Introduction to API Management

Conceptual Level Briefing

YYYY-MM-DD

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Agenda

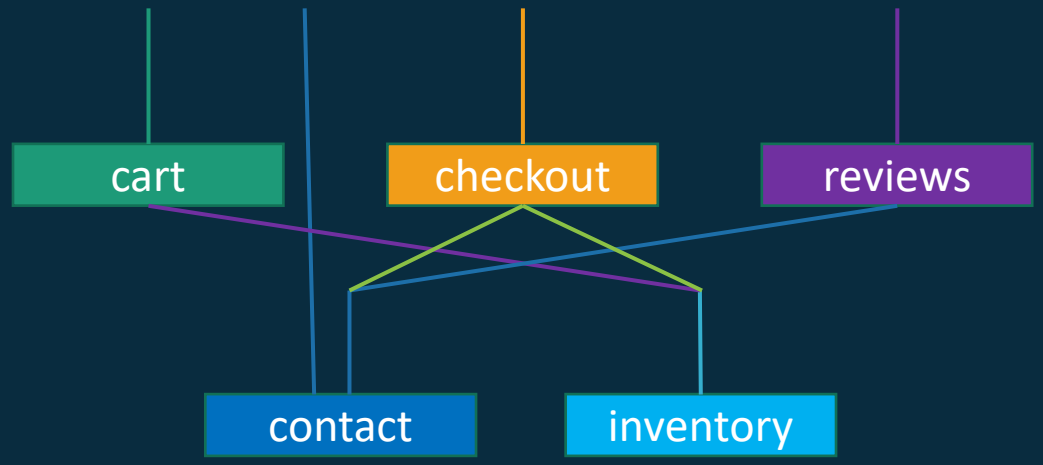
- What is API Management?
- Benefits and use cases
- Platforms and tools
- Architectural patterns and strategies

What is API management?

API Management is about driving the consumption of business assets securely and easily

API management refers to the process of ***creating, publishing****, and* ***managing*** *API connections within an enterprise and multicloud setting. More than just a place for these API connections to live, API management offers a scalable, unified platform that allows enterprises to share and socialize their API configurations while controlling access, collecting and analyzing usage statistics, and enforcing associated security policies.*

Retail App Example



Frontend Microservices

Backend Microservices

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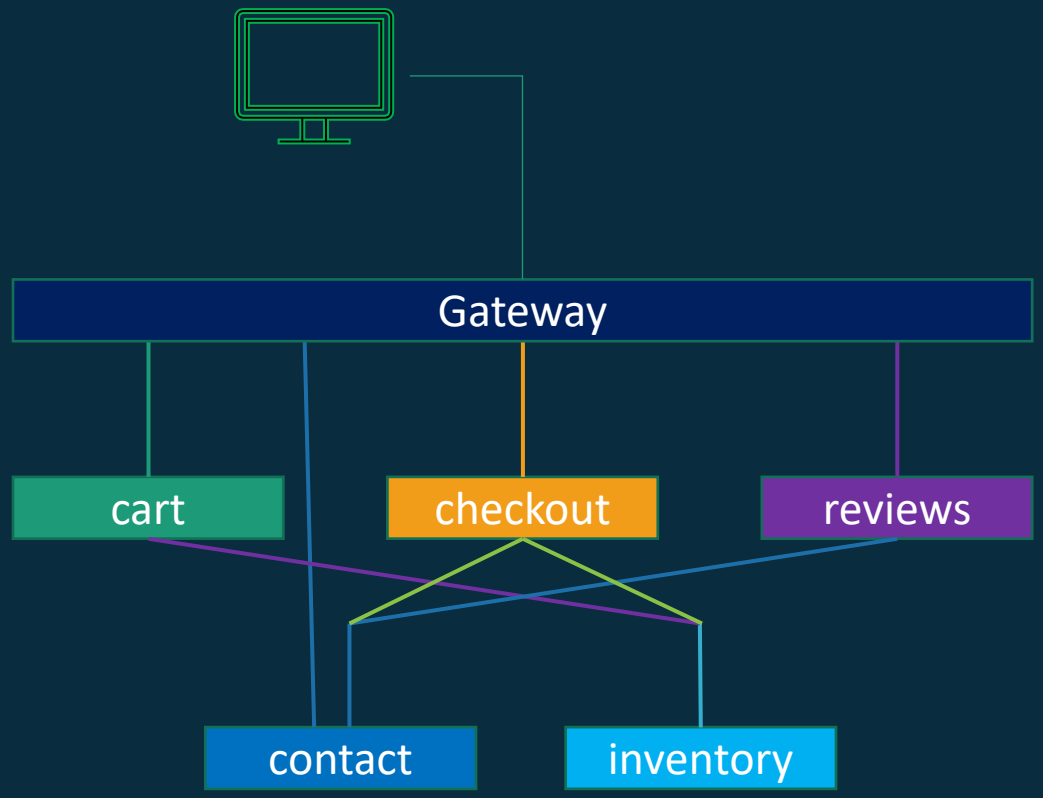
Retail App Example



