



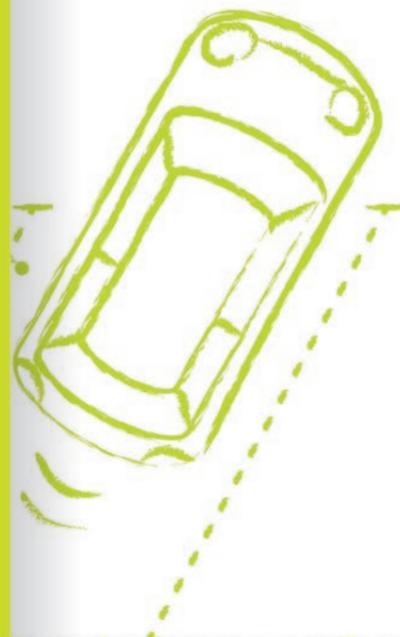
Toward a Sustainable Future ▶



INSTITUTE FOR INFORMATION INDUSTRY  
2016 ANNUAL REPORT



We are navigating a *clear decisive line* through tough conditions, taking effective action **TODAY** while creating strong foundations for growth **TOMORROW**.



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## Fulfilling Social Responsibility and Cultivating New Talents

Institute for Information Industry (III) is committed to creating a high-quality professional environment and happy working atmosphere. We have attracted high-caliber talents to work for us and motivated them to challenge their capabilities, and we have received-for two consecutive years-acclaim for Outstanding R&D Substitute Military Service Employment.

Taking care of the physical and psychological well-being of our employees is the key to help them balance between work and life as well as improve their productivity. By sponsoring various fitness programs, including health related seminars, III encourages an active life style for all its employees. Every year, III holds family-friendly excursions, family sports competitions, and other outdoor activities to strengthen team building, networking opportunities, and healthy social relationship.

Social responsibility is part of III's culture. We sponsor charity events, such as One-Day's Pay Donation, in response to the Tainan Earthquake, Endless Compassion, a blood donation drive to boost Taiwan's blood bank. We also organized or participated in various social services, such as beach cleaning, volunteer work for the mentally impaired, and others. III employee, Dr. Gann Chung-Wei, also the Chairman of Hope of Vision Association Taiwan, negotiated for the rights to many films so that they can be narrated to the visually impaired, allowing them to enjoy the language and imagery of films.

III is also dedicated to cultivating core professional skills in our employees and has to this end established 6 integrated training programs, including newcomer training, core-competence training, professional technical training, management training, career-advancement training, and international-talent training. Each program corresponds to a specific area of job functions. For international talent training, outstanding employees are selected and sent abroad to various research institutes around the world to participate in short-term projects with durations between 3 to 12 months. This program allows the employees to hone their R&D skills, while strengthen III's international connections and collaborations.

For example, in 2016, several of III's outstanding employees were sent to the trial site of TOYOTA's Driving Safety Support Systems, where they learned how to conduct accident analysis, experiment-performance analysis, and full-site experiment. With this experience, III is developing vehicle-and pedestrian-safety solutions based on accident analysis and cutting-edge technology, using simulated locations in Kaohsiung City.

Other than R&D projects, the international-talent training program also sponsors international business development skill. In the past few years, III employees were sent to Myanmar to consolidate resources of local communities and business associations, and to promote Taiwan's home-grown IT solutions. These programs hone the business development skills of our team, enrich their experience, and expand their horizon. At the same time, it also help Taiwan's IT industry explore new markets.



Education (%)	
Doctorate	10
Master's	66
Bachelor's	19
Associate Degree & Others	5



Occupation Category (%)	
R&D	62
Industry Development	22
Administration	15
Cross Category & Uncategorized	1

Data prepared: June 1, 2017

## Promoting Patent Portfolios and Value-Added Applications

As a major provider of integrated software-hardware technologies and solutions, III assists Taiwan's ICT industry to keep up with the global advancement of digital economy, and help bring their products to the international markets by licensing our technological innovations to increase their competitiveness.

It is our aim to fully commercialize and industrialize our scientific and technological advances. For example, as we mastered the essential aspects of wearable technology, we rallied various parties of interest in the industry to form the Smart-Glasses Alliance for the purpose of exporting Taiwan-made smart glasses (which won us a USD 10 million order from HP) and widening the application of wearable technology. In addition, we help design a model of safety-helmet glasses for China Steel Corporation, and an orthopedic surgery glass for Show Chwan Health Care System affiliated hospitals, reducing surgery time by 30%. In the last three years, we have licensed 381 technologies to various industries and helped attract investment of NTD 16.5 billion. In 2016, our revenue from technological licensing reached NTD 170 million (16.5% of our research and development budget), 6 high-value technologies were licensed for over NTD 5 million each (fig 1).

### Patent Analysis and Portfolio Strategies

Since 2016, III has employed comprehensive patent analysis and consolidate strategic-portfolio building: a dedicated team of patent experts are assembled to assist engineering teams in patent applications and related consultation. To increase the practical applications of our patents, consideration were given to the most likely countries/regions of their uses, and from the perspective of our competitors. In the past three years, an average of 271 patents were filed each year, with a 1:2 ratio of domestic to international patent applications in 2016, and with 99% for inventions and 1% for utility-model patents. The 10 top areas of our patents are: LTE wireless network, LTE wireless interface layer, WLAN, word-processing/translation, complex event identification, data-security threat detection, mobile-application systems/methods, routing protocol, and big-data analysis service.

### Quality Patents

In order to propel the application of patented technologies, III builds its technology and product patents in strategic categories to form patent portfolios (fig 2). Specifically, we build thematic patent portfolios in the fields associated with important industry trends such as cloud computing, mechanical-device communication, device-to-device direct communication, and Integrated Telematics System. III promotes the licensing of its patented technologies to Taiwan's IT industries through its website, press conferences, guest visits, and other information sharing exhibitions.

An avid proponent of building valuable patents and applying them in industries, III participates in the annual invention contest of Taipei International Invention Show and Technomart. In 2016, our patent "Testing Device and Testing Method Thereof" received the highest prize (platinum award) out