



Cisco Intent-Based Data Center Solution

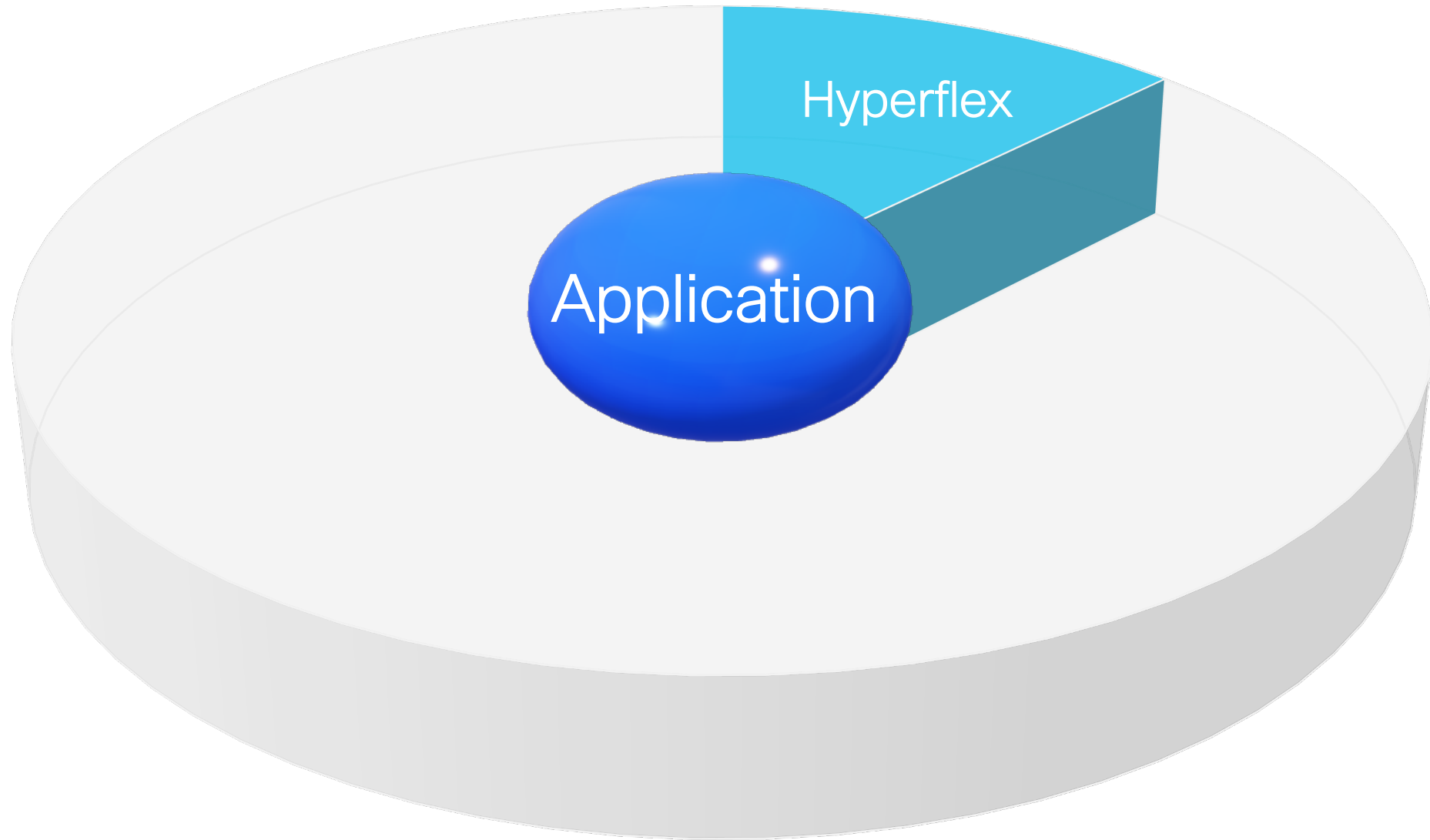
Miloš Pavlík
Cisco Technical Solution Architect



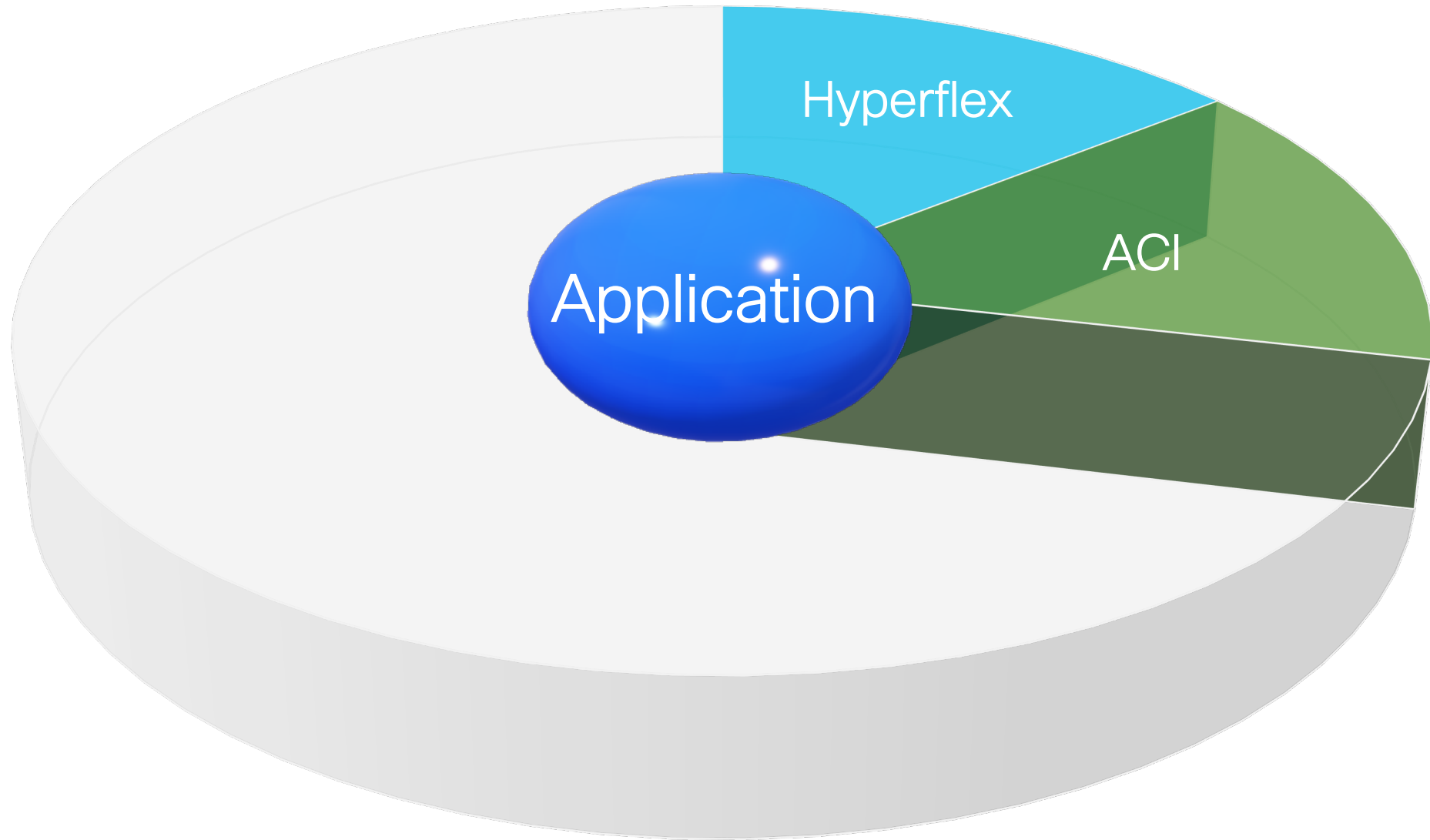
An aerial view of a dense city skyline, likely New York City, with numerous skyscrapers and buildings. Overlaid on the image are several white circular icons: a network of three nodes in the top left, a traffic light in the middle left, a smartphone in the bottom left, a cloud with an arrow in the bottom center, a terminal window with a cursor in the top right, a cloud in the middle right, a smartphone in the bottom right, and a network of three nodes in the far right. There are also several small white dots scattered across the image.

App is the new business
Developer is the new Customer
Multicloud is the new Data Center

