IMS: Next Generation Network Convergence
A simple solution to transform your business

www.huawei.com

tan Ahmed
nager Marketing
awei Technologies

GSMA Arab World

HUAWEI

Content

- **Time for transformation has come**
- **IMS : a simple solution to transform your business**
- **Global Trend For Transformation**

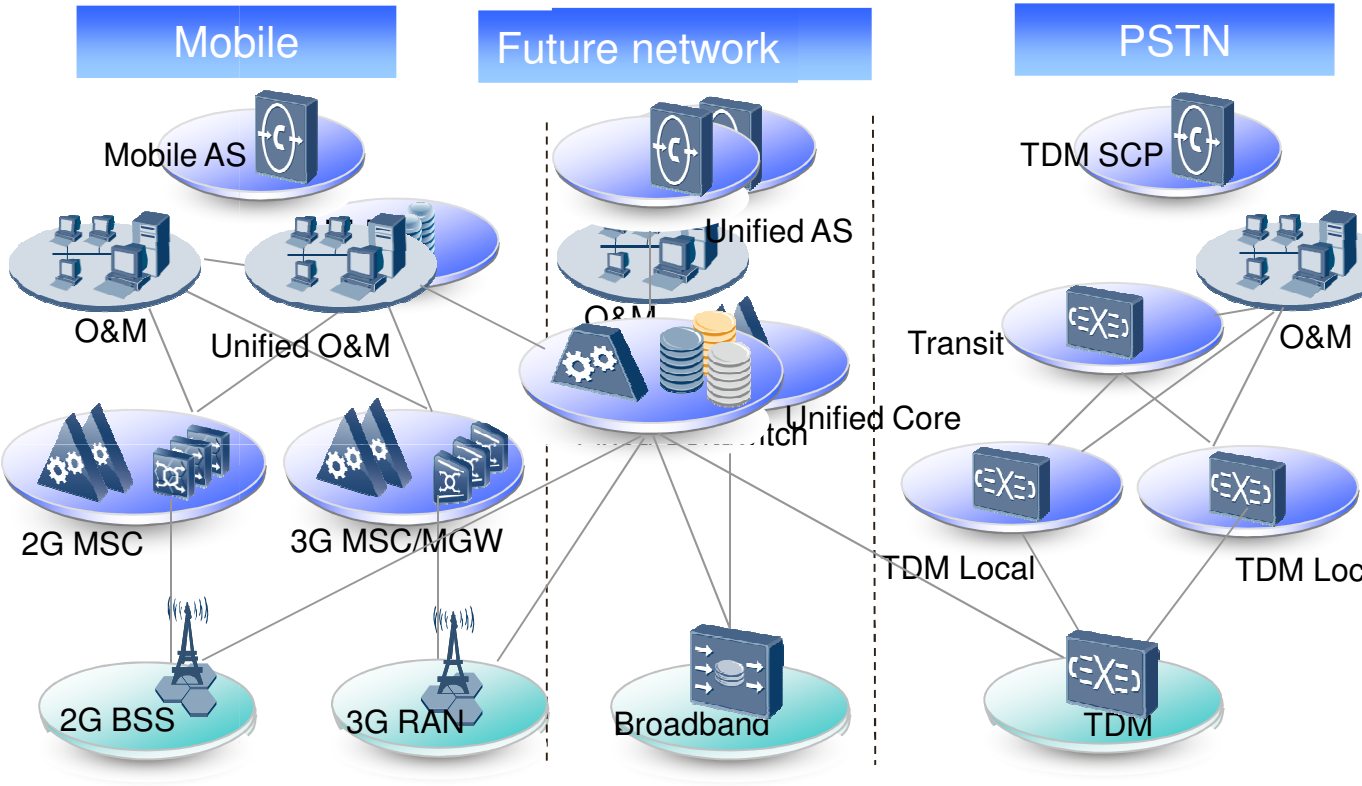
Simplicity drives core network transformation

Challenges

- Old core platforms = high TCO
- Complex and disparate core networks
- Difficult implementation of new services
- Complex BOSS, complex O&M

Transformation trends

- Centralized all-IP architectures
- Easy service delivery
- Simplified O&M



The complexity challenge can be transformed into a simplification opportunity

Diversifying applications becomes mandatory

ommunication

Google Voice skype LG

ontent

hulu YouTube SAMSUNG

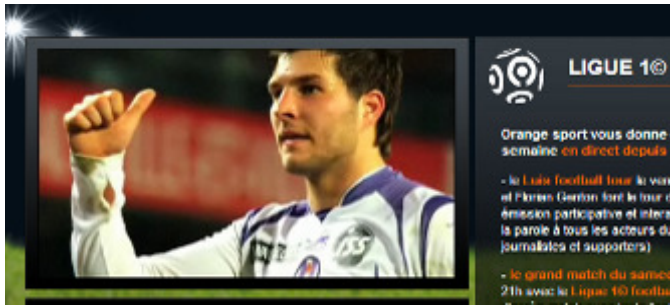
nterprise services

Salesforce

Triple play bundles



Exclusive Content Deals



Challenges

- Voice is under threat, worst with 4G
- Video goes streaming, Business goes SaaS
- Over-The-Top = dumb-pipe threat

Transformation trends

- Triple play and quad-play = lock-in / up-sell
- Expanding communication services
- Bolstering position on the value chain

Existing customer base is a key asset for new revenue generation

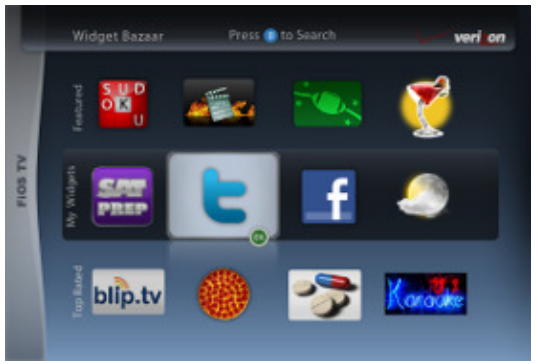
New business models require mindset shift



00k applications, 3 billions download in 18 months

Facebook Connect authentication for 3rd parties





Verizon open IPTV initiative

Mobile Market 移动应用商场

China Mobile Application Stor

Challenges

- Apple App Store = mindset revolution
- Industry replicas = Telcos by-pass
- Even authentication is under threat

