2017 Taiwan ICT Introduction

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Taipei Computer Association (TCA)

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@Thailand
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Taiwan is known for...
✓ The Major Procurement Center for Global ICT Companies & Buyers
✓ Ranked 1st in Worldwide Major ICT product market share for more than 10 products

- Land Area - 36,193 km²
- Population - 23.43 million (70% resided in urban area)
- Household - 8.38 million
- Per Capita Income (2015) - US$ 22,632 (GNP) - US$ 39,600 (PPP*)

**ICT Penetration Rate**
- PC: 88.4%
- Internet: 84.8%
- Mobile Phone: 113.2%
- Smart Phone: 65.4%
- Digital TV / STB: 78.9%

*PPP = Purchasing Power Parity

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, Department of Statistics, MOI, NCC, III-FIND, compiled by MIC, April. 2015
### Worldwide leading ICT products Made by Taiwan

#### 2015 World TOP 3 Taiwan ICT Industry/Product

<table>
<thead>
<tr>
<th>World No. 1</th>
<th>World No. 2</th>
<th>World No. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ MotherBoard (89.9%)</td>
<td>➢ IC design (22.1%)</td>
<td>➢ LCD monitor (22.0%)</td>
</tr>
<tr>
<td>➢ Notebook PC (80.9%)</td>
<td>➢ (&gt;10 in) TFT LCD display (21.2%)</td>
<td></td>
</tr>
<tr>
<td>➢ Desktop PC (27.5%)</td>
<td>➢ (&lt;10 in) TFT LCD display (20.3%)</td>
<td></td>
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<tr>
<td>➢ Server (17.3%)</td>
<td>➢ IC Substrate (26.7%)</td>
<td></td>
</tr>
<tr>
<td>➢ Wafer Foundry (70.3%)</td>
<td>➢ Tablet (42.6%)</td>
<td></td>
</tr>
<tr>
<td>➢ IC Packaging and Testing (54.2%)</td>
<td>➢ xCable CPE (80.2%)</td>
<td></td>
</tr>
<tr>
<td>➢ xCable CPE (80.2%)</td>
<td>➢ DSL CPE (63.0%)</td>
<td></td>
</tr>
<tr>
<td>➢ WLAN (62.4%)</td>
<td>➢ WLAN (62.4%)</td>
<td></td>
</tr>
<tr>
<td>➢ Portable Navigation Device (71.7%)</td>
<td>➢ Portable Navigation Device (71.7%)</td>
<td></td>
</tr>
<tr>
<td>➢ PCB (28.7%)</td>
<td>➢ LCD monitor (22.0%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: [mic.iii.org.tw](http://mic.iii.org.tw)
Contribution of ICT Industry to Taiwan’s GDP

ICT Industry Percentage in terms of Contribution to Taiwan’s GDP, 2000 - 2012

- ICT's Share: 10.2% 9.4% 10.7% 12.1% 12.4% 12.5% 13.8% 13.5% 13.4% 12.6% 13.3% 13.0% 12.8%

Source: DGBAS, compiled by MIC, January 2014

- According to the statistics from DGBAS (Directorate-General of Budget, Accounting and Statistics), Executive Yuan (Taiwan), Taiwan’s ICT industry accounted for 12.8% of the total GDP in 2012.
IoT (Internet of Things) brings global digital nervous system

- Global internet device from 1 billion in 2016 to 14 billion by 2022
- By 2030, 25 billion active people have "smart" devices
- IoT is Internet of Everything
- The key index for development of IoT: information security, data, profiling, business intelligence, machine learning, visual analytics, big data, the cloud, machine-to-machine, communication and sensors.
Solid ICT infrastructure established

Source: mic.iii.org.tw
Taipei’s Potentials for Smart City Development

- **Neihu Technology Park & Nankang Software Park**
- Neihu Technology Park: Over 4,400 Technology Company • Annual Revenue over 4.2 Trillion NTD
- Over 70% citizens have mobile devices; 80% Internet Penetration Rate.
- Ecosystem: R&D, Design, Manufacture, International Trading Network
- Collaborating stakeholders to make Taipei evolve into international smart city
IoT Innovation Living Lab

- Provide basic resources, cultivate creativity through incubator.
- Using IoT innovation to meet citizen’s demand.