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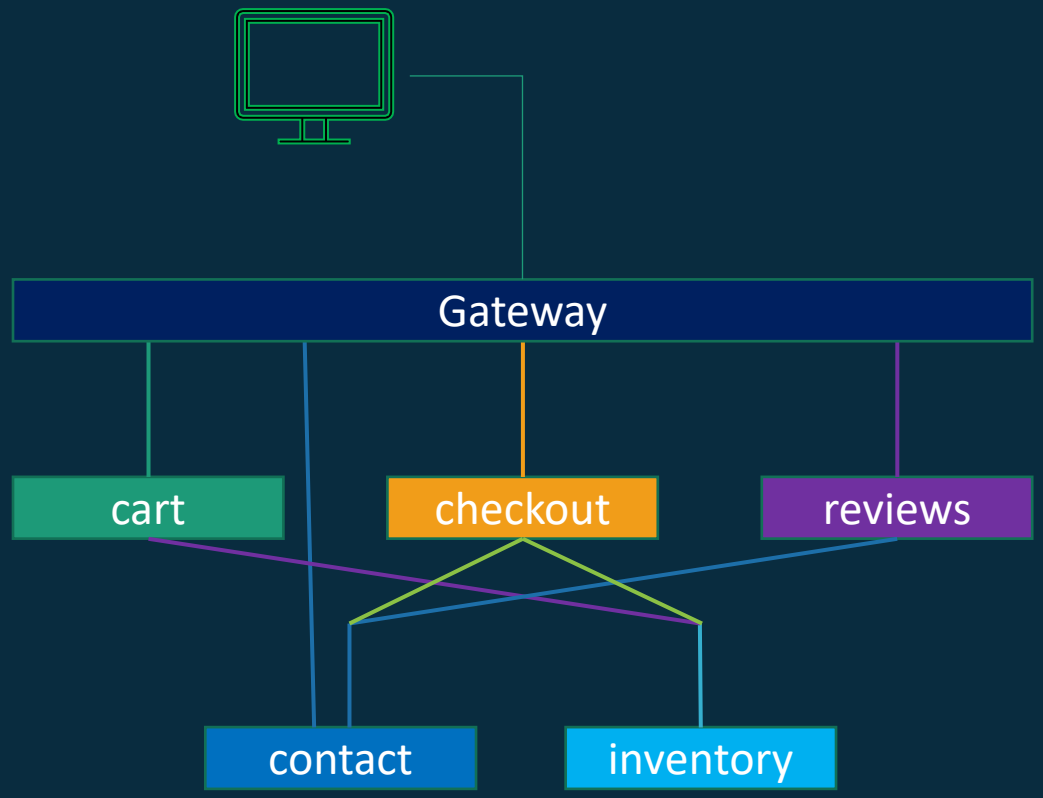
Developer Portal



Developer Portal

Self-service hub to:

discover APIs

Browse, access and share API documentation

learn how to use them

test them out with interactive console

create and manage accounts

request and manage API access

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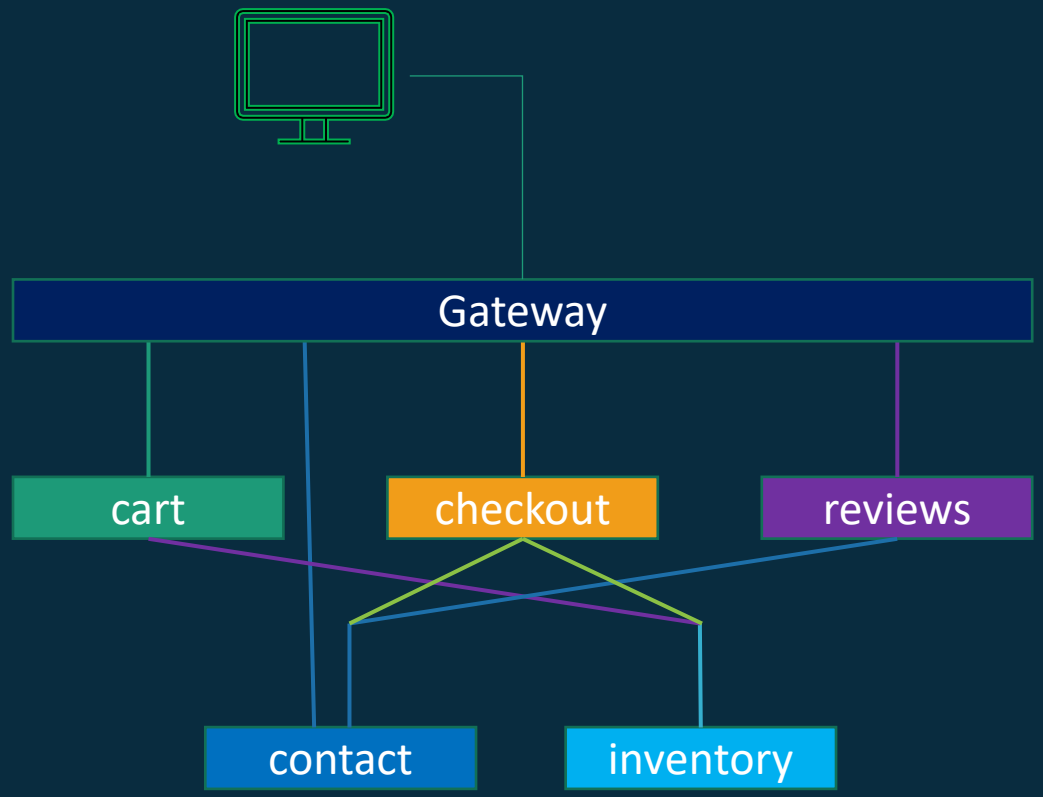
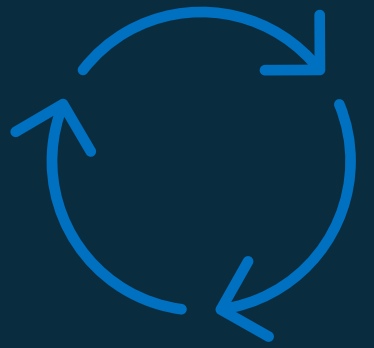
Management including Lifecycle