Transformation trends

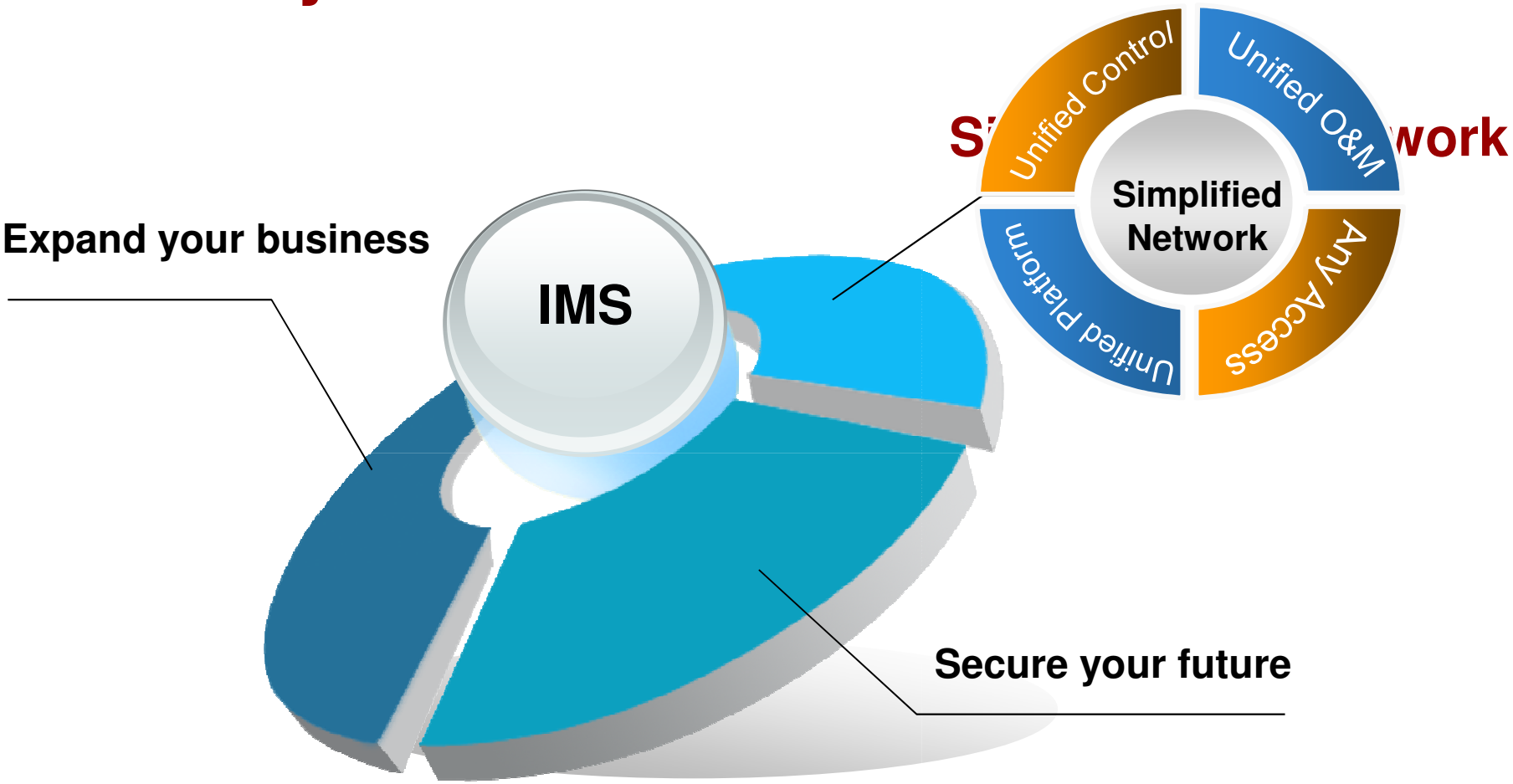
- Telco2.0 models
- Opening APIs
- Operators application stores

Time for transformation has come

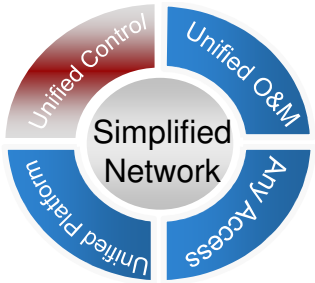
Content

- Time for transformation has come
- **IMS : a simple solution to transform your business**
- Global Trend For Transformation

Three keys of the transformation



Fixed network soft transformation



Simplify Your Network | Expand Your Business | Secure Your Future

Highlights

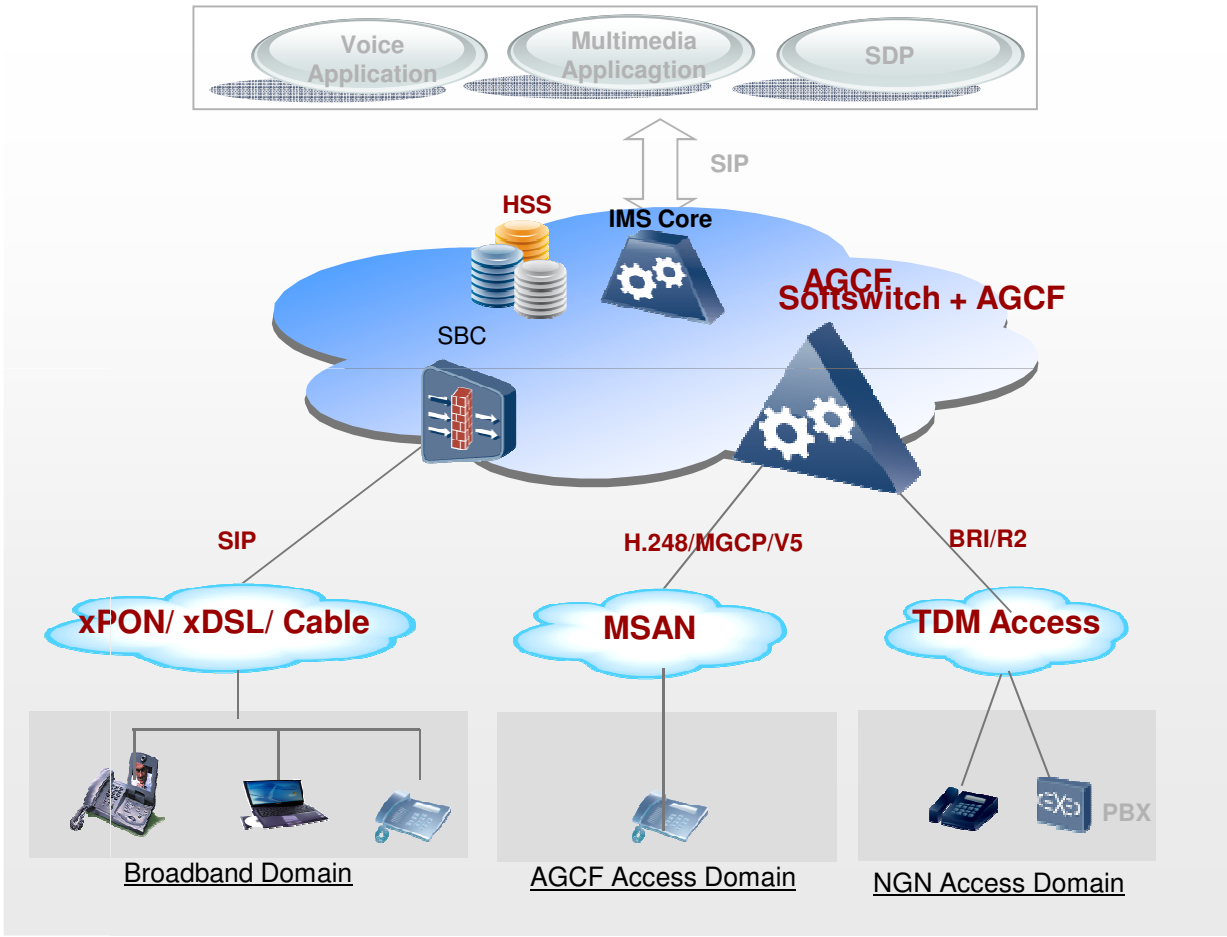
- **Unified control:** Softswitch and AGCF coexisting supports narrow and BB access.
- **IMS new application** available for legacy user
- **One command migrates SS user to AGCF user**

Benefits

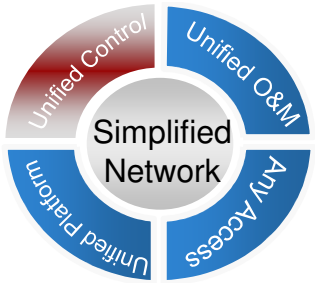
- **Defend existing market** with full PSTN service inheritance
- **Improve loyalty** with new IMS business opportunities
- **Saving OPEX**

