



Cisco Expo 2012
Morocco

Mobile Internet

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Innovate Together



Global Mobile Data Traffic Drivers

More Mobile Connections



By 2016...



Faster Mobile Speeds



2G > 3G > 4G

Enhanced Computing



Rich Media Apps/Content

You Tube

flickr

facebook

Google

Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2011–2016

By 2016, global mobile data traffic will reach an annual run rate of 130 exabytes per year.

130 exabytes is equal to:

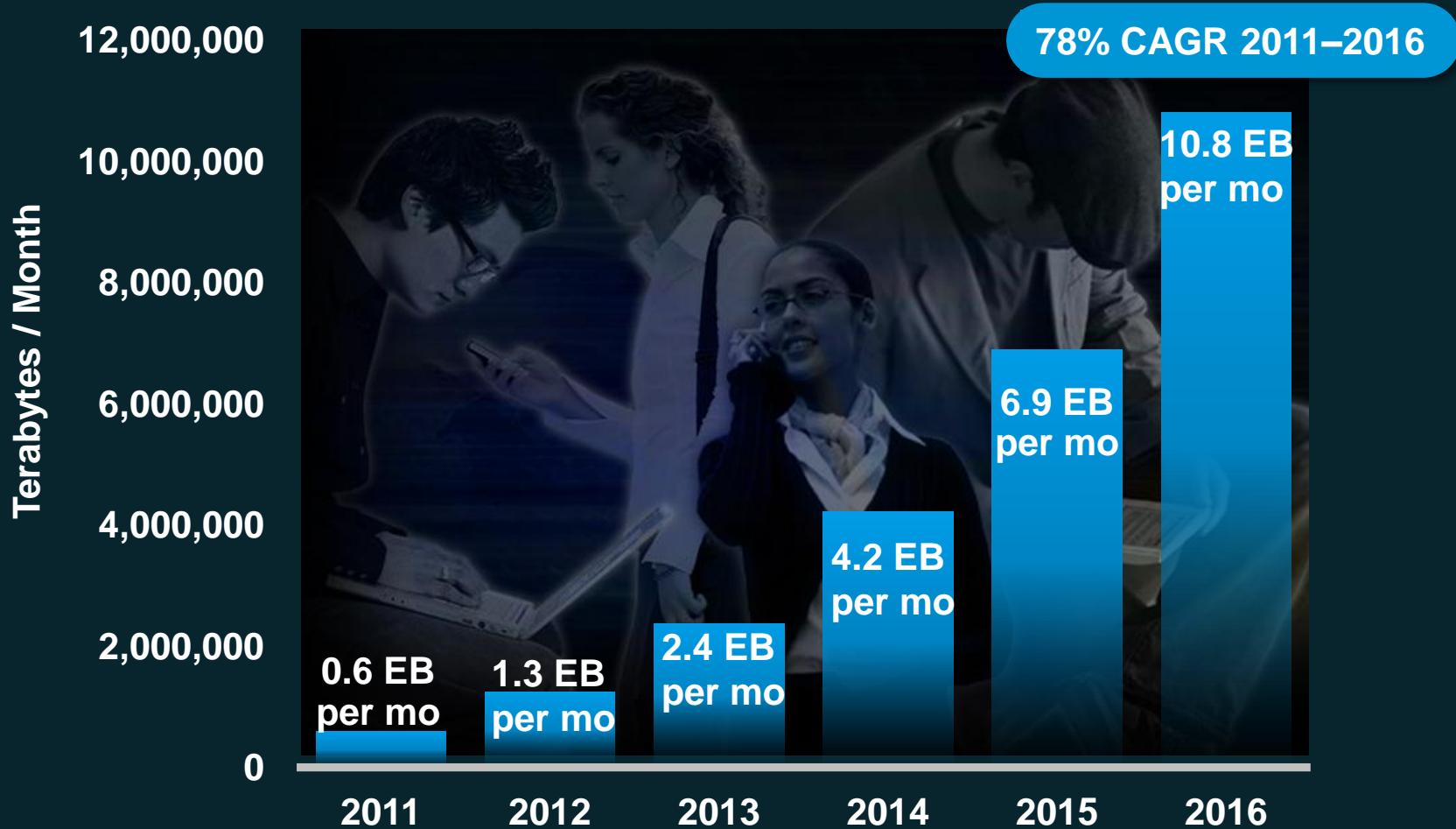
- 136X more than all IP traffic generated in 2000
- 33 billion DVDs
- 813 quadrillion SMS text messages



Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2011–2016

Global Mobile Data Traffic Growth / Top-Line

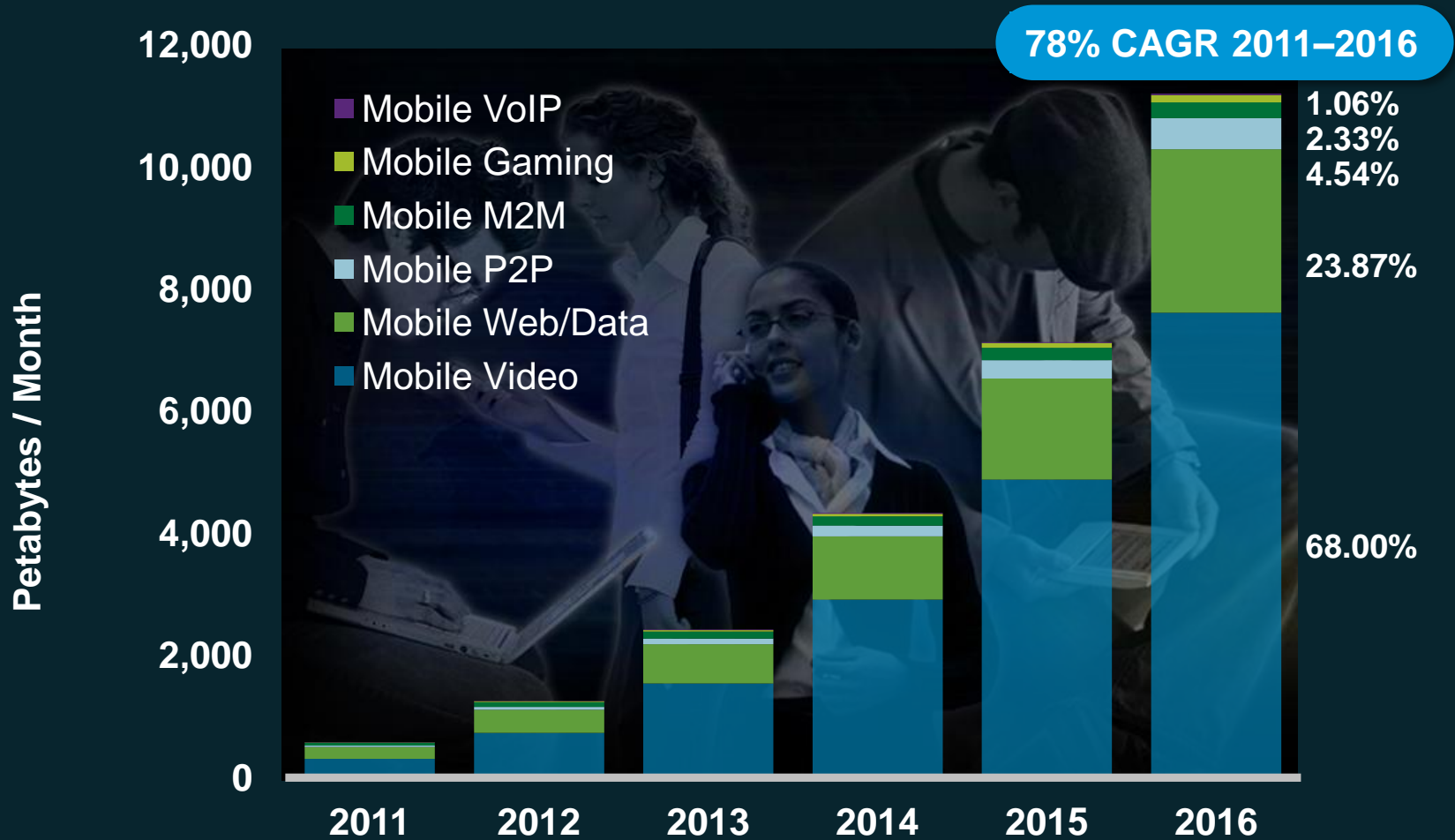
Global mobile data traffic will increase 18X from 2011 to 2016



Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2010-2015

Global Mobile Data Traffic Growth / Applications

Video to reach 70 percent of mobile data traffic in 2016

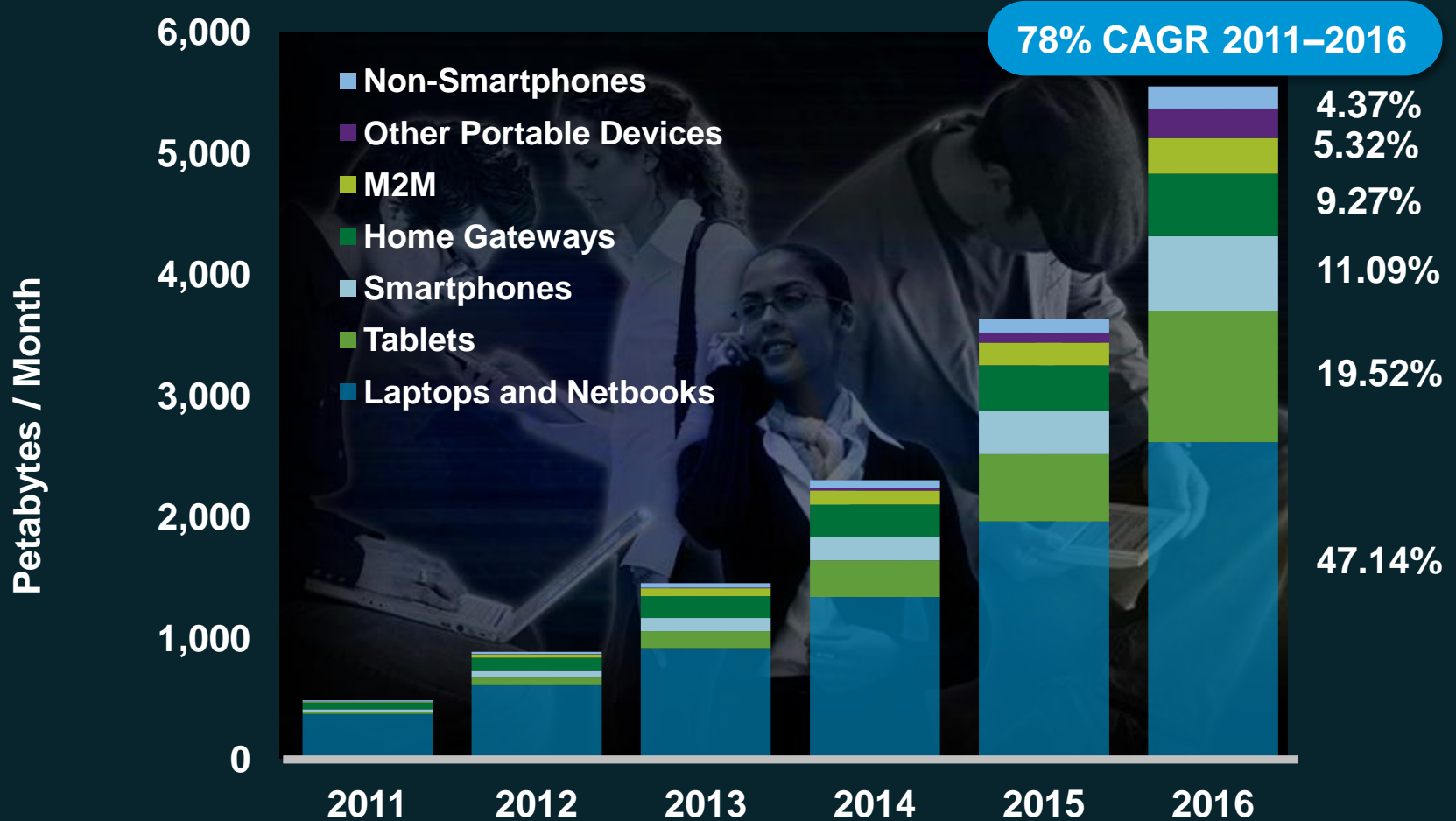


VoIP traffic forecast to be 0.21% of all mobile data traffic in 2016

Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2011–2016

Global Mobile Data Traffic Growth / Devices

Laptops dominate through 2016; tablets drive 19.5% of traffic by 2016

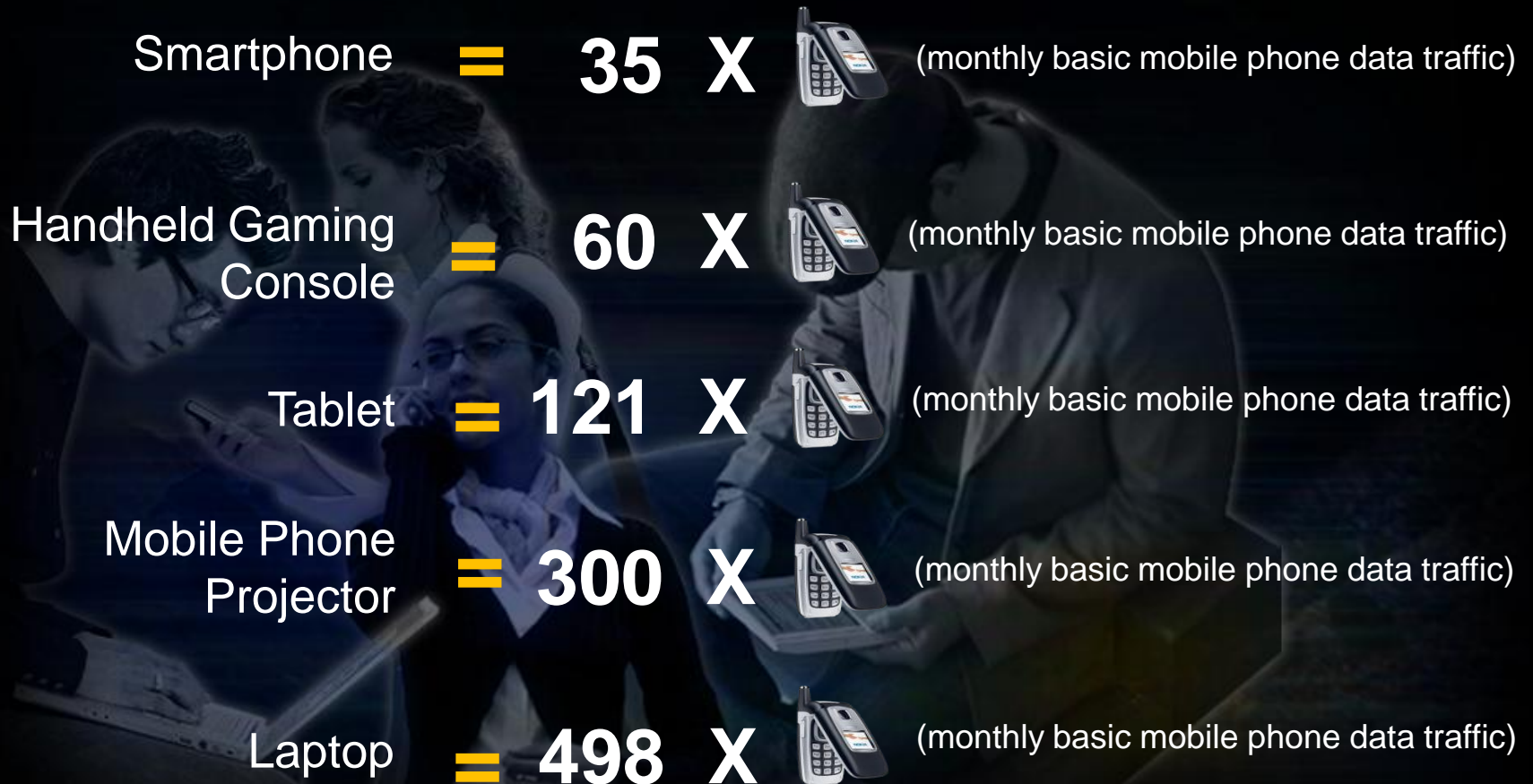


Other Portable Devices forecast to be 3.3% of all mobile data traffic in 2015

Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2011–2016

Mobile Device Data Traffic

2011 Mobile Device Data Traffic Generation Comparisons



Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2010–2015

Cisco VNI Global Mobile Data Traffic Forecast, 2010–2015

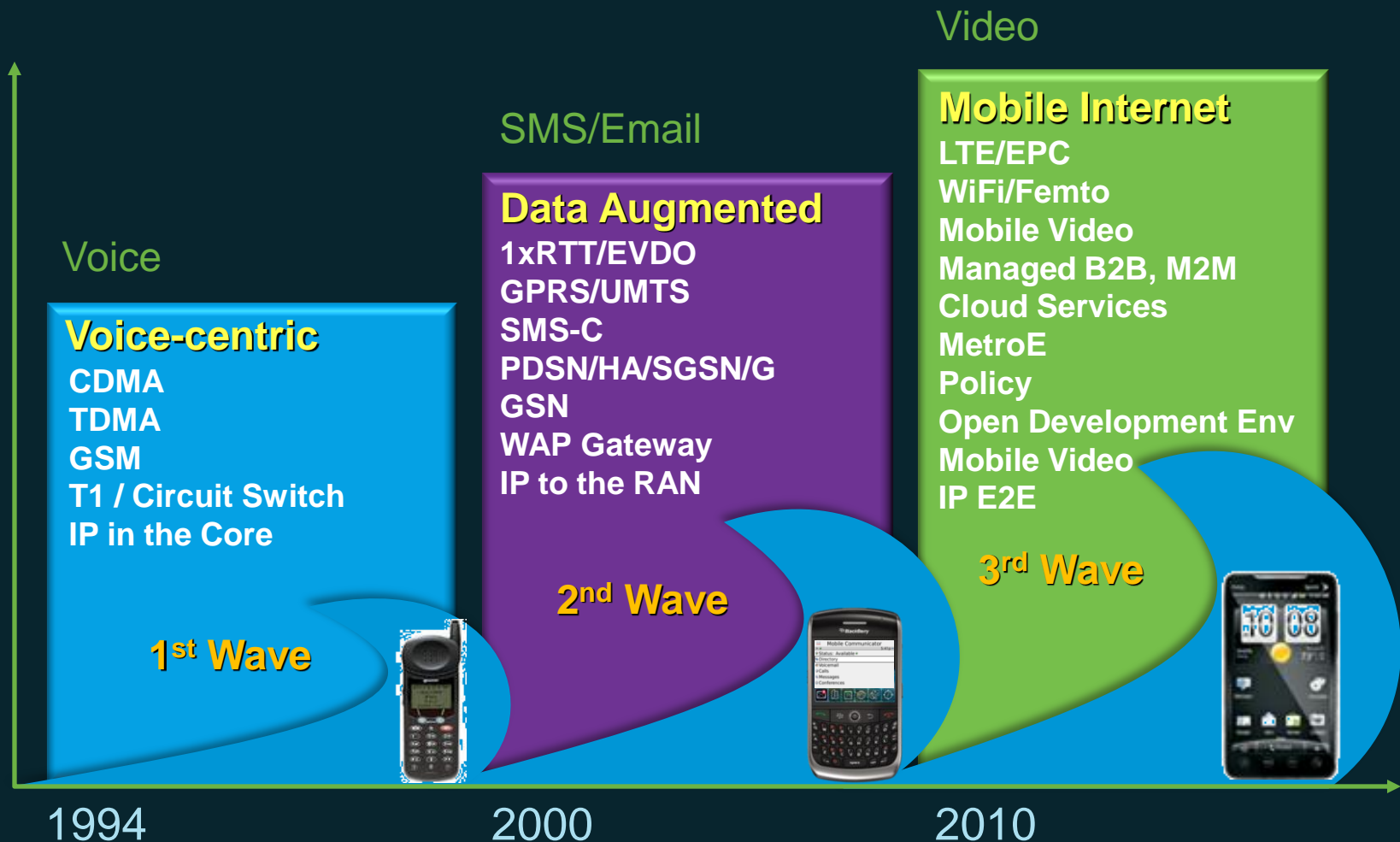
Key Takeaways / Summary

- **VNI** By 2016, global mobile data traffic will reach **10.8 exabytes** per month (or a run rate of **130 exabytes** annually).
- **VNI** Global mobile data traffic grew **2.3-fold** in 2011 (YoY), more than **doubling** for the fourth year in a row.
- **VNI** Global mobile network connection speeds nearly **doubled** in 2011 and will increase 9-fold by 2016.
- **VNI** By 2016, over **two-thirds** of the world's mobile data traffic will be video.
- **VNI** From 2011—2016, consumer mobile data traffic has **83% CAGR**; business mobile data traffic has **66% CAGR**.
- **VNI** By 2016, there will be more than one mobile connected device (10.3B) for **every member** of the world's population (7.5B).

Source: Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2010–2015

Evolution of the Mobile Business

Empowering the User



Users Are Demanding More . . .

