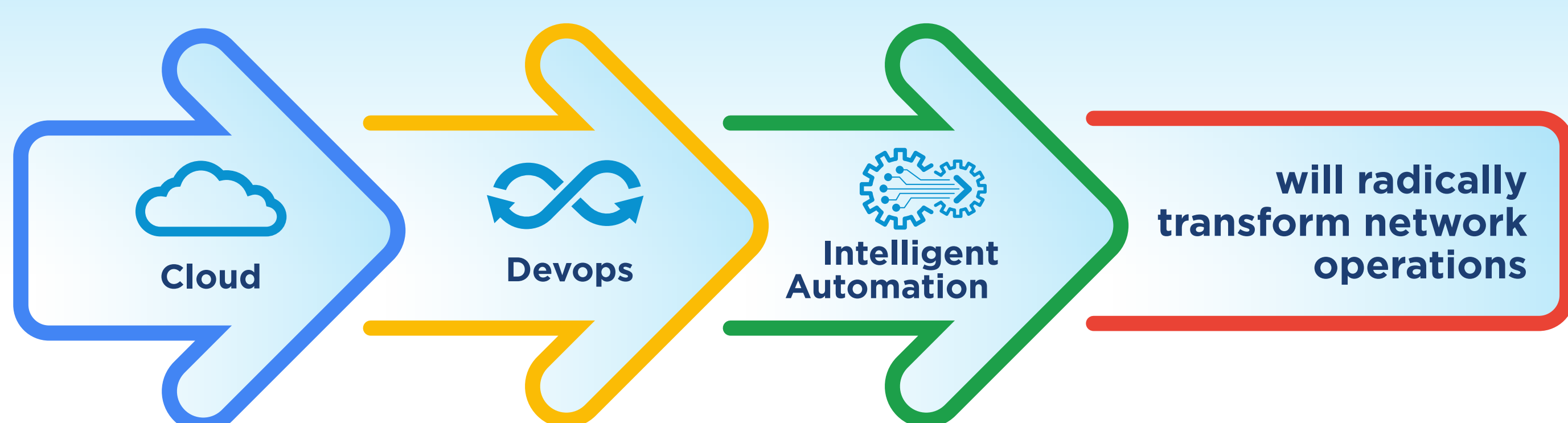


# Powering Up Multicloud DevOps and Digital Business with Software-Defined Networking

## Modern Enterprise Networks Embrace Applications to Drive Business Outcomes



**70%** of IT departments will rethink NetOps roles and staffing, by 2022

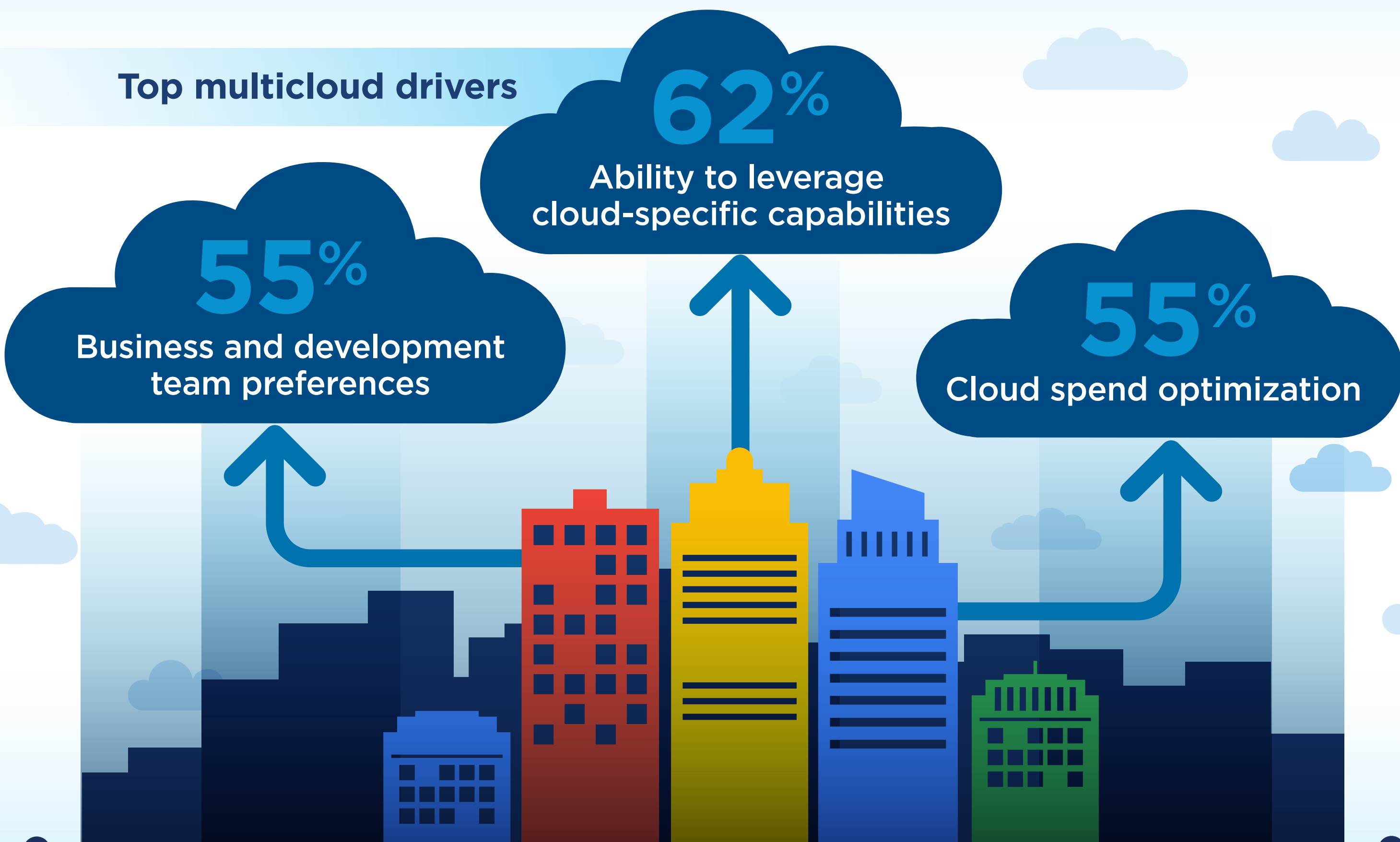
Source: IDC FutureScape: Worldwide Enterprise Network Infrastructure 2020 Predictions, October 2019