Reference

- **Malaysia TM, Replacing 4M PSTN lines, launching 1M VoBB**



Mobile network soft transformation



Simplify Your Network | Expand Your Business | Secure Your Future

Highlights

- **Anchoring CS call to IMS for new application**
- **IMS New Application** available for legacy user
- **Unified HLR/HSS**
- **MSS can migrate to mAGCF**

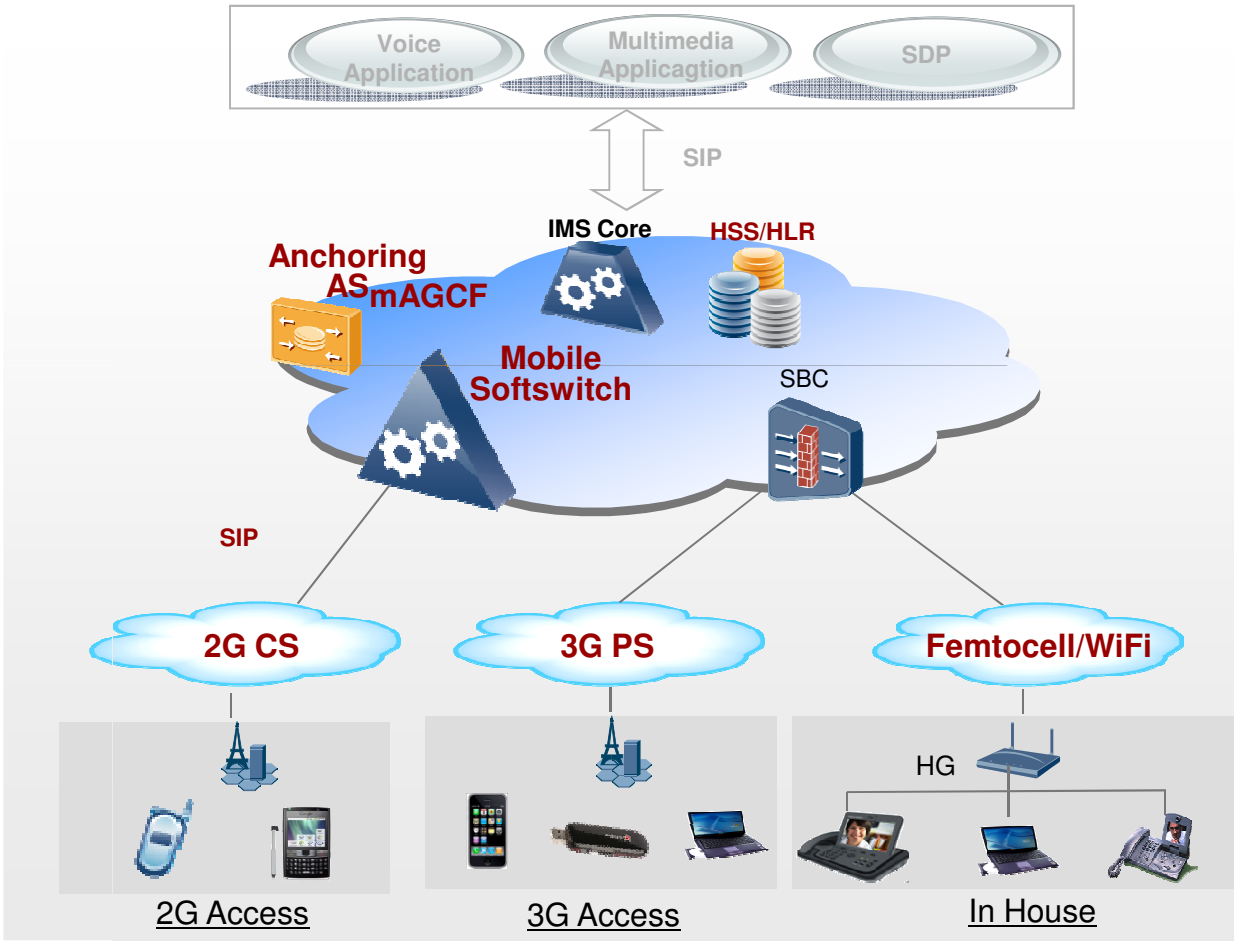
Benefits

- **Achieve innovative application for 2G CS user**
- **Expand mobile to full service**
- **Smooth evolution to ICS**

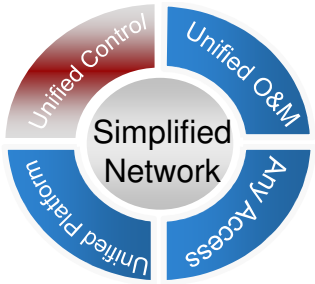
Reference

- **China CMCC, 5 million subs,**
  super mailbox, convergent centre,
  HD conf. increase about 15%
  ARPU to mobile user

中国移动通信 CHINA MOBILE



Smooth migration to ICS simple architecture



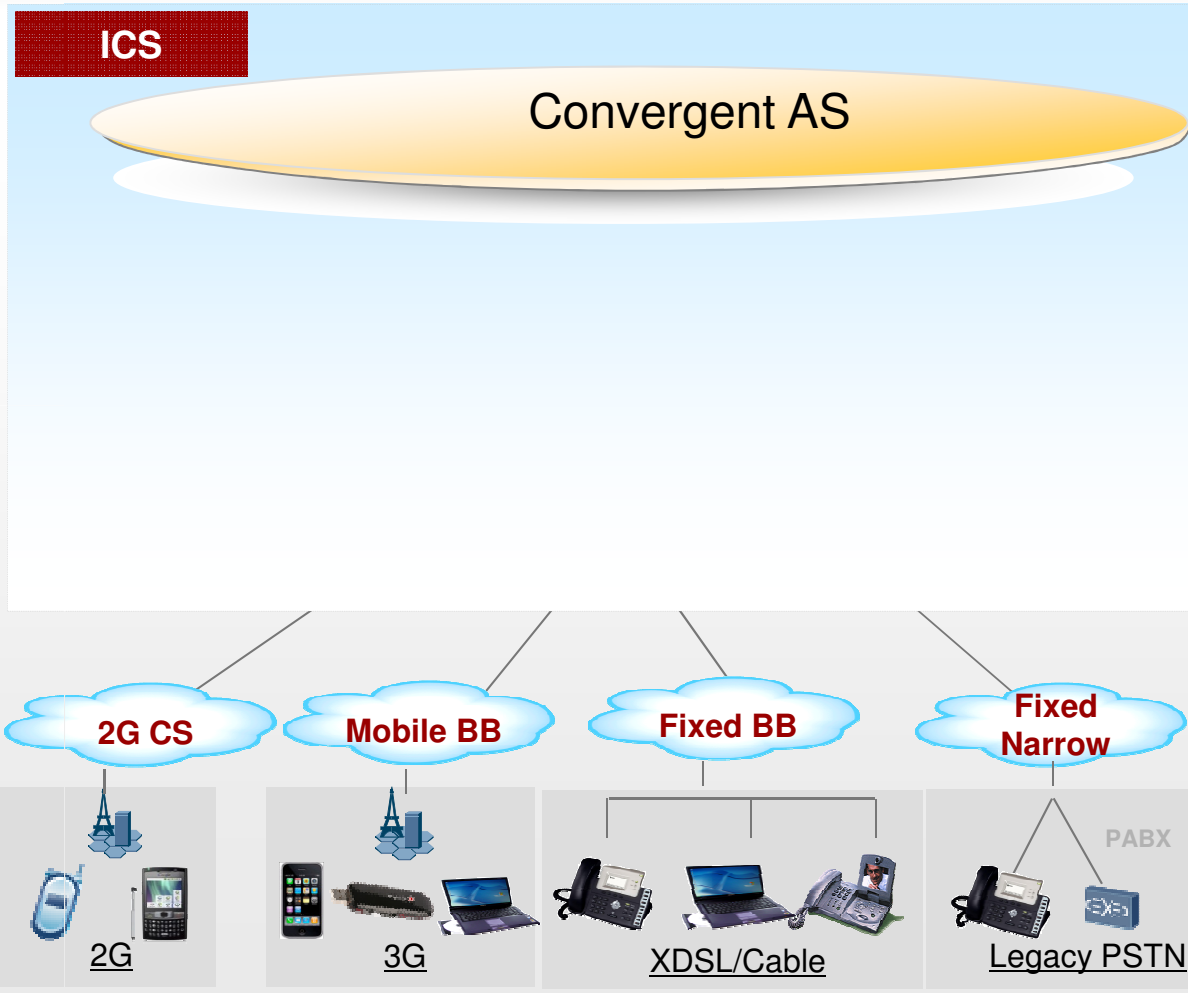
Simplify Your Network | Expand Your Business | Secure Your Future

