Optimizing the Application Experience in a Cloud Native World

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DGTL-PSOCX-1239

Agenda

- The Application Challenge

- Cisco Aligned Portfolio

- Customer Experience Strategy for Success

- Conclusion

Introduction

The Digital Application Landscape is Changing
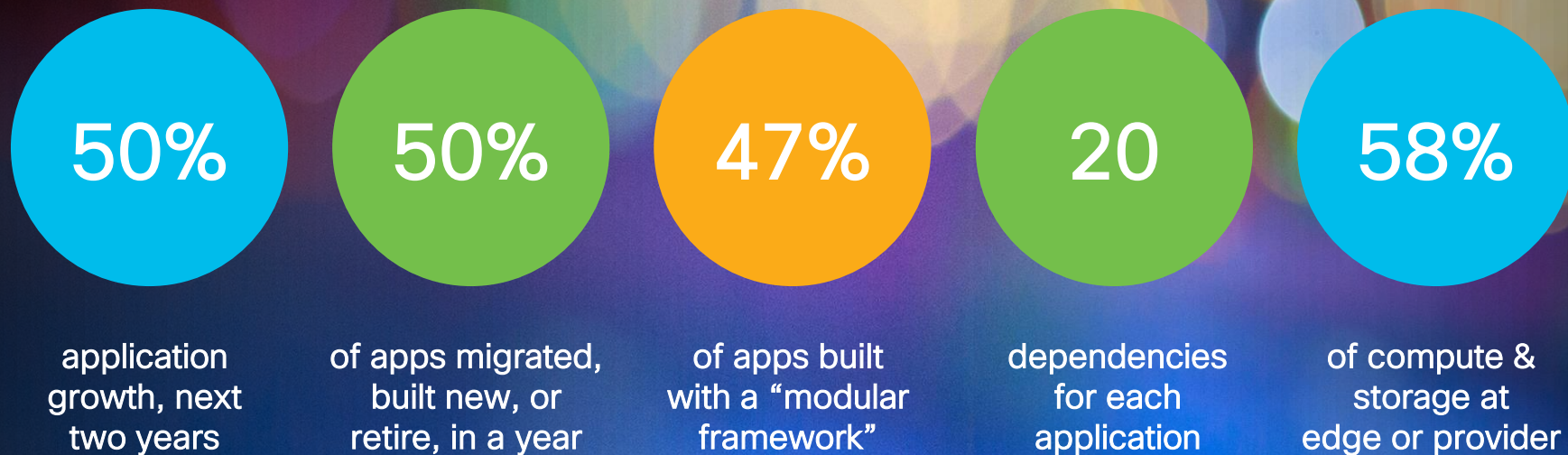
50%
application growth, next two years

50%
of apps migrated, built new, or retire, in a year

47%
of apps built with a "modular framework"

20
dependencies for each application

58%
of compute & storage at edge or provider

Cisco - The App Attention Index

IDC Transforming Applications and Multicloud Operations

The Application
Challenge

CISCO Live!

Applications have Evolved
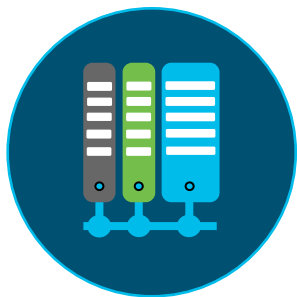
Mainframe

Client/Server

Web

Cloud & Microservices

But the overall landscape can be complex….

