Axiomtek Business Development

YT Yang
March 21st , 2014

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AXIOMTEK

Agenda

✓ **New Era: Industry 4.0, M2M and IoT**

✓ **Global Organization**

✓ **Business Leadership**

✓ **Business Strategy**

    ✓ **Business integration**

    ✓ **Amoeba BU**

    ✓ **Product and Technology Strategy**

    ✓ **Business Models**

✓ **Performance Overview**

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Industry 4.0

From Industry 1.0 to Industry 4.0:
Towards the 4th Industrial Revolution

Industry is on the threshold of the fourth industrial revolution. Driven by the Internet, the real and virtual worlds are growing closer and closer together to form the Internet of Things.
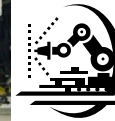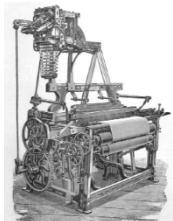
4. Industrial Revolution based on Cyber-Physical production systems

Industry 4.0

3. Industrial Revolution though introduction of electronics and IT for a further automation of production

Industry 3.0

2. Industrial Revolution though introduction of mass production based on the division of labor powered by electrical energy

Industry 2.0

1784 first mechanical loom

1. Industrial Revolution though introduction of mechanical production facilities powered by water and steam

Industry 1.0

Degree of Complexity

End of 18th Century   Start of 20th Century   Start of 70ies   Today

Industrial and Technology Trend

2012	2013
• Media Tablet and Beyond	• Mobile Device Battles
• Mobile-Centric Applications and Interfaces	• Mobile Applications and HTML5
• Social & Contextual User Experience	• Personal Cloud
• Application Stores and Marketplace	• Enterprise App Store
• **The Internet of Everything**	• **The Internet of Things**
• Next-Generation Analytics	• Hybrid IT and Cloud Computing
• Big Data	• Strategic Big Data
• In-memory Computing	• Actionable Analytics
• Extreme Low-Energy Servers	• In Memory Computing
• Cloud Computing	• Integrated Ecosystems

Top 5

Source: Gartner 2013

Internal Of Things

Connected! All the time! Everywhere!

Growth of Population vs. Devices

	2003	2010	2015	2020
World Population	6.3 Billion	6.8 Billion	7.2 Billion	7.6 Billion
Connected Devices	500 Million	12.5 Billion	25 Billion	50 Billion
Connected Devices Per Person	0.08	1.84	3.47	6.58

More connected devices than people
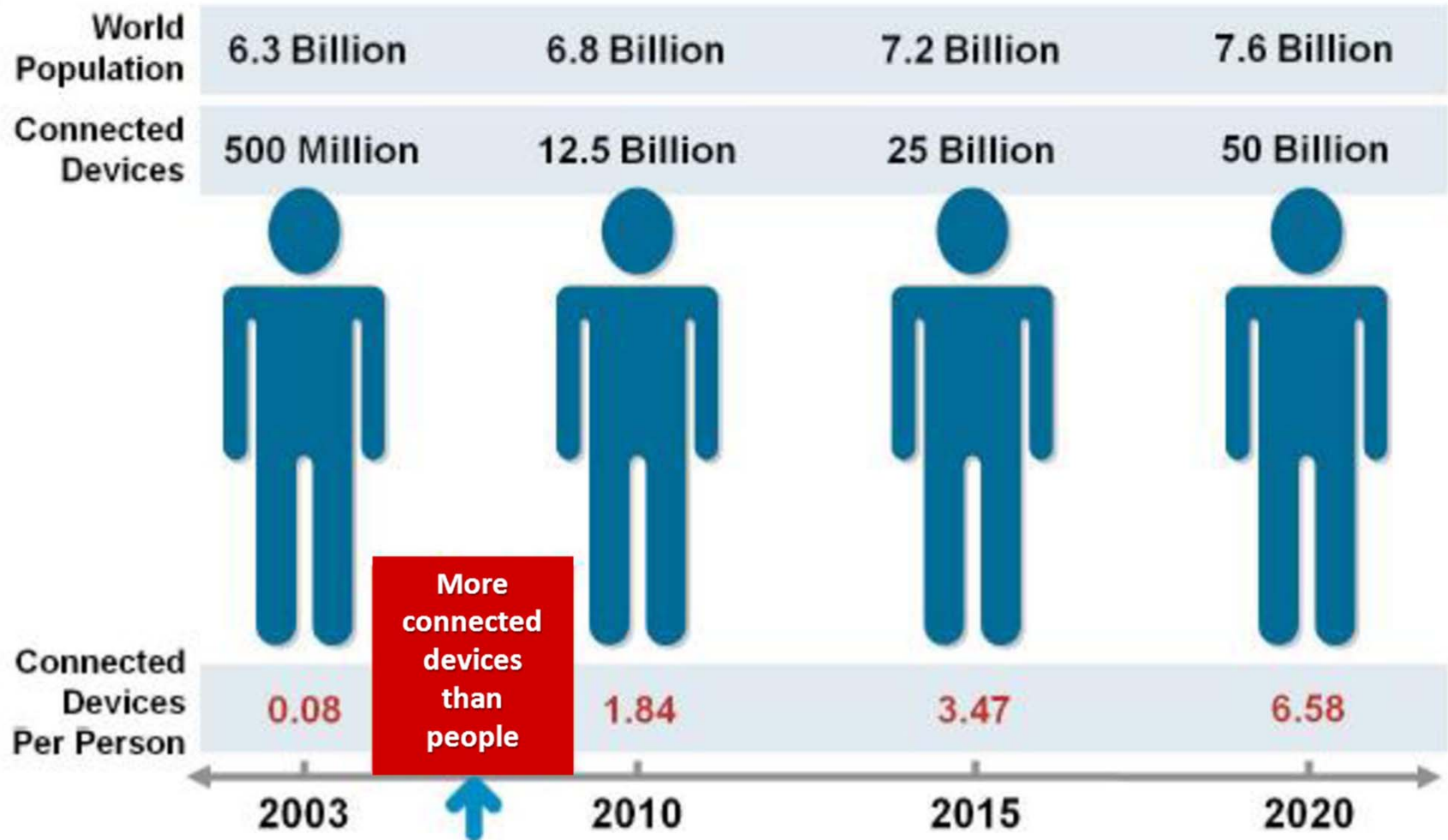
Source: Cisco IBSG, April 2011

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2015 Global Data Volume

By 2015 the number of networked devices will be double the entire global population. All sensor data has uncertainty.

The total number of social media accounts exceeds the entire global population. This data is highly uncertain in both its expression and content.

Data quality solutions exist for enterprise data like customer, product, and address data, but this is only a fraction of the total enterprise data.