Highlights

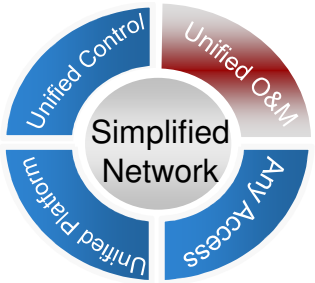
- **Smooth migration to ICS with SW upgrade:**
  - Fixed Softswitch to AGCF (access gateway)
  - Mobile Softswitch to mAGCF
- **Software migration to convergent TAS**
- **Software migration to unified O&M**
- **Service blending: voice, video, picture etc.**

Benefits

- **Simple:** unified AS,CORE,O&M = lower TCO
- **Flexible:** standard interface for service delivery = shorter TTM
- **Huawei One Core vision:** simplicity, re-usability and density



Unified O&M for simple operations



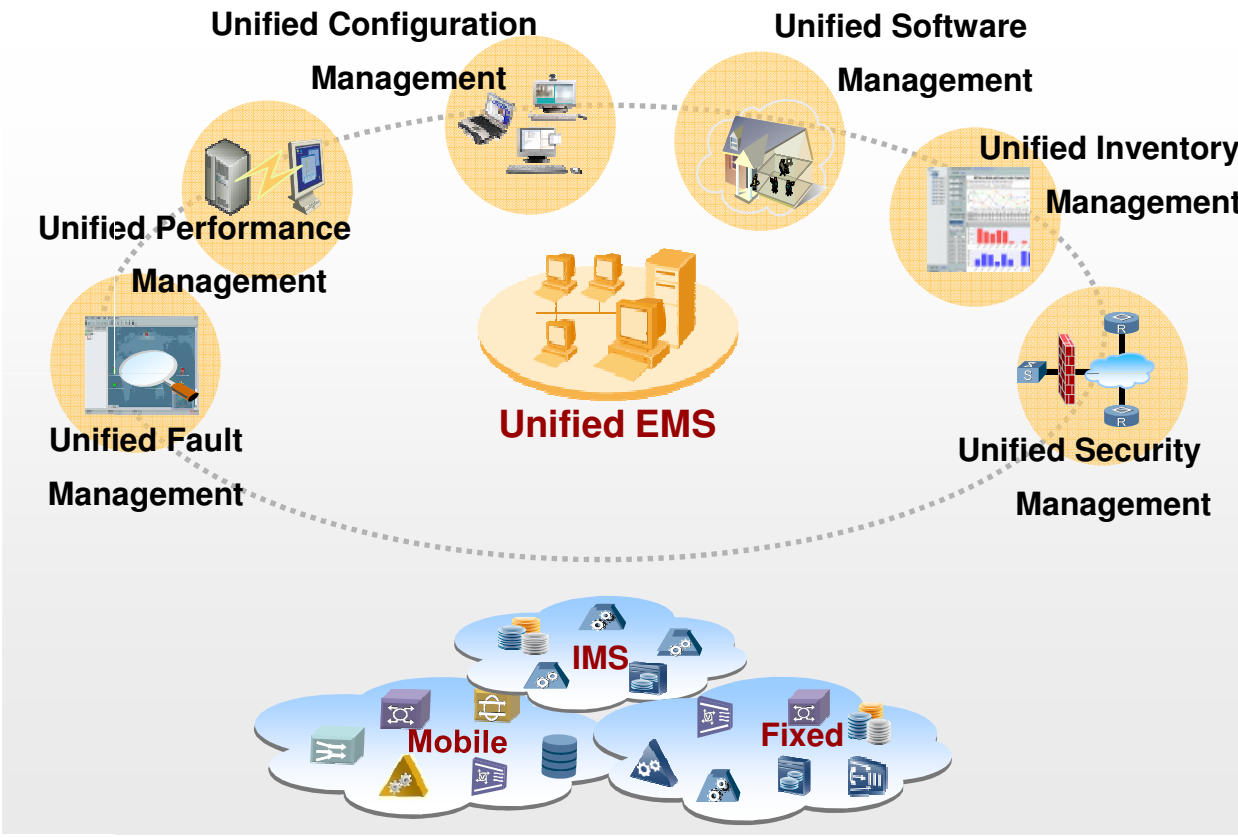
Simplify Your Network | Expand Your Business | Secure Your Future

Highlights

- Unified O&M shared by mobile, fixed, mobile core network
- Seamless upgrade for whole network ensures smooth service
- E2E signaling tracing tool for whole network

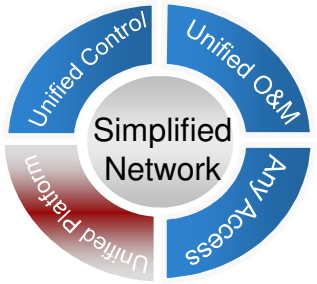
Benefits

- Simplify O&M complexity and reduce HR cost
- Reduce BOSS development costs and integration cycle
- Shorten service provisioning cycle



In line with One Core vision, Huawei IMS reduces the EMS element numbers, reduces the TCO

Unified hardware and software platform



Simplify Your Network | Expand Your Business | Secure Your Future

Highlights

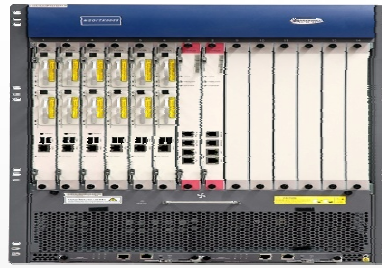
- **Unified hardware and software platform for IMS / mobile Softswitch / Packet Core**
- **Large capacity ATCA Hardware**
- **Pool based solution**
- **Multi-element board sharing tech.**

Benefits

- **FMC and Future Proof:** Target architecture ready (ICS)
- **Room (65%) and power saving (52%) /user**
- **Shorten TTM:** Unified HW&SW platform to shorten TTM of new feature and application
- **Resource dynamic sharing:** reuse blades when VoCS shrink and VoPS take off,



