



Gemtek

A Leader in Wireless Broadband Access

Corporate Introduction

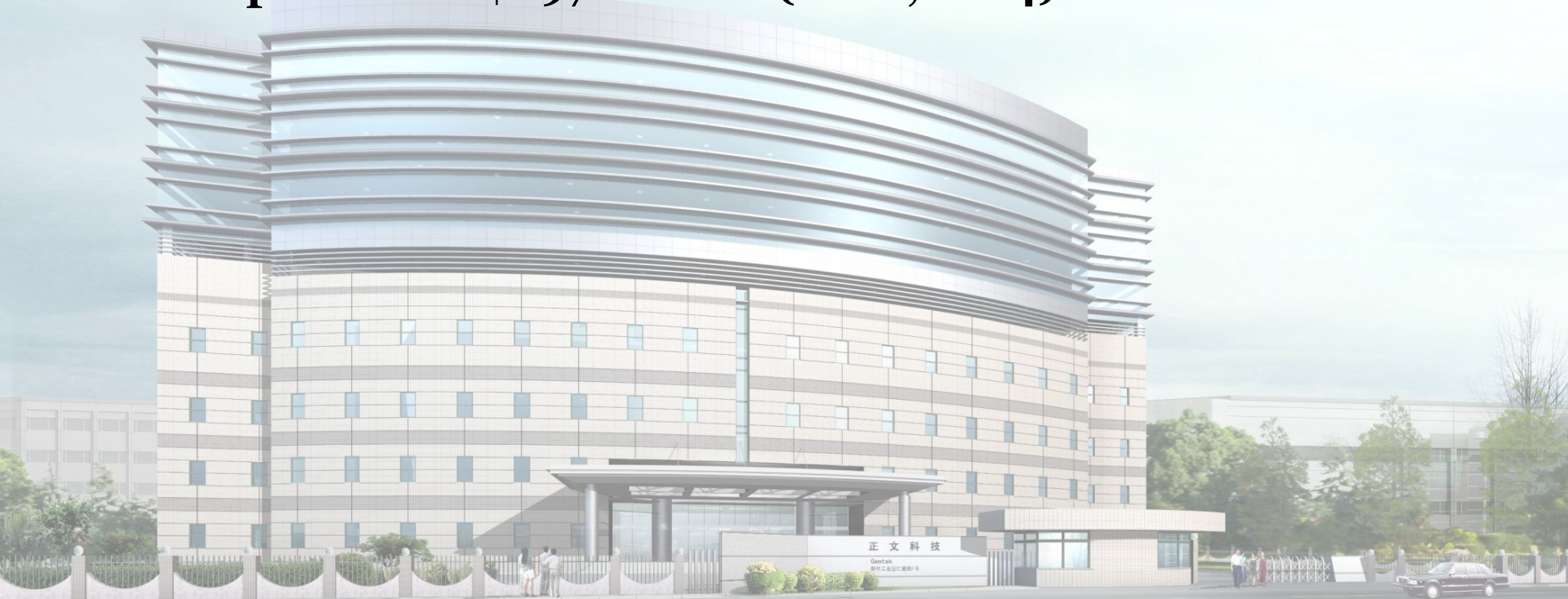
Gemtek
Wireless Broadband Anywhere

Corporate Facts

A Wireless Communication Company:
Headquartered in Hsinchu Industrial Park,
Total Employees $\approx$ 6,055 (TWN: 1155; China: 4900)

Capital: NT\$3.09 Billion (US\$104.85 Million)

Market Capital: $\approx$ US\$297 Million (June, 2014)



Global Operation Sites

Hsinchu Headquarter



Floor Space: 322,000 SQF
Land Area: 215,000 SQF

Czech Republic



Plant Size: 102,000 SQF



Certified Sites:

ISO 9001

ISO 14001

OHSAS 18001

TL9000

C-TPAT

Chang Shu Plant



Plant Size : 441,600.SQF
Land Size : 1,635,520.SQF

KuShan Plant



Plant Size: 330,000 SQF
Land Area: 150,000 SQF

Core Competencies

Design Aspects:

- Antenna
- Cross Platform Integration
- Interoperability
- DFM
- Mechanical Design

Manufacturing Strengths:

- Economy of Scale
- Continuous Improvement Plan
- Manufacturing Flexibility
- Cost Down Programs

RF & Engineering Capability

Commercialization Capability

SW Integration & Customization Capability

Software Capability:

- Embedded OS Development
- Compatibility
- Platform Integrations
- Customization Flexibility
- Manufacturing Programming
- CMMI Certified

First half of 2014 Financial Performance

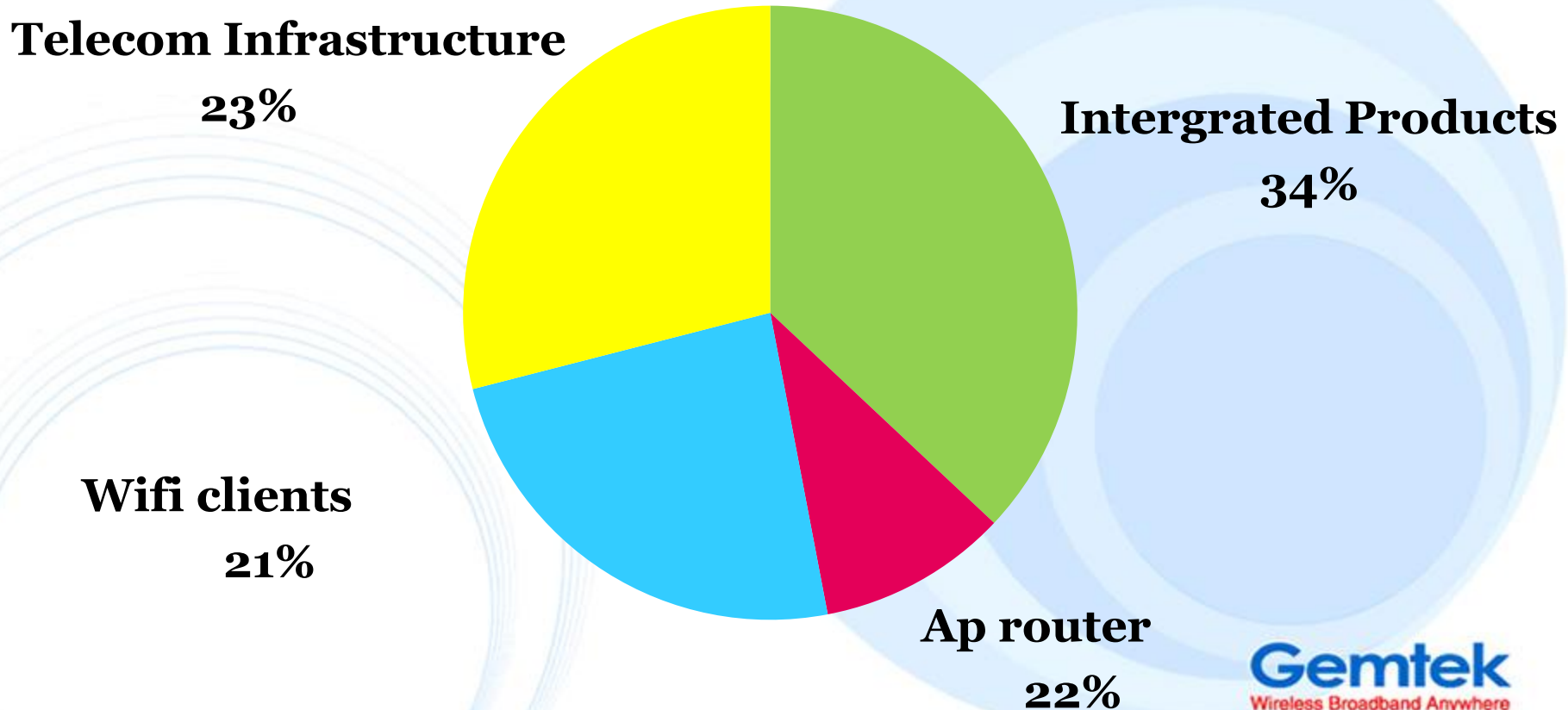
2014 Financial Outcome

Units: NT\$ Thousands; Consolidated

	As of June 30, 2014
Sales Revenue (k)- June 30, 2014	7,617,122
Gross Profit (k)	912,886
Gross Margin (%)	12%
Operating Income (k)	49,425
Operating Margin (%)	1%
Net Profit After Tax (k)	68,900
EPS after tax	0.19

1H14 Revenue Breakdown

- Shipments of 2 product categories, **Integrated Products** and **Telecom Infrastructure** (telecom business), contribute more than **76%** of sales revenue.
- New market expansion for product shipments: **Wifi Clients** (IOT)



1H14 Summary of facts

- Adjusting product mix rather than emphasizing sales revenue increase:
 - Strategically decrease shipment of low end IPSTB (low gross margin and severe price competition). High end IPSTB shipment take up slowly in 1H14 , but will be ramped up in 2H 14.
 - PC wifi modules and SIP card demand increase in 2Q14 in turns of development of IOT.
 - WiMax and 3G Femtocell are decreasing but 4G LTE is ramping up.
 - Exchange rate issue: Facing appreciation of NTD and RMB.