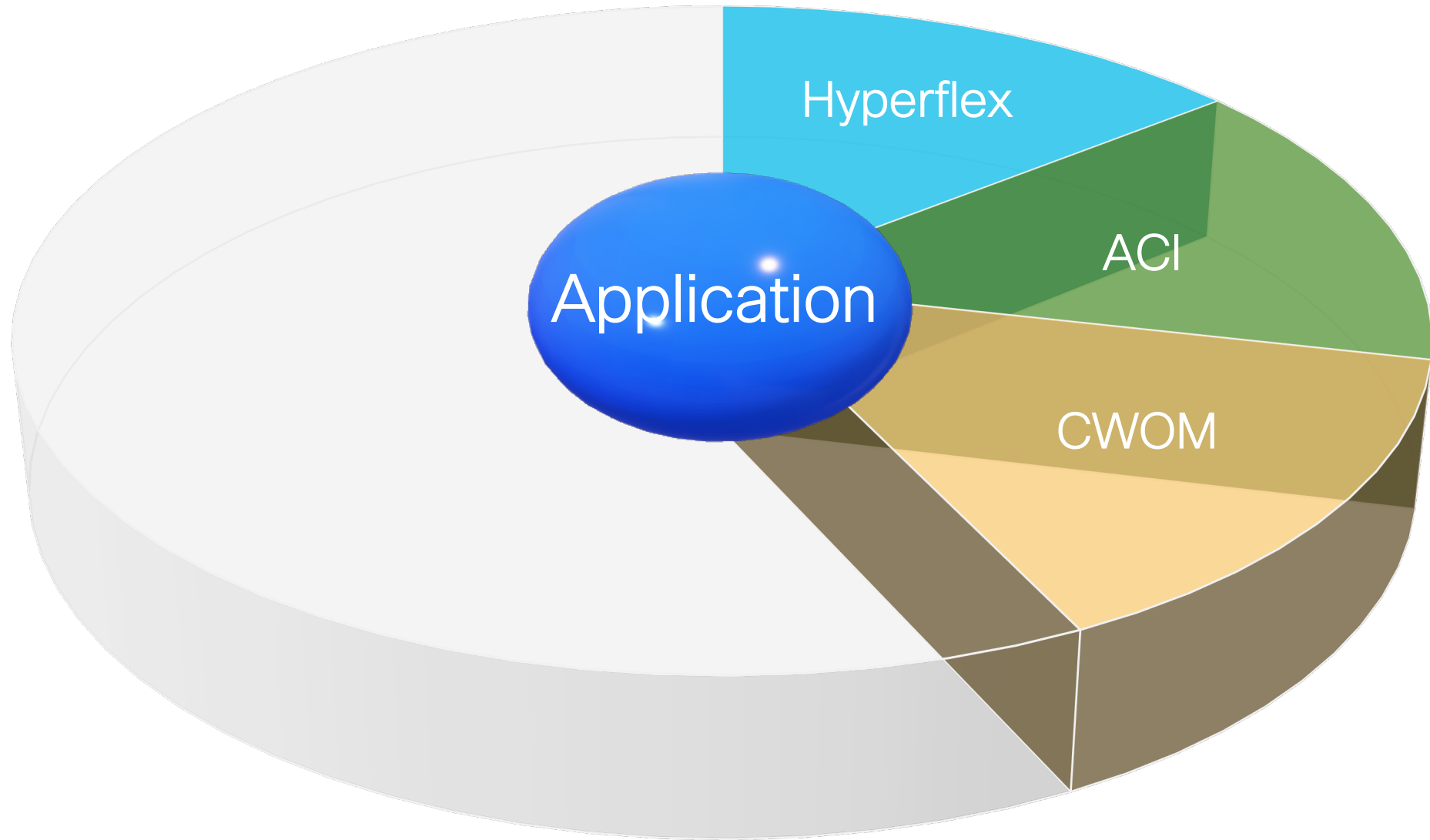
Cisco DC Solution



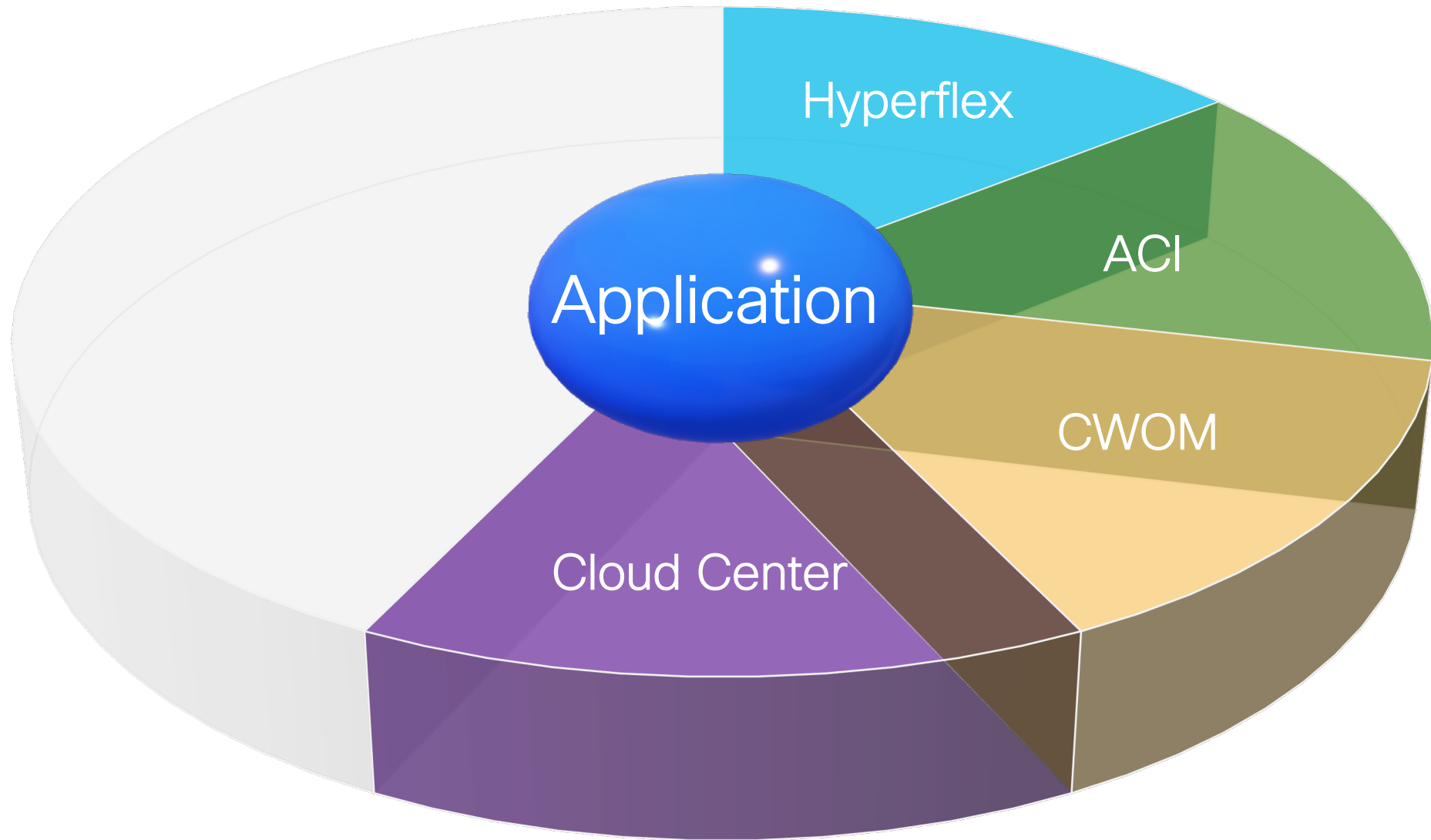
Cisco DC Solution



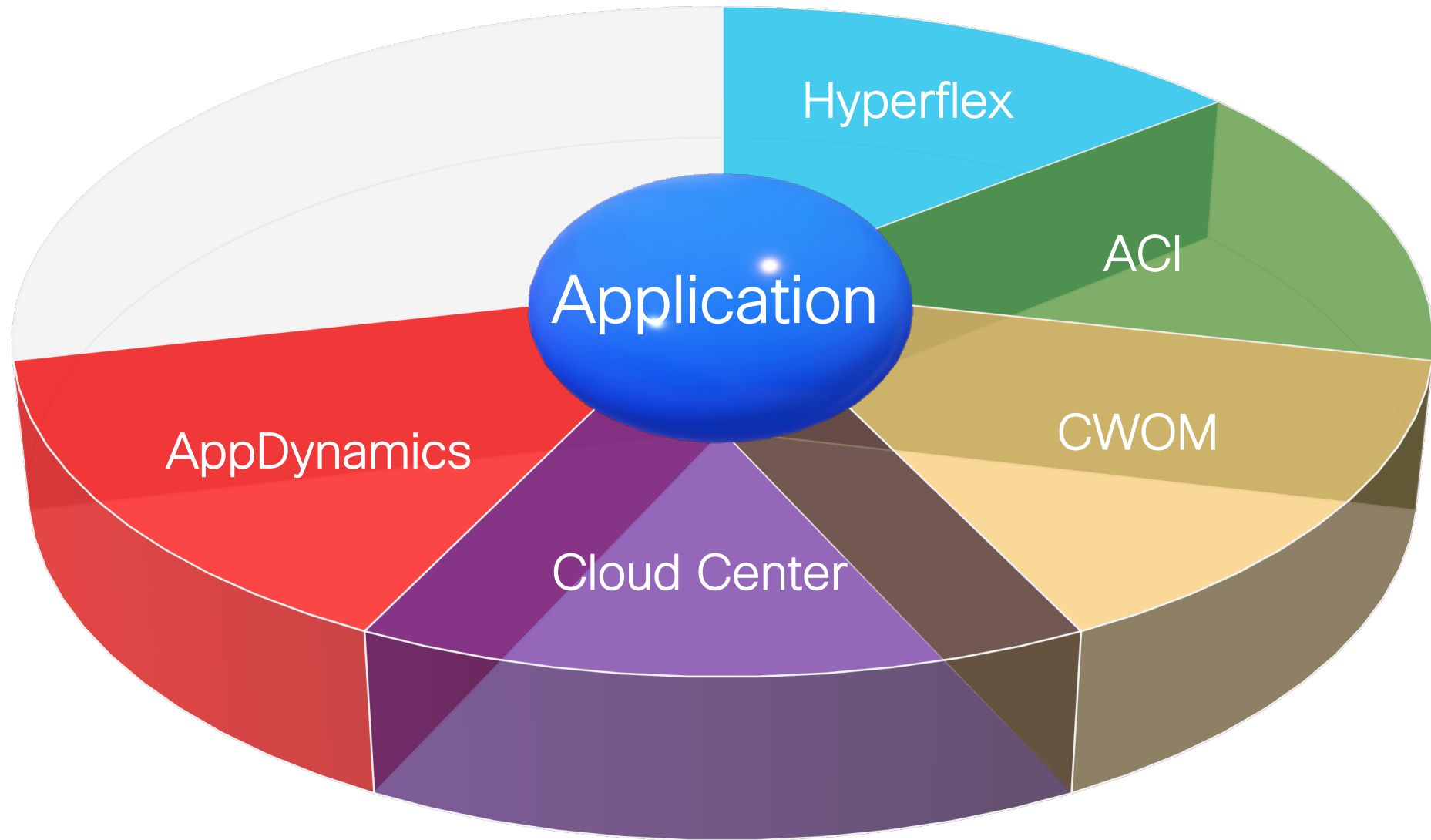
Cisco DC Solution



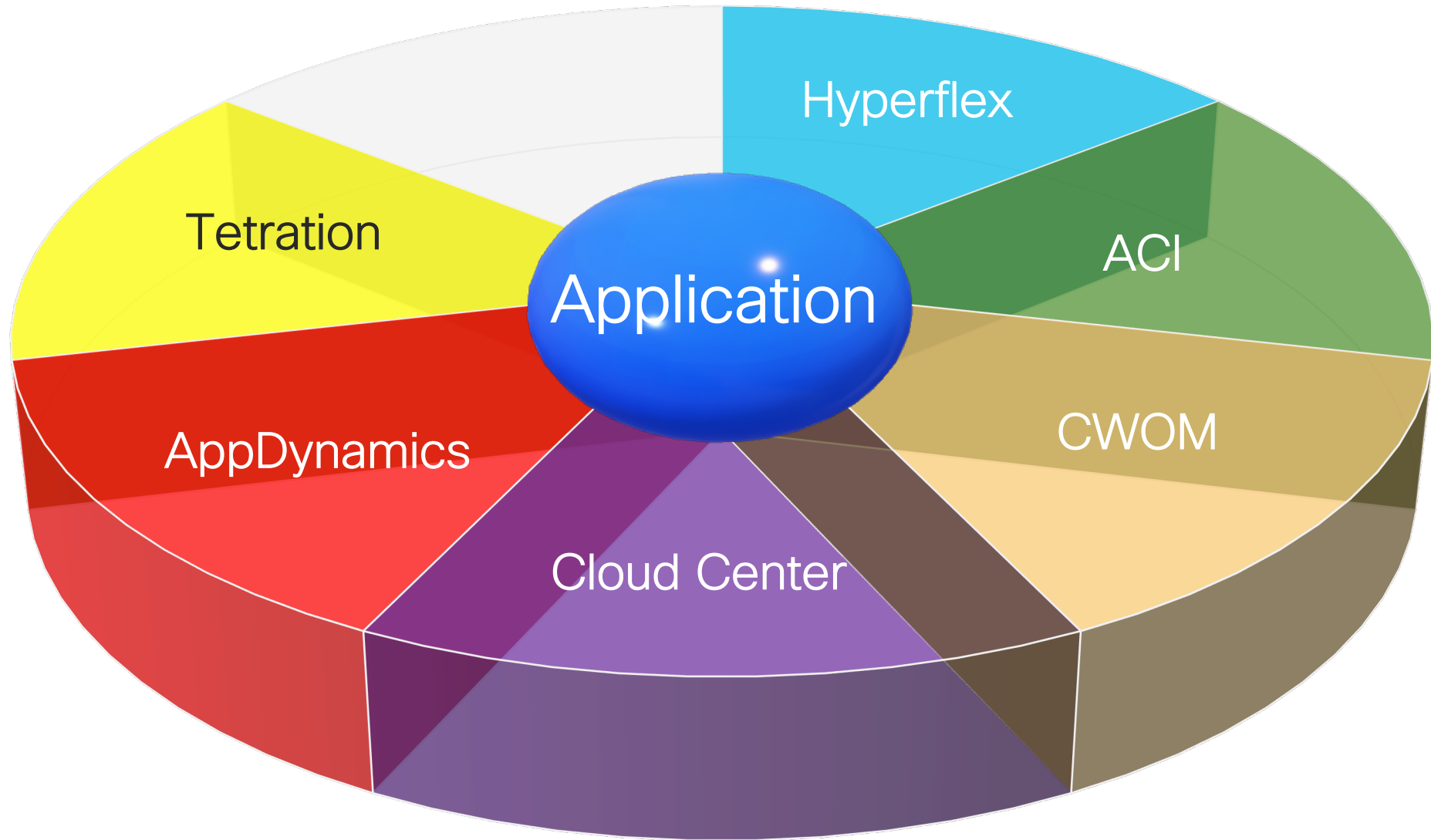
Cisco DC Solution



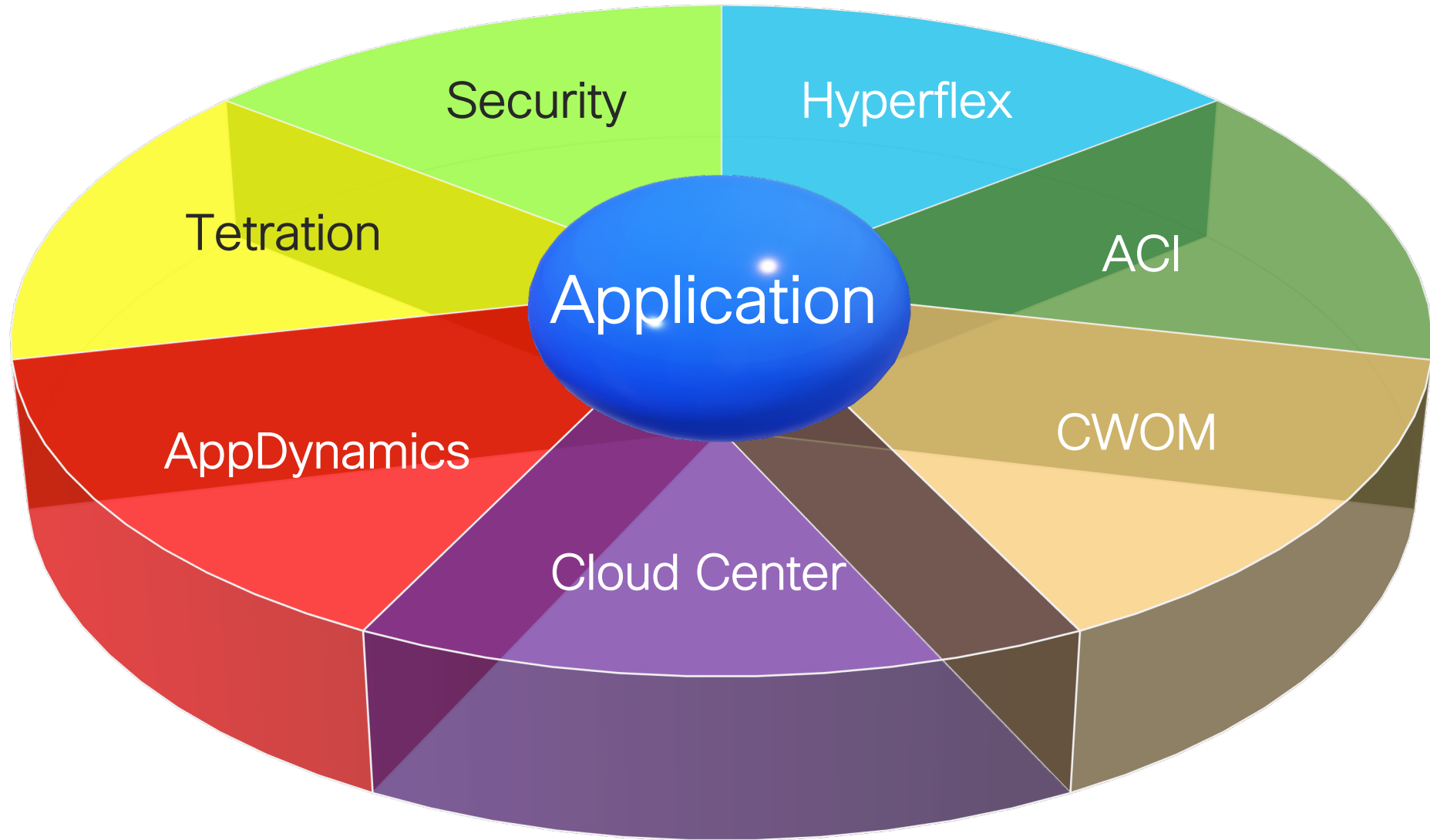
Cisco DC Solution



Cisco DC Solution



Cisco DC Solution





Cisco HyperFlex Anywhere

What is HyperFlex?

Engineered and Optimized HCI

Performance and Scalability to Power

Any App, Any Cloud, Anywhere



HX Data Platform

- Purpose Built for HCI
- Fast and Flexible
- Enterprise Grade Storage

Cloud Platform