Consumers want more personalized experiences



Consumer Experiences

- More visual
- More social
- More personal

Business users demand greater productivity



Business Experiences

- More collaboration
- Better returns
- Improved mobility/portability

Mobile Communications: Shifting Environment

Business

Operator Competitors
Voice Revenues
Walled Garden
B2C Model

OTT Competitors
Multimedia Revenues
Hosted, OTT, App Store
B2B2C Model



Traditional Expertise

End User Experience

Mobility / IP Expertise

Entertainment

Information

Collaboration

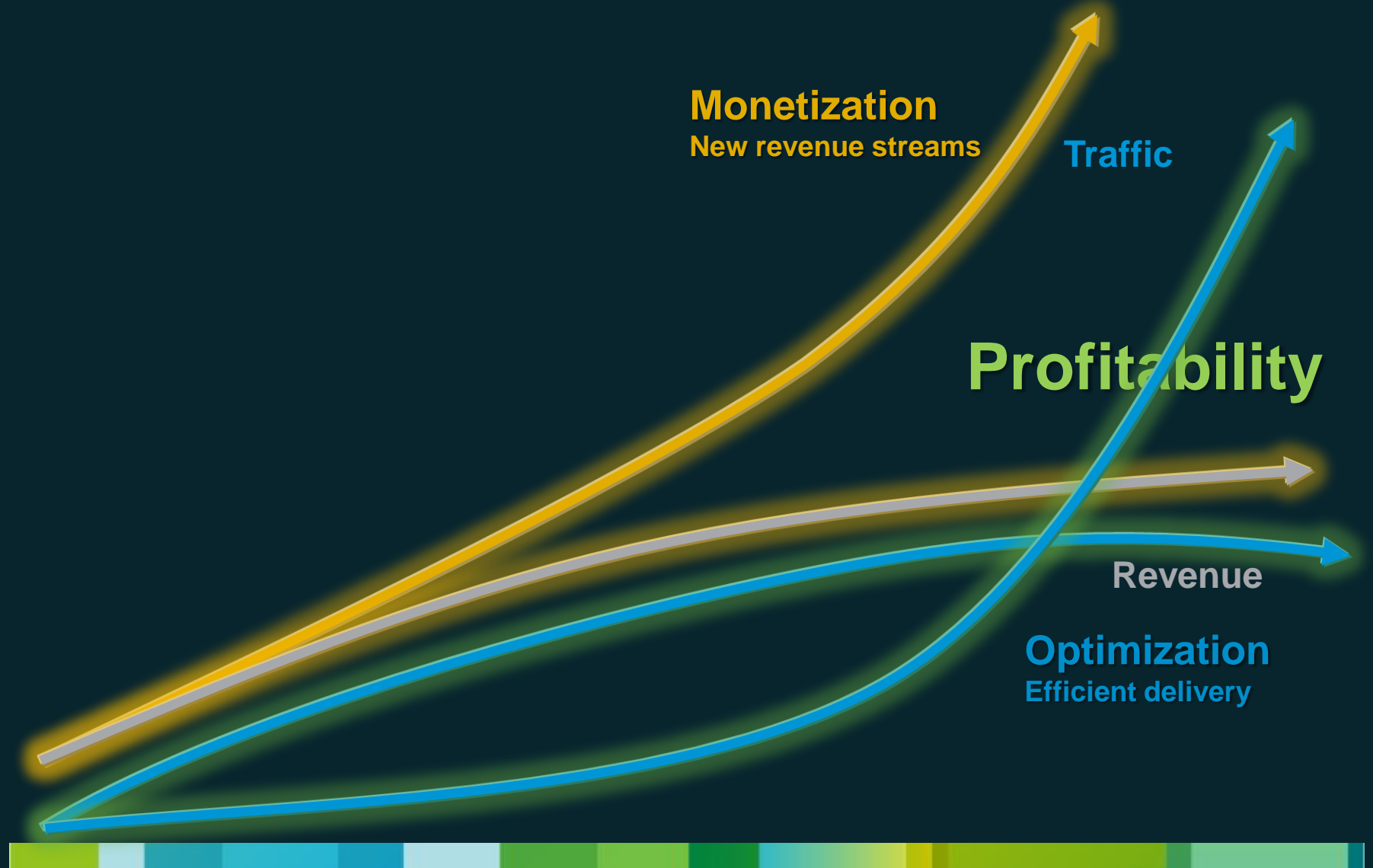
IP

Technical

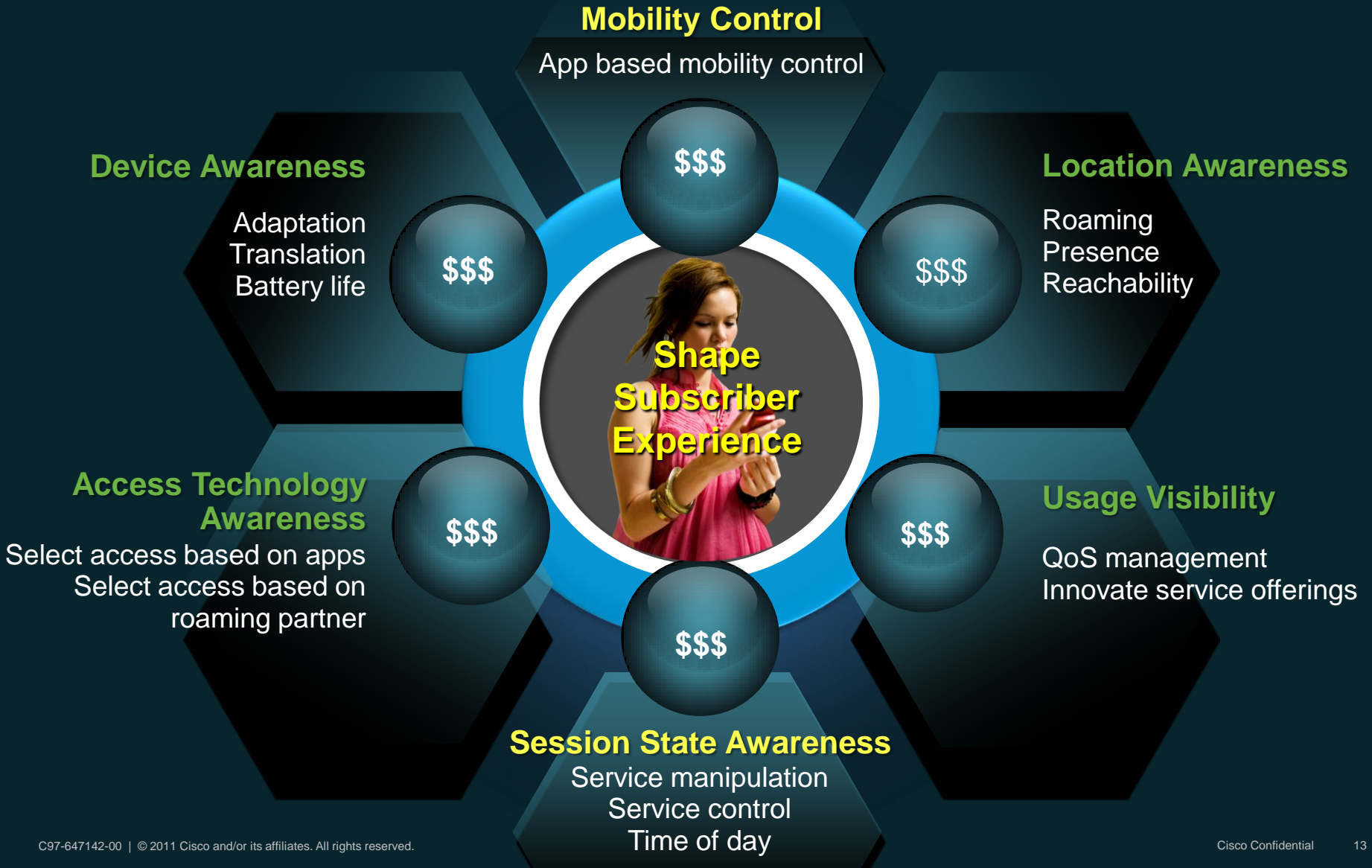
2G, 3G ...
Circuit
Network Services
Access Focus