Market Development

Data Evolution

- According to Cisco, global mobile data traffic will increase around 13 times from 2010 to 2019.
- Mobile network connection speeds will increase 10-folds by 2015.



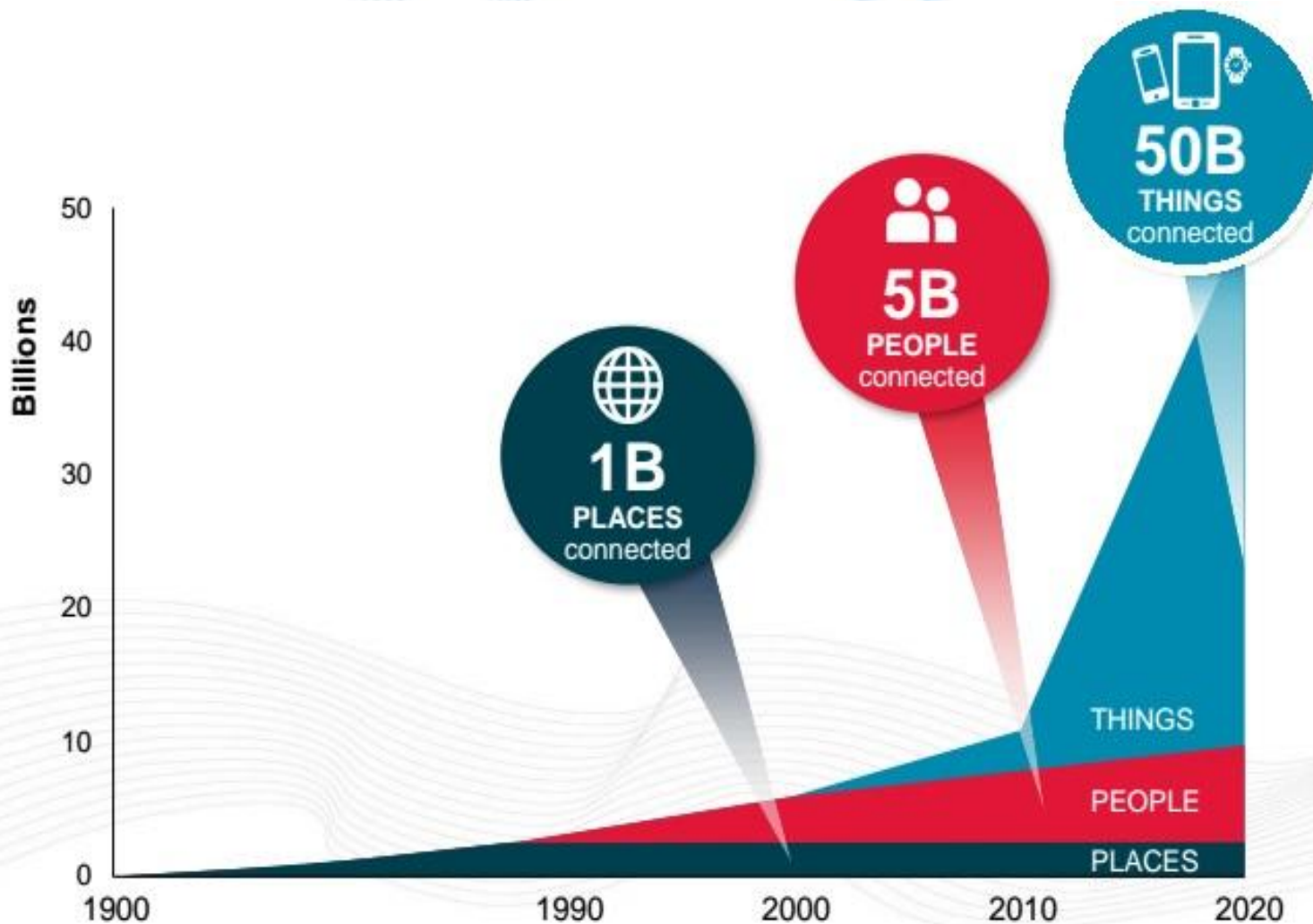
按應用類型劃分的行動數據流量
(EB/月)