- Cisco Intersight
- Cisco CloudCenter
- Cisco Workload Optimization Mgr.

UCS Foundations

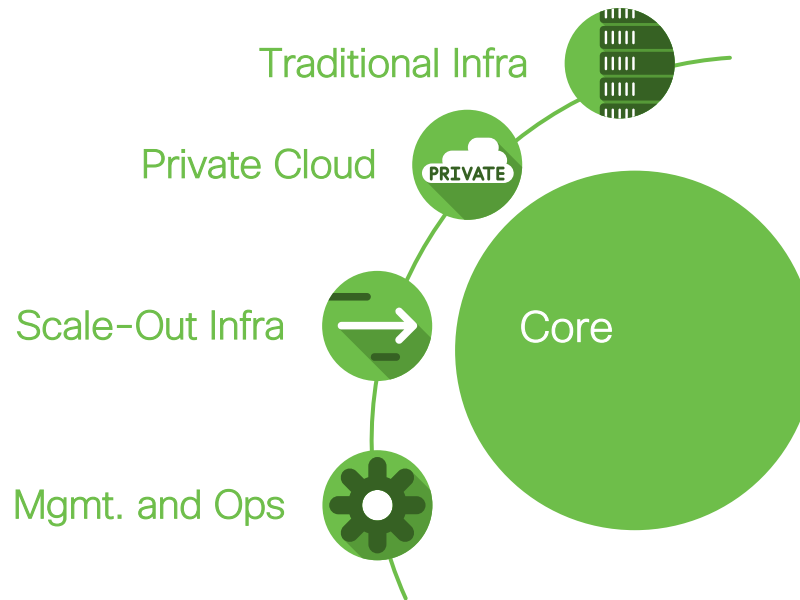
- Software Defined Compute
- Fabric Centric
- Intent-Based

What does the future look like?

#1 Initiative Is to Reduce Operations and Capital in the Core

“Over the Last Two Years, IT Organizations Spent **70%** on “Run the Business” IT Spending, up from 67% in 2013 to 2014, and 65% in 2012”

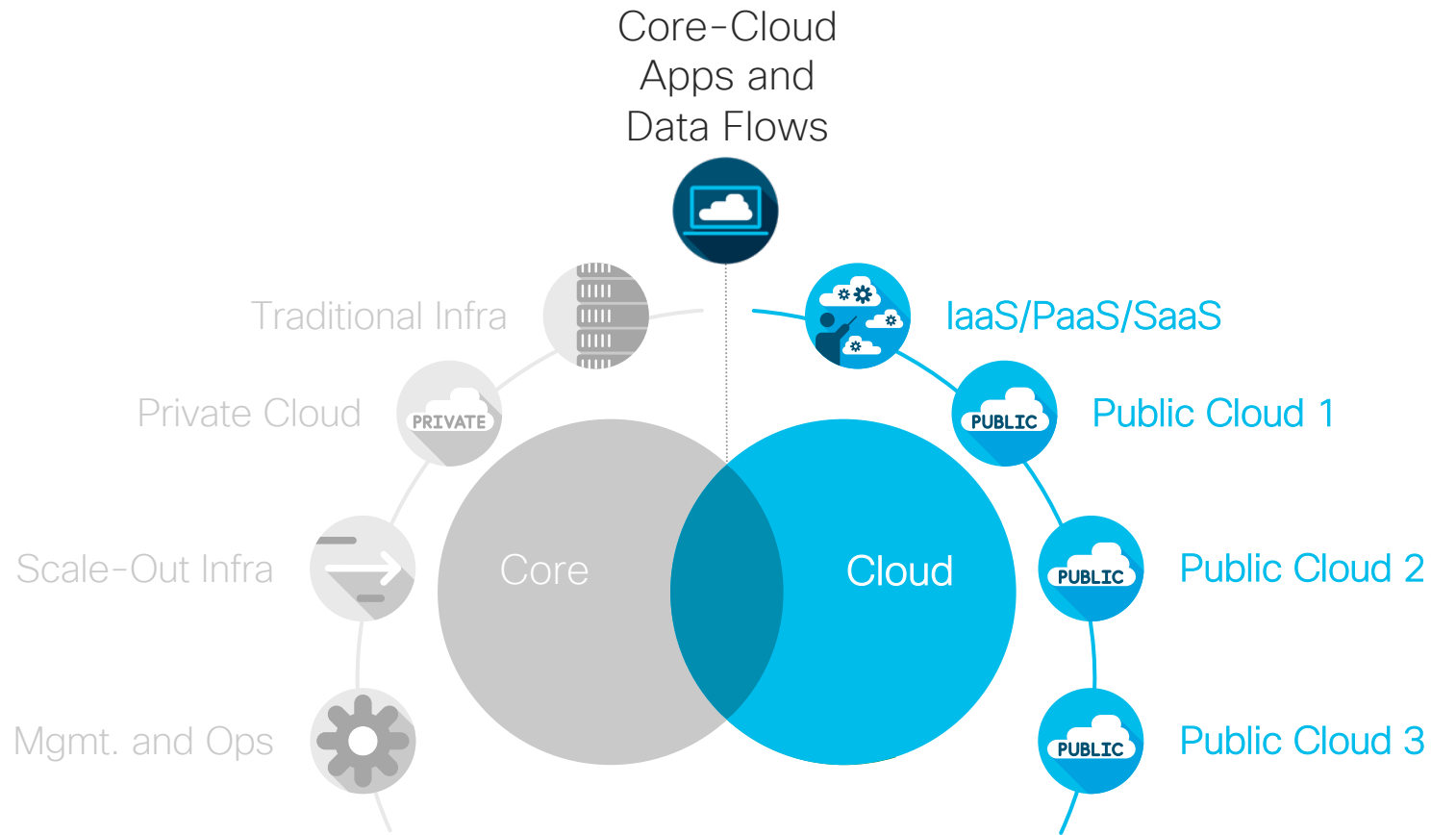
04/18 Gartner,
2018 Strategic roadmap for compute infrastructure, Chirag Dekate, Daniel Bowers, et al., 10 April 2018.