AdvancedTCA®

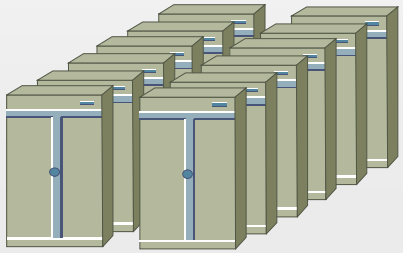


Max Capacity : 10 M subscribers



5 cabinets ATCA

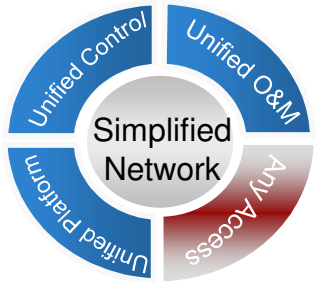
=



12 cabinets CPCI

Huawei IMS is part of Huawei One Core vision: simplicity, re-usability, density

Any Screen, Any Where, Any Access



Simplify Your Network | Expand Your Business | Secure Your Future



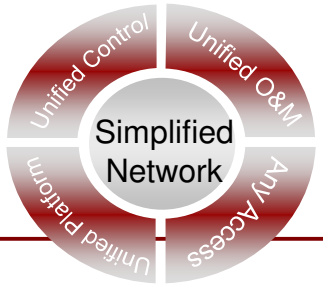
3 Screens
- TV
- Video Phone
- PC

IMS

3 Networks
- Mobile, fixed, IMS network convergence
- The same service

3 Mobility
- Time shift
- Space shift
- Screen shift

Huawei E2E IMS Portfolio Overview



Offerings

Full Service

- Mobile Extension
- One Key
- VoWimax
- IMS Centralized Service
- iRoaming
- Rich Communication Suite
- Vo3G/4G

Fixed NM Transformation

- FOCUS
- MM Telephony
- Convergent trunk node

Enterprise

- MM Conference
- Convergent Centrex
- Business Trunking

MSO

- IMS Cable
- IMS IPTV

Products

Application Servers and Enabler

MMTel MM Conf. Centrex MMRT One Key IPTV RCS Info Search

3rd Party AS

MS OCS

SDP

SDP

Operation Support

EMS Prov. CCF DNS/ENUM

IMS Core & Interworking

CSCF/MRFC HSS/SLF SPDF/PCRF MRFP MGCF A/I-BGF

Terminal

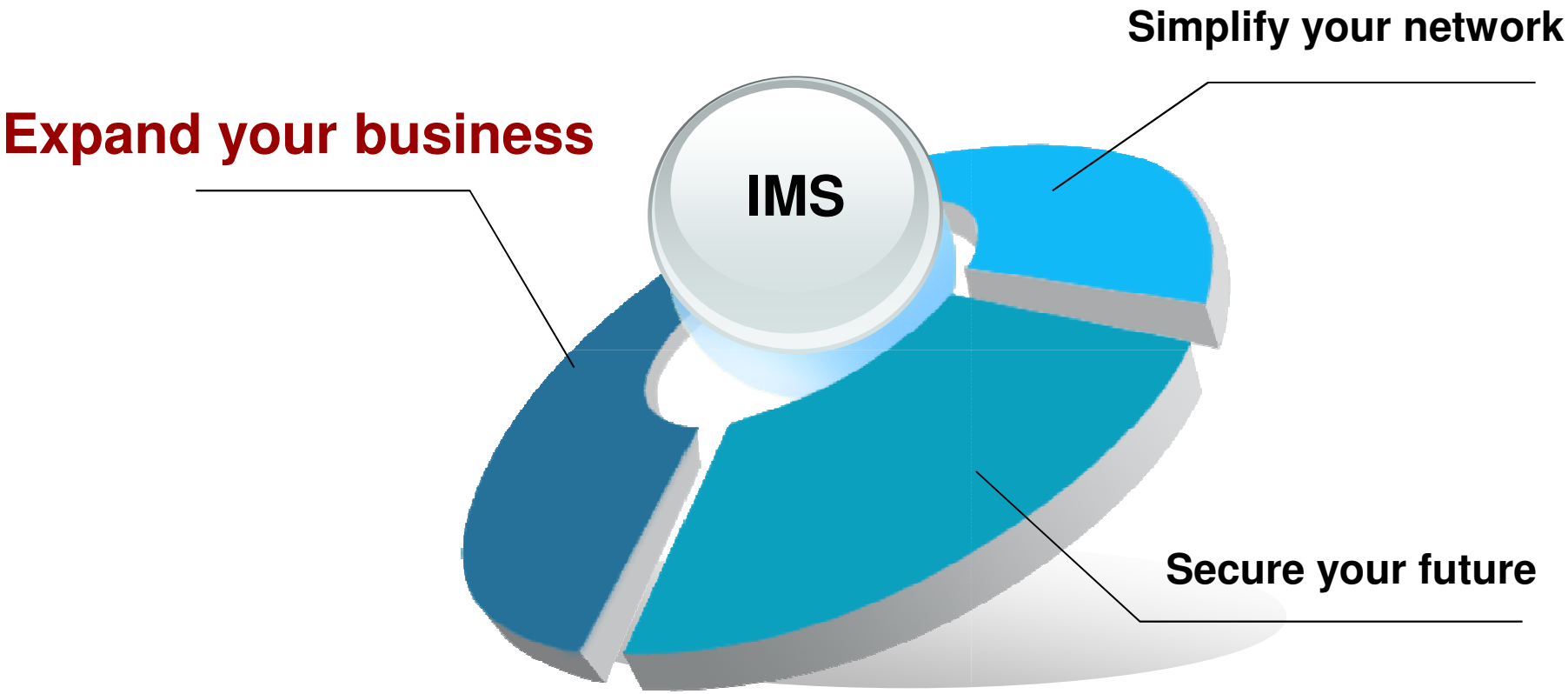
Handset USB Dongle Soft Phone CPE

Standard Compliant

3GPP tispan IETF CableLabs 3GPP2 WiMAX FORUM ITU International Telecommunication Union GSMA OPEN IPTV FORUM

Huawei provides E2E total Solution, which now is commercially ready.

Three keys of the transformation



Application Overview - Target Customer Segment

Simplify Your Network | **Expand Your Business** | Secure Your Future

Personal



One Key
Rich Communication Suite
Video sharing
MMRT

Home



IPTV
Digital Home
Multimedia Call
VOBB

Enterprise



Convergent Centrex
Convergent Conference
Office Communication Suite

Telco Services

3rd party services

IMS

Put your phone in a dongle with One Key

Simplify Your Network | **Expand Your Business** | Secure Your Future

Highlights

- One number, SIM card authentication
- Soft client running on the dongle
- Fully plug and play and anti-virus
- Customizable for new service promotion

Benefits

- Leverage on existing customer base to enhance ARPU and loyalty
- Fully portable service (any connected PC)
- Simple user experience
- New service promotion channel

Reference

China Mobile ：50k One Key subscribers in 1 month

中国移动通信 CHINA MOBILE 移 动 信 息 专 家



Expand your communication services with USB dongle

Enter Interactive World with IMS Based IPTV

Simplify Your Network | **Expand Your Business** | Secure Your Future

Highlights

- TV-Telco convergent services (Caller ID display, IM, Presence…)
- Seamless services across screens: TV, Mobile, PC
- Personalized portal VoD/Advertising

Benefits

- Deliver true triple play services to enhance loyalty
- Simple and consistent user experience
- Increase VoD ARPU and generate new revenue