13倍

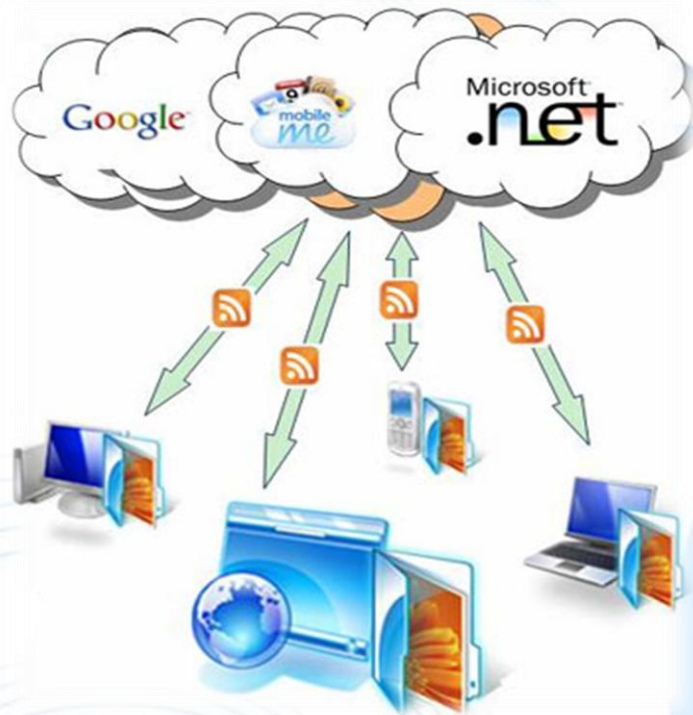
2013 年至 2019 年，行動視訊串流量成長倍數



Global devices connected to the Internet



Cloud Computing Brings Network Revolution



中時電子報
China Times E-Paper

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Cloud & The Market



•Server

•Platform



•Cloud
•Brokers

•Infrastructure



•Software

•Hardware

Paradigm Shift in TV Internet

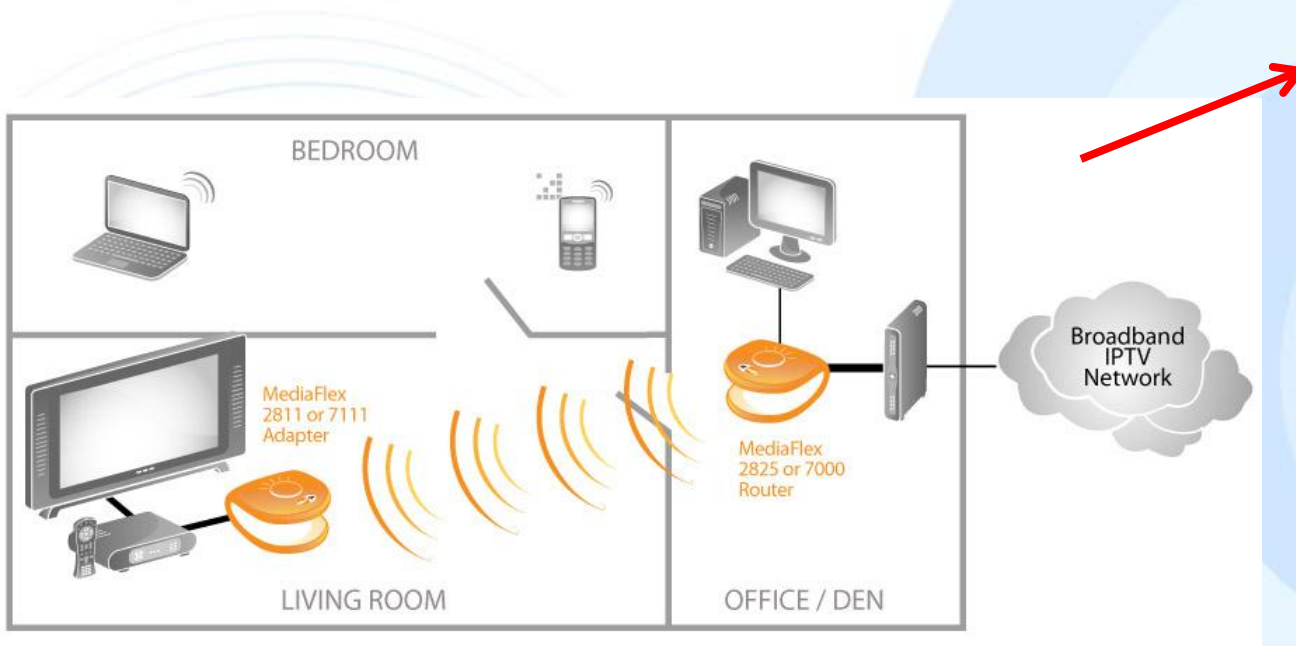
•Time Shifting •Place Shifting •Source Shifting



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New Trend of Home Entertainment

- IP STB requires a box as a brain to control home entertainment services.
- New trend suggests smartphone allows mobile internet devices control a box/ dongle and becomes a service centre.



Internet of Things

Connect anything, anytime, anywhere

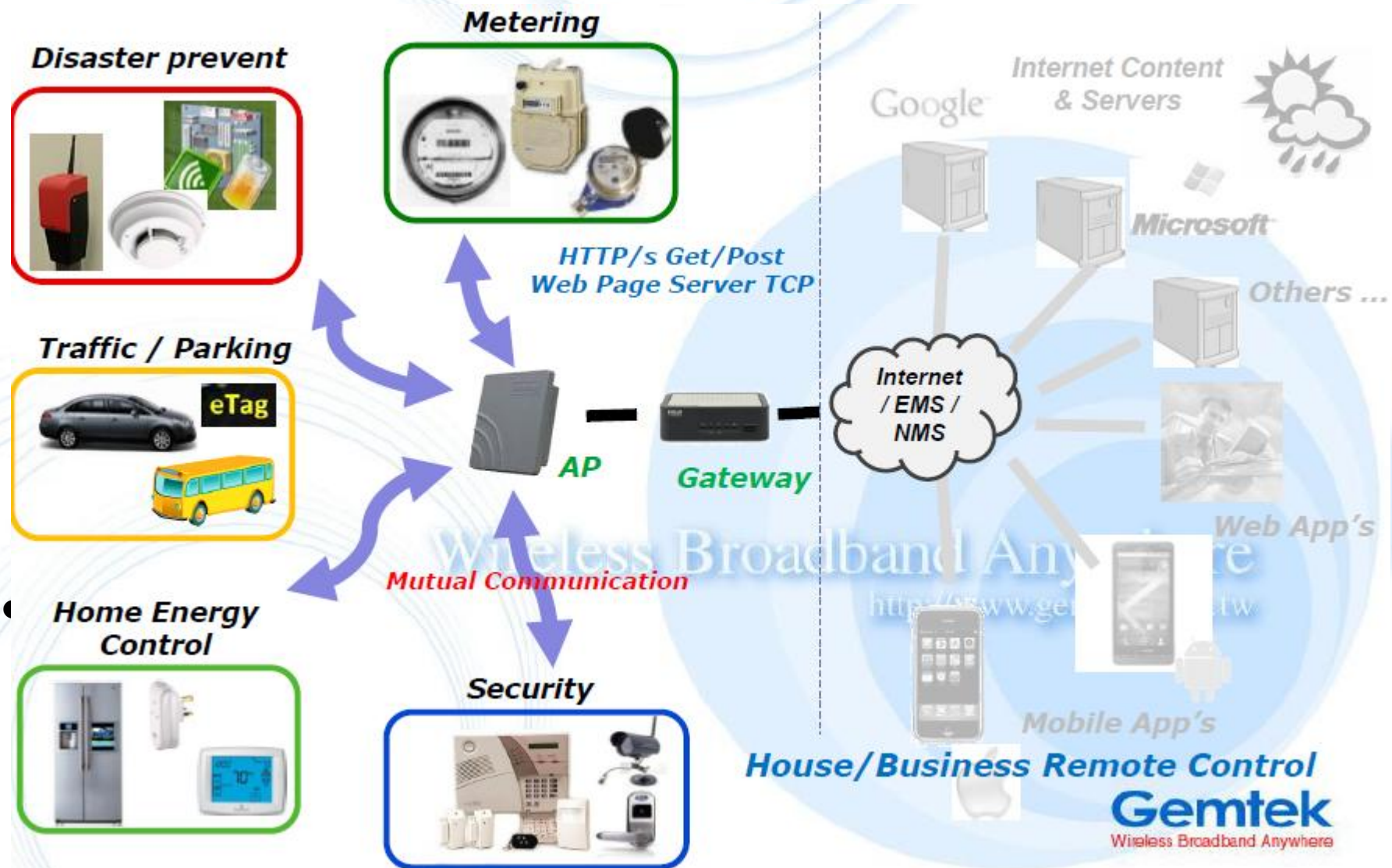


Future of Wearable Devices



Solution of Safety & Disaster Prevention

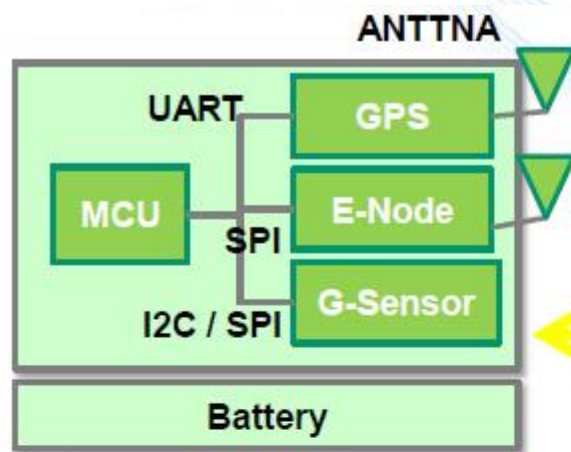
Solution of Safety & Disaster Prevention



Disaster Warning



Sensor Scenario + Block Diagram



- Timestamp
- Node ID
- Tilt angles, tilts in X Y & Z axis, direction
- Move distance and direction
- Battery voltage
- Temperature & humidity