Apps Team

VMs & Containers

CPU   Mem

Network
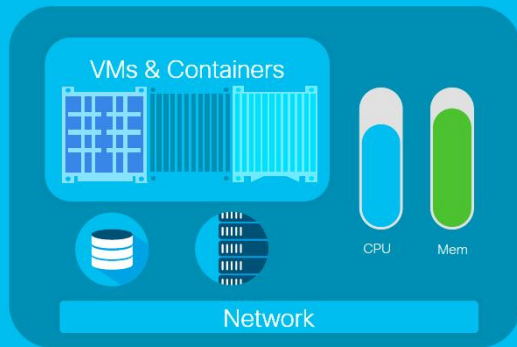
Focused on Stacks & Workloads

Focused on App Topologies and Experience

Infra Team

DGTL-PSOCX-1239
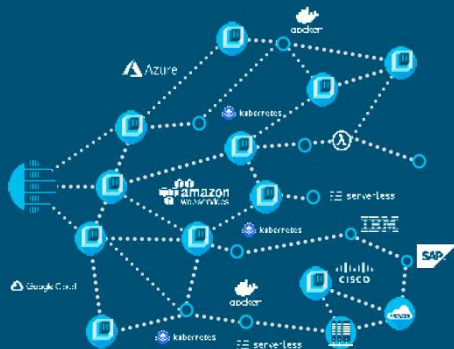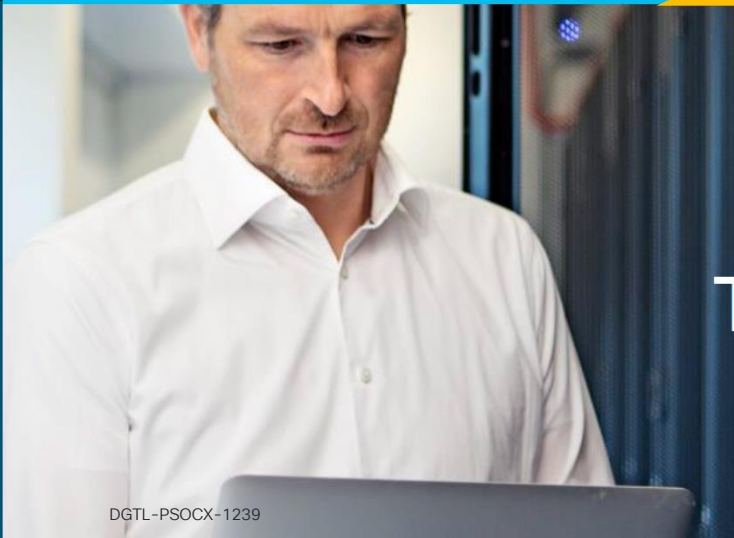
There are Challenges!

How many applications do I have?

Where are they located?

Are my applications portable?

Is my infrastructure ready?

How do I manage application(s) lifecycle?

What about security?

Cisco Aligned Portfolio

How does Cisco bridge these environments?

Environments must work as one
Traditional, Cloud Native, SaaS

On-premises environment

Campus

Branch

DC/Colo

IoT/Edge

Consistent, production-grade experience

App and Workloads Management

Security

Networking

Public clouds and SaaS

aws

...

Office 365

box   salesforce   ...

How does Cisco bridge these environments?

Existing — Applications — SaaS & Cloud Native

On-premises environment

Consistent, production-grade experience

Public clouds and SaaS

- Campus
- Branch
- DC/Colo
- IoT/Edge

Application Performance Monitoring

Application Workflows | Deployment | Cost

Application Optimization

Application Security

Network Security

Software Defined Networking

How does Cisco bridge these environments?

| Existing | Applications | SaaS & Cloud Native |

On-premises environment

Consistent, production-grade experience

Public clouds and SaaS

Container Platform | UCS Director

Intersight | HyperFlex | UCS

Nexus 9K

- AppDynamics
- CloudCenter Suite
- Workload Optimization Manager
- DUO | Cloudlock | Email Security | Umbrella
- Stealthwatch Cloud | Tetration
- Cloud ACI
- CSR1000v | vEdge | Meraki vMX