Global Data Volume in Exabytes

9000
8000
7000
6000
5000
4000
3000
2000
1000
0

Aggregate Uncertainty %

100
90
80
70
60
50
40
30
20
10
0

Sensors (Internet of Things)

Social Media (video, audio and text)

VoIP

Enterprise Data

Multiple sources: IDC, Cisco

2005   2010   2015

source:IBM,2012

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Opportunities of Connected Devices

Billions of Smart Connected Devices, 2020
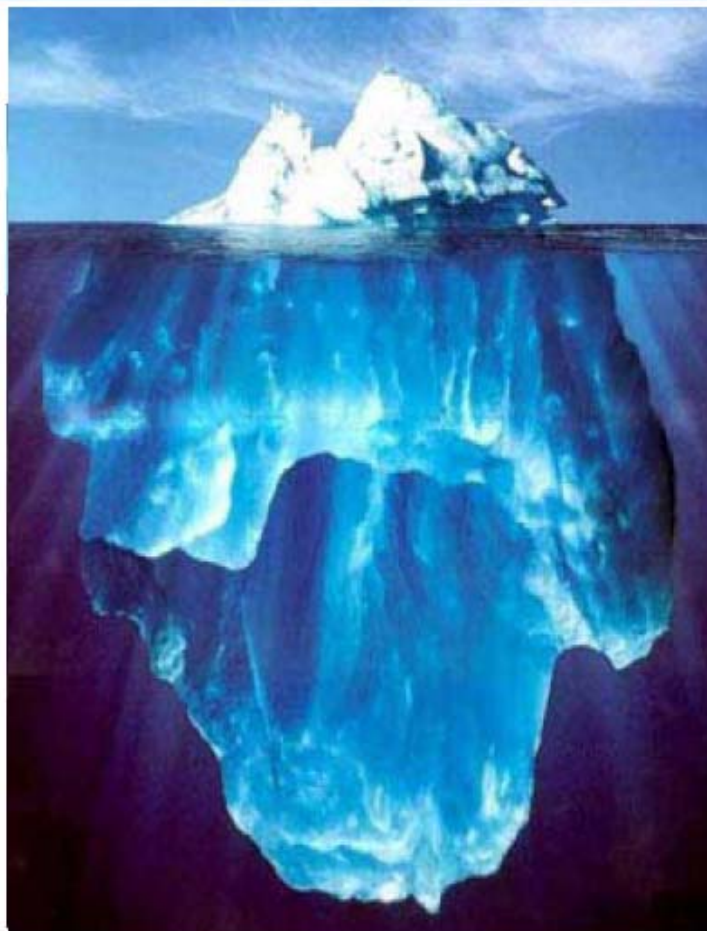
PCs
1.9 billion

Mobile Phones
2.6 billion

CE Devices
2.0+ billion

Embedded
25 billion
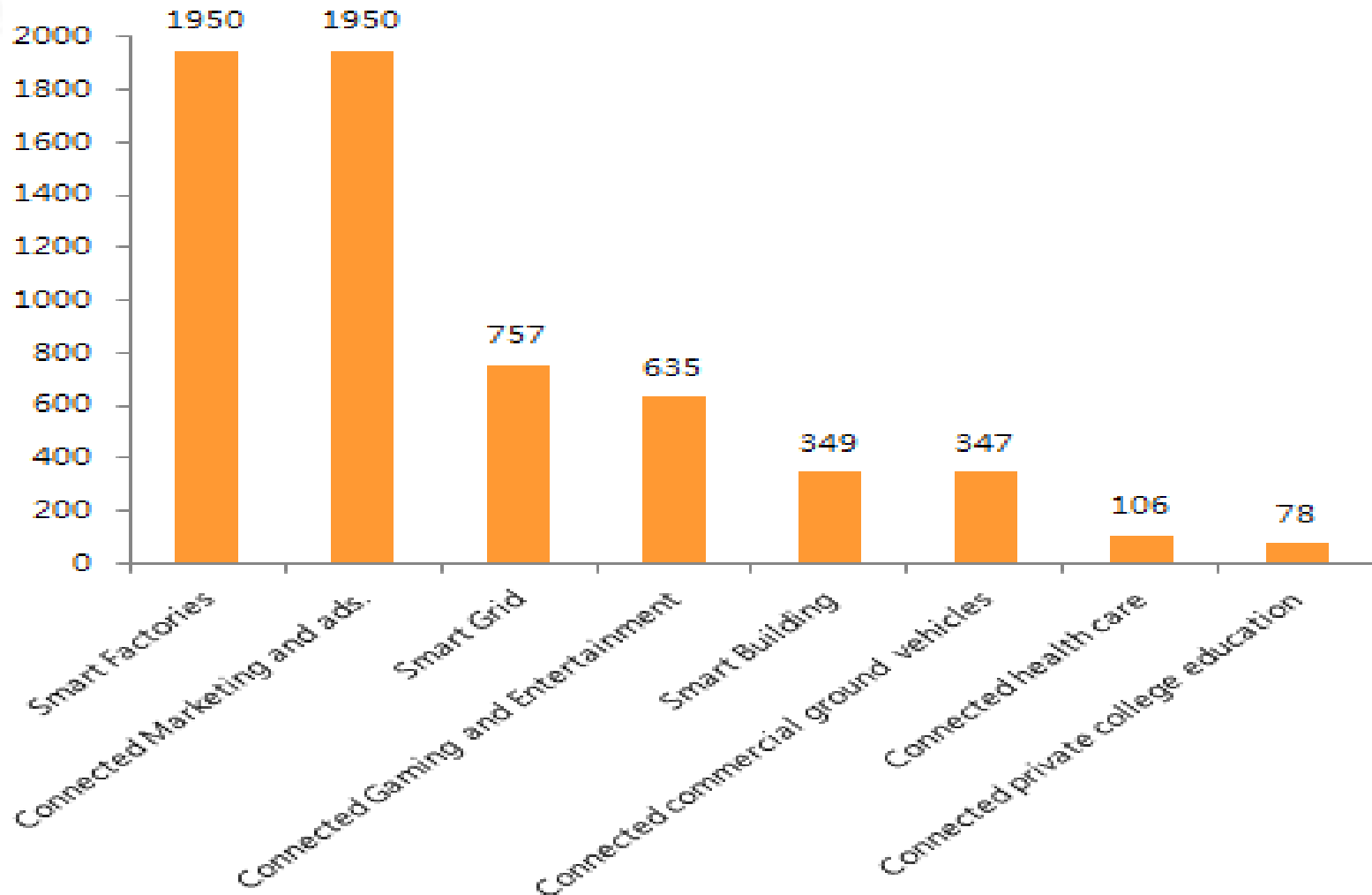
Market Opportunities