Reference

True triple play 5M IPTV subscribers

ARPU Increase from 108 to 155 RMB

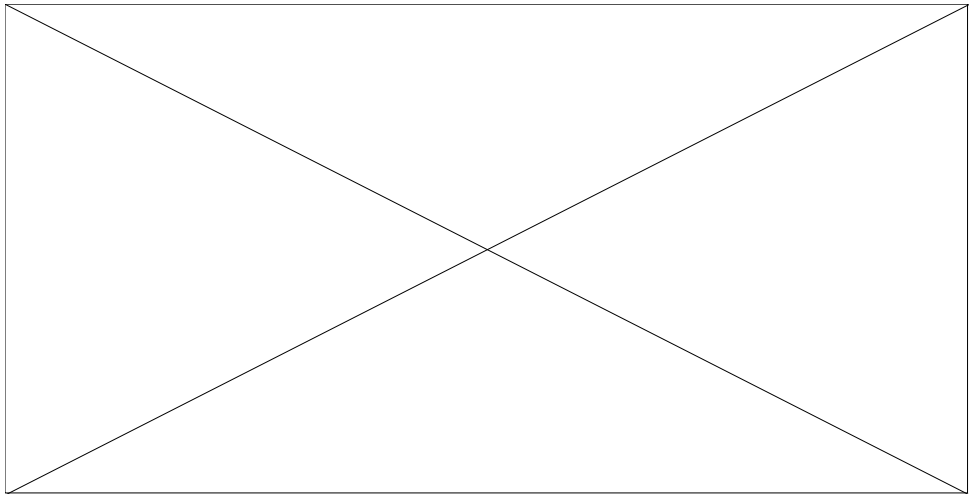
中国电信 CHINA TELECOM

Multi-screens experience



Rich interactive services





Enhance corporate experience with convergent centrex

Highlights

- **Convergent Service**: voice, SMS
- **IT & CT integration, web console, self-service**
- **Any PBX interconnection**
- **Open Capability**

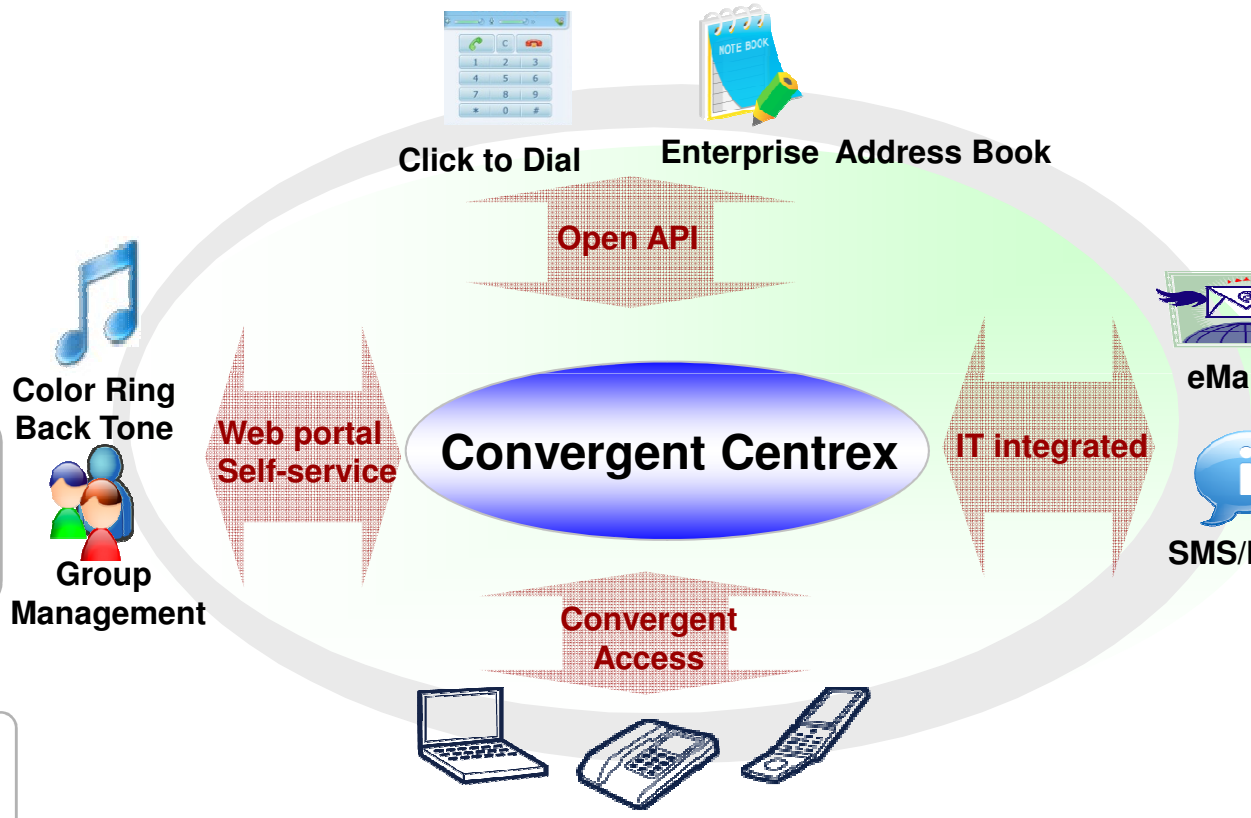
Benefits

- **Lock in your enterprise users**
- **Up sell the existing Centrex user**
- **Reuse the legacy PBX equipment**

Reference

- **IP Centrex, conference, green call, enterprise convergent solution**
- **Fixed + Mobile+ Broadband**

Beeline



mprove meeting efficiency with HD convergent conferen

Highlights

- **HD video:** 1920*1080p CD quality sound
- **Any access/terminal :** 2G, 3G mobile, fixed, Soft client, telepresence
- **Audio, video and data conference**
- **web schedule/control, SMS/email notification**

Benefits

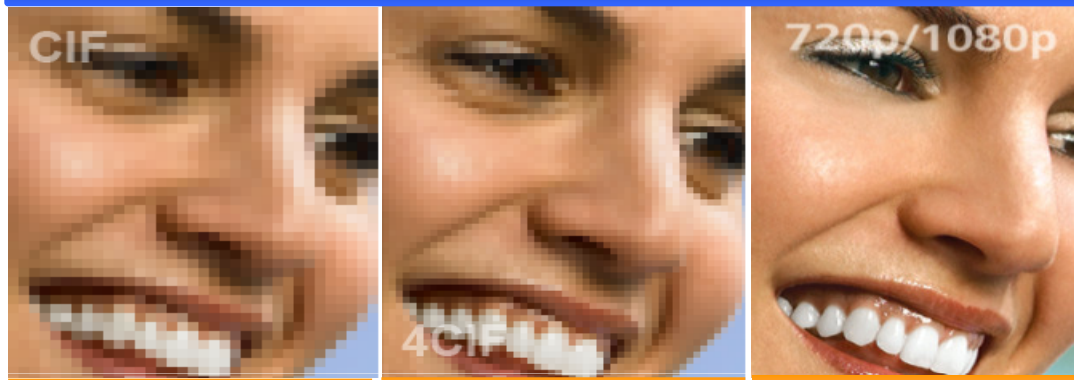
- **Green service, improve your environmental image**
- **Enlarge the target customer base**
- **Flexible business model:** Ports rents, pay as you grow

Reference

- **China Mobile Guizhou province deployed 10 sets of HD video conference system**
- **Wining more customers from government and business sectors**

中国移动通信 CHINA MOBILE 移 动 信 息 专 家

HD video conference



Voice, Video and Data conference



Convergent Conference, Anytime and Anywhere

Flexible service creation and execution with SDP

Simplify Your Network | **Expand Your Business** | Secure Your Future

Highlights

- **Network capabilities exposure to 3rd parties**
- **Telco/Web 2.0 mashups, CP/SP aggregation**
- **Digital Shopping Mall, uTV, RCS and SNs**
- **Integration with IMS through standard interfaces**

Benefits

- **Sandbox to reduce TTM and cost for new services**
- **AppStore and Cloud ready architecture**
- **New Business Models to create new revenue streams**