Developer Portal

Version and revision control



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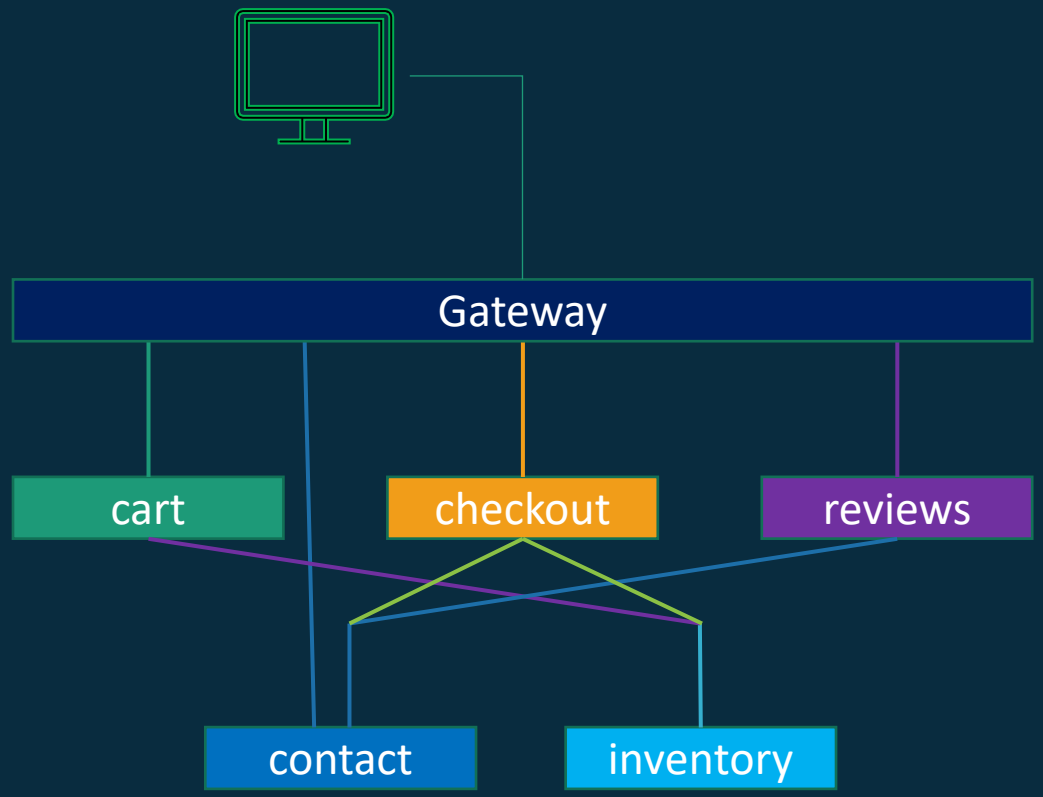
Reporting and Analytics



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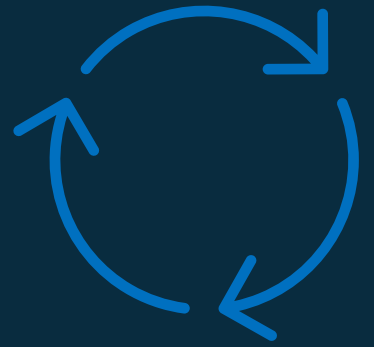

Reporting

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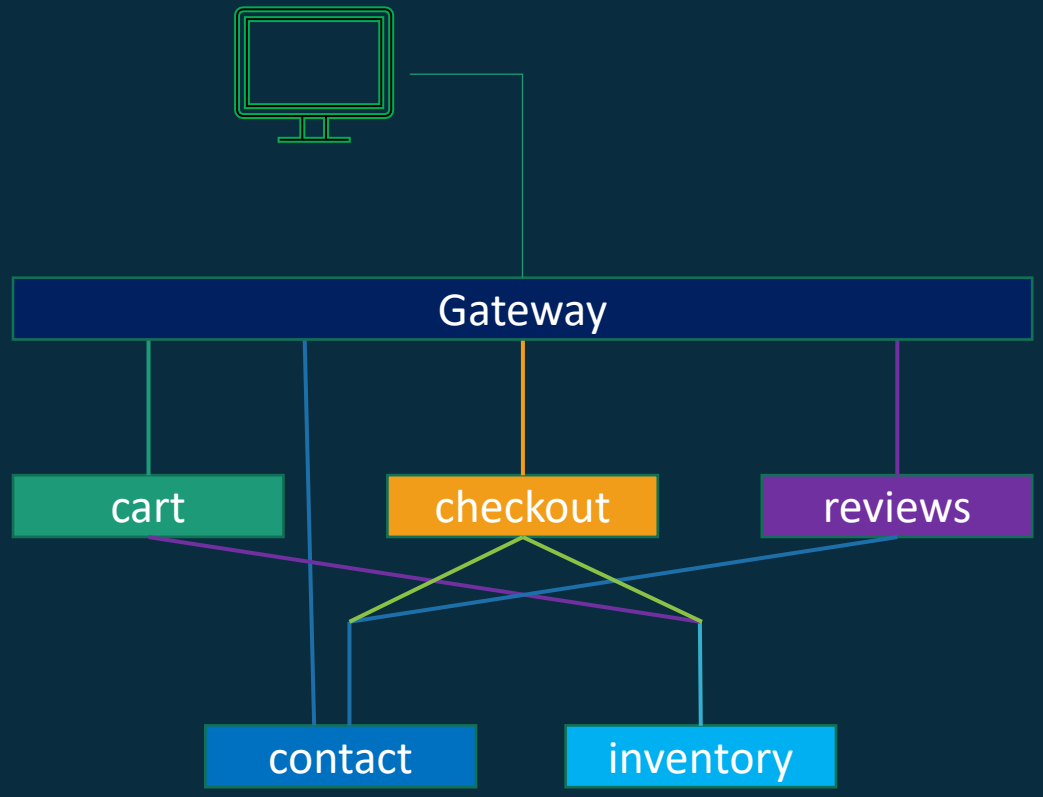
Real life scenarios



Developer Portal

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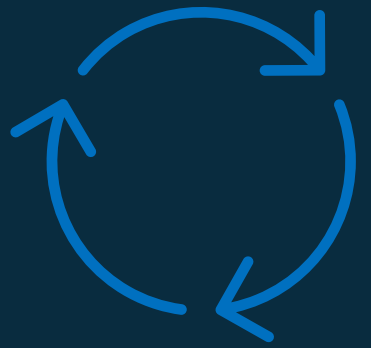
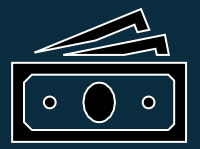