**LoRa IoT Experimental Platform**
- Free platform for experiment with coverage
- Spanning the entire Taipei City
- Low energy consumption, long distance, short data

**Air Box-300 Environment Sensors**
- Distributed to city elementary schools, given to developer communities and the public
- All data made public after collection

**IgniteNet IoT Platform**
- Sensors given to citizens and installed on vehicles
- Analyze car’s route and speed along major and secondary thoroughfares

**AoT Integrated Sensors**
- Traffic flow analysis
- Analyze the effects of climate and humidity on traffic

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**Smart Transportation**
**Air Quality Sensors**
**Smart Home**
**Smart Care**
**Other Smart Applications**
Taiwan: Open Innovation System

The Open Innovation System of Taiwan ICT Industry

Vertically Integrated Industrial Clusters

OEM → ODM → OBM

Network

Innovation

Knowledge

Human Resource

Education

Entrepreneurship

Skill

Globalization

Information

e-Connection (Logistics)

Gov Stimulus Plans

R&D Strategic Alliance between businesses

Public R&D Program Support & Technology Transfer

Multinational R&D Centers

Global Supply-Chain Management

Source: mic.iii.org.tw
Taiwan’s Industry Seeks for New Opportunities

**Vision**
- Foreseeing Trends, Building Quality Industry

**Trends**
- Intelligence
- Green
- Culture & Creativity

**Core Themes**
- Foster emerging industries
- Secure core industries
- Revamp traditional industries

**Strategies**
- Foster New Industries: Promote efforts for emerging industries
- Expand Service Breadth: Develop total solutions
- Bridge Gap to Success: Strengthen strategic supply chains
- Uphold High Value: Increase product quality and value
- Support Hidden Champion: Support hidden champion to grow

**Policy**
- Setting up fair taxation systems, fund raising, talent fostering, land revitalization and reuse and infrastructure establishment

Source: mic.iii.org.tw
Taipei Computer Association (TCA) Introduction
Taipei Computer Association

The Representative of Taiwan’s ICT Industry

- **Date of Establishment**: November 5th, 1974
- **Current Chairman**: Tsu-Hsien Tung (Founder & Chairman of PEGATRON)
- **Regional Offices**: Taipei, Taichung, Kaohsiung
- **Overseas Branches**: Tokyo, Suzhou, Guangzhou
- **Members**: 4,000+ (including top 100 ICT companies exAcer, ASUS, representing 80% of Taiwan’s total ICT production value comes form TCA members)

ICT Production value:

- **1974**: US$50 million
- **1981**: US$120 billion

Number of TCA Members:

- **1974**: 15
- **2010**: 4,000+

**Pie Chart**

- 50% Hardware, Peripherals, Information Appliances
- 30% Telecom, Internet Service, Retail, E-learning, E-commerce, Publish Digital Documents
- 20% Commercial Software, Internet Software, Communication, Multimedia, ASP/ISP

**Further Details**

- **History**
- **Growth**
- **Member Composition**

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Board of Directors

- Canon
- PEGATRON
- ANJO
- HTC
- ASUS
- SYSTEK
- Delta
- Acer
- Gigabyte
- IBM
- Epson
- HP
- Microsoft
Our Service

OUR MISSION
1. Unify our members
2. Development of the Industry

Industry
1. Business Alliance
2. Exhibition
3. Promotion through Internet

Consumer

Government
Lobbying

Society
Along with the policy suggestion, we gathered the companies that are involved in the same field to form business alliances, now we have more than 40 alliances.
Engaging Business and Marketing the Industry

To Educate Market, To Expand Business
Annually Attracted Over **3.6 Million** Visitors

<table>
<thead>
<tr>
<th>Month</th>
<th>Exhibition</th>
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<tbody>
<tr>
<td>Jan.</td>
<td>Taipei Game Show</td>
</tr>
<tr>
<td>Feb.</td>
<td>Smart City Summit &amp; Expo</td>
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<tr>
<td>Apr.</td>
<td>Spring Computer Show</td>
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<tr>
<td>Jun.</td>
<td>COMPUTEX TAIPEI (B2B)</td>
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<tr>
<td>Jul.</td>
<td>Taipei Computer Applications Show</td>
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<tr>
<td>Sept.</td>
<td>Digital Taipei</td>
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<tr>
<td>Dec.</td>
<td>IT Month</td>
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</tbody>
</table>
APICTA – Asia Pacific ICT Alliance, is an alliance of national ICT organizations representing their respective economy to build and enhance a mutually cooperative network to promote ICT, enhance technology innovations, capability and adoption, and encourage the development of indigenous ICT solutions for the global market.
“the Driving Force of Taiwan ICT Industry & a World-class Industrial Association”
2017 Taiwan ICT Promoting Delegation Introduction
Smart Integrated Enterprise Solution

**Enterprise**
- knovia: Human Capital Management
- Openfind: Enterprise email Cloud Solution
- Phantosys: Intelligent Desktop Virtualization
- DATA8SUN: ERP Cloud
- STRAAS: Video Streaming Platform
- mobile mind: Mobile Middleware & Security Platform

**Smart Cloud**

**IOT & Industry 4.0**
- TUTK: IOT platform with P2P live streaming, recording, data collection
- INFINITIES: IOT Cloud Platform
- NETCHAIN: Wi-Fi Network & Security Solution
- EMO: MES Solution
- Big Data