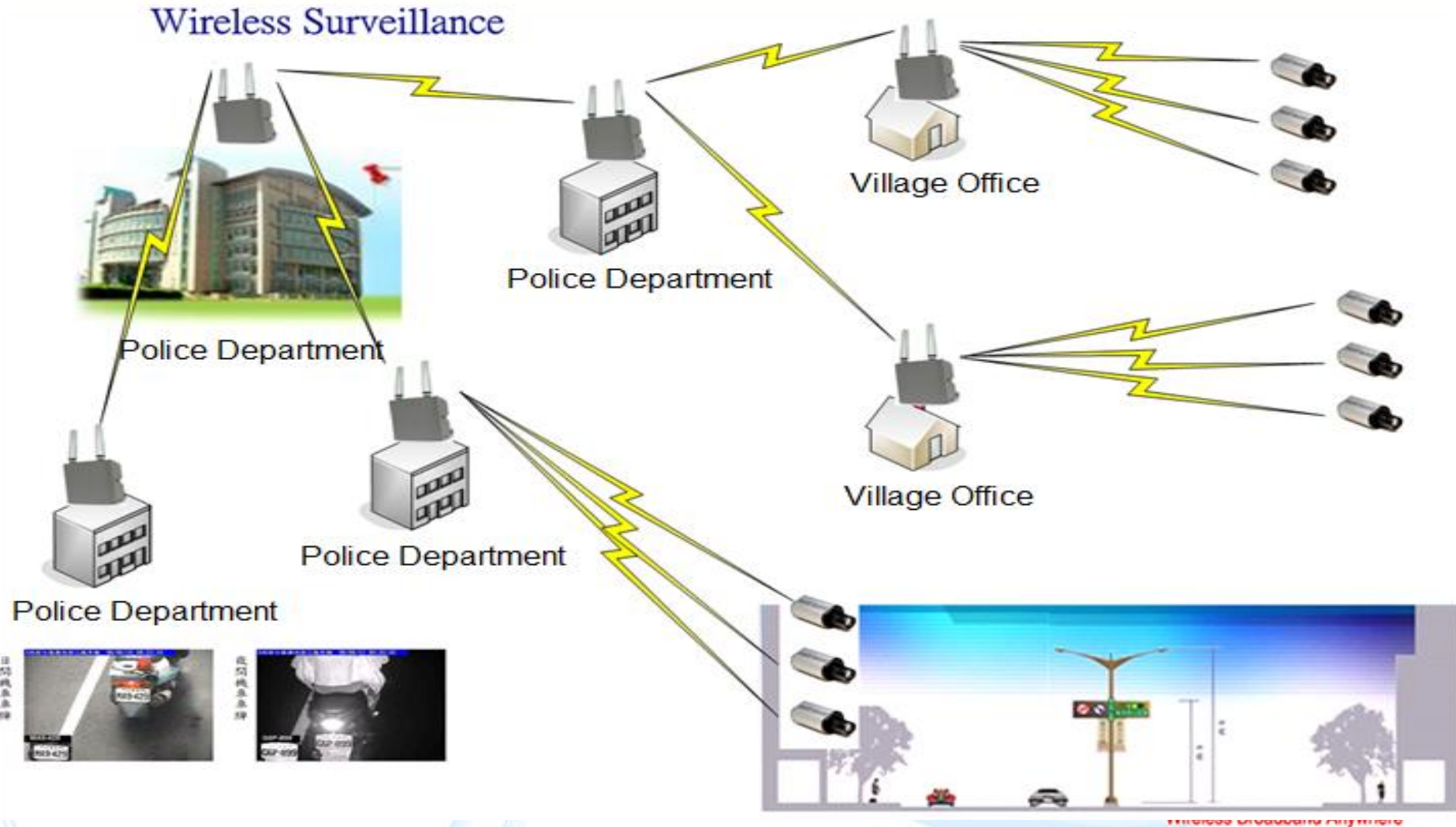
Smart city

Smart City



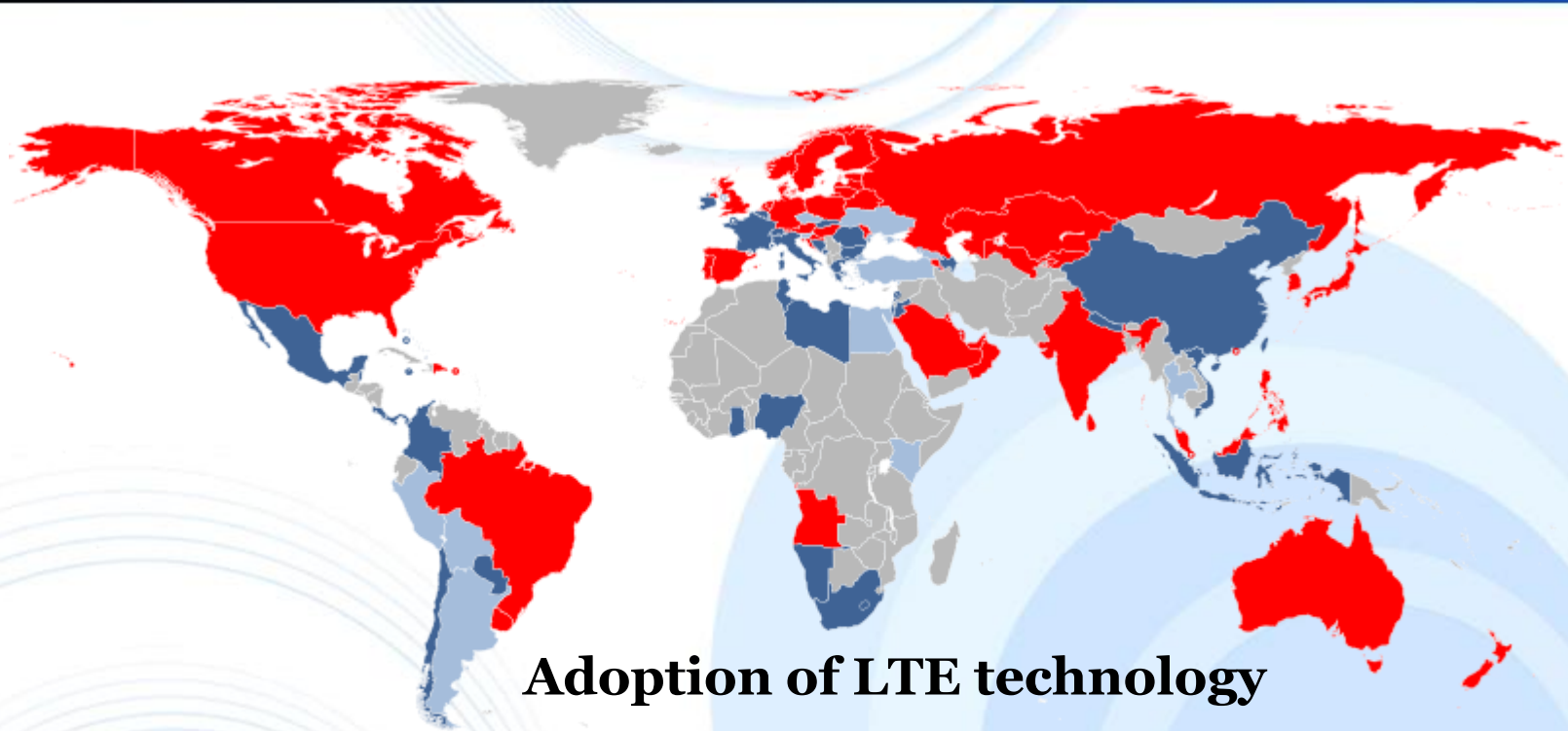
WiFi Security Solution: Wireless Surveillance

- **Police Security Surveillance- Deploy more than 3,000 sets sucessfully.**





LTE



Adoption of LTE technology



Countries with commercial LTE service



Countries with commercial LTE network deployment on-going or planned



Countries with LTE trial systems (pre-commitment)