Reporting



Monetize

Formalize

Centralize security

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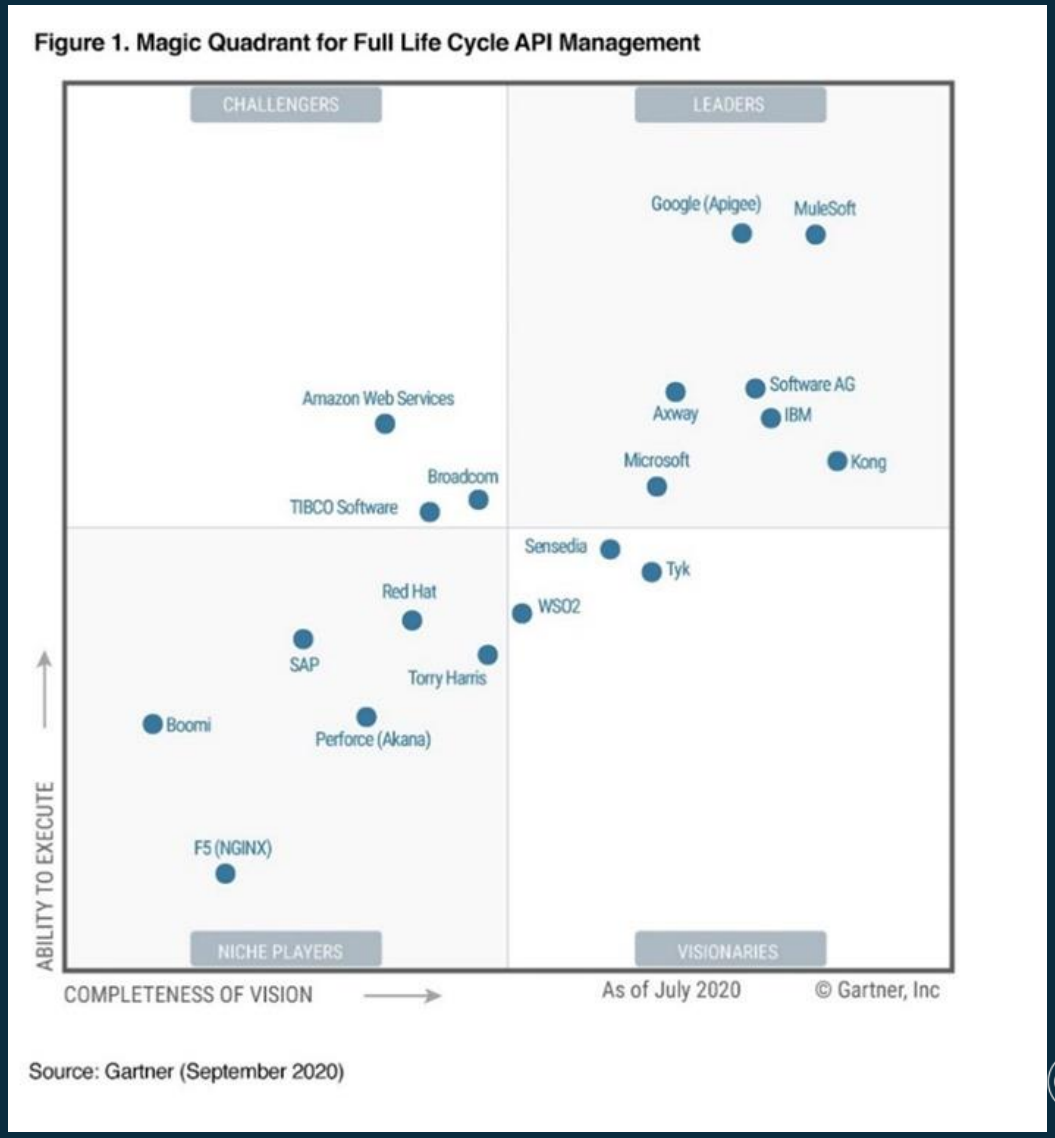
Other use cases

- API management platforms benefit organizations in a number of ways. Here are a few everyday use cases when implementing an API management solution:
  - Supporting digital transformation strategies
  - GDPR and compliance considerations
  - Ensuring data security

API management platform vendors



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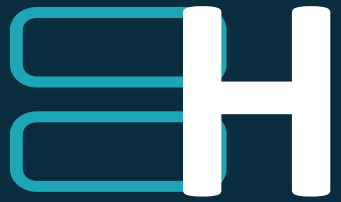
Microservices