- Smart grid
- Smart appliances
- Home networks
- M2M & industrial
- POS and Kiosks
- Health
- Transportation and logistics
- Networks and Infrastructure
- Automotive
- Video surveillance
- Sensors
- Other

©2011 IDC | 17

IDC
Analyze the Future

Market Projection for Smart World

2013 – 22 10yrs NPV($bn)

Category	Value
Smart Factories	1950
Connected Marketing and ads.	1950
Smart Grid	757
Connected Gaming and Entertainment	635
Smart Building	349
Connected commercial ground vehicles	347
Connected health care	106
Connected private college education	78

Source: CISCO IBSG / GBI Research

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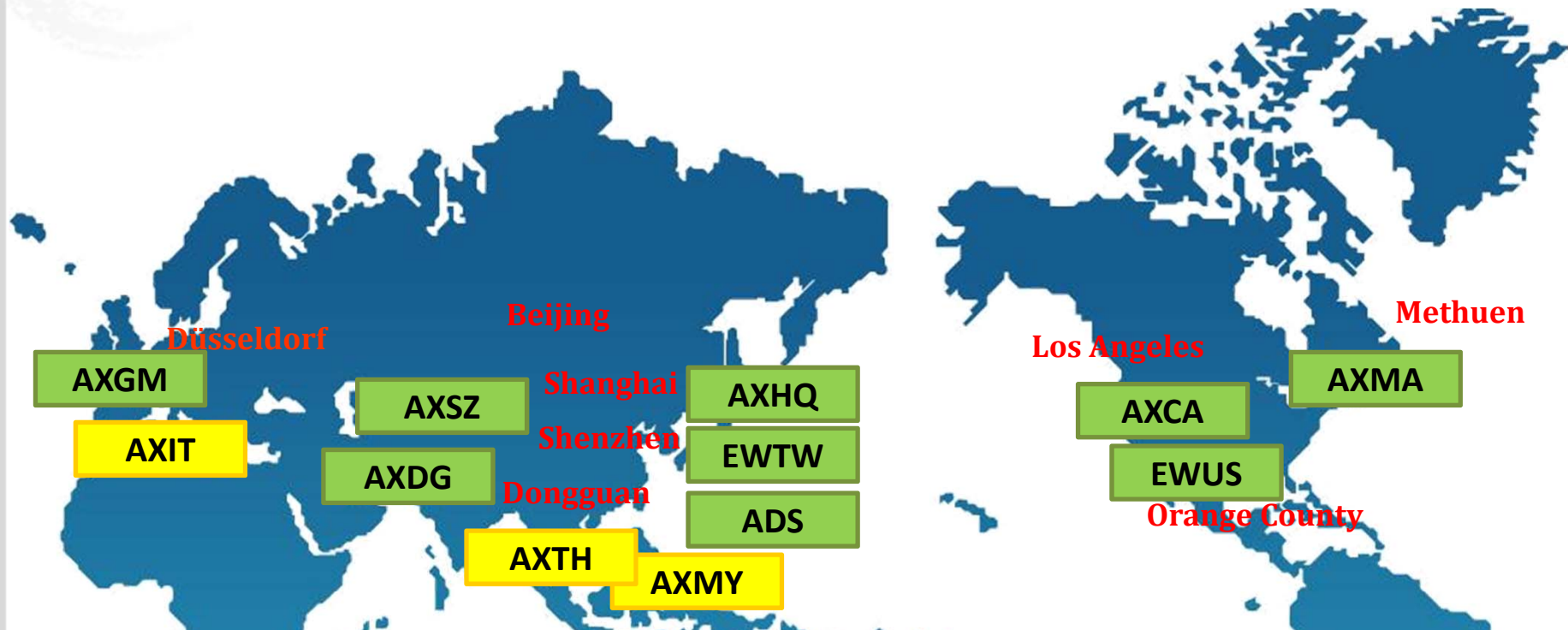
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  - ✓ **Amoeba BU**
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  - ✓ **Business Models**
- ✓ **Performance Overview**

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Group Organization

AXHQ
Taiwan

| AXUS | AXGM | AXSZ | AXDG | EtherWAN | ADS |

AXCA

AXMA

AXBJ

AXSH

EtherWAN
USA

Taipei, Taiwan (Headquarters)

California, America

Langenfeld, Germany

Beijing, China

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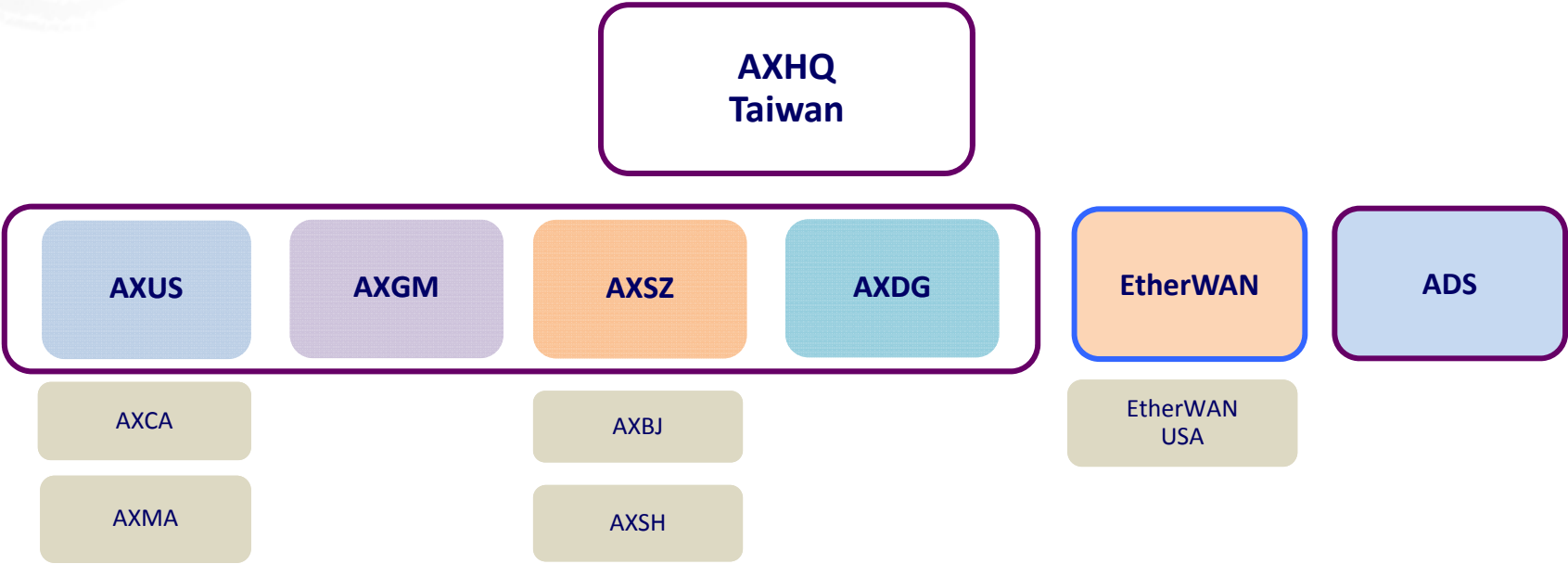
Global Operation and Location

