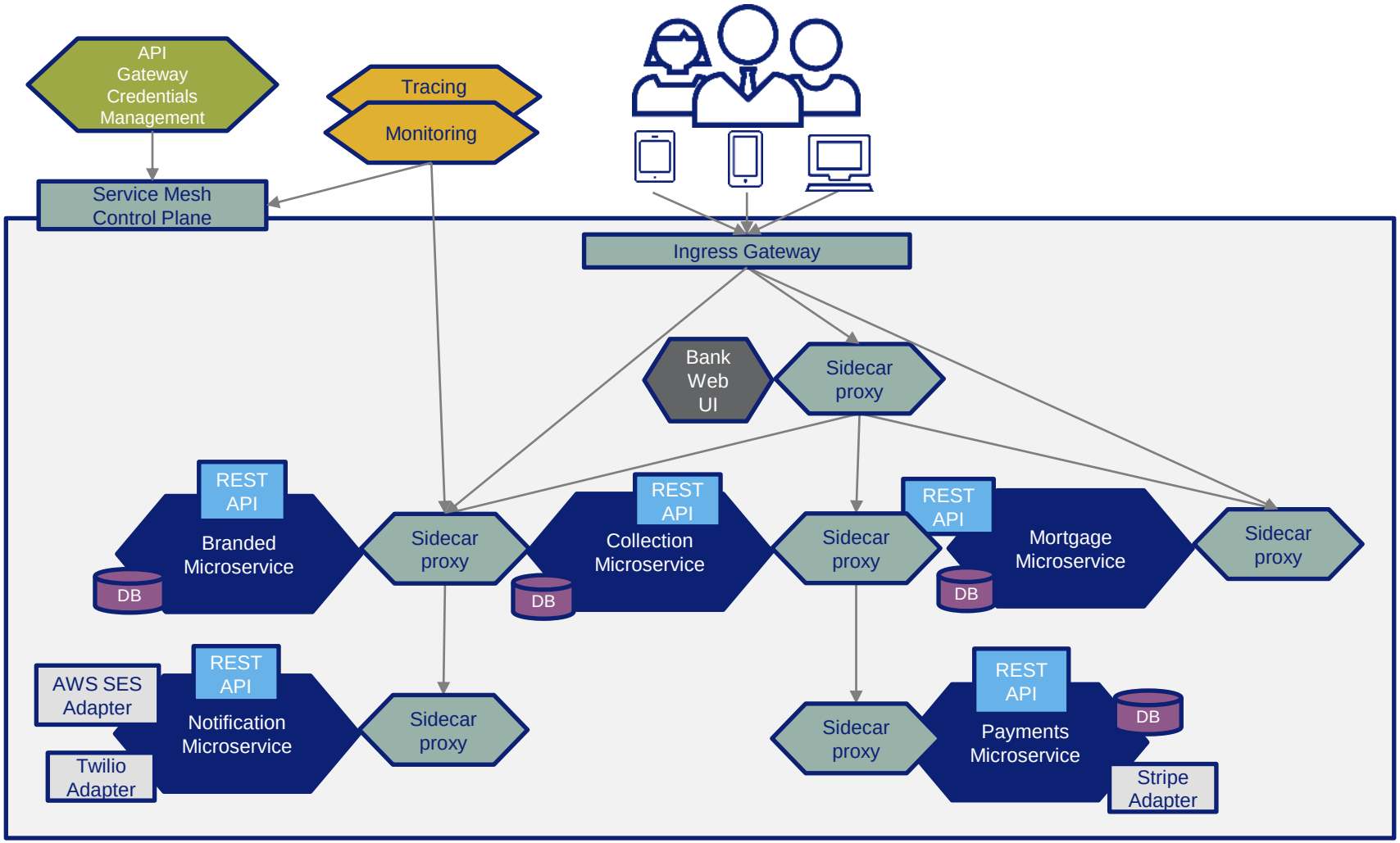


Evolution of Service Mesh Technology

How do we convert the microservice to use Service Mesh?



Microservices Infrastructure in Service Mesh using Istio



Questions

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