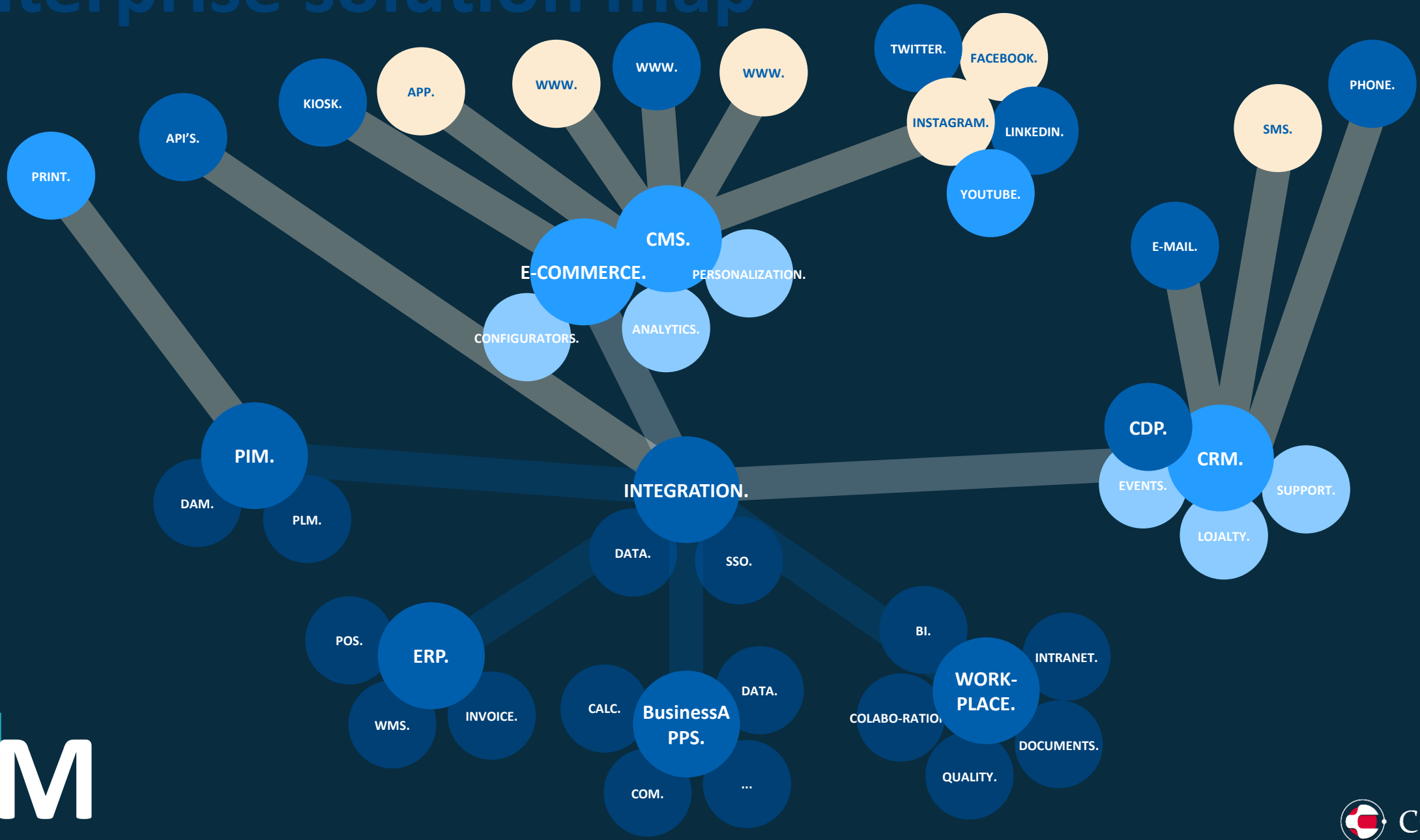
API-first

Cloud-Native



Headless

Enterprise solution map



Microservices

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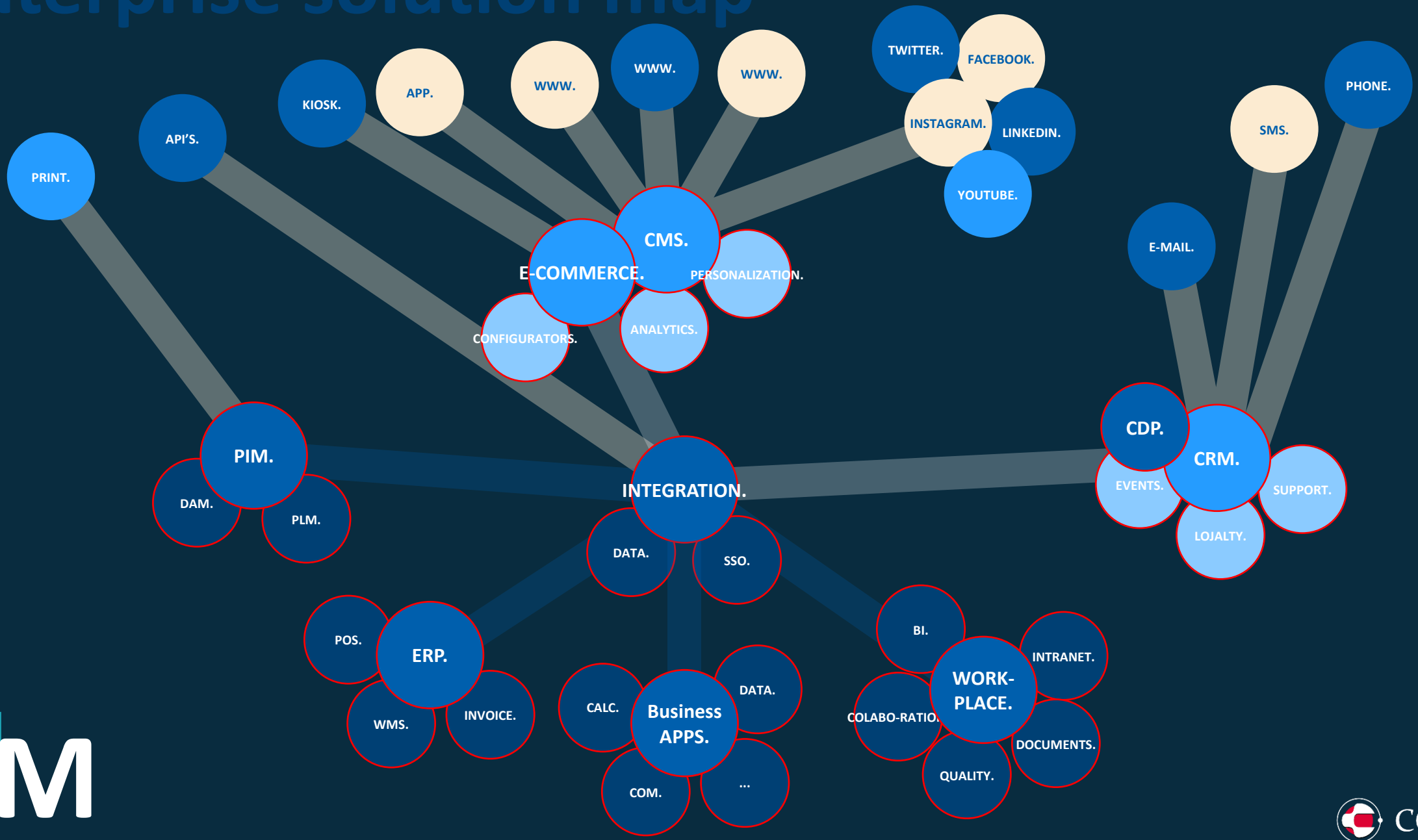