Reference

MEGAFON, STC, TATA indicom, Telefónica, vodafone, etisalat, 中国移动通信 CHINA MOBILE



Enabling a broader portfolio - with IMS

Tapping into the Telco 2.0 opportunities with IMS

Simplify Your Network | **Expand Your Business** | Secure Your Future

Highlights

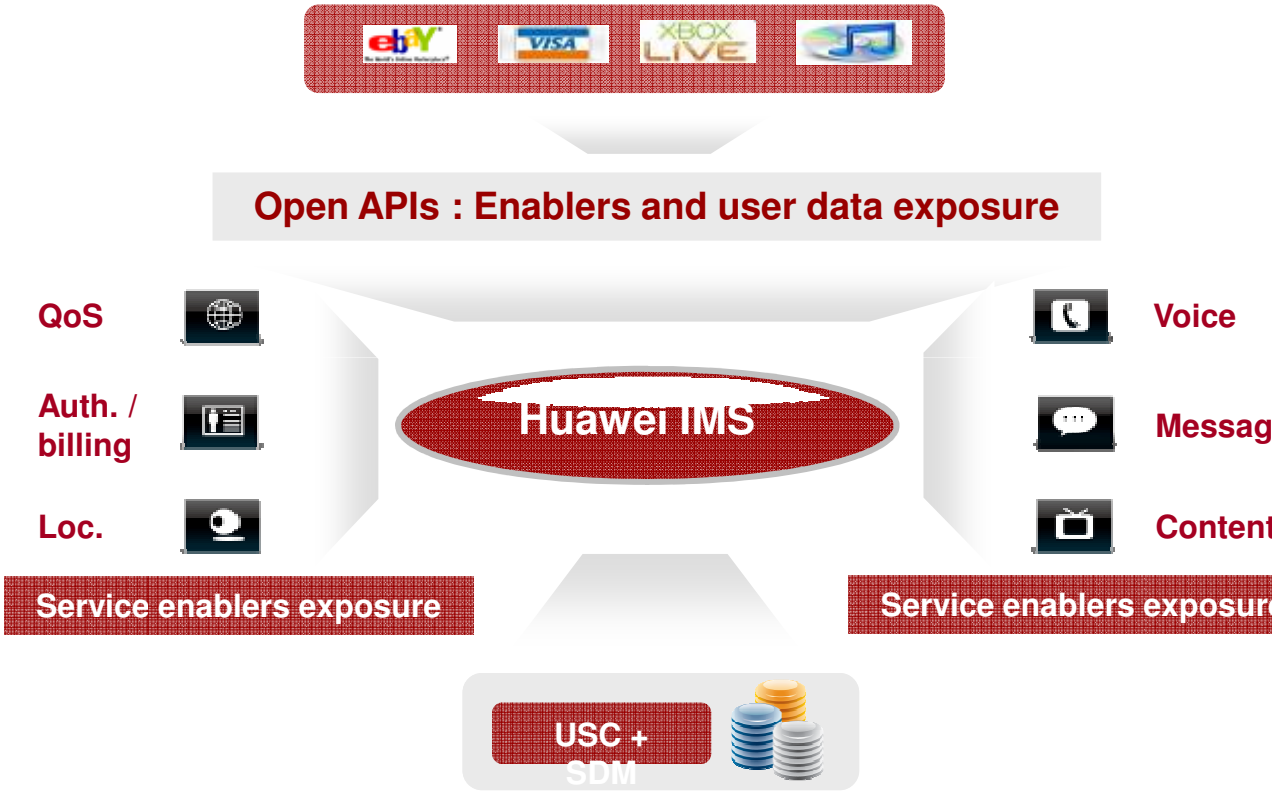
- **Exposing service enablers:**
  - authentication, billing, location, QoS
  - communication, multimedia & content
- **Monetizing highly profiled user data:** fixed and mobile information in a single database

Benefits

Enable new Telco 2.0 business model "two-sided market"

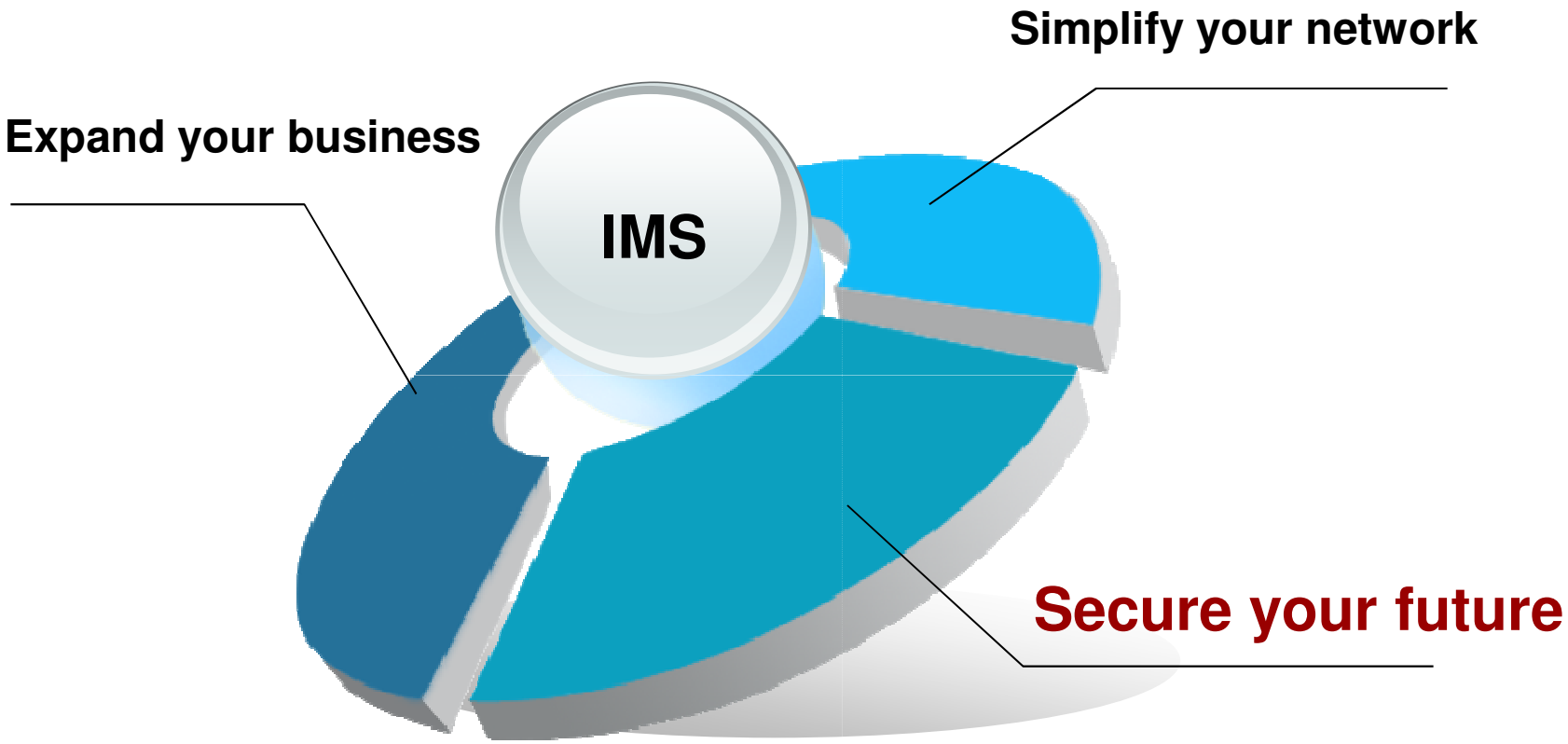
Network monetization with new partners

User data monetization through advertising



Telco 2.0 two-sided business model may increase revenues from 15% to 35% in the next 5 years

