



Race to 5G Summit

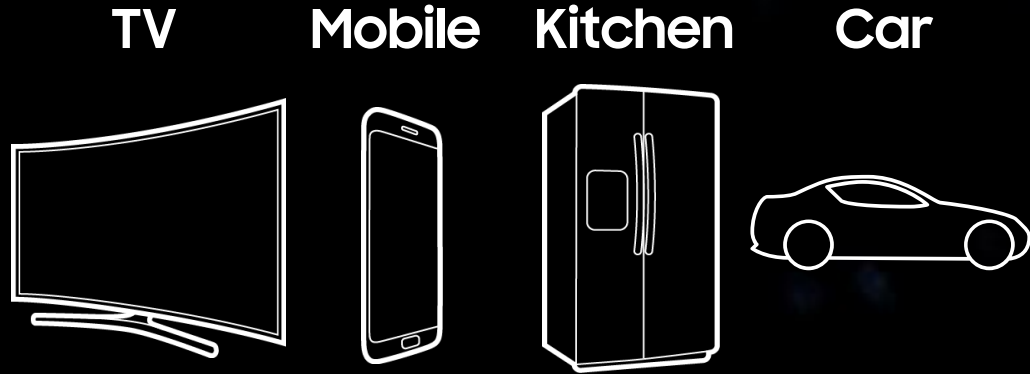
# SAMSUNG

## Tim Baxter

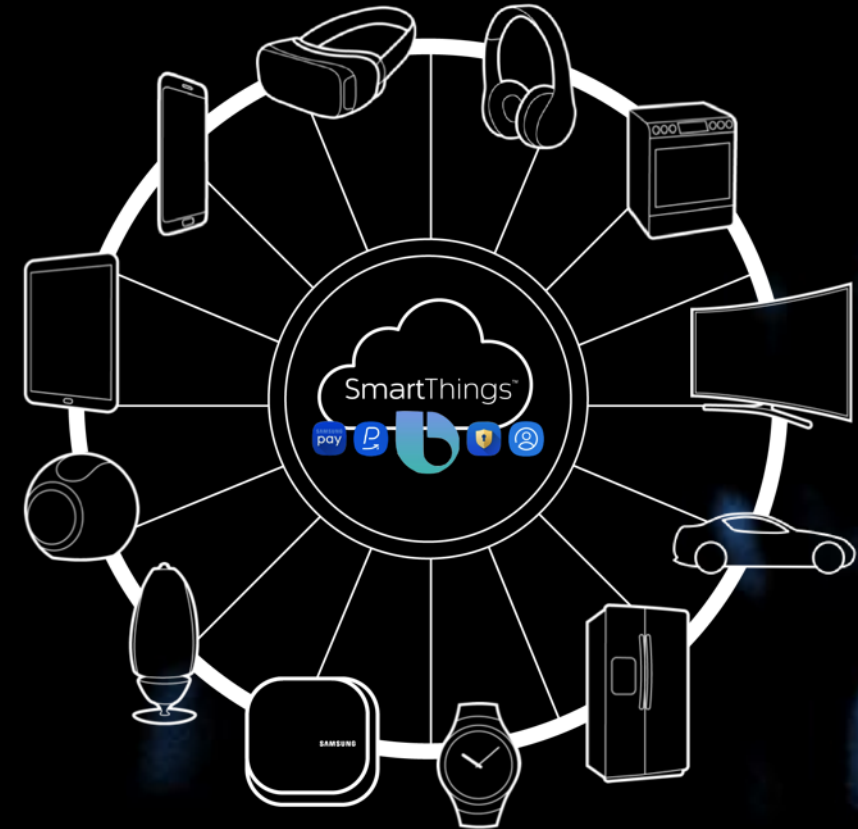
President and CEO

Samsung Electronics North America

# Samsung's Vision



**Discrete Experiences**



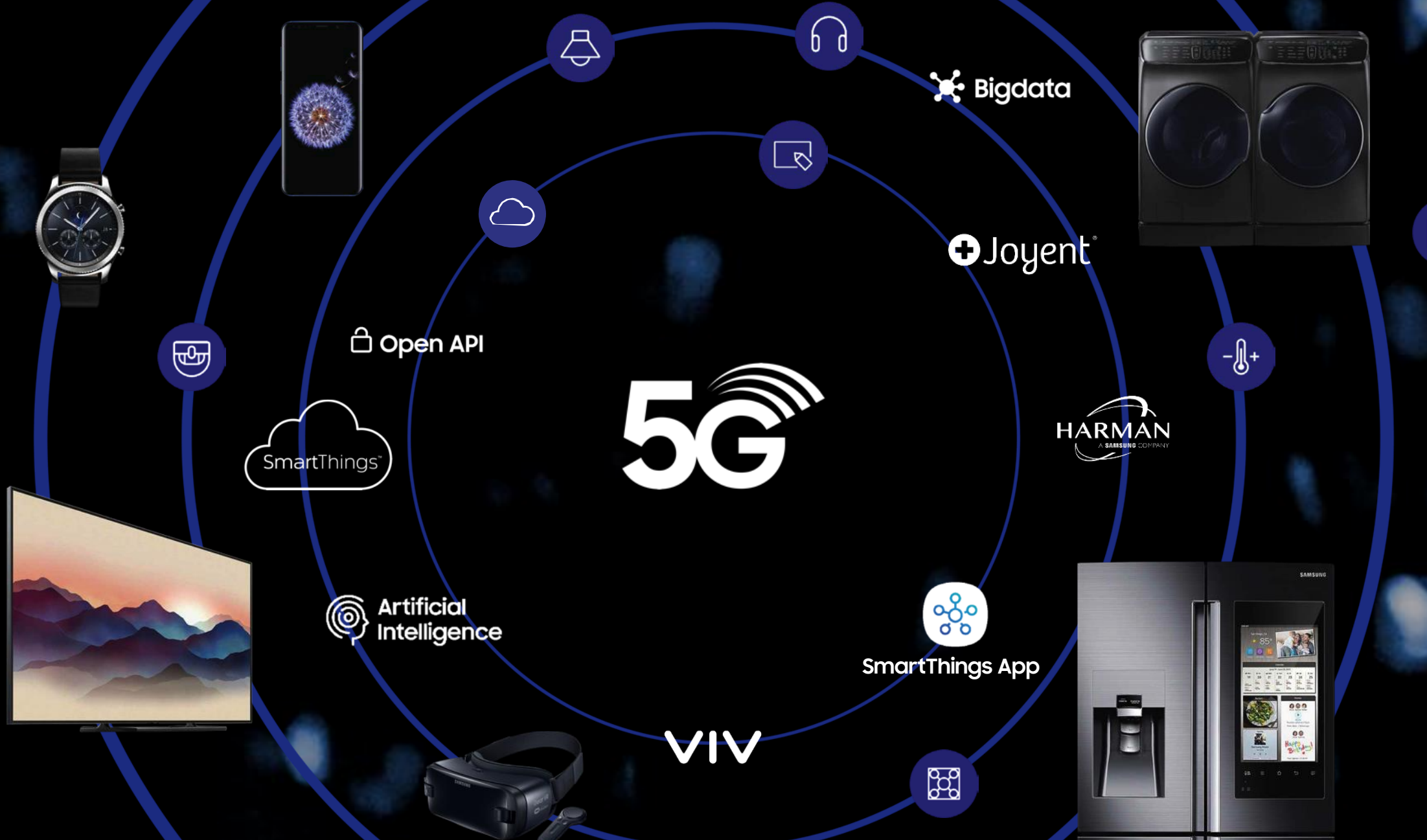
**Seamless Experiences**

Single Cloud, Single App and Bixby

# A Multi-Year Journey



# 5G



Bigdata

Joyent

Open API

SmartThings

Artificial Intelligence

SmartThings App

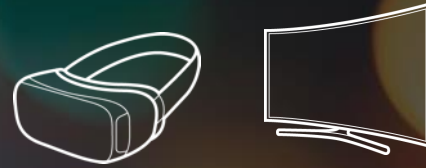
VIV

HARMAN  
A SAMSUNG COMPANY





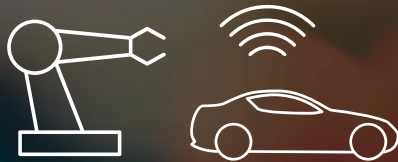
# Benefits of 5G



## Enhanced Mobile Broadband

Peak speed 20 Gbps