Microservices

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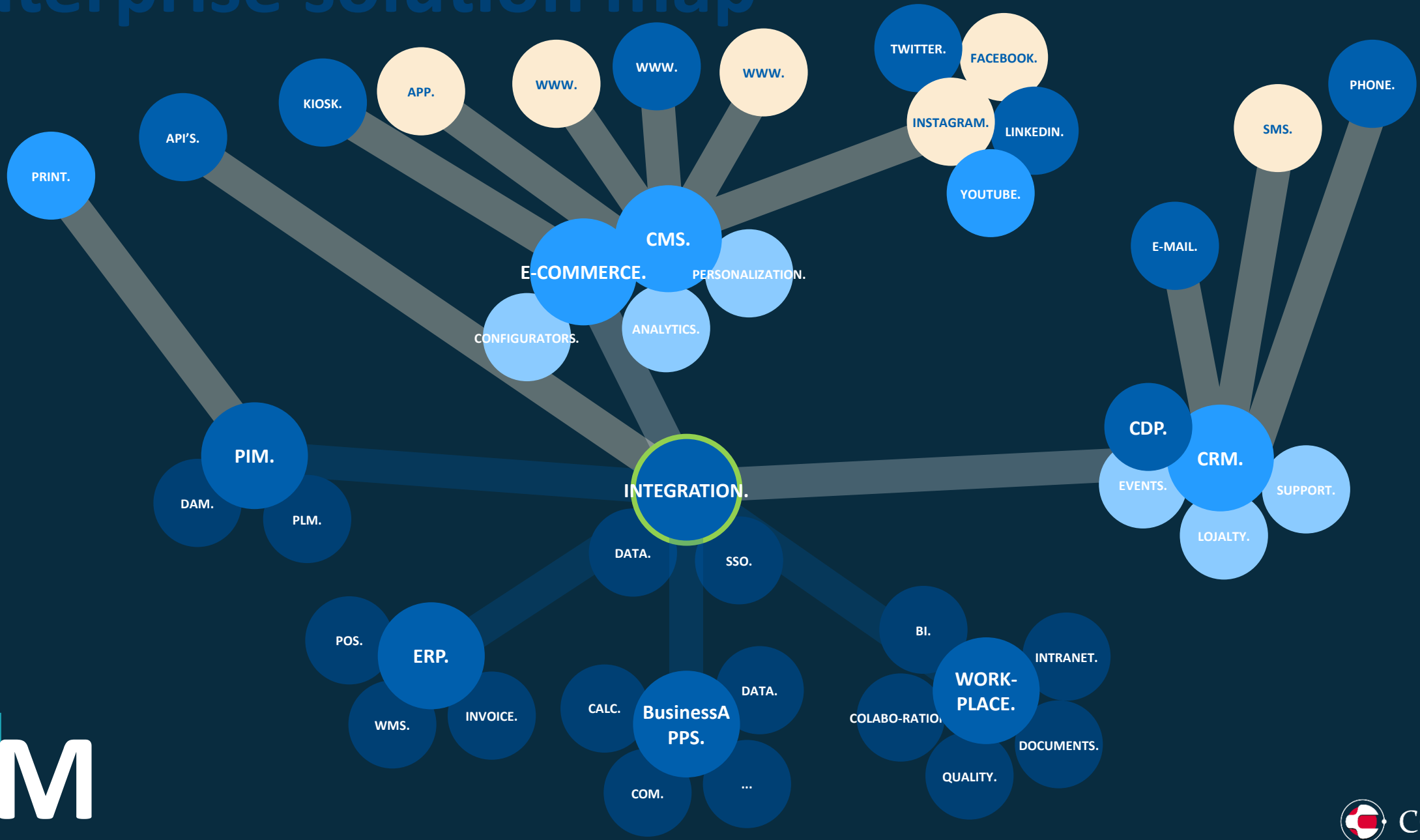

Microservices

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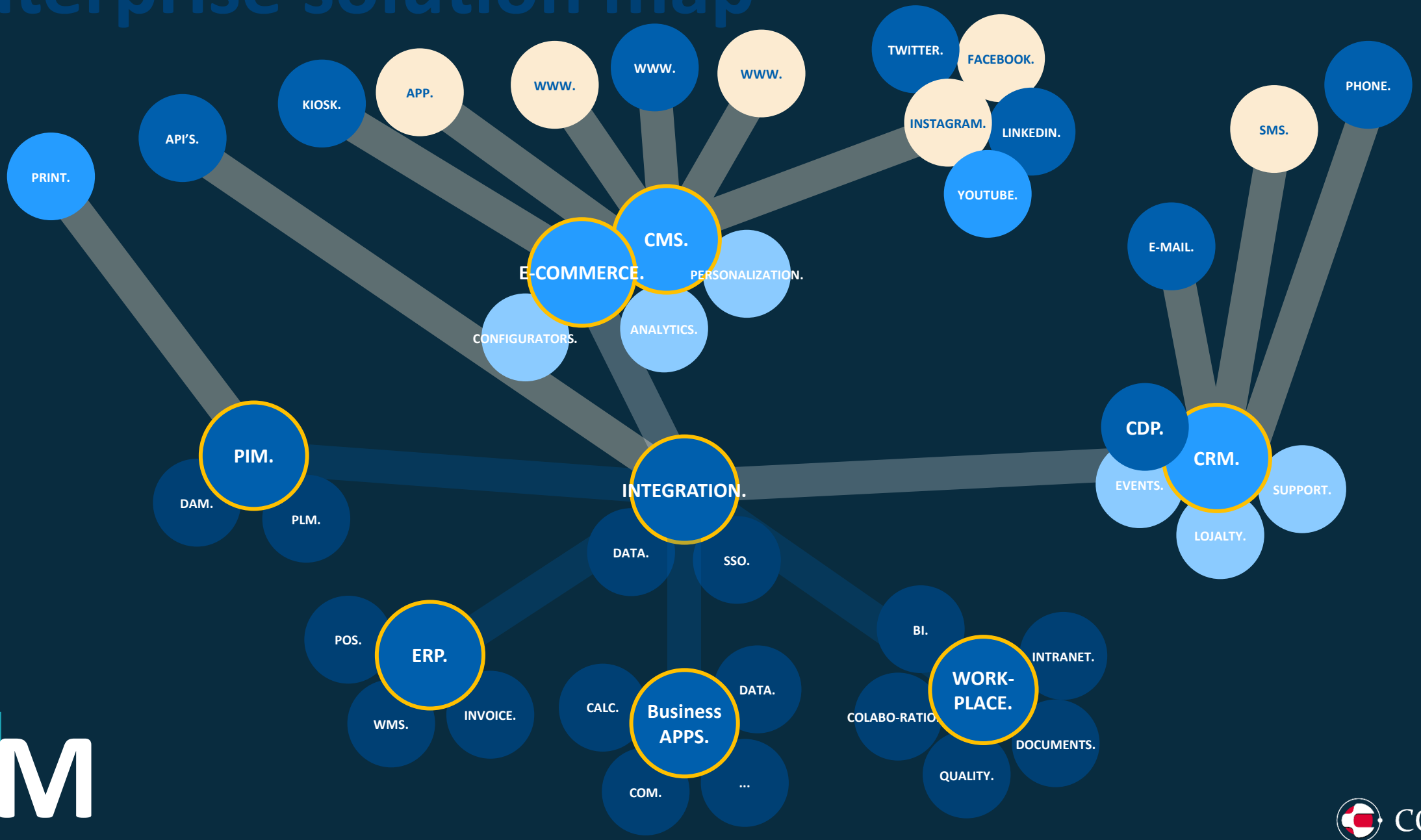