AXGM · AXIT · AXSZ · AXDG · AXTH · AXMY · AXHQ · EWTW · ADS · AXCA · EWUS · AXMA

Düsseldorf · Beijing · Shanghai · Shenzhen · Dongguan · Los Angeles · Methuen · Orange County

Company	Axiomtek				EtherWAN		ADS	Total
Region	China	Taiwan	USA	Europe	Taiwan	USA	Taiwan	
Sales Offices	3	2	9	1	1	4	1	21
Manufacturing	1	1	2	-	1	-	-	5
Engineering	1	1	2	1	1	2	1	9
Logistics Hubs	1	1	2	1	1	1	-	7
Employee	106	400	68	21	123	20	7	745

Subsidiary

Franchising Partner

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Business Leadership

Vision:

✓ **Global leader in vertical channel development, focusing on embedded computing and industrial networking solutions**

Mission:

✓ **Provides technology and valued services to support our partners in the lead of vertical domains**
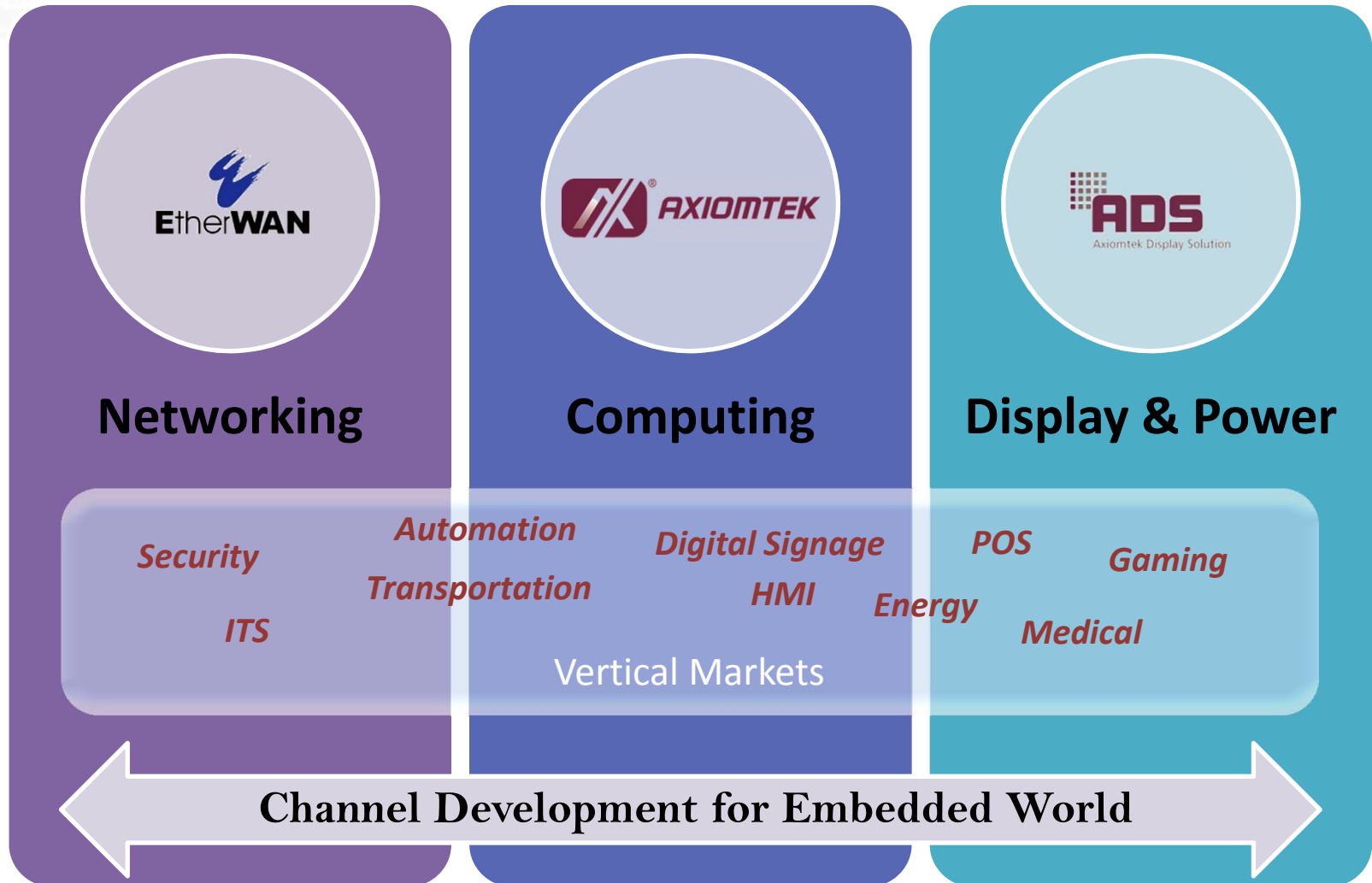
Business Leadership
Trusting Partnership and Valued Services

- ✓ **We respect partners and expect long-term mutual success**

- ✓ **Core competency on differentiation and innovation**

- ✓ **Innovative new business models in vertical markets**

- ✓ **Leading position of technologies in each of our target fields**

- ✓ **Global channel development on value-added service business**

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Group Business Integration

Networking — EtherWAN

Computing — AXIOMTEK

Display & Power — ADS (Axiomtek Display Solution)

Vertical Markets

Security
ITS
Automation
Transportation
Digital Signage
HMI
Energy
POS
Gaming
Medical

Channel Development for Embedded World

Strategy Business Unit

AXIOMTEK   **EtherWAN**   **ADS** Axiomtek Display Solution

OBM/ODM/OEM

AXUS	AXEU	AXCN	TW	Channel Partners	KA/ODM

Regional Business Units

Design-in	Transportation	Energy & Utility	Gaming/POS/NA

EMB	IMB	SoM	IPC	SSBC	EBDS	iCON	GPPC	HMSS		

EBM
(Embedded Board & Module)

ESP
(Embedded Systems & Panel PC)

DSS
(Digital Signage Solutions)