What does the future look like?

By 2020, Over 90% of Enterprises Will Use Multiple Cloud Services and Platforms

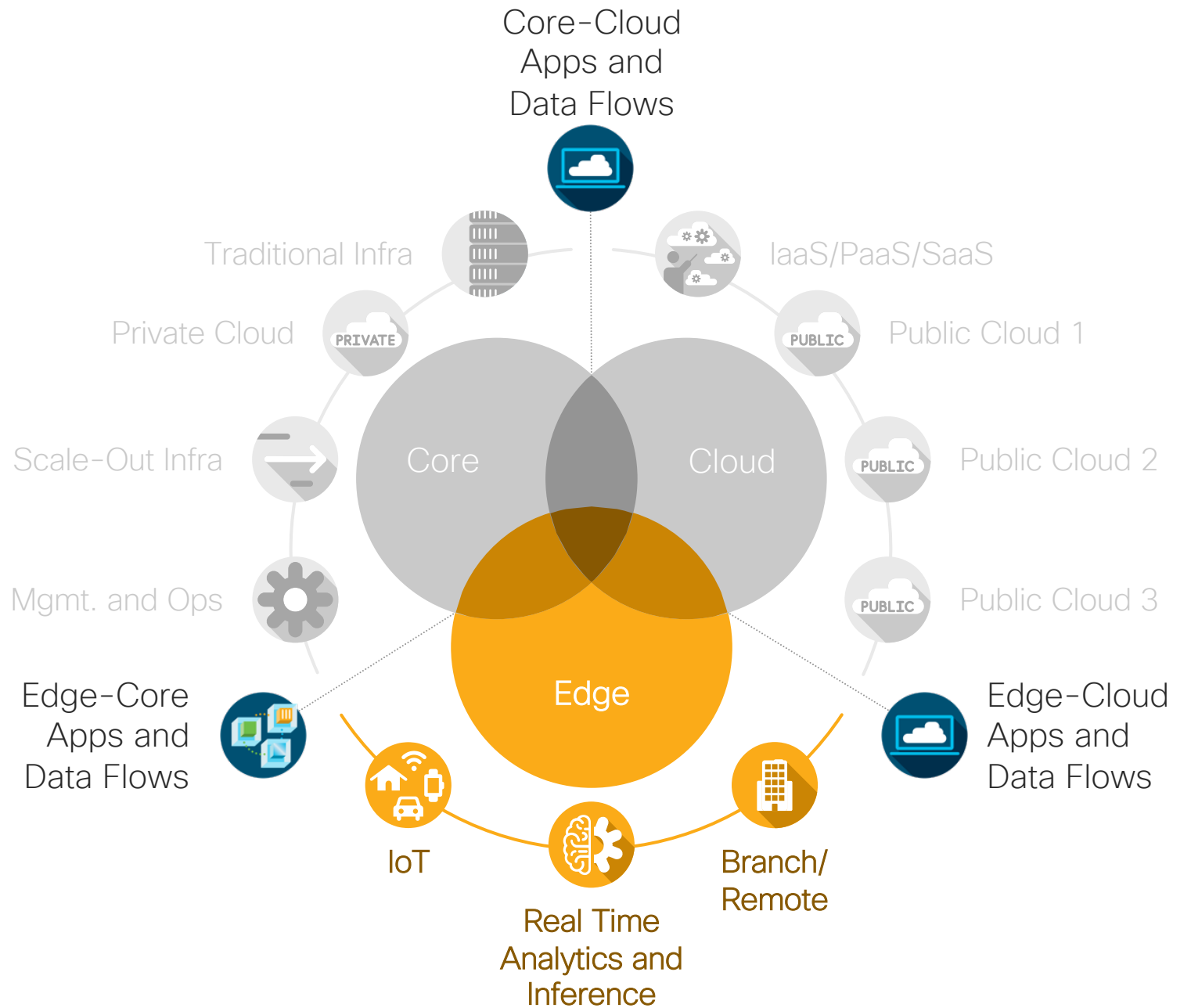
2018 IDC,
IDC FutureScape:
Worldwide IT Industry 2018 Predictions



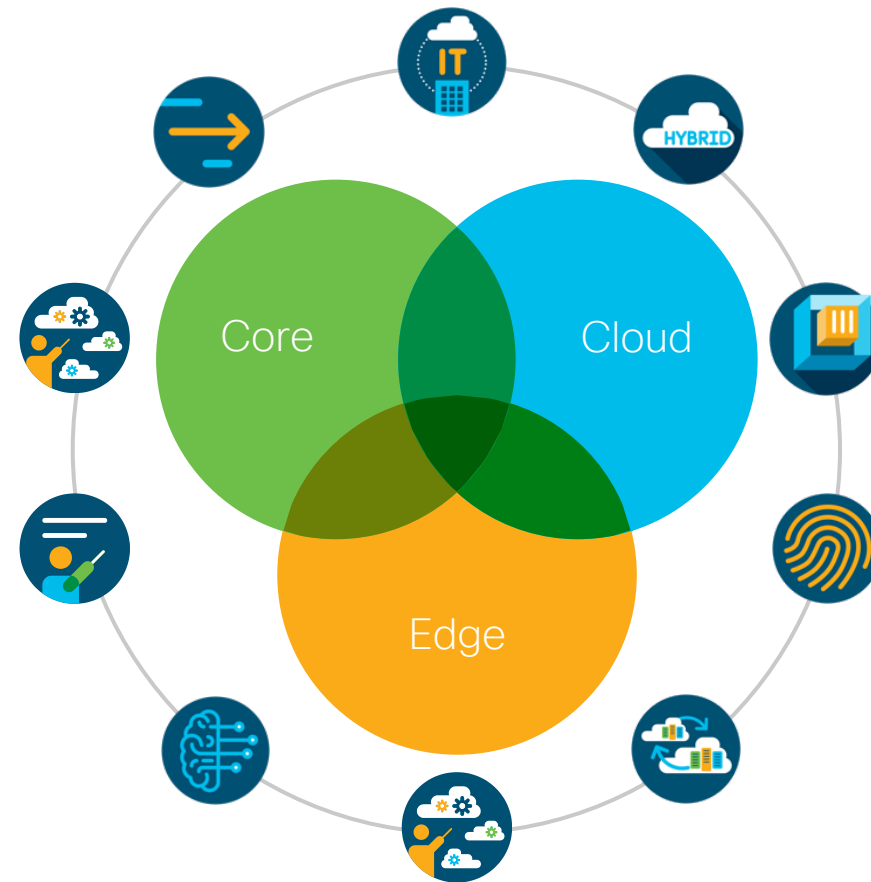
What does the future look like?

“By 2022, more than **50%** of enterprise-generated data will be created and processed outside [of] the core data center or cloud”

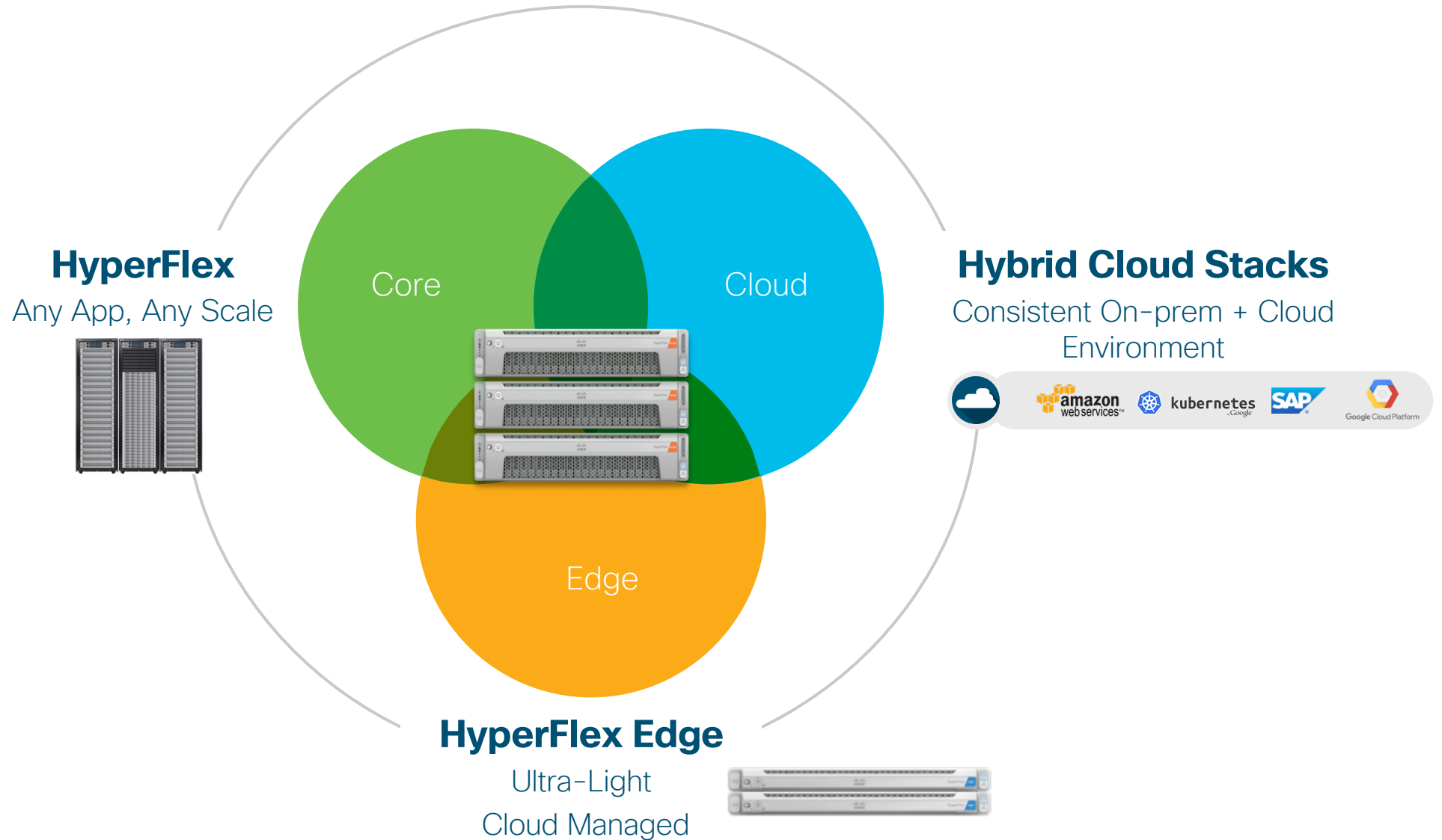
12/18 Gartner,
Gartner IT Infrastructure, Operations & Cloud
Strategies Conference Event Presentation,
The Future of IT Infrastructures: Always On,
Always Available, Everywhere, David J.
Cappuccio, Bob Gill, et al., 3-6 December
2018