Microservices

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- 100% cloud based services platform
- Microservice development
- DevOps principles
- Automatic Builds, Tests and Deploys for increased quality assurance

- CASE

TEAM OF 3-5 FTE

Solution Architects & Developers

- Microsoft .Net Core and Azure
- Microservice based on REST protocol
- Api Management
- Custom Integrations
- Development of Power Apps

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- Cloud based service platform
- Loosely-coupled, self contained Microservice architecture
- Integration Services development
- API publishing
- DevOps principles
- Automatic Builds, Tests and Deploys for increased quality assurance
- Version handled APIs, non breakting updates
- Proactive monitoring

- CASE

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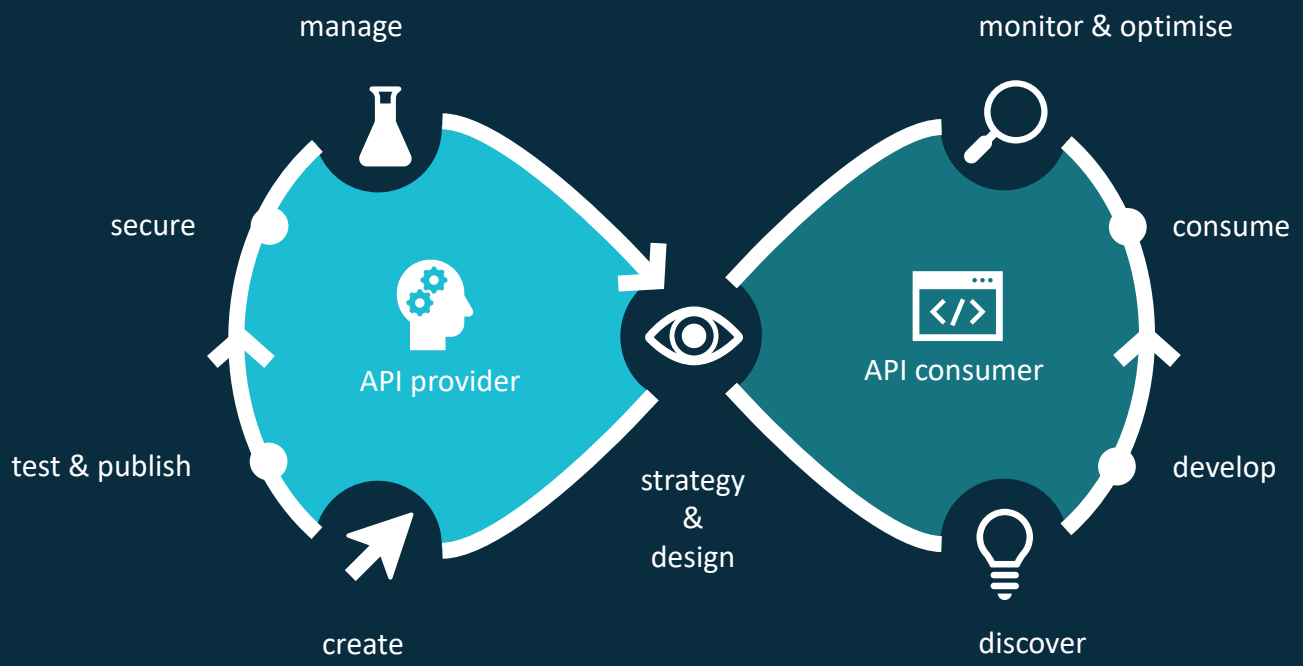
FULL LIFE CYCLE API MANAGEMENT MODEL



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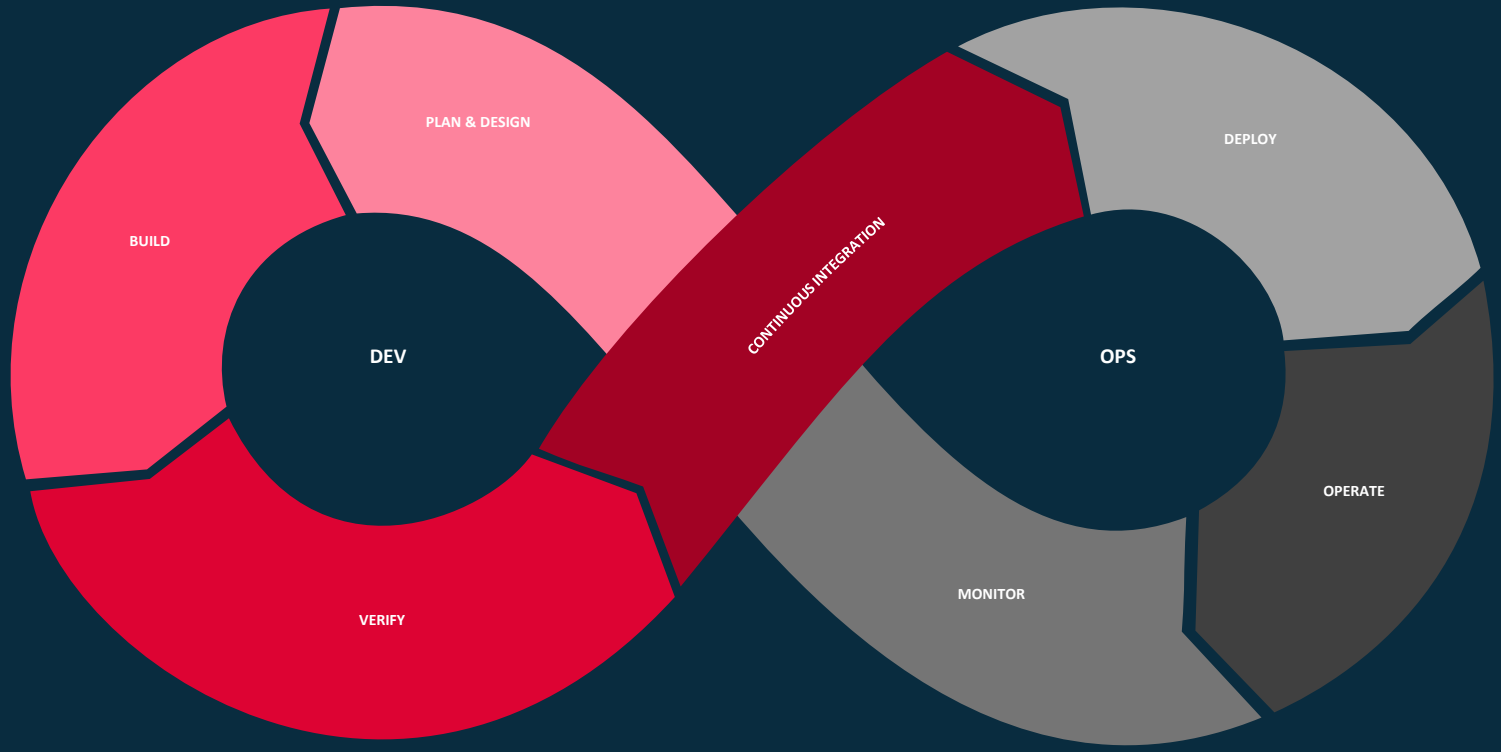
PLAN & DESIGN
BUILD
DEV
VERIFY
CONTINUOUS INTEGRATION
DEPLOY
OPS
OPERATE
MONITOR