Application Migration Strategy
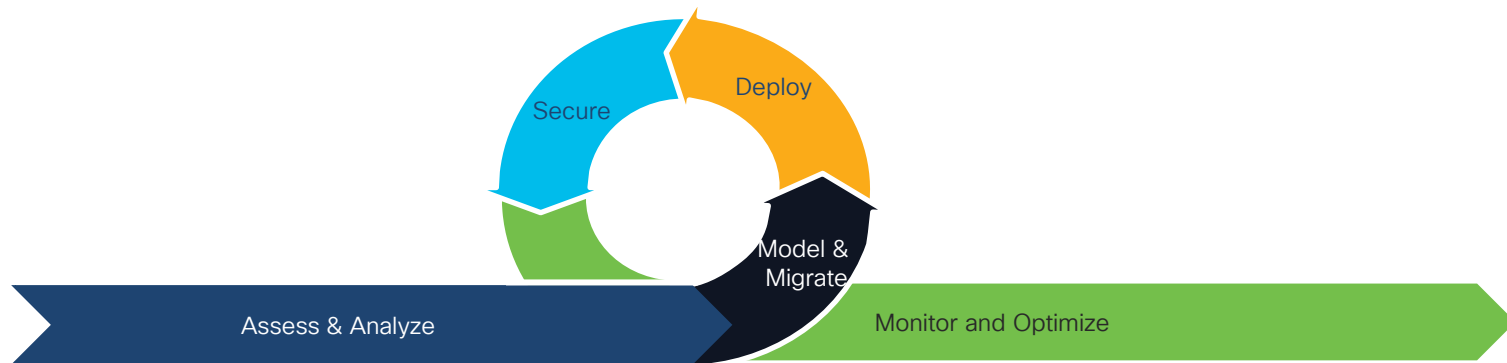
Assess and Analyze

Provide visibility to key applications and create a migration plan

Model and Migrate

Containerize and Model applications for Cloud environment

Deploy

Deploy into cloud endpoints

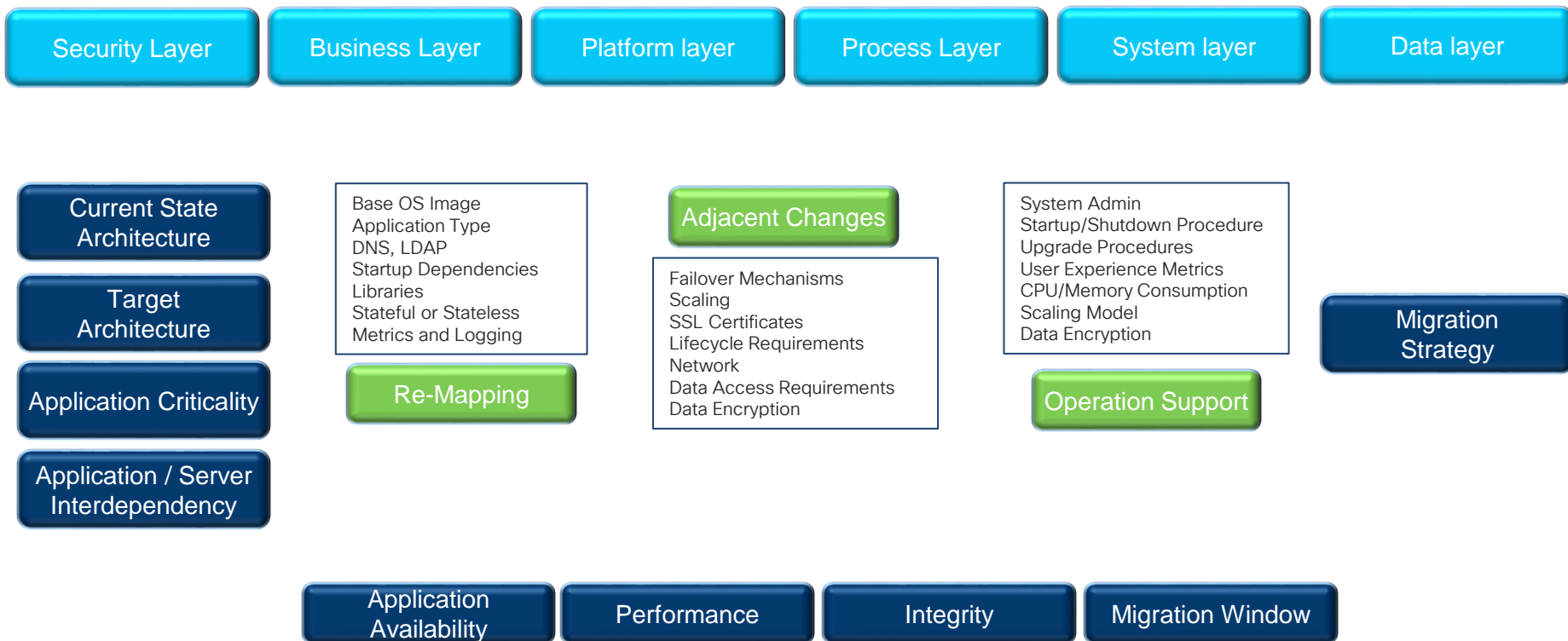(private or public)