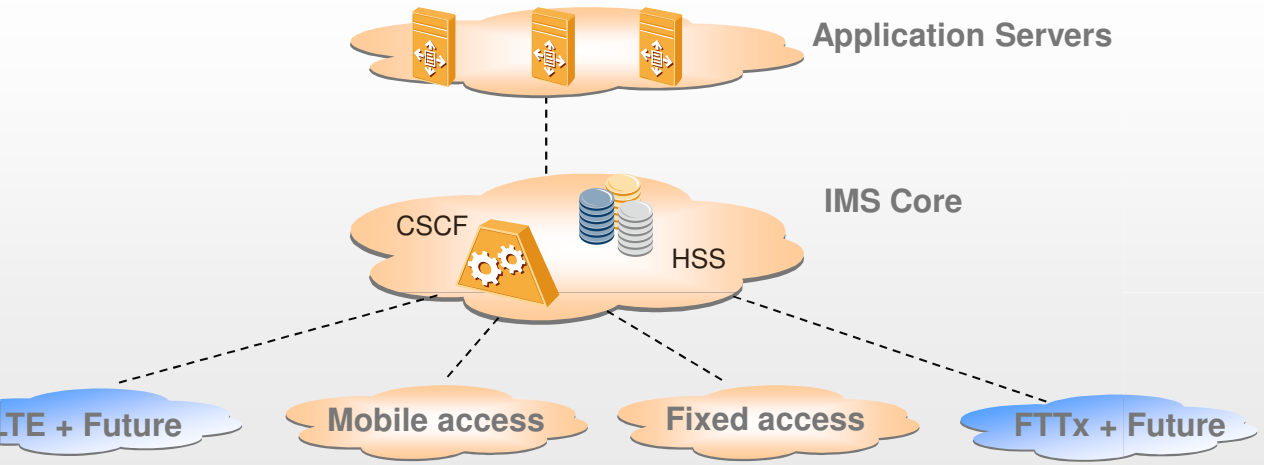
Three keys of the transformation



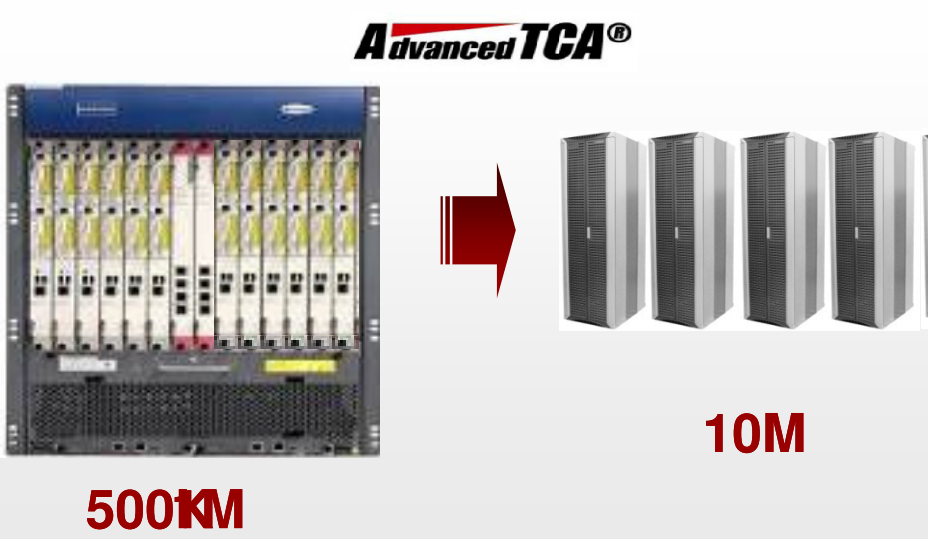
Ready for the future

Simplify Your Network | Expand Your Business | **Secure Your Future**

ICS (IMS Centralized Architecture) is ready for future access



- ATCA scalability for smooth growth



Benefits

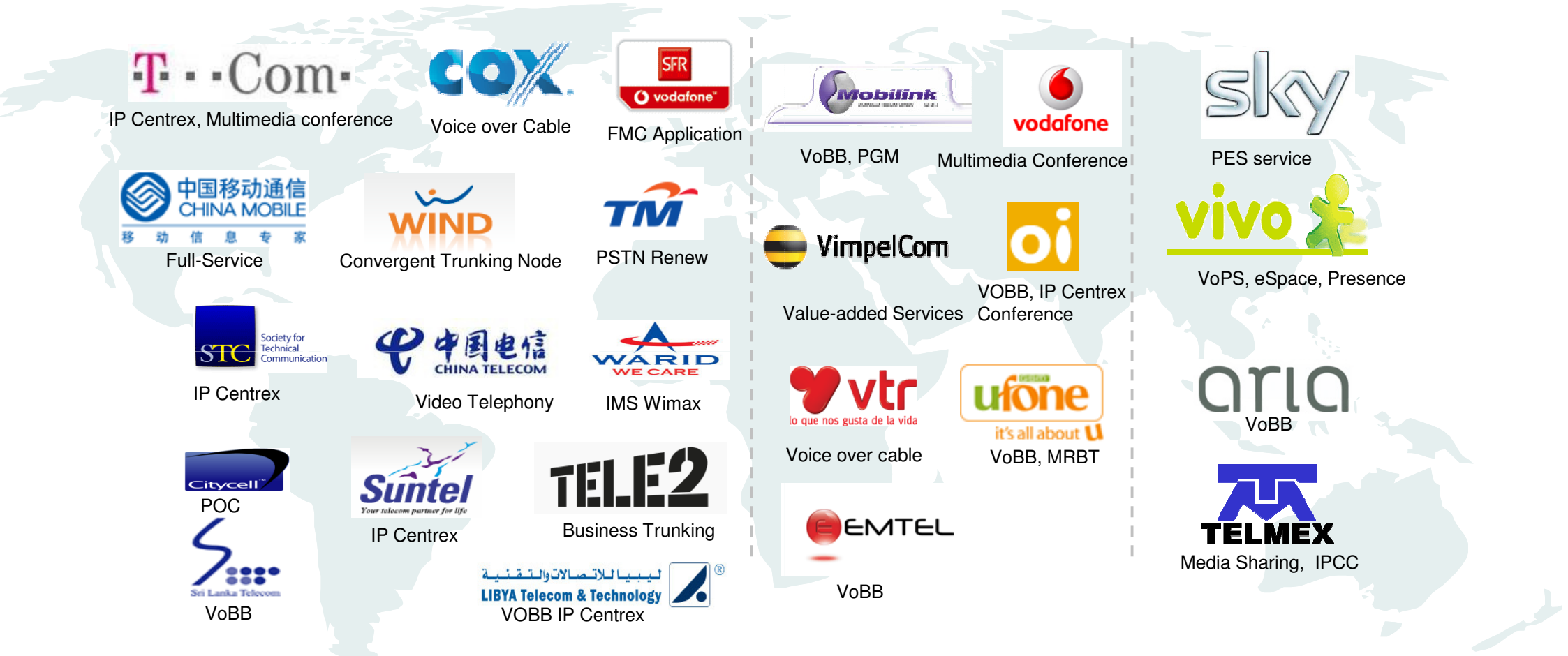
- Limited initial investment – linear incremental cost:
- Re-use IMS Core & IMS AS
- Consistent and seamless service across networks

Investment protection for future growth & network developments

Content

- Time for transformation has come
- IMS : a simple solution to transform your business
- **Global Trend For Transformation**

Global Trend



Key takeaways

Network simplification

- Softswitch + AGCF = service inheritance + IMS services
- ICS target = simple and efficient One Core
- ATCA = high performance & unified O&M

Business expansion

- One Key, IMS based IPTV = more consumer revenue, less churn
- IMS IP Centrex & HD Conf. = up-sell + lock-in business users
- Huawei SDP = flexibility and 2.0 opportunities

Future-proof choice

- ATCA +ICS = smooth scalability + re-usability + future-proof
- Huawei IMS = best in class for IOT, deployments, financials



Thank you

www.huawei.com