LTE Market Growth

Worldwide deployments stepping up: 916 million subscribers expected in 2017

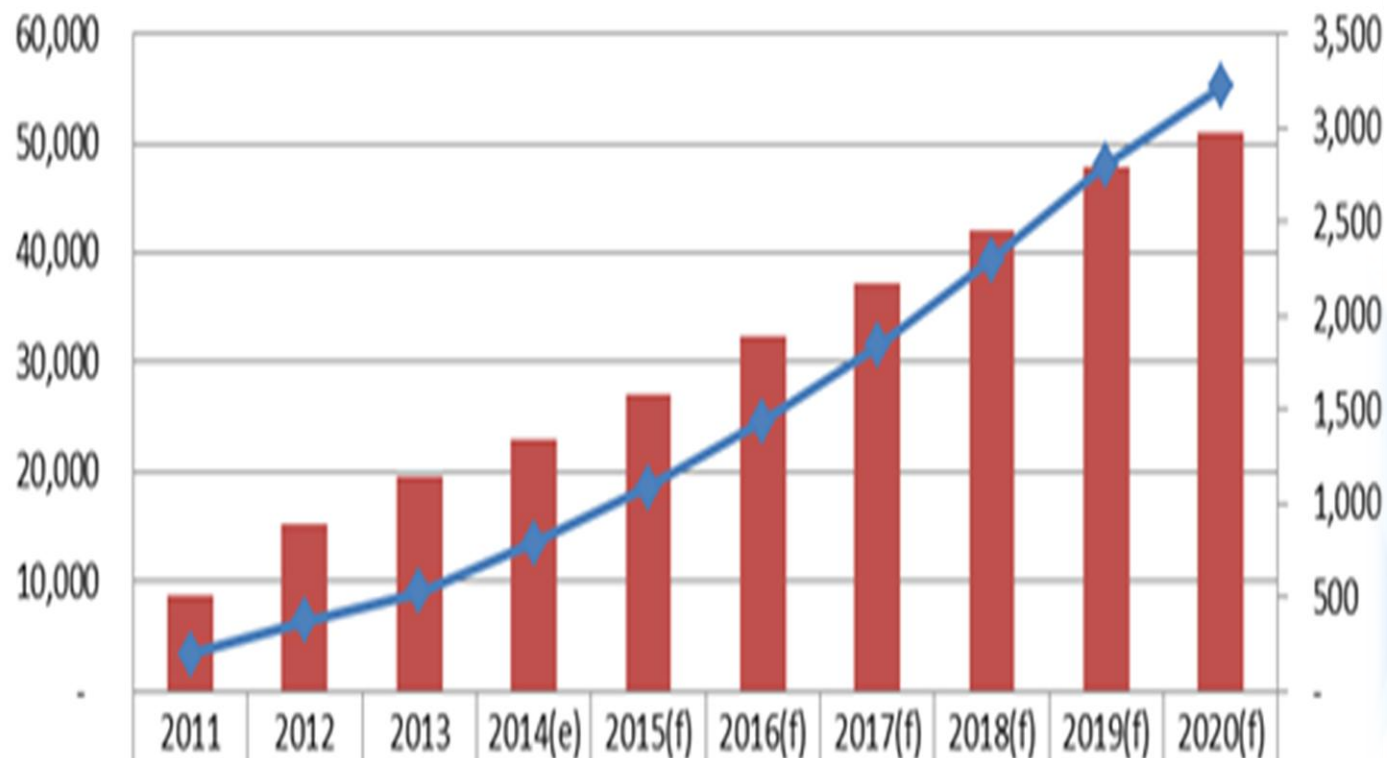
- LTE devices support Mobile WiMAX in order to facilitate smooth transition for operators switching to **TD-LTE**.
- Asia-Pacific will increase its subscriber share from 26% in 2011 to 41% to reach **375 million LTE subscriptions in 2016**.
- The **LTE-Advanced** will represent 30-40% of the total LTE subscriber base at the end of 2017 and should reach a half-billion LTE-Advanced subscriptions worldwide.

LTE Subscriber Projection



LTE CPEs Worldwide Units

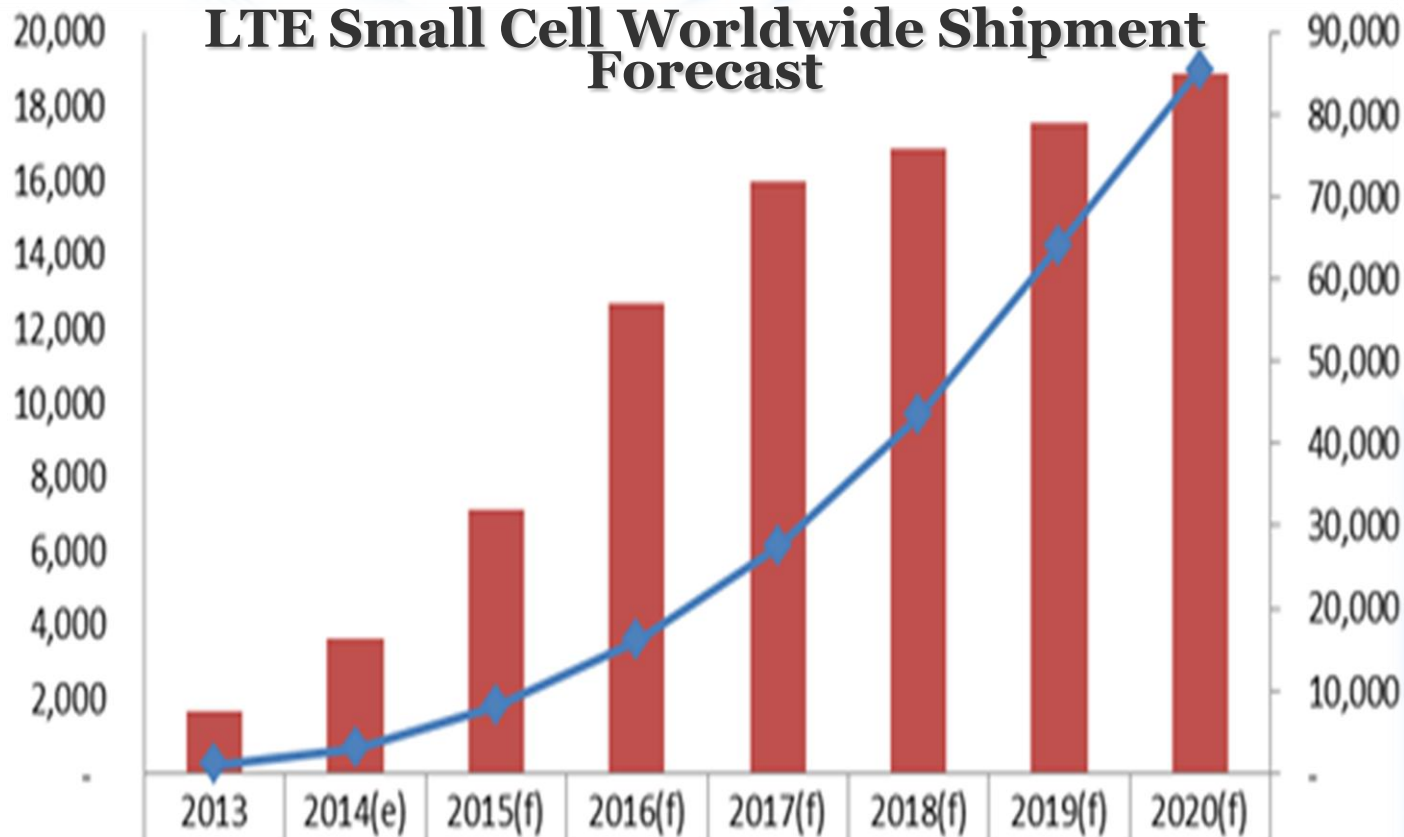
LTE CPEs Worldwide Shipment Forecast



LTE CPE sales (million USD)	513	898	1,146	1,346	1,580	1,886	2,167	2,456	2,789	2,968
LTE CPE shipment (thousand unit)	3,400	6,343	9,056	13,500	18,630	24,592	31,477	39,347	48,003	55,203

LTE Small Cell Market

LTE Small Cell Worldwide Shipment Forecast



●註：Small Cells含概Micro cell、Metro cell、Pico cell、Femto cell

Gemtek Business Model

Future Business Model

1. OEM/ODM Business: Focus on hardware product design & manufacturing for Telco/ retail businesses



2. Cloud Service Business: System operation/solution and customised service integration for versatile MID/ fixed devices



OEM/ODM Business Model

Product Mix
Shift



Early-mover
Advantage



Telco
Strategy



Cloud Service Business Model

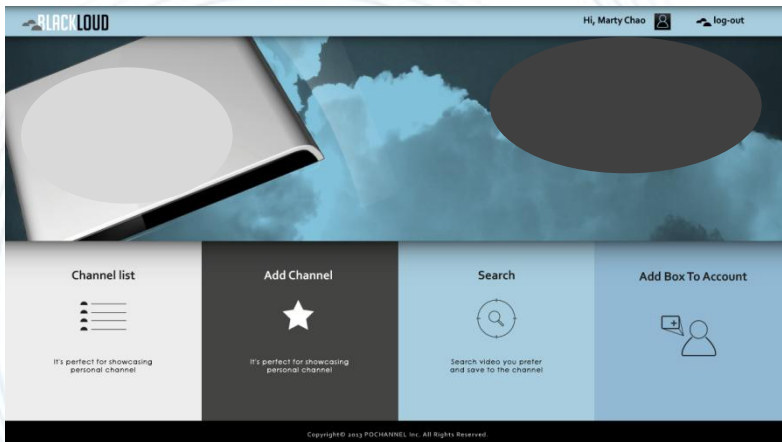
1. System solution



2. Run the operational services



3. Integrated devices for end users



FreePP, a Global Internet Telecom beyond Voice call.