Secure

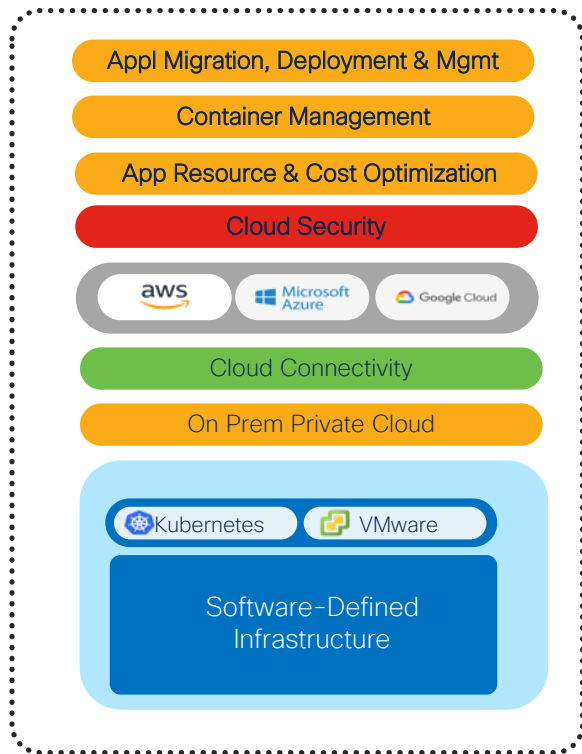Provide proactive protection and visibility, delivered on target end points

Monitor and Optimize

Provide Application & infrastructure monitoring for every line of code and transaction with real-time analytics.

Application Analysis Should be Detailed

| Security Layer | Business Layer | Platform layer | Process Layer | System layer | Data layer |

Current State Architecture

Target Architecture

Application Criticality

Application / Server Interdependency

Base OS Image
Application Type
DNS, LDAP
Startup Dependencies
Libraries
Stateful or Stateless
Metrics and Logging

Re-Mapping

Adjacent Changes

Failover Mechanisms
Scaling
SSL Certificates
Lifecycle Requirements
Network
Data Access Requirements
Data Encryption

System Admin
Startup/Shutdown Procedure
Upgrade Procedures
User Experience Metrics
CPU/Memory Consumption
Scaling Model
Data Encryption