The Future is the Distributed Datacenter

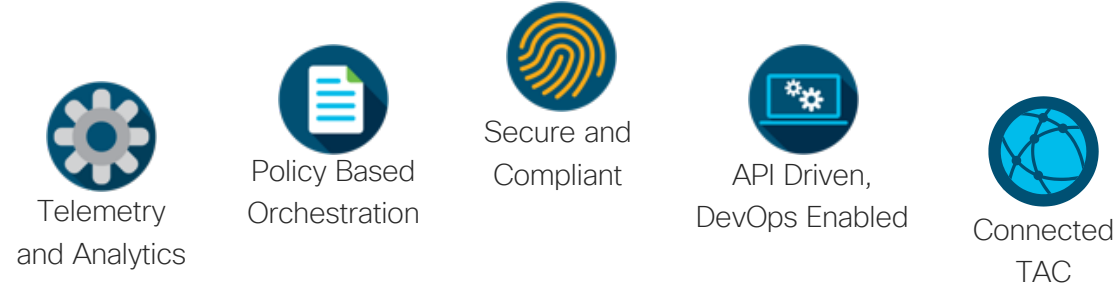


Cisco HyperFlex Anywhere



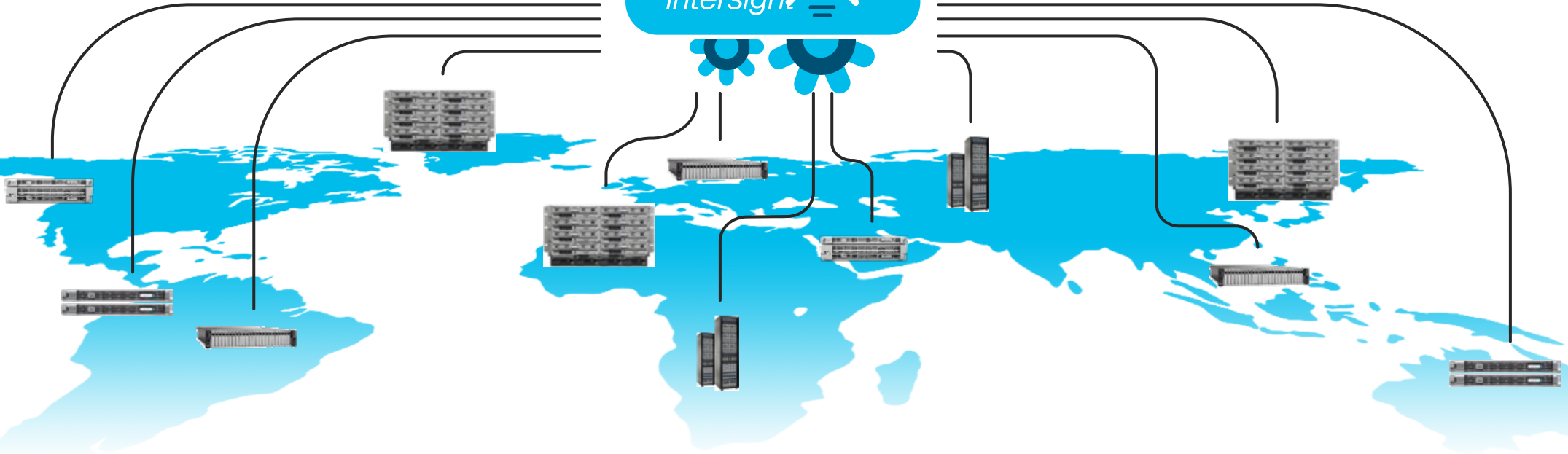
Cisco Intersight

Intelligent Centralized Management



SaaS
Simplicity

Actionable
Intelligence

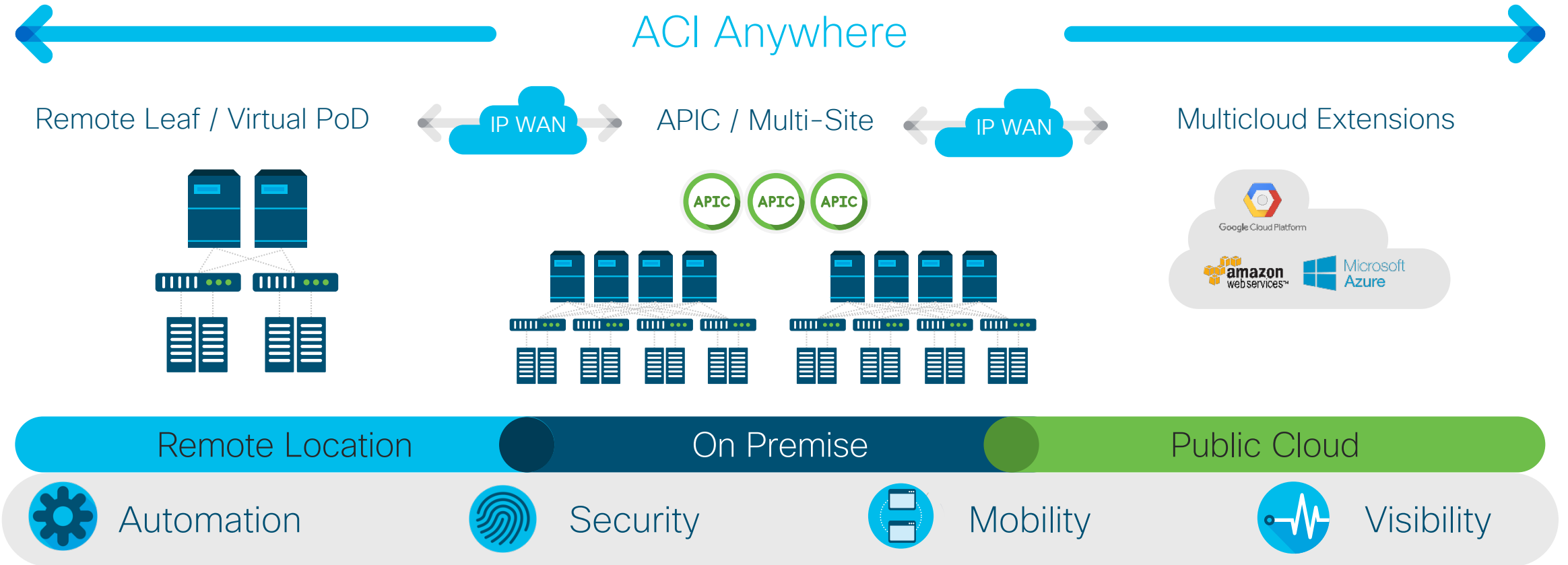




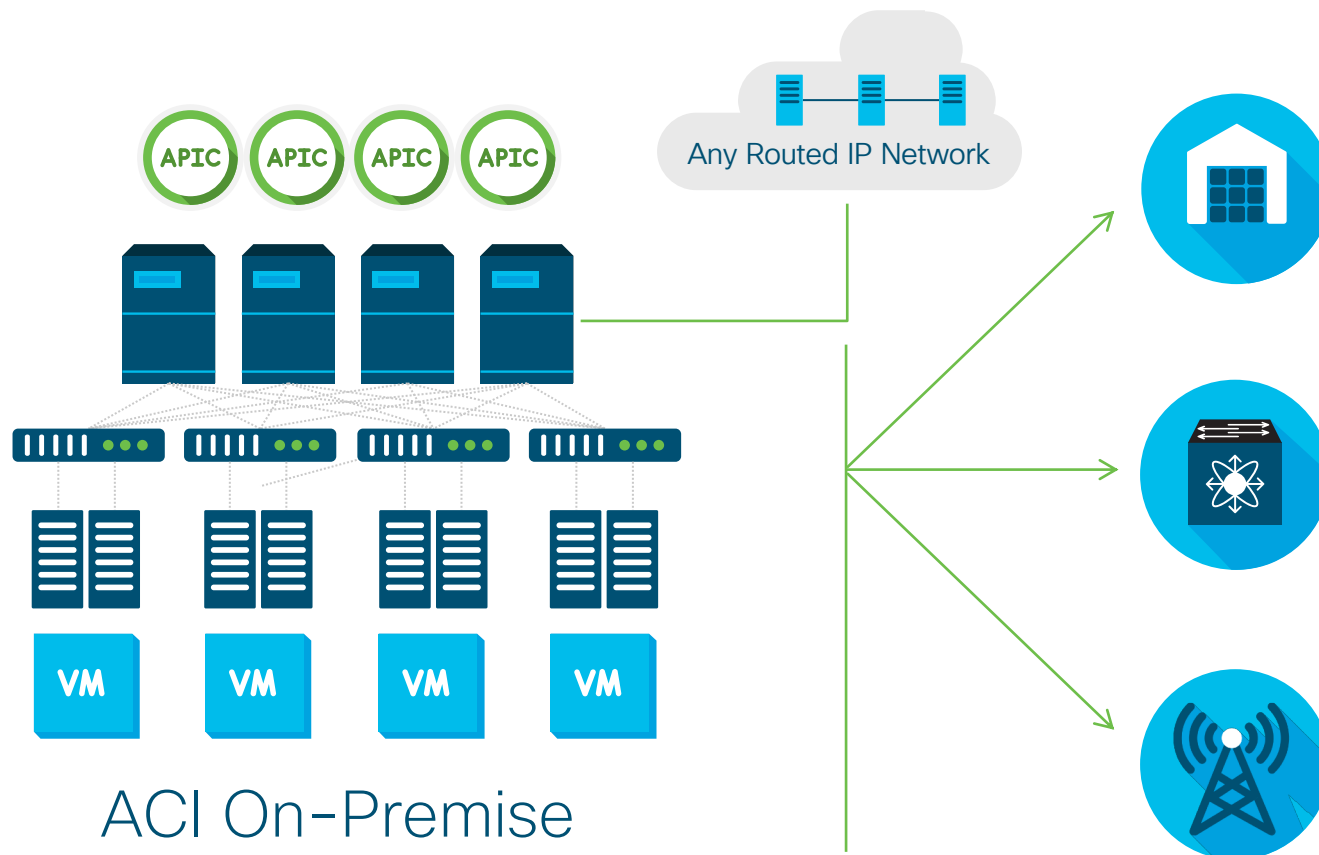
Cisco ACI Anywhere

ACI | Architecture

Any Cloud, Any Application, Any Platform, Anywhere



Extending ACI into Virtual Environments with ACI Virtual Edge



Physical Remote Leaf

- Satellite/Remote locations deployment
- Leverage Nexus 9K hardware capabilities
- Extend ACI policy