FreePP APP

- Handwriting & Graffiti
- Free voice messages
- Free online phone calls
- Illustration and stickers
- Free multimedia message
- Group chats

TalkFree Box No more phone bills!

- Free connection between home phone and smart phone.
- Free connection anytime, anywhere.
- CD voice quality.
- No computer configuration.



Product Introduction

Market Segments & Product Lines

Segments

Local Area Networking

*Integrated
Broadband Acces*

Telecom Infrastructures

*Enterprise and Solution
Networking*

*Consumer Mobile
Electronics*

Product Lines

**WiFi AP/RT
W-HDMI/PLC
Combo Modules**

**xDSL- IAD
GPON IAD
Transceivers**

**Small cell
Indoor/ Outdoor
LTE CPE**

**OTT
SMB AP/UTM
Smart Grid
Smart sprinkler**

**STB/MID
Smart home
Wearable Devices**

Sample Products



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2014 Main Driver

Integrated Products

Telecom Infrastructure

High End AP/Router

Cloud Services



LTE

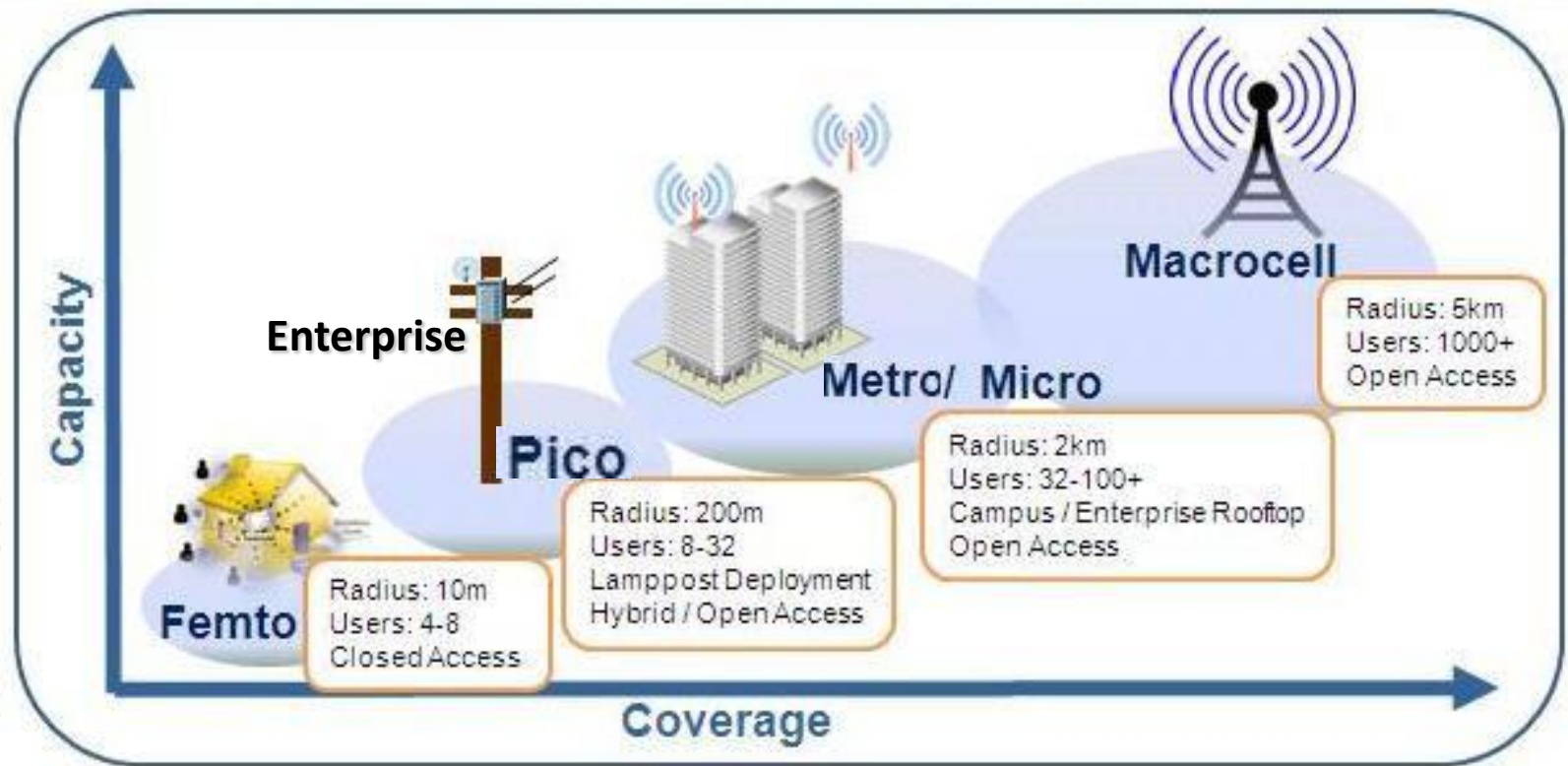
Gemtek LTE Product Line

	Design Target	Product Type	Picture
Indoor Fix BB / Voice	Fix Application / High Power / Multiple Options	Data/Data Voice / Data Voice Wi-Fi	
Mobile Broadband	Compact/ CM-Less / Fancy ID	USB Dongle USB Docking	
Module	Mini-PCIe/NGFF for multiple platform/ Embedded OS support	Embedded Module	
Convergence	3G/4G to Wi-Fi / Compact Size/ Low Power / Fancy ID	3G/4G to Wi-Fi	
Outdoor / M2M	3G/4G Module Option /Seam-less/ Low Power / Fancy ID	Outdoor Bridge / PoE Modem	
Combo Integration	Combine wireless WAN with multi-media devices	IP Cam + LTE LTE OTT ; voice LTE	

Confidential

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4G LTE Small Cell Categories