DMS

Strategic Business Unit/Product Divisions
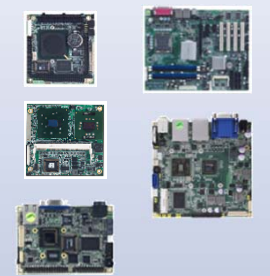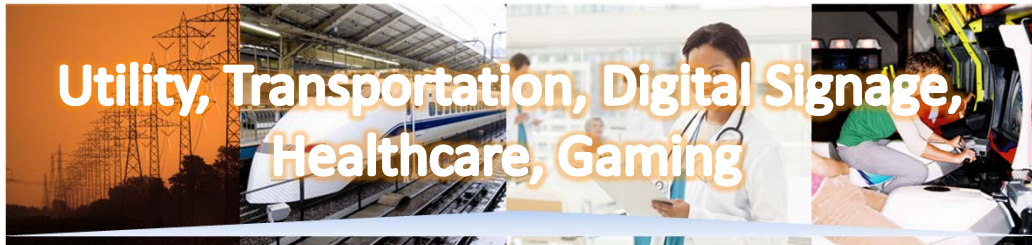
AXPT in Taiwan PCBA & System Integration	AXDG in China Chassis assemble & Integration	AXSYS in US Valued System Integration

Facilities

Product Strategy
Deeply Embedded Solutions in Vertical Markets

Utility, Transportation, Digital Signage, Healthcare, Gaming

(intel®)

AMD

American Megatrends

freescale semiconductor™

Microsoft

Linux™

ANDROID

**Embedded Boards
System on Modules
Slot CPU Cards**

**Industrial PCs
Embedded Systems
Network Appliance**

**Touch Panel PCs
Fanless HMI
Digital Signage**

**Industrial Ethernet
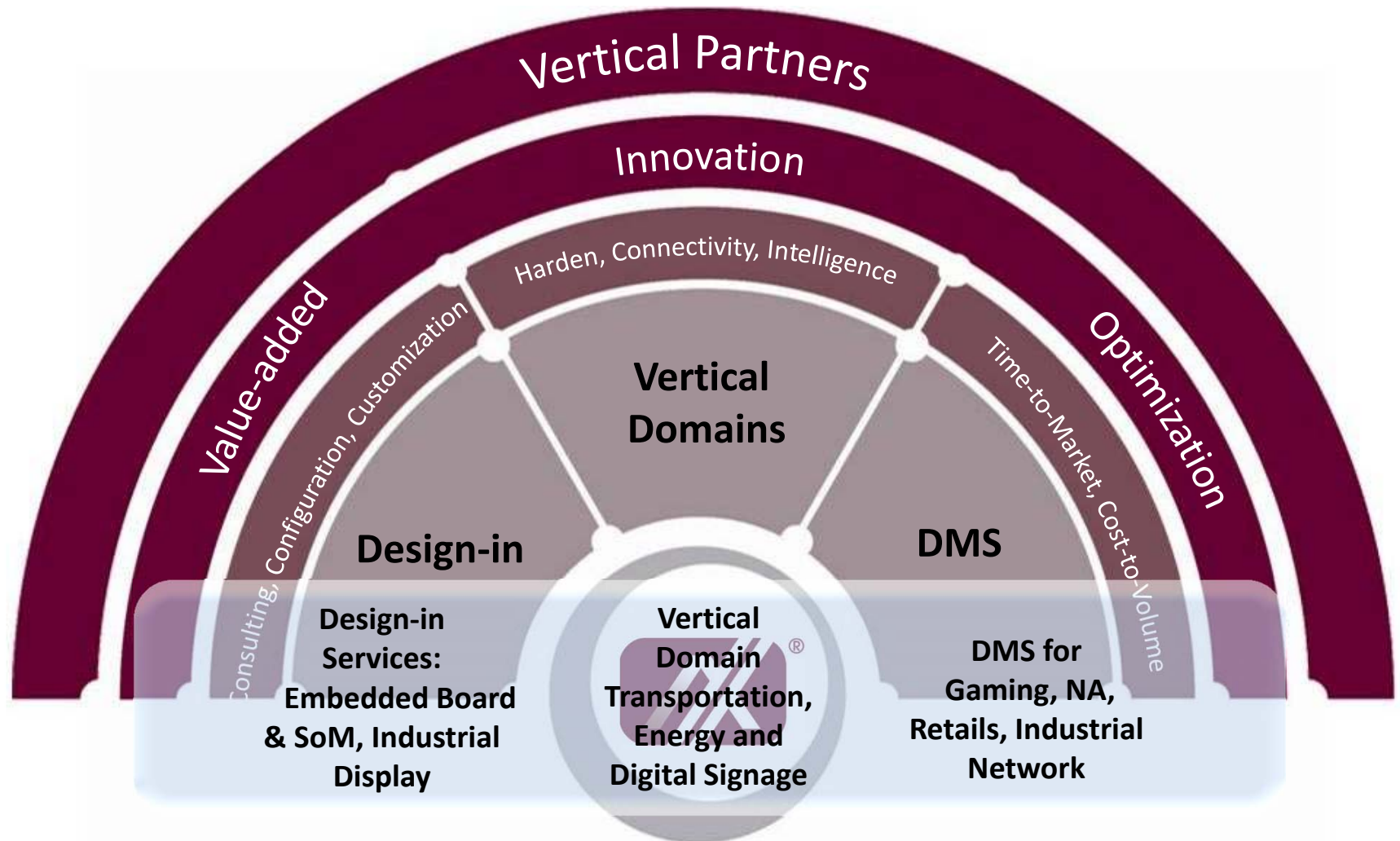Switch & Converters**

Cloud   Intelligent   Energy-saving   Modular Design   Customization

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Technology Approach

Embedded Board & SoM	Embedded Systems
High density design with tiny solutions	Thermal, temp. managed solutions
Thermal and temp. managed solutions	AXView software utility to support remote monitoring and management , security and connectivity
Ability to support EOS of WinCE/XP/7, Linux and Android	IP66 water-proof, dust-proof, anti-vibration, EMC/EMI and surge protection
Design-in services to support customized solutions of X86 and RISC platforms	Experienced in certificates of vertical markets; transportation, energy 、 marine and hazardous location
Battery backup solutions	Video mixer with PIP solutions
Design-in services for peripheral integration of LCD, T/S, SSD, and SPS	Integrated rich digital and analog I/O for automation solutions
	EtherCAT and Zigbee wireless technology