Edge area 100 Mbps



## Ultra Reliable & Low Latency

1 ms Latency

$10^{-9}$  Error-rate, Ultra reliability



## Massive Machine-Type Communications

1 million device connections/km<sup>2</sup>

High energy efficiency



5G

# 5G Context

1990s

## 2G

10 Kbps



Texting

2000s

## 3G/4G

10 Mbps



Texting



Internet  
Access



Video

2018

## 5G

10 Gbps



Texting



Internet  
Access



UHD & 3D  
Video

5G Smart City



Wireless  
CCTV



Digital  
Signage



LTE  
Backhaul



5G Train



Autonomous  
Driving & V2X

# Unlocking 5G Potential

Video IoT

Mobile 5G

CCTV

AR

Enterprise Services

Connected Car & V2X

Digital Signage

Wireless Backhaul

Private Network

Connected Car

5G AU

Traffic Lights

5G FWA

5G AU

Passenger Service

5G Train

Fixed Wireless Access



# Changing the Face of Transportation



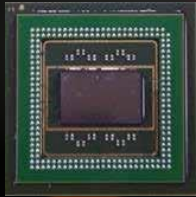


# Our 5G Leadership Position

## Chips

Modem / RFIC

28GHz RF CHIPSET



5G MODEM

## Devices



Mobile



5G Home Router

## Networking

5G mmWave Access



5G Sub-6GHz Access



Virtualized Access and Core

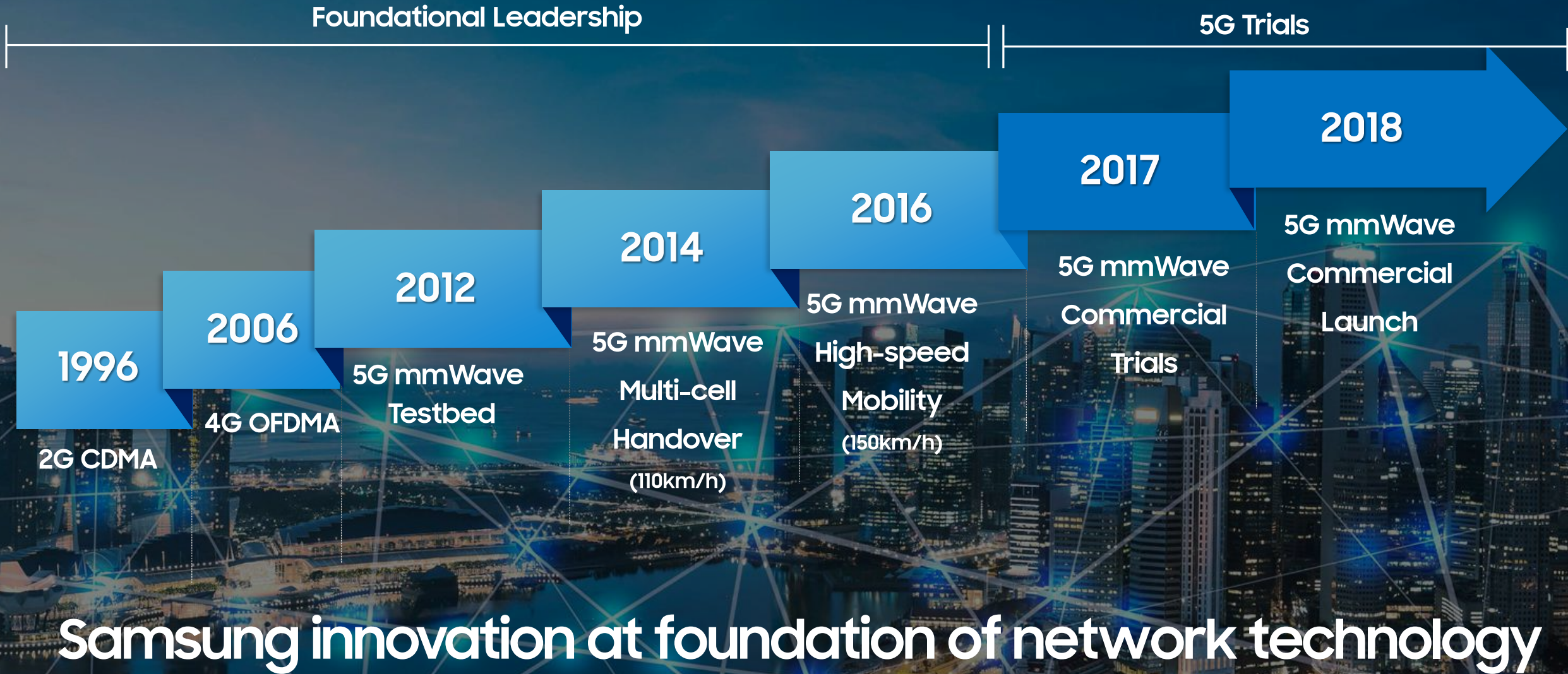


COTS Server

VIRTUALIZED RAN  
VIRTUALIZED CORE  
VIRTUALIZED MANAGEMENT SYSTEM

“Secure 5G and Trusted Supply Chain”