ACI Virtual Pod

- Extend ACI Policy w/o H/W
- Virtualized Spine, Leaf and APIC
- Bare-metal providers, co-location providers, legacy networks

ACI Mini Fabric

- Small scale and cost optimized deployments
- 5RU: Ideal for space, power and cooling restrictions
- Telco DC, small to midsize business

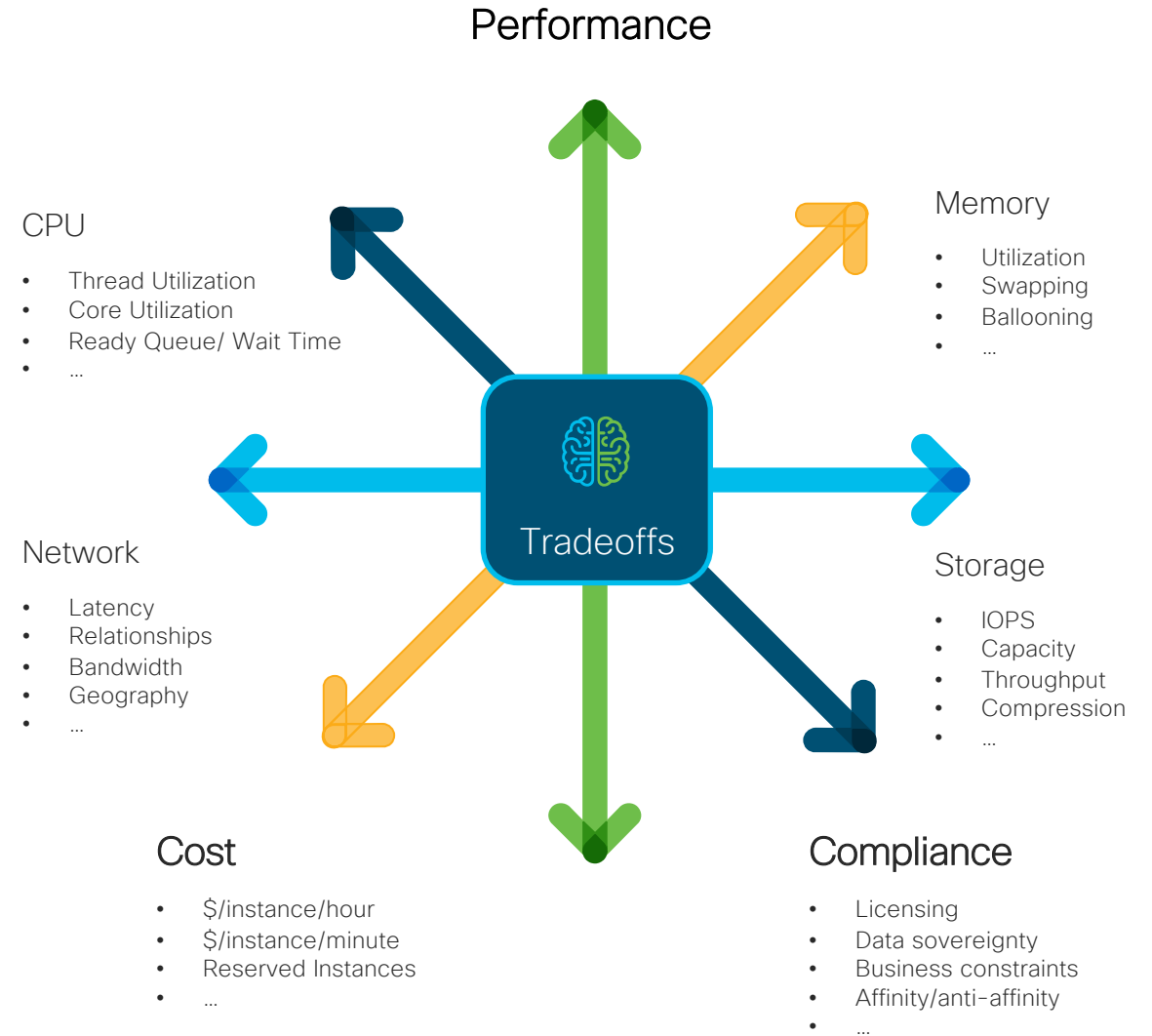


Cisco Workload Optimization Manager (CWOM)

Dynamic Adjustment

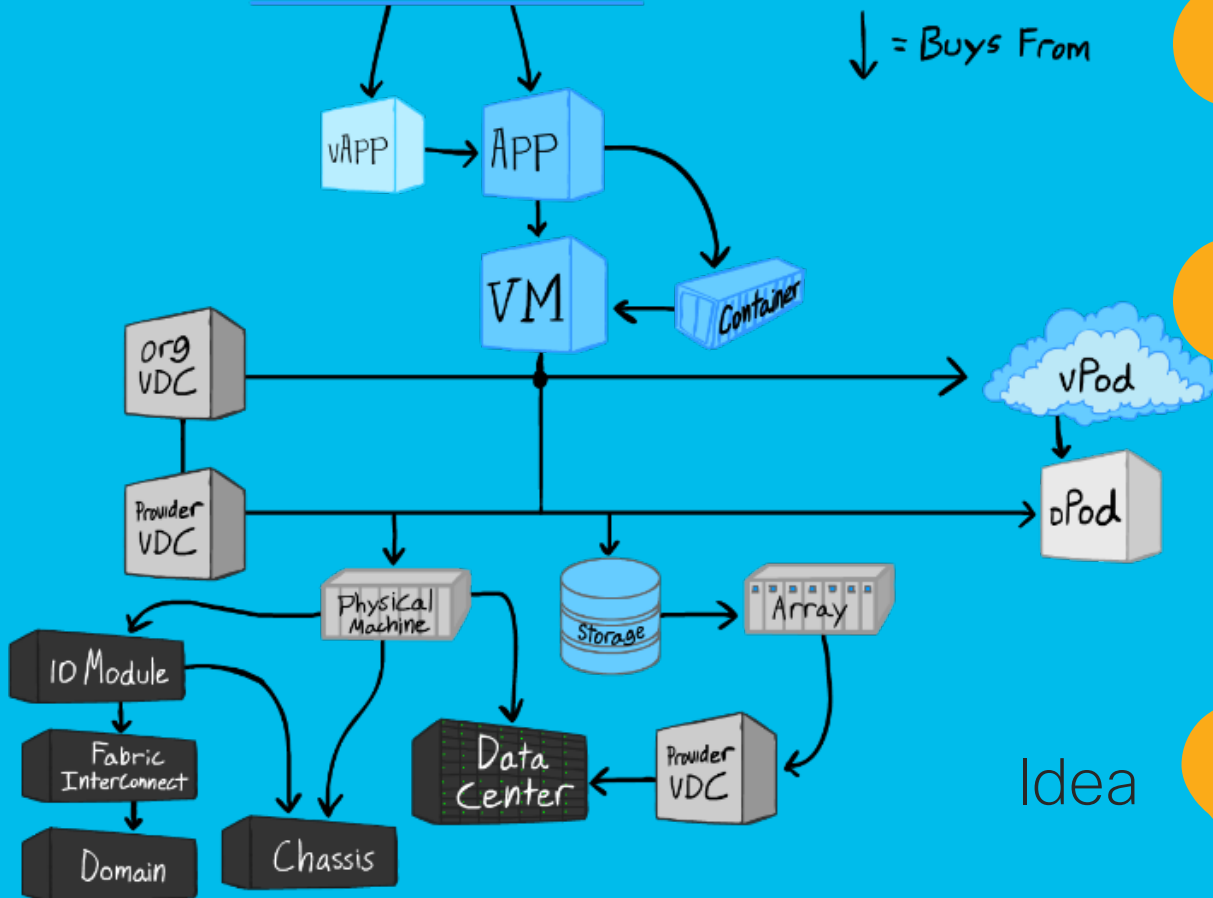
- Navigate multiple tradeoffs
- Operate in real time
- Self-managing

- 
- Initial Workload Placement
 - Increase Resources
 - Decrease Resources
 - Move Workload
 - Retire Resources



How does WOM automate decision-making?