Gemtek Small cell

Gemtek LTE Small Cell Family

- LTE Single mode



- **Residential** Small Cell

- LTE Single mode



- **Enterprise** Small Cell

- UMTs/LTE Multi mode



- **Outdoor** Small Cell

2014 Main Driver

Integrated Products

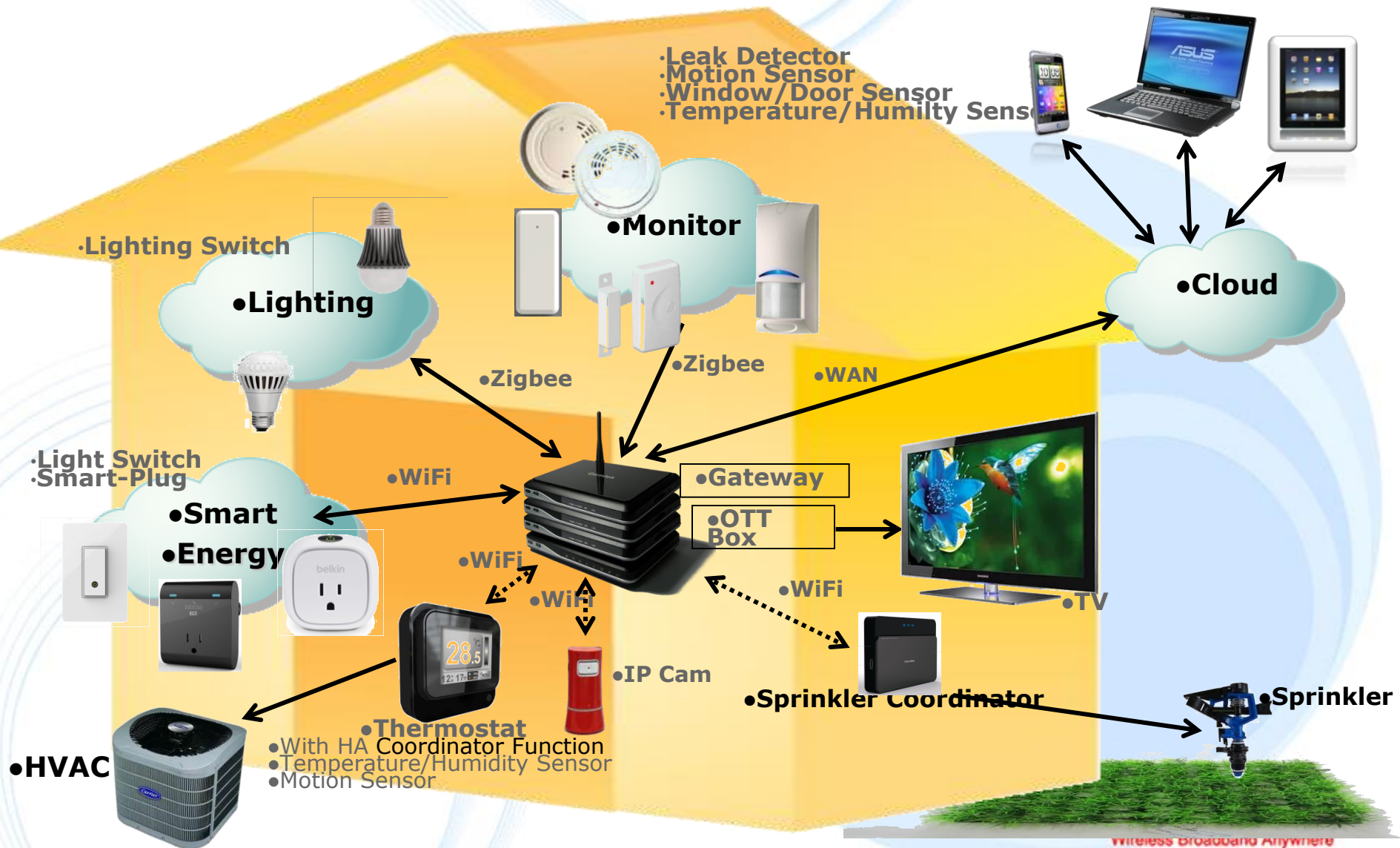
Telecom Infrastructure

High End AP/Router

Cloud Services

Home Automation

Home Automation



Home Automation: Smart Cam

Service content:

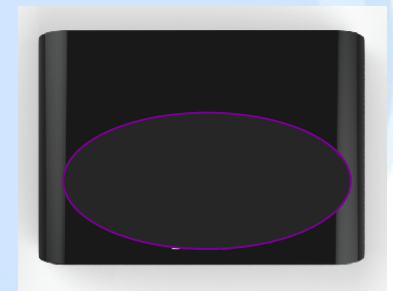
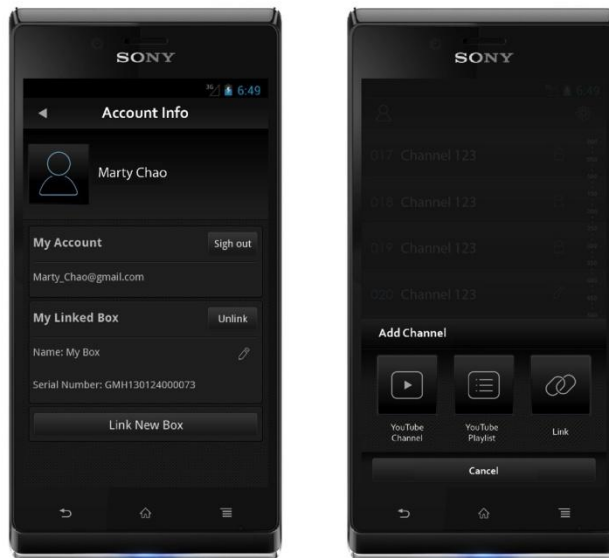
- Intercom
- FreePP built in
- Home Automation
- Door bell
- Baby Monitor
- Sports Cam
- Video conference
- Police Cam (LTE)



IP TV/Smart TV

Internet TV/OTT Box

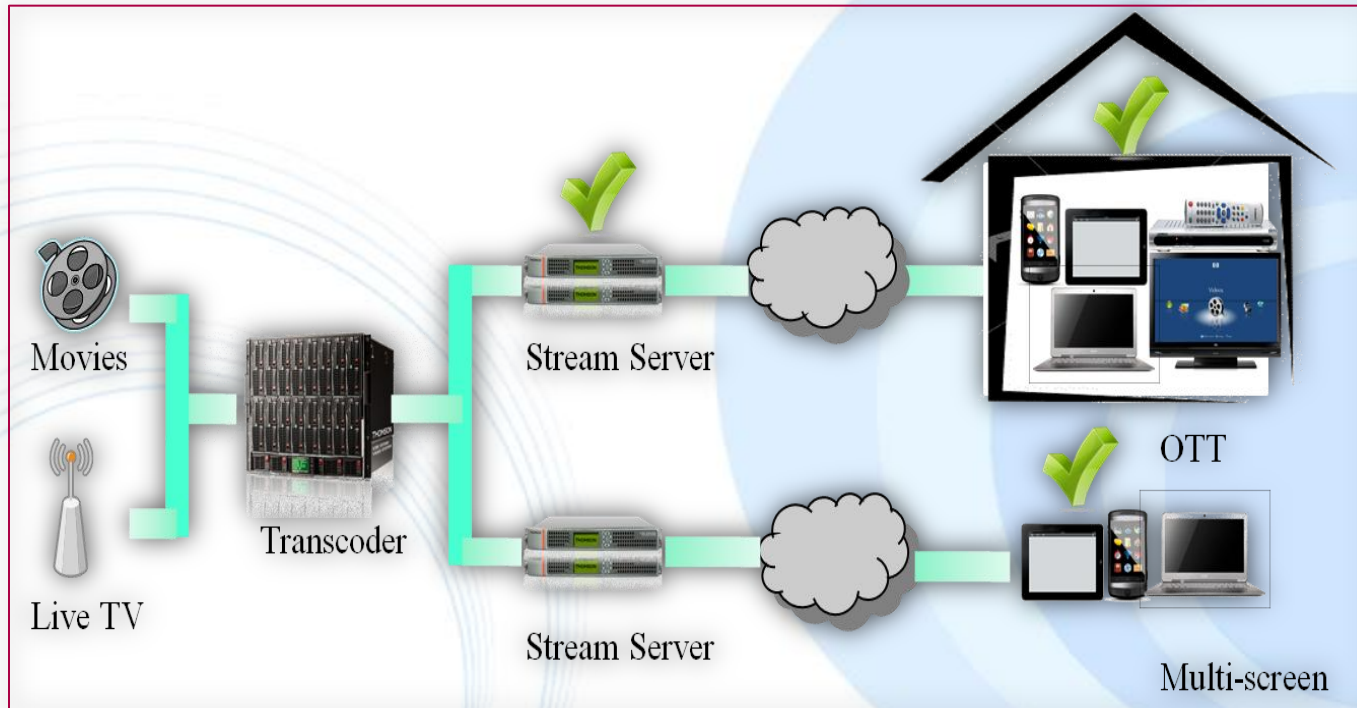
- Gemtek offer localised and personalised service content through mobile internet.
- Gemtek operates service content and create platform for clients.
- Gemteks aims on integrating mobile internet and fixed devices altogether through cloud.



