# EMERGING TECHNOLOGY TRENDS

*Agenda:*

- ➢ *Bandwidth Growth*
- ➢ *Macro Level Technology Trends*
- ➢ *COVID Impact on Technology*
- ➢ *Future Technology Planning*
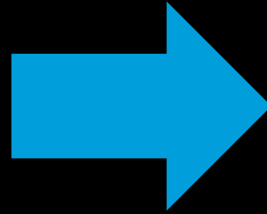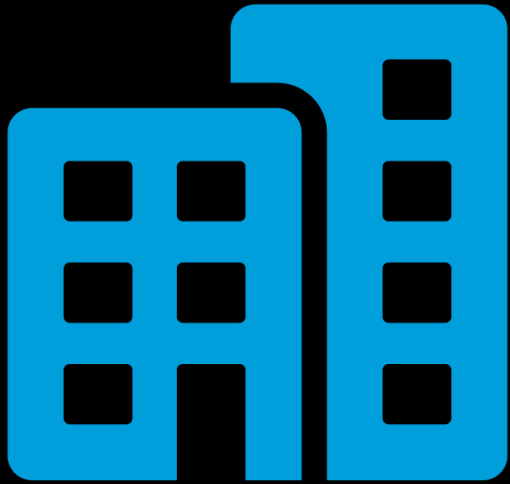- ➢ *Additional Emerging Trends*

# Bandwidth Usage Continues to Explode

| Year | Global internet traffic |
|------|-------------------------|
| 1992 | 100 GB per day |
| 1997 | 100 GB per hour |
| 2002 | 100 GB per second |
| 2007 | 2,000 GB per second |
| 2017 | 46,600 GB per second |
| 2022 | 150,700 GB per second |

Source: Cisco VNI, 2018.

3

# Network Endpoints Have Evolved

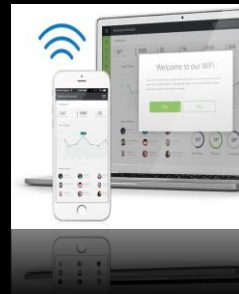**THEN** (physical buildings)

**NOW** (everything connected)

# Macro Technology Trends

The cloud has changed connectivity/networking

93%

93% of businesses are using cloud technology in one form or another

The "endpoint" has changed.



There will be over 50 billion connected devices by the end of 2020

IP traffic is growing exponentially.
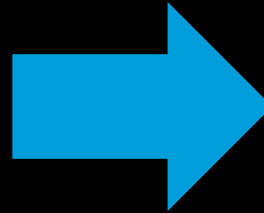
3x

Traffic to expand 3x by 2020

# Impact of COVID19 on Technology Trends

**Prior to COVID**

**NOW** (Post COVID)

- Customer Physical Interaction
- Growth in Online Presence
- Digital Marketing/Tracking
- Growing Security Concerns

- Must have Technology Plan
- Digital Security
- Vendor/Partners
- Data Analytics

*A good TECHNOLOGY strategy/planning needs to consider...*

Applications and Usage

Cloud Strategy

Internet Access

Connectivity Transport

Security

# Additional Emerging Trends in Technology

Cyber Security

Artificial Intelligence

3D and 4D Printing

5G Data Networks

## EMERGING TRENDS

Predictive Medicine/Healthcare

Smart Cities

Internet of Things (IoT)

Cloud and Edge Computing

# How business can succeed in the future….

- ✓ Technology Planning
- ✓ Agile/Flexible
- ✓ Digital Presence
- ✓ Online Security