# Leading the Way in Networks



Samsung innovation at foundation of network technology



# Leading the Charge Globally



Secure end-to-end transmission



Fastest handover in the world



High-speed trial transmitting 8K content



Live content transmission throughout a stadium



# Evolving 5G Tech for Consumer Use Cases

## 5G Needs Identification

Consumer Lifestyle Trends

Market & Expert Research

Technological Developments

## 5G Organizing Framework

Level of Investment

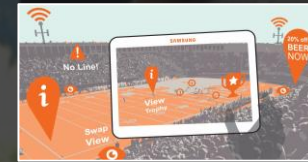
Landscape of 5G Opportunities

5G Geographic Deployment

## Future 5G Use Case Development

Collaboration with Key Partners

Test & Learn



# Creating the 5G Future Today



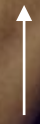
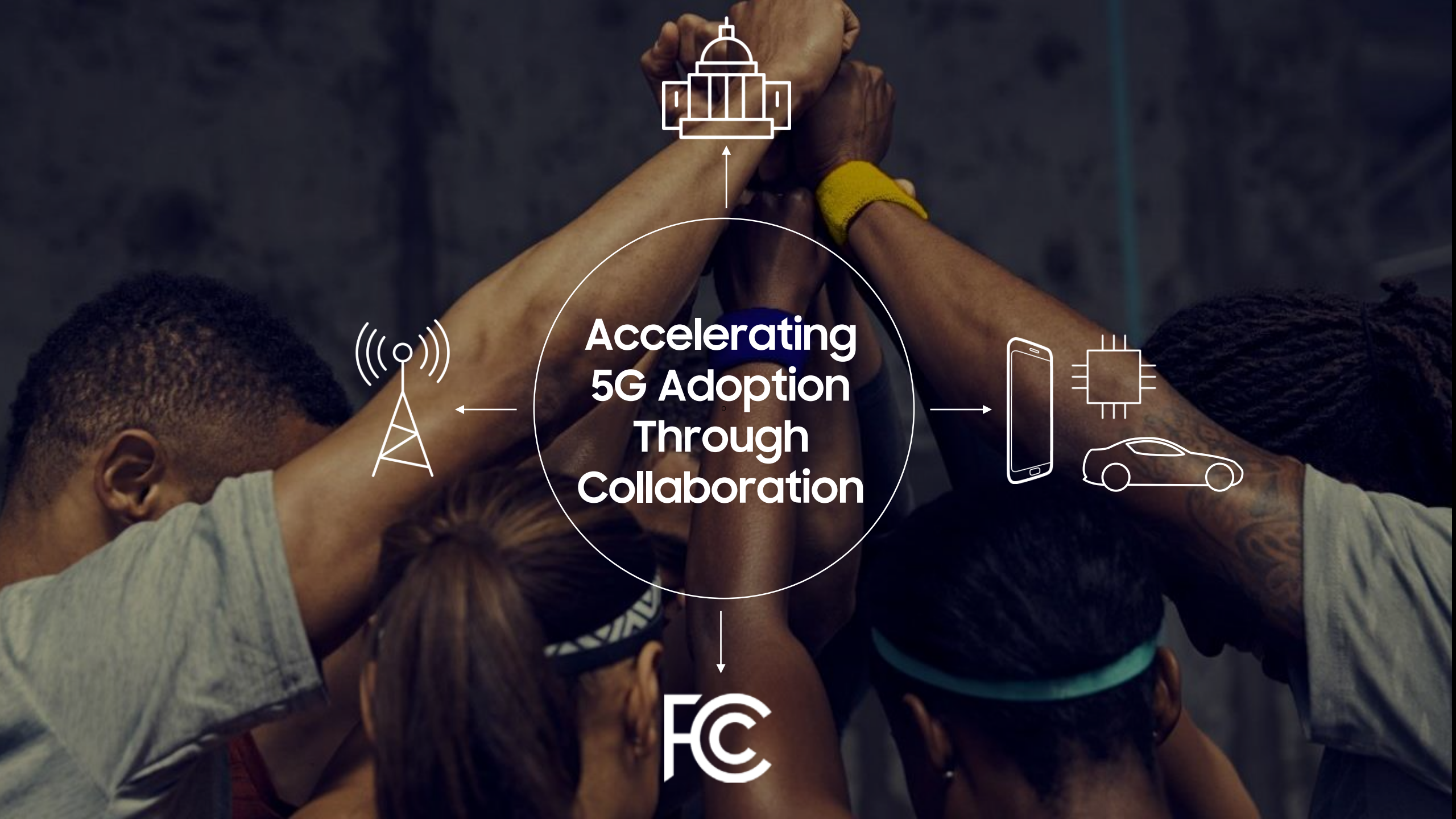




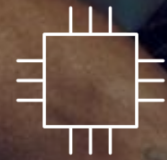
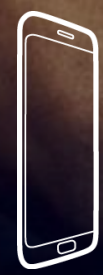
# The First 5G Commercial Solution Authorized by the FCC







**Accelerating  
5G Adoption  
Through  
Collaboration**



# Leading America into the 5G Future

**40 Years**

IN THE U.S.

**20,000**

EMPLOYEES IN THE U.S.

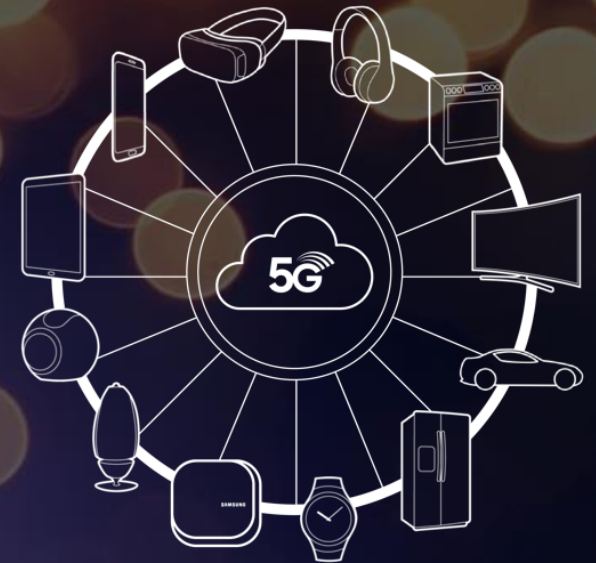
**\$30 Billion**

INVESTED IN THE U.S.



TYPES OF INDUSTRY

- Manufacturing
- R&D
- Corporate, Marketing and Sales
- Customer Service



25 Years of U.S. Wi-Fi deployment