The Business



1

Abstraction:
Supply Chain

2

Analytics:
Supply, Demand, Price

3

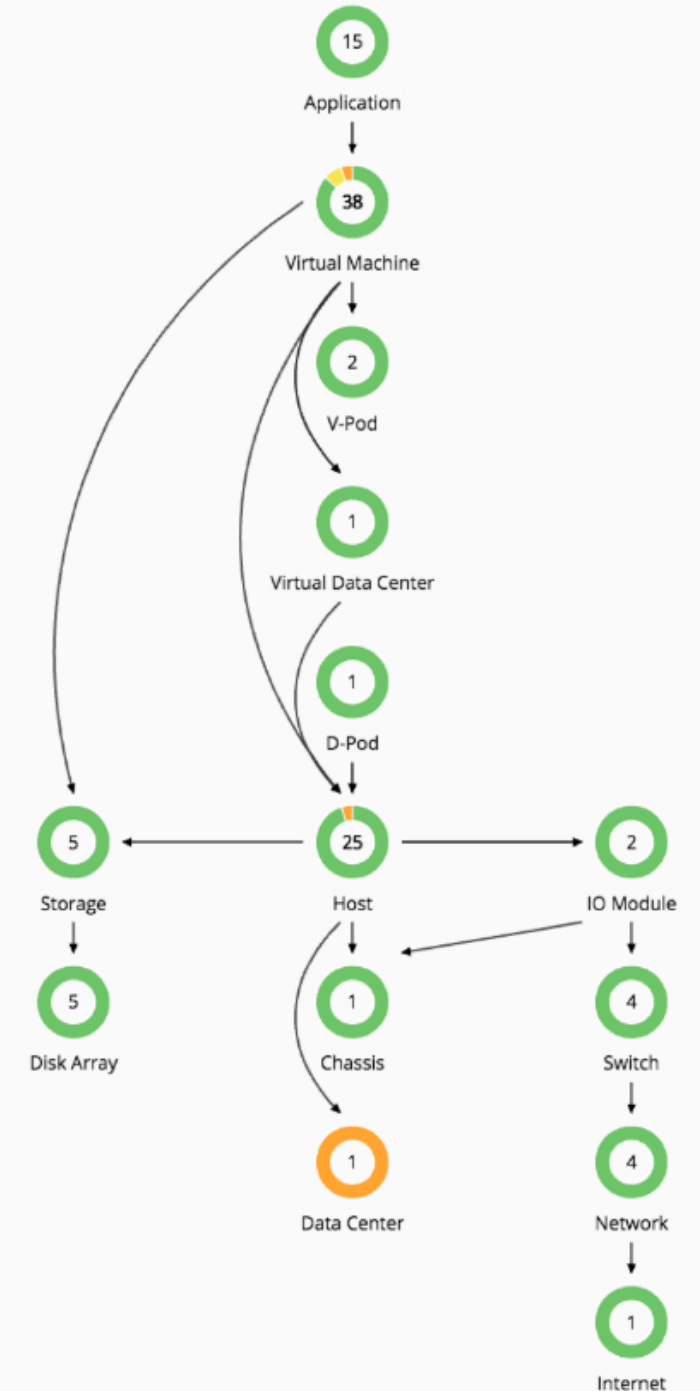
Automation:
Real-time action

- Placement
- Scaling
- Capacity

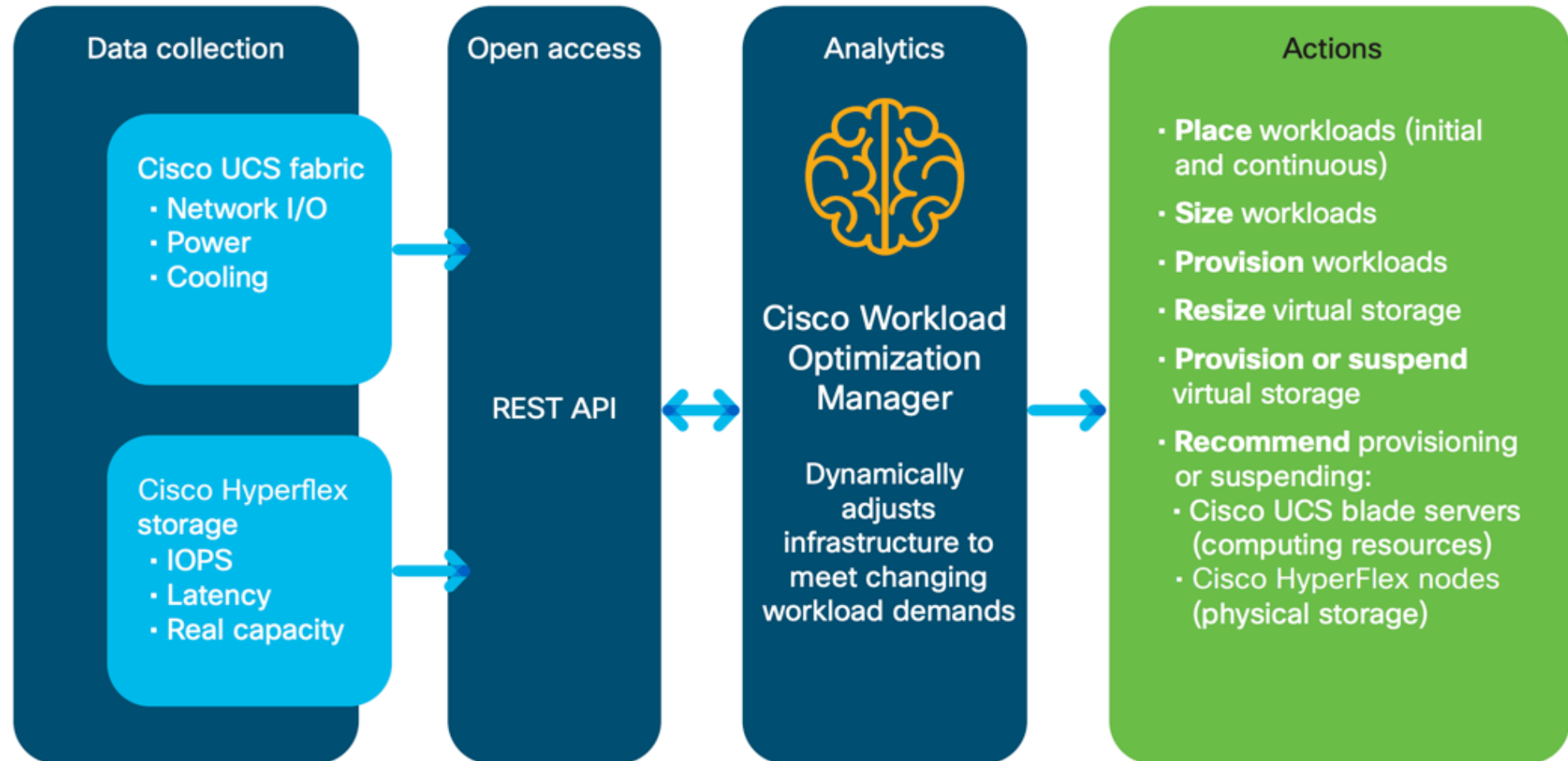
Idea



Solution



CWOM and UCS/Hyperflex

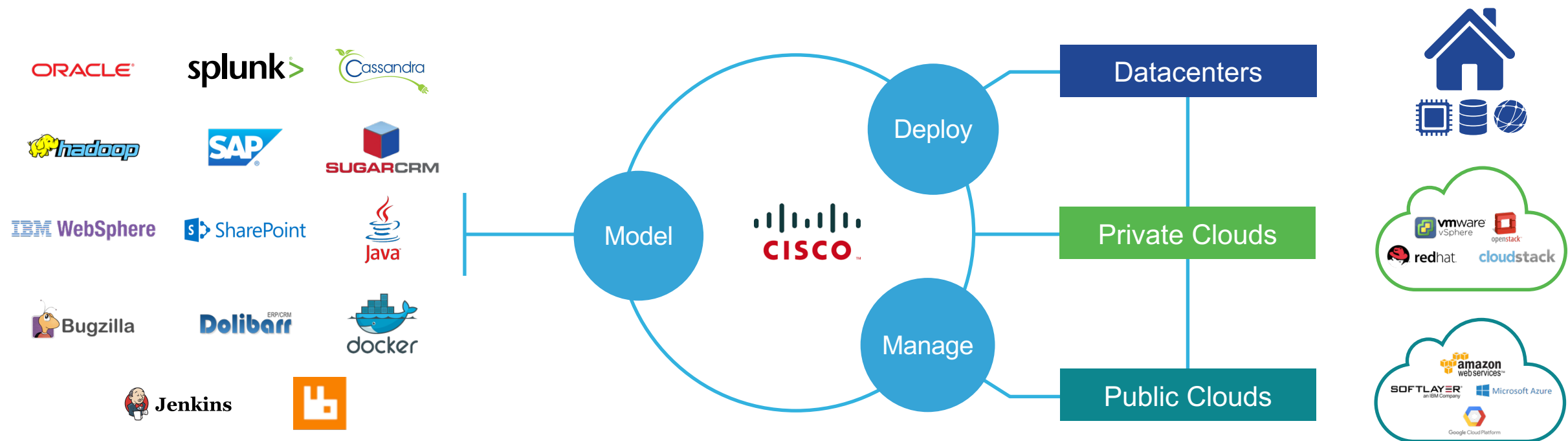


A low-angle, upward-looking shot of a modern glass skyscraper. The building's facade is composed of large glass panels reflecting the sky and clouds. The lines of the building converge towards the top, creating a strong sense of height and perspective. A small, dark, spherical object is visible at the very peak of the building. A solid blue rectangular overlay is positioned in the lower half of the image, containing the text.

Cisco Cloud Center

Cisco CloudCenter

Any Application. Any Cloud. One Platform.