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Three Business Models

Vertical Partners

Innovation

Harden, Connectivity, Intelligence

Value-added

Optimization

Consulting, Configuration, Customization

Time-to-Market, Cost-to-Volume

Vertical Domains

Design-in

DMS

Design-in Services: Embedded Board & SoM, Industrial Display

Vertical Domain Transportation, Energy and Digital Signage

DMS for Gaming, NA, Retails, Industrial Network

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Design-in Service Model

Deliver high valued and custom services

1) Dedicated FAE to support high value technical services

2) Technical portal and e-configuration to speed up customer's design cycle

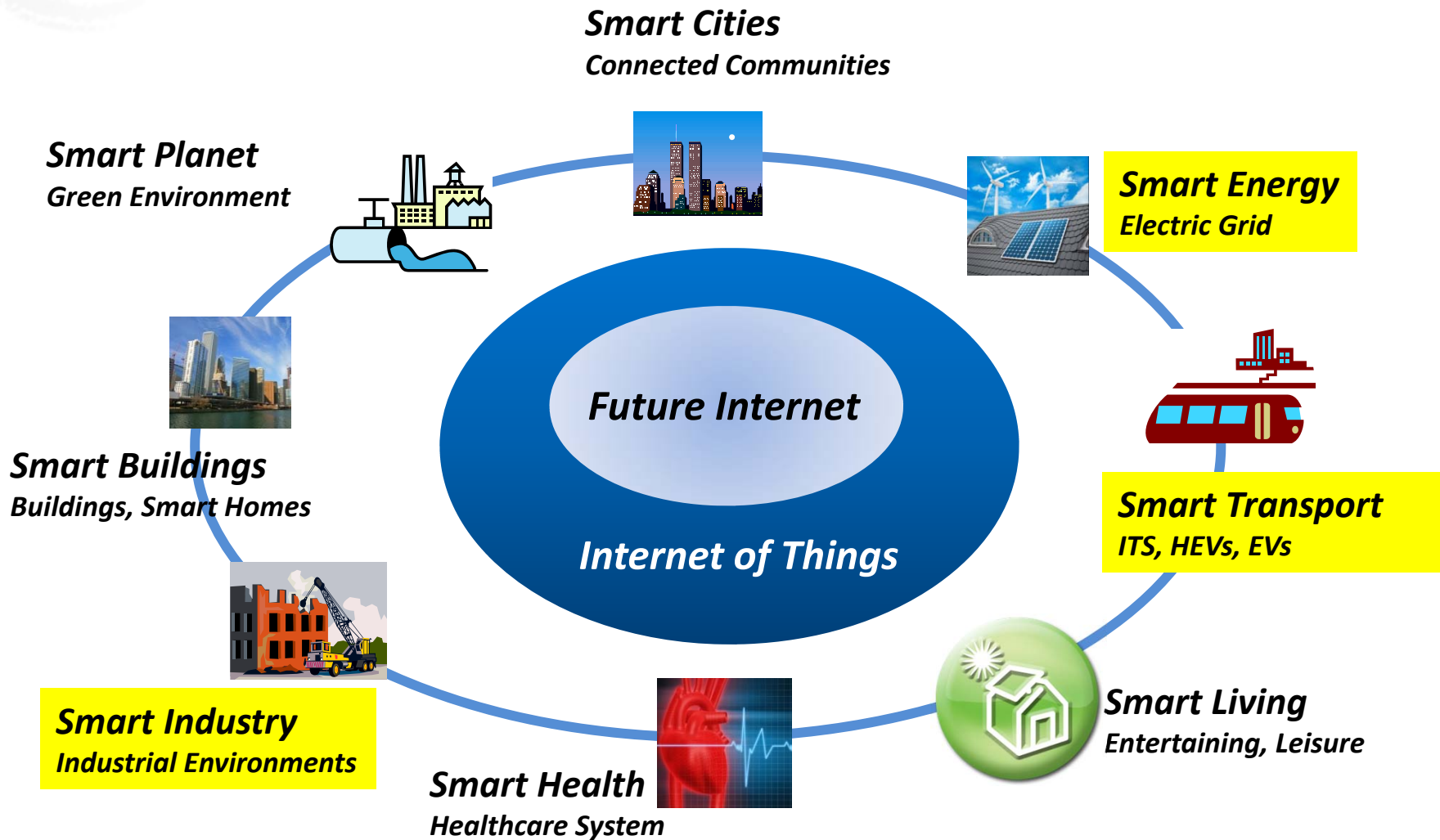3) Software services of custom BIOS and EOS support of Windows, Linux and Android

Embedded Systems and Connectivity for Vertical markets Development

Integrated rich IO and Ethernet-base technology to be a solution providers

1) Integrated industrial network technology toward IoT/M2M smart industries

2) Synergy with vertical partners/suppliers to enrich our products on target industries

3) Emphasize on certificates of transportation, energy, Marine and Hazardous location

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Customer and Markets

Smart Cities
Connected Communities

Smart Planet
Green Environment

Smart Energy
Electric Grid

Smart Buildings
Buildings, Smart Homes

Future Internet

Internet of Things

Smart Transport
ITS, HEVs, EVs

Smart Industry
Industrial Environments

Smart Living
Entertaining, Leisure

Smart Health
Healthcare System

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Design to Manufacture Services

Focus on large accounts and specific vertical markets

1) Design of complex customer platforms that mix COTS, custom boards, displays and I/O components
2) handles all aspects of supply-chain management to ensure flawless, on-time product build and delivery
3) Offers its customers comprehensive and on-going support throughout their product life cycle
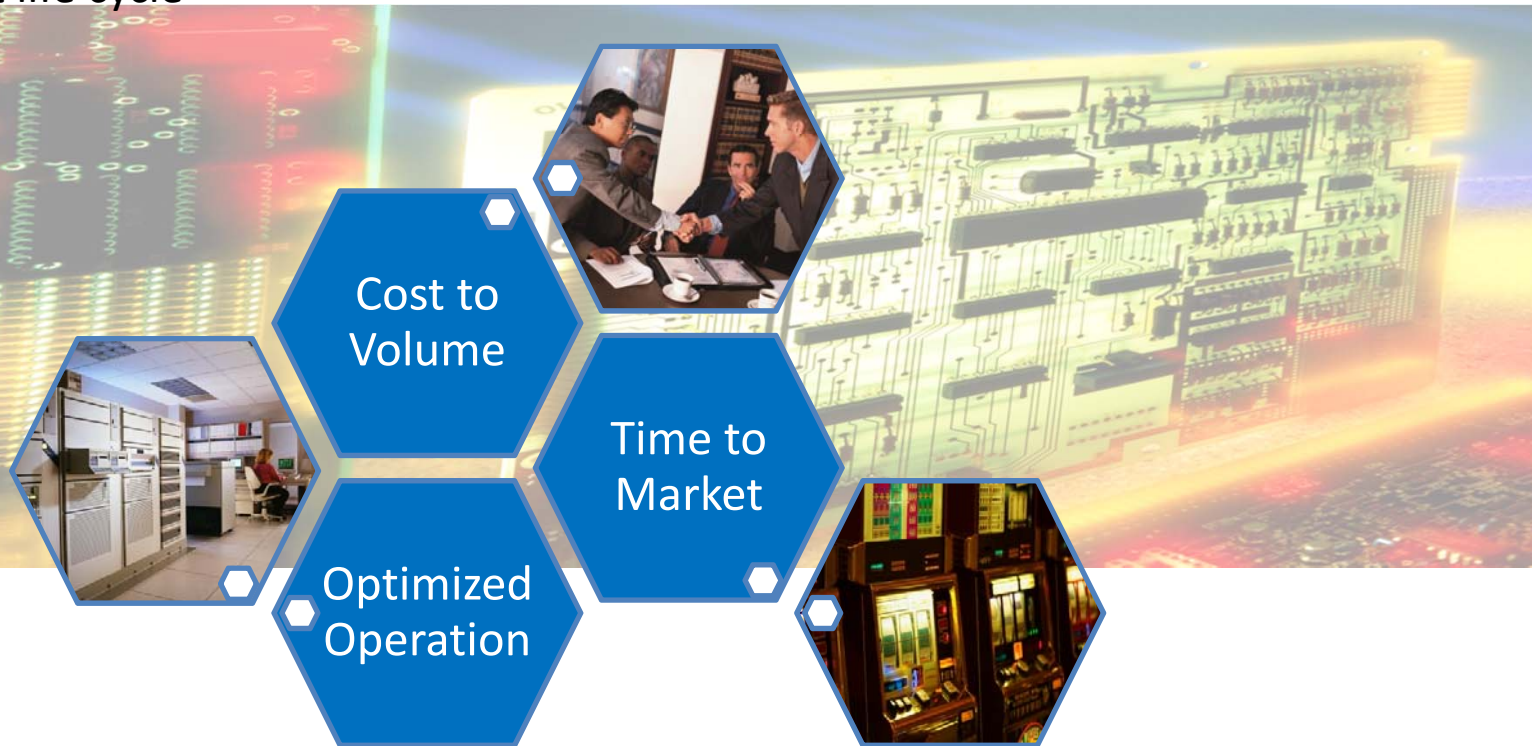
Cost to Volume