Operation Support

Migration Strategy

Application Availability

Performance

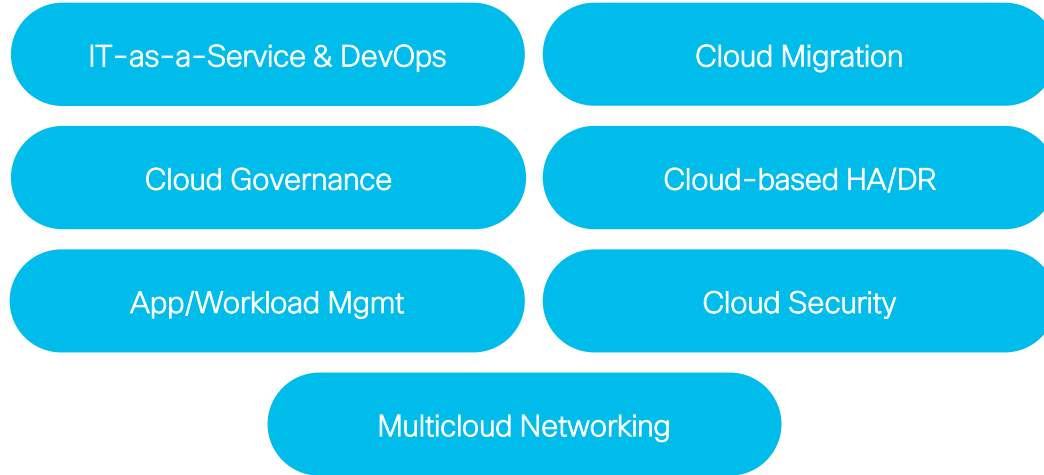**Integrity**

Migration Window
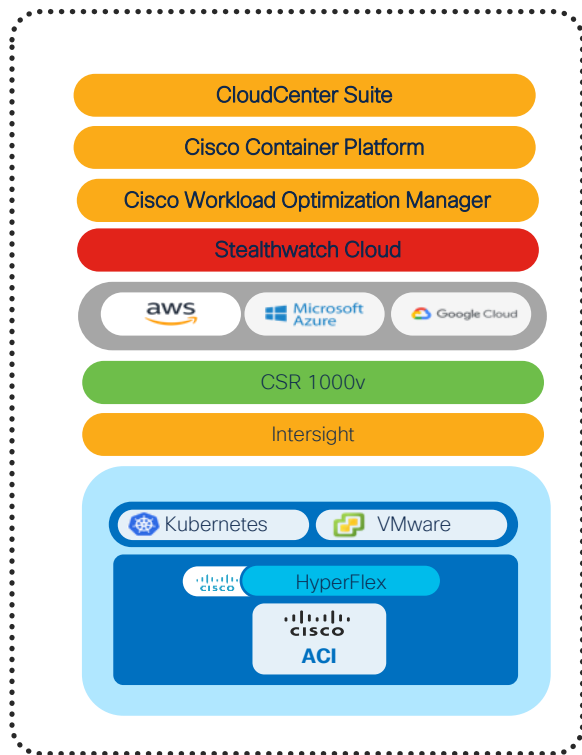
Key Functionalities for a Solution

- Software Defined Infrastructure (Compute/Networking)

- Cloud Connectivity (Multicloud Networking)

- Cloud Security (Protecting users, workloads, applications)

- Application Lifecycle Management

- Virtualization (Containers and Virtual Machines)

- Workload or Resource Optimization and Cost Accounting

- Application Performance and Monitoring

Customer Driven Use-Cases

IT-as-a-Service & DevOps

Cloud Migration

Cloud Governance

Cloud-based HA/DR

App/Workload Mgmt

Cloud Security

Multicloud Networking

Cisco Multicloud Foundation Service – A Solution!

Bringing all the building blocks or key functions together:

- Virtualized or containerized applications on premises or in the cloud
- Build and run cloud applications using consistent services to meet regulatory or technical requirements.
- Application modernization
- Consistent IT policies and governance controls Comprehensive cloud expense management and visibility of workloads
- Integration with existing 3rd party platforms
- Native integrations with CI/CD tools.