## Multicloud Usage Boosted by DevOps and Digital Innovation

Multicloud architectures include on-premises and public cloud platforms that enable digital innovation

**93%** of large enterprises have adopted multicloud

### Top multicloud drivers



Source: IDC Multicloud Management Survey, March 2019. N = 200 U.S.-based enterprise I&O decision makers using multiple infrastructure clouds

## Digital Transformation Relies Upon Containers and Kubernetes

Consistent DevOps deployment, scaling, migration, and management across multiple clouds and on-premises infrastructure platforms is underpinned by open standards provided by containers and Kubernetes

### Today

**74%** of organizations are implementing, piloting, or actively using microservices

**67%** of enterprises have adopted DevOps to promote Agile development and faster innovation

### By 2024

**80%** of all new applications will be developed using a programming language that will be deployed in containers

Sources: IDC FutureScape: Worldwide Developer and DevOps 2020 Predictions, October 2019; IDC, PaaSView and the Developer, June 2019. N = 2,500; IDC FutureScape: Worldwide Cloud 2020 Predictions, October 2019

## Edge Computing Will Extend the Enterprise Network Footprint

### By 2021:

**90+%** of enterprises worldwide will meet infrastructure needs using a mix of on-premises/dedicated private clouds, public clouds, and legacy platforms

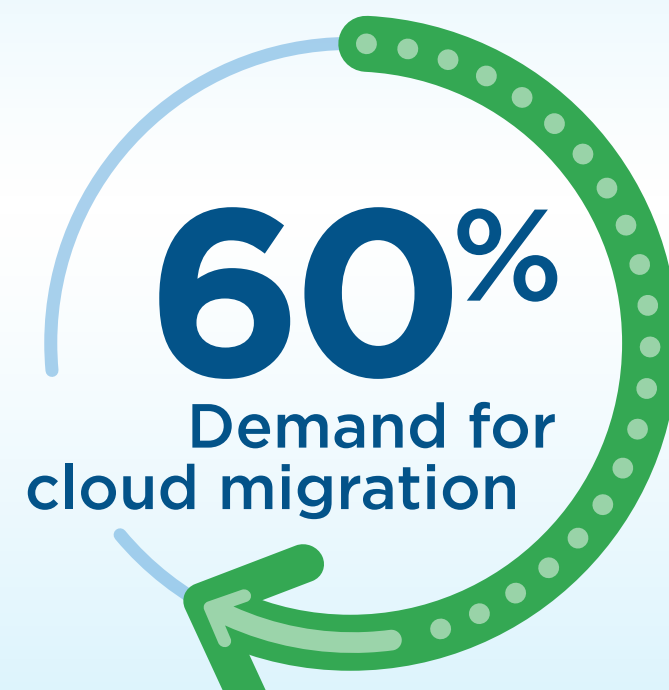
### By 2023:

**50+%** of new enterprise IT infrastructure deployed will be at the edge rather than in corporate datacenters, up from less than 10% in 2019

Sources: IDC FutureScape: Worldwide Cloud 2020 Predictions, October 2019; IDC FutureScape: Worldwide IT Industry 2020 Predictions, October 2019

## Multicloud Compliance and Networking Challenges Posed by Containers

### Impact of containers on multicloud management:



Source: IDC Multicloud Management Survey, March 2019. N = 200 U.S.-based enterprise I&O decision makers using multiple infrastructure clouds

## Software-Defined Networks Are Critical for Multicloud Digital Agility

**60%** of large enterprises will adopt multicloud software-defined networks (SDN) for operational simplicity and consistent network and security policies across hybrid IT environments

SDN overcome limits to business agility as app and infrastructure demands scale by providing:



Automated provisioning



Programmatic management



Integration with cloud orchestration

Sources: IDC FutureScape: Worldwide Enterprise Network Infrastructure 2020 Predictions, October 2019; IDC FutureScape: Worldwide Developer and DevOps 2020 Predictions, October 2019

Learn more about the Google Cloud and Cisco Partnership at [cisco.com/go/google](https://cisco.com/go/google) and [cloud.google.com/cisco](https://cloud.google.com/cisco)