Time to Market

Optimized Operation

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2010 to '13 Sales Performance
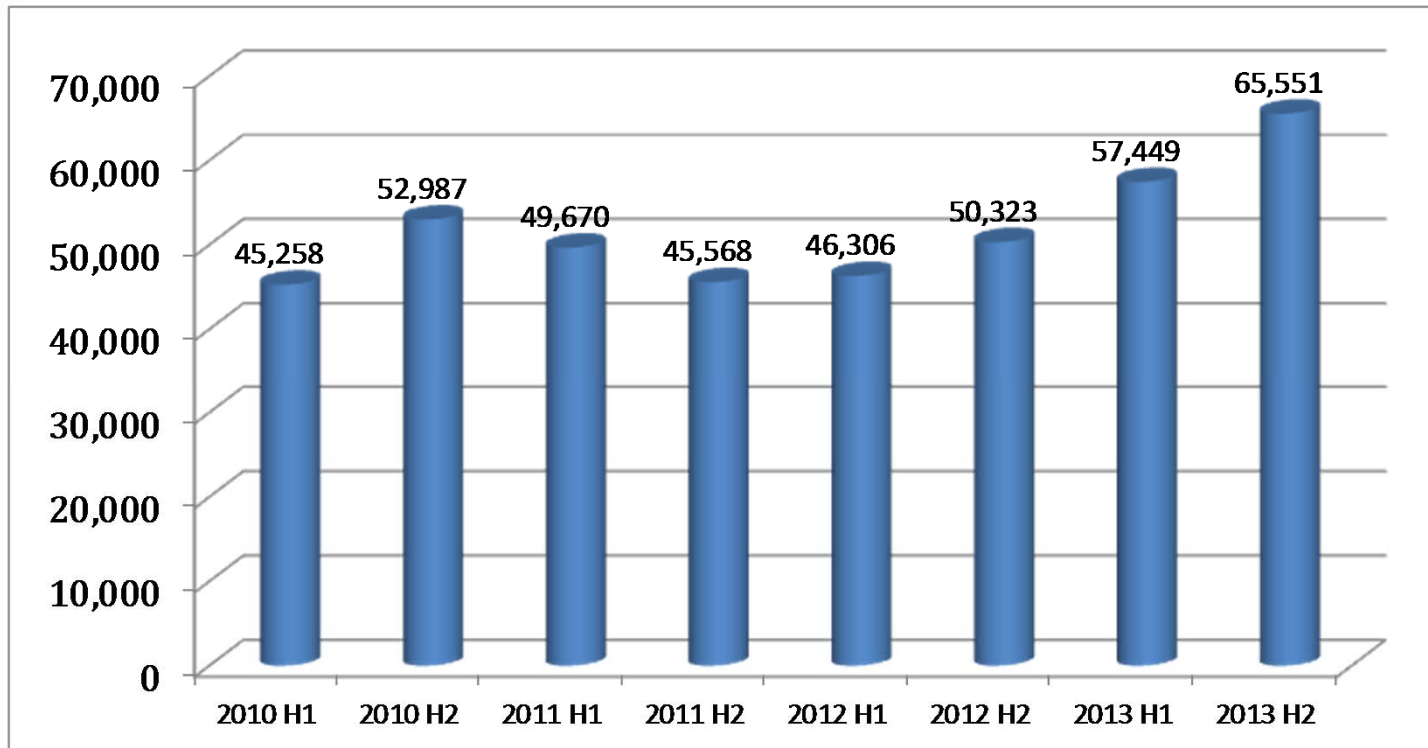
Year	2010		2011		2012		2013	
	H1	H2	H1	H2	H1	H2	H1	H2
Revenue (K USD)	45,258	52,987	49,670	45,568	46,306	50,323	57,449	65,551

OBM/ODM Ratio

ODM, 35%

OBM, 65%
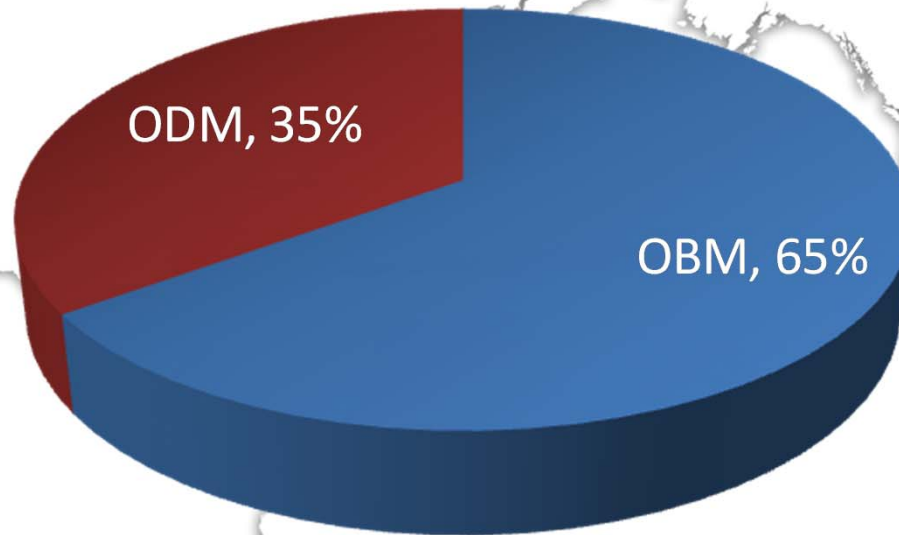
OBM: Original Brand Manufacturer
ODM: Original Design Manufacturer
100% consolidated revenue