3G, 4G, WiFi, Femto
IP
Cloud Services
Services Focus

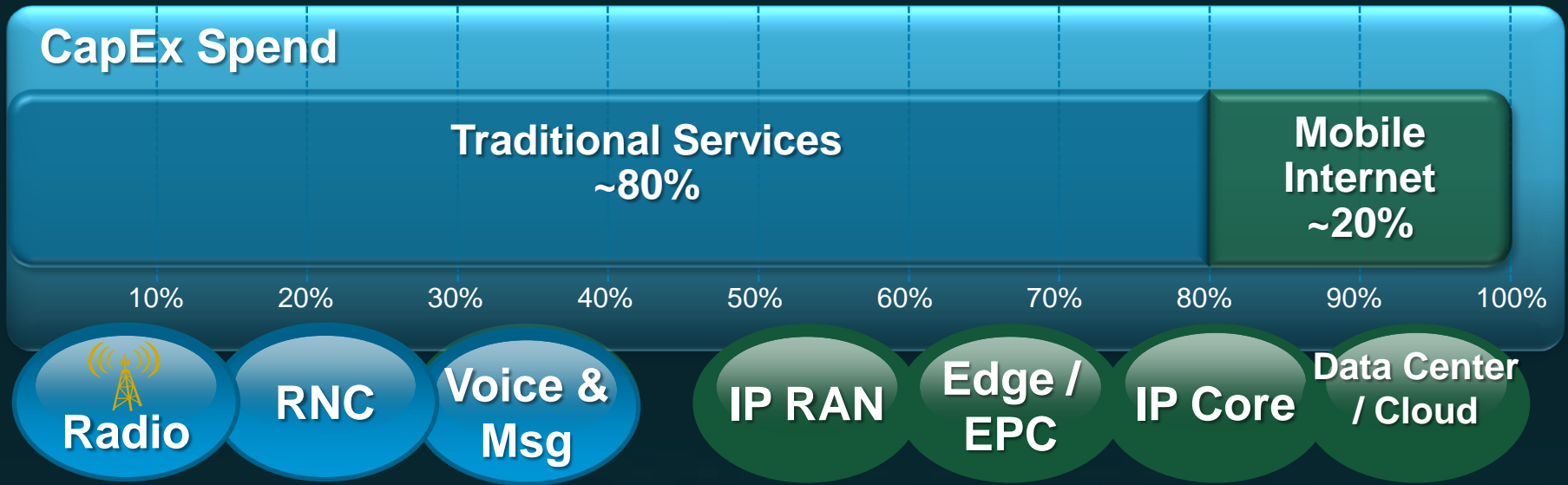
Challenge of Shifting Environment



Service Provider Advantage: Intelligence



What MOVEs Your Network: Investment in Intelligence



**New \$
Opportunity =**

Mobile Internet is Profitability Engine

Differentiation, new revenues, network optimization, and flexibility

Cisco M.O.VE

Monetization, Optimization and Videoscape Experience

Mobile Videoscape Experience

Across Devices, Networks and Content



Monetization

- Premium offerings
- Backend partnerships
- Differentiated video services



M.O.VE

Optimization

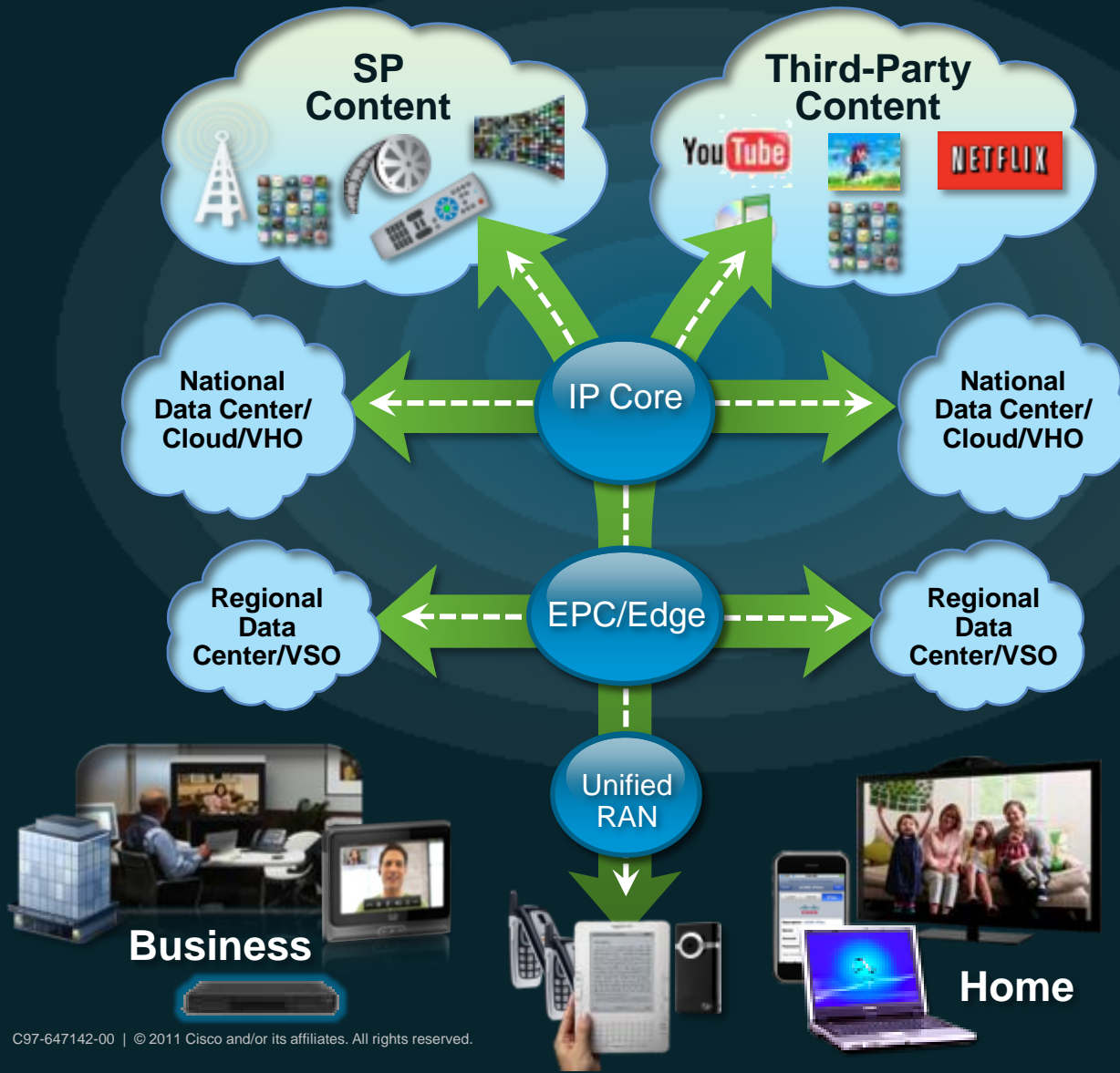
- Optimal data transport
- Network awareness
- Subscriber intelligence



Comprehensive, Integrated, Intelligent

Cisco Mobile Internet Architecture

Distributed to Scale with Non-Linear M.O.V.E Demands



Multi-Service

Video, Voice, Internet
B2B2C

Multi-Path

Cell to Cell
Cell to Cloud

Multi-Access

Radio Access
WiFi Access
Ethernet Access

Thank you.