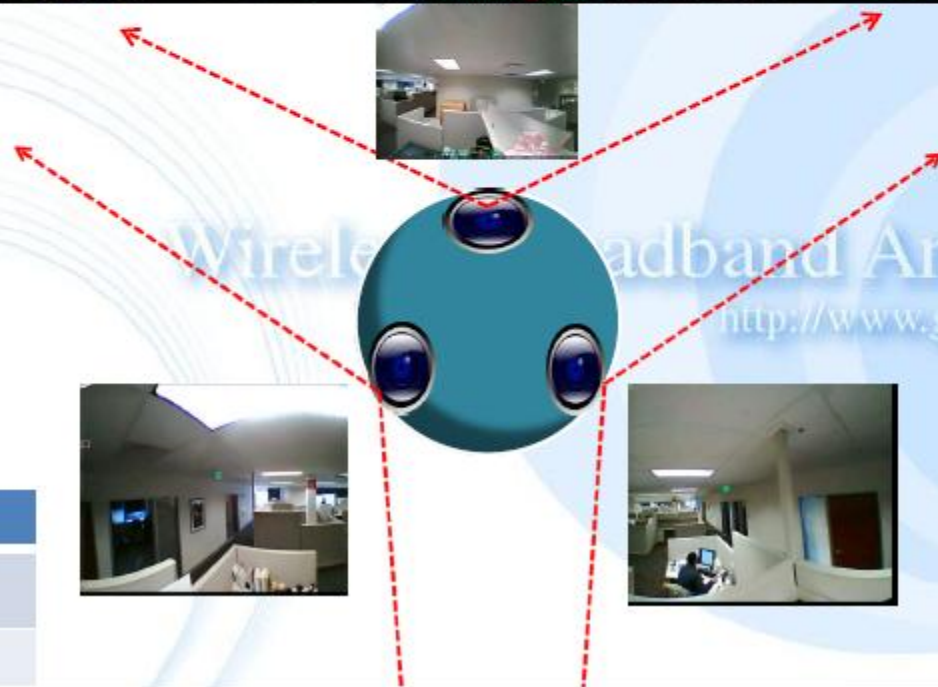
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Cloud Total Solution: TurnKey Operation

- Gemtek Video Direct provides an Operator or a Content Deliverer with a total internet TV solution.
- The solution could be offered under special request of customization and needs.
- TKO System Architecture:



LTE 360 Cam Panoramic View



Lens	
Actual Horizontal View Angle	124° *3

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<http://www.gemtek.com.tw>

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Multi-media Communication solution

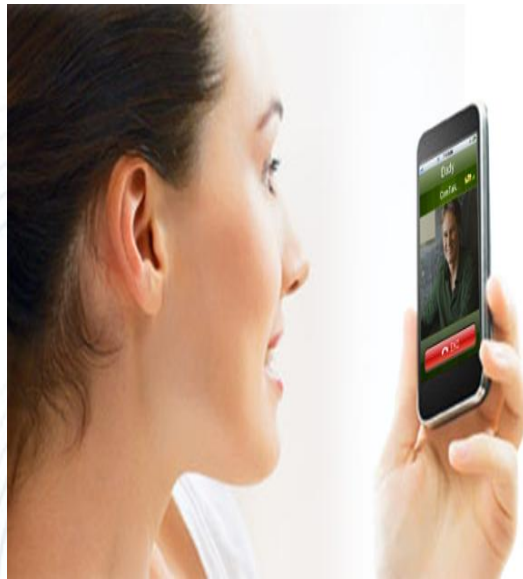
Multi-media communication solution



DECT Phone



TalkFree Box



CamTalk



FreePP



OTT Box



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2014 Main Driver

Integrated Products

Telecom Infrastructure

High End AP/Router

Cloud Services

IPSTB

- The shipment of IPSTB is adjusted because of changes in market demand and the trend of product life cycle.
- Low end IPSTB shipments in turning into High end IPSTB as home entertainment is upgrading to a new form.



IAD & GPON Landscape

- New potential customers are emerged in IAD business.
- A very high speed broadband access for residential gateway, consists Ethernet switch, 11a+n/n/ac Wi-Fi access point, and VoIP in one box.
- GPON: Fiber to the “X” (FTTx) is a carrier’s best solution: Reliable Internet access & driving down the OPEX for carriers in a competitive industry.



2014 Main Driver

Integrated Products

Telecom Infrastructure

High End AP/Router

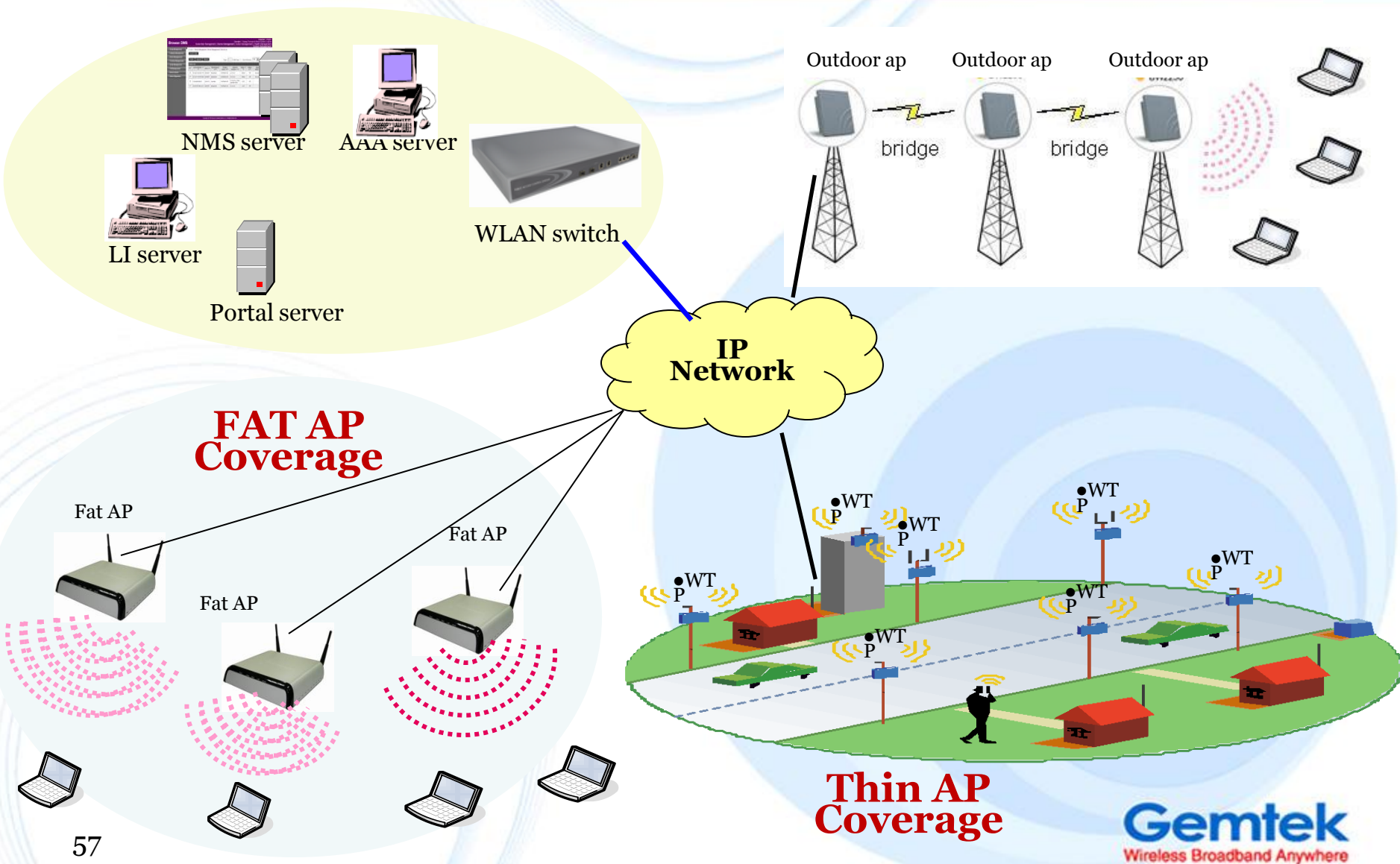
Cloud Services

High End Access Point

- 802.11ac brings upgrade in devices.
- Upgrades: Controllers, switches and Ethernet cabling
- High end AP= Enterprise AP will contribute revenue growth for the following year.



WiFi Hotspot



Thank You