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Product Segment

- Embedded Boards and SoMs, 13.5%
- Industrial Network, 21.5%
- Panel PC and Display, 12.0%
- Embedded Systems, 53.0%

100% consolidated revenue

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OBM - Sales Region
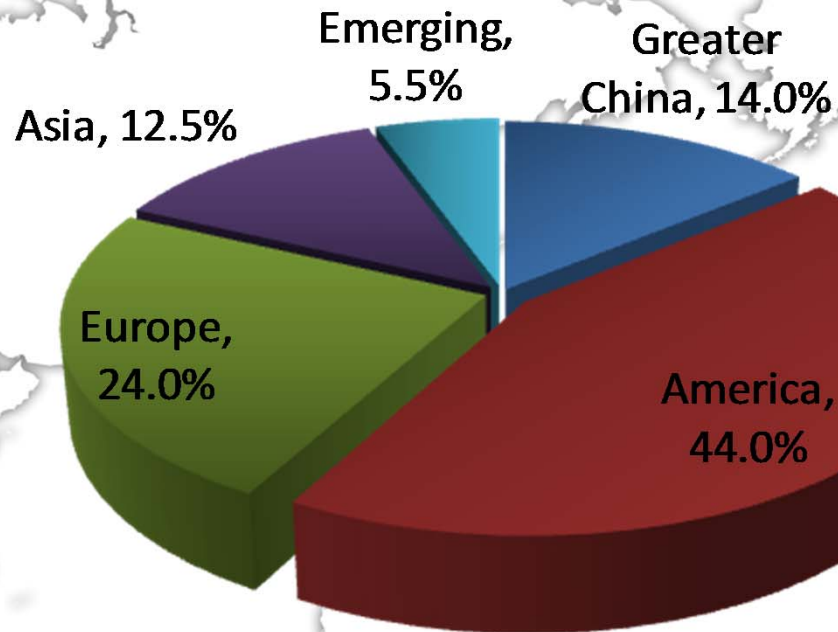
65% of the consolidated revenue

ODM – Application Industry

Gaming, 42%

Industrial Network, 28%

NA, 8%

POS/Lottery/Voting, 22%
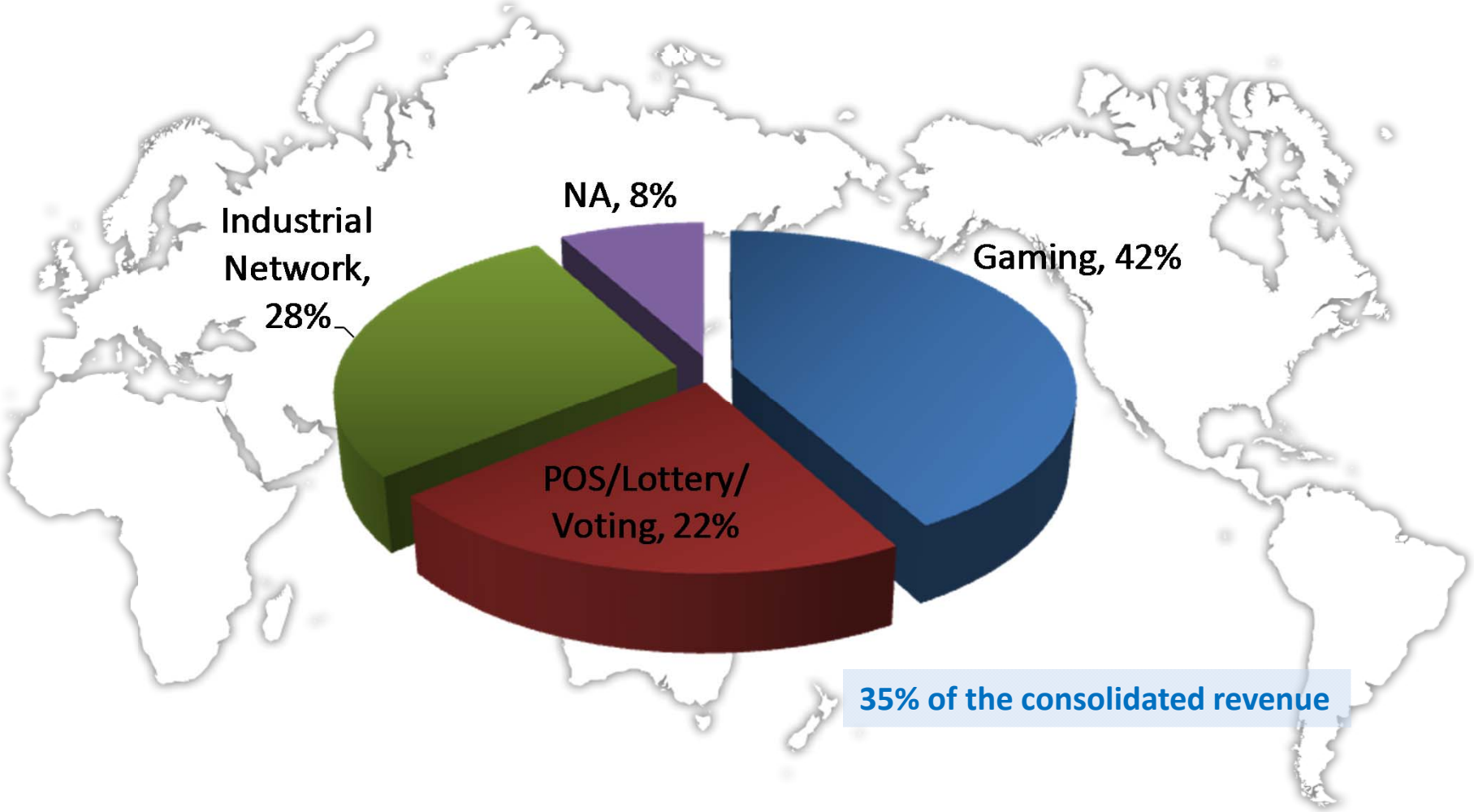
35% of the consolidated revenue

Axiomtek's Seven Products Won the "Taiwan Excellence 2014" Award

2013 Global Conference in Prague

Thank You