Cisco Multicloud Foundation Service – A Solution!
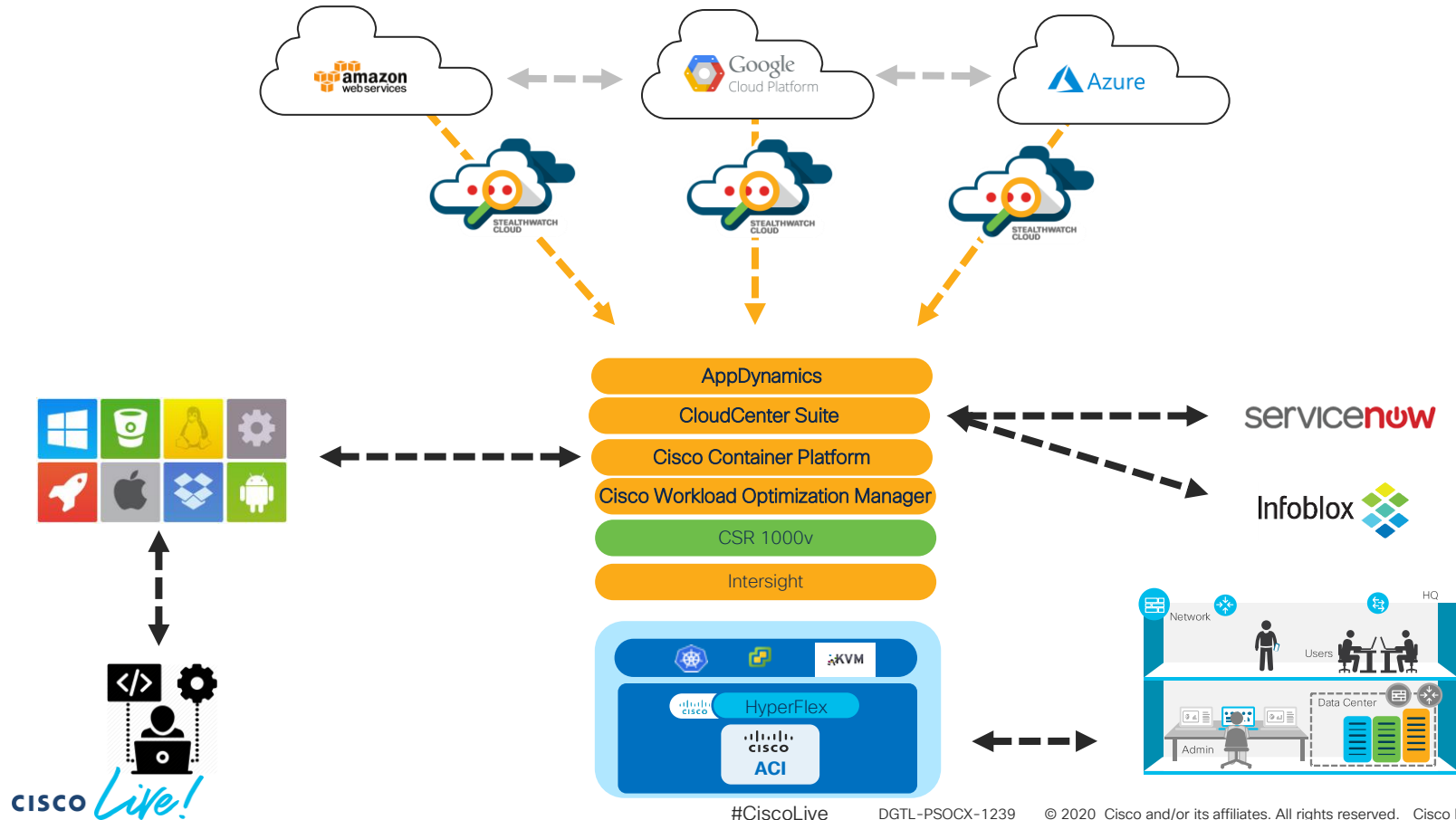
Conclusion

Analyze

Analyze your applications to understand their dependencies, roles, and then create solid migration plan

Leverage

Leverage Cisco CX or partners to assist in your application journey whether its Network, Compute Security, DevOps, or Cloud

Optimize

Continue to focus on the lifecycle of your applications and solution. Constant review and updates should be a standard process.

Continue your Pathway to Success

Visit CX On Demand beginning June 4

Cisco Live Day 2 Keynote	Alvio Barrios	Liz Centoni	Todd Nightingale
CX Demos	CX Cloud	**CX Cloud for Partners**	Business Critical Services

| Innovation Channel | **Innovation Talk** Collaborative Intelligence + Future Innovations: How Cisco CX Accelerates Customer Success Tony Colon, Pat Tittiranonda | | **Product & Strategy Overview** How CX Uses ML/AI to Reduce Your Operational Risk Chris Rittler |

Product or Strategy Overview Sessions	
Managed Services • Accelerate Transformation with Cisco Managed Services	**Enterprise** • ITSM OS Update - Closed Loop Between Cisco DNA Center and Service Now • Accelerate and Prepare the Groundwork for Your Cisco DNA Center Implementation • Outsmarting SD-WAN Threats
Support Services • Leverage Cisco Support Services for Business Continuity	
Cloud • Optimizing the Application Experience in a Cloud Native World	**Security** • How to Adapt Your Workforce Needs During Changing Times
IoT • Best Practices for Deploying Large Scale IoT Devices	**Service Provider** • Virtualization in Mobility

Thank you