Single Integrated
Management Platform

Full Application Lifecycle
Management

Enterprise-Ready

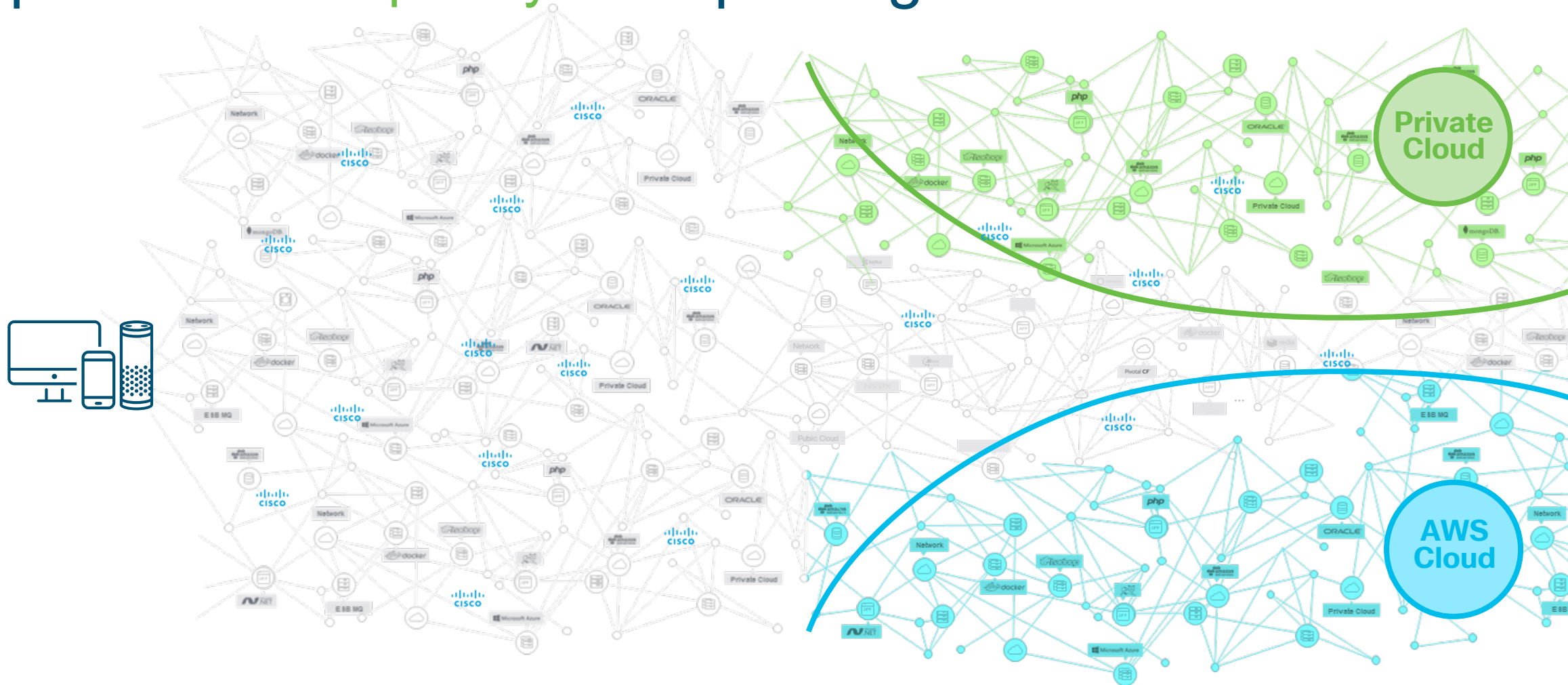
Scalable

Secure



AppDynamics

Application Complexity Is Exploding



1 More Complexity
More Components

2 More Dependencies
More Distributed

3 Release Apps faster
Faster Cycles

AppDynamics

Real-time, end-to-end performance management of complex, distributed applications across private and public cloud environments.

Visualize – All application components, dependencies and connections instantly, in one user interface

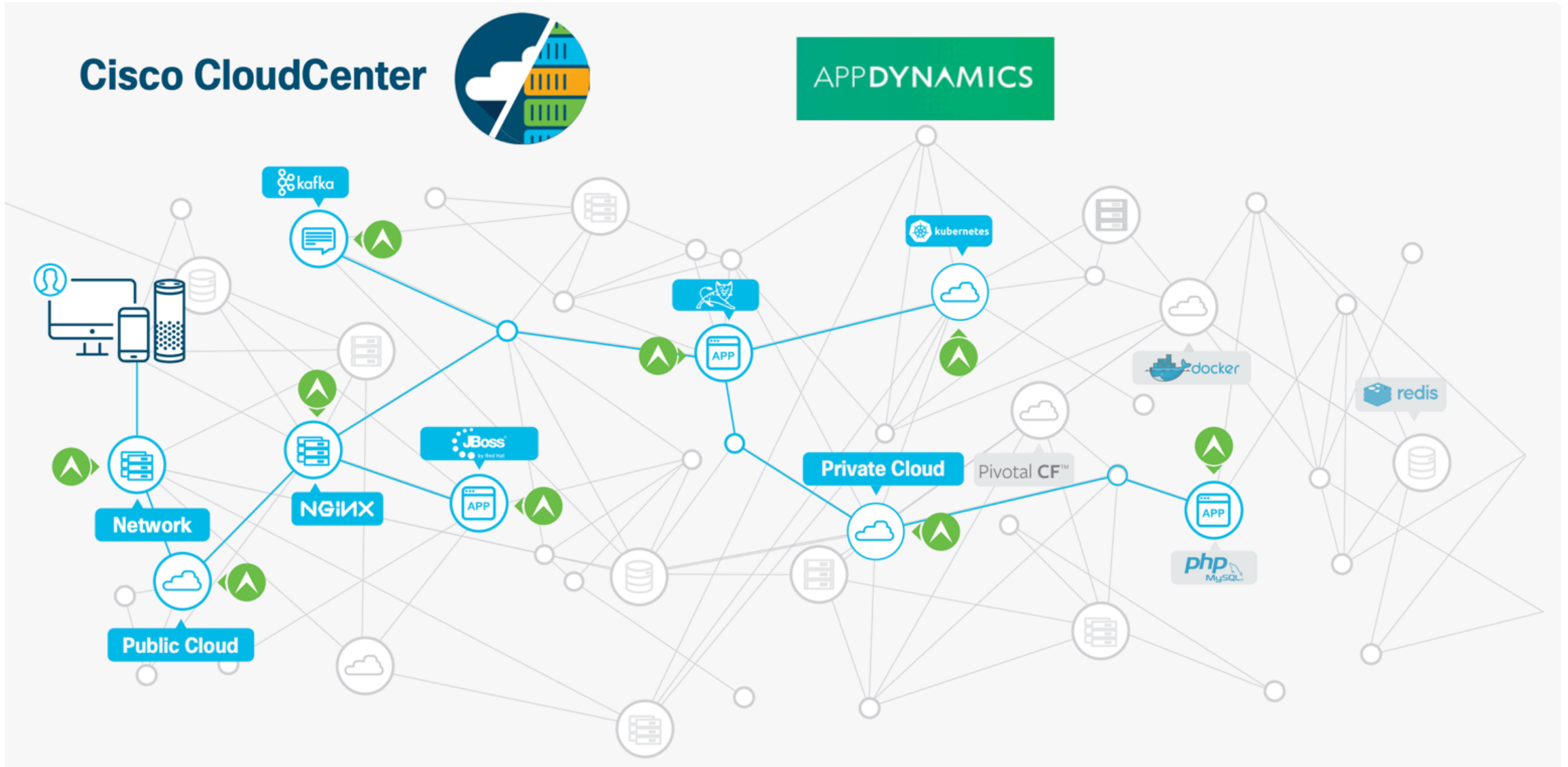
Focus – On making sure that applications meet user experience needs with the automatic monitoring of Business Transactions

Know – That every alert is business relevant and needs to be acted upon

Understand – The root-cause of application performance issues down to the code level



AppDynamics and Cloud Center



AppDynamics and CWOM

AppDynamics understands
the business application topology



Application and development

Workload Optimization Manager drives
the infrastructure so that applications
get the resources they need



Infrastructure and operations



Cisco Tetration

Cisco Tetration

Understand what's running in your datacenter



Cisco Tetration



Visibility and
forensics

East-west communication, users
and user groups accessing
application, location information, etc.,



Process and
software inventory

Process information, installed
software inventory, etc.,



Application insight

Application dependency maps

Cisco Tetration

Identify anomalous behavior deviations





Cisco Security



Protect the
workload
everywhere



On prem

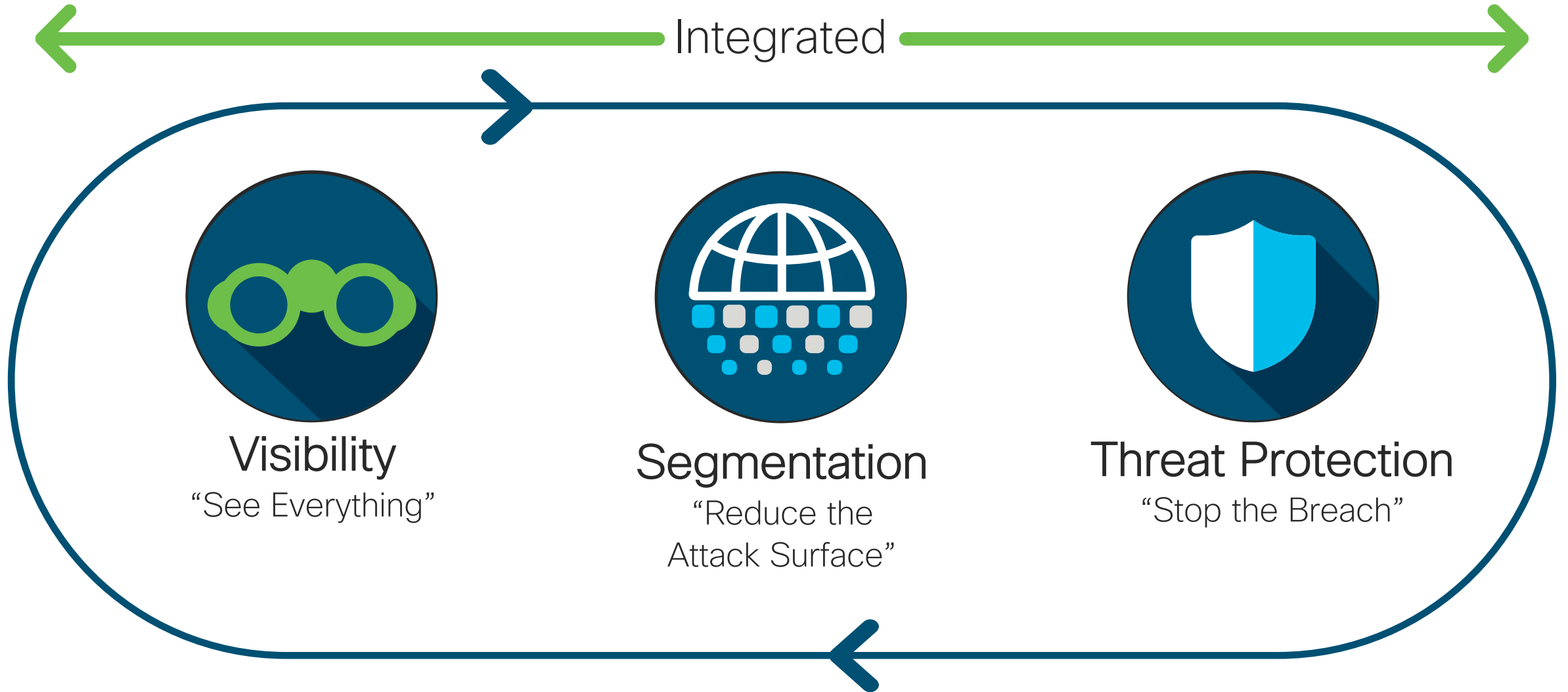


Public



Private

Cisco Data Center Security



Cisco Cloud Center

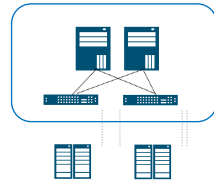
Cisco AppDynamics

Cisco Workload Optimisation Manager

Cisco Container Platform

Cisco Intersight

Remote Leaf / Virtual PoD



APIC / Multi-Site



Multi-Cloud Extensions



Edge Computing

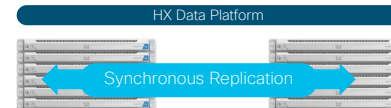
Cisco HyperFlex



Cisco UCS



Cisco Hyperflex



Edge DC

Core DC

Cloud

Security Everywhere



Analytics Everywhere



Policy Everywhere



Constantly
learning

Intent-based
data center

Constantly
protecting

Constantly
adapting





THANK YOU