- CASE

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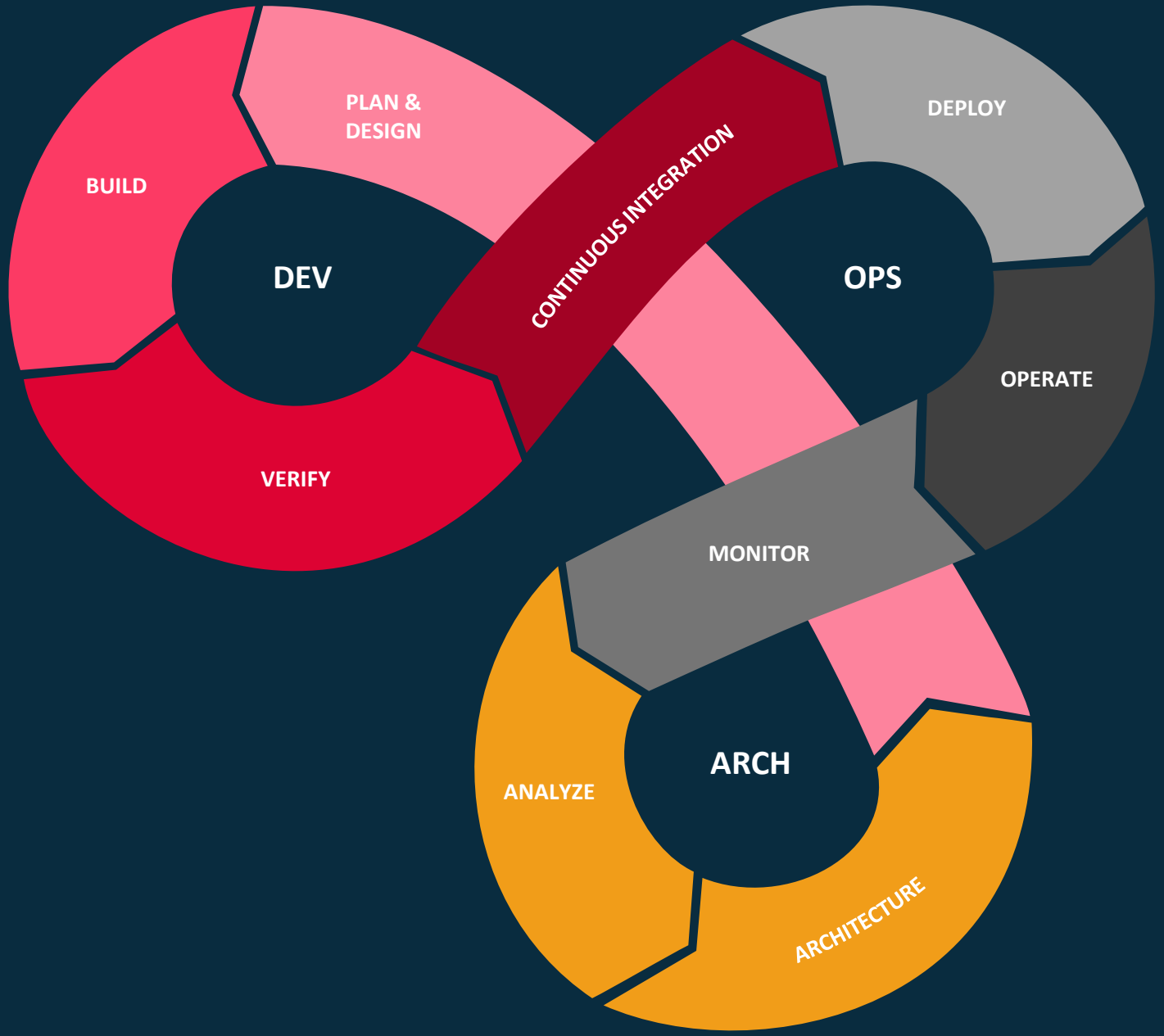
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OPS
OPERATE
MONITOR
ANALYZE
ARCH
ARCHITECTURE

CONSID

ANALYZE

Microservices – Analyze

- Analyze results
- Outside-in approach (Business Requirements govern)
- Avoid Microservices to become the bottleneck for the company's innovation
- Implement API Management features gradually

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ARCHITECTURE

Microservices - Architecture

- Single Responsibility – A Microservice shouldn’t have hard dependencies to other Microservices
- Micro ≠ Microscopic
- Versioning of APIer
- Loose Coupling – Plan for asynchronous communication with messages
- Design for “eventual consistency”
- Use an API Management solution to distribute and socialize the functionality of the Microservices
- SaaS & PaaS > IaaS
- Cloud first

Thank you!

API Management is about driving the consumption of business assets securely and easily

Business Strategy alignment is key when forming your architecture and establishing way of working, selecting platform and tools are downstream consequences

Consid is helping customers on their digital journey

MACH enables organizations to kickstart and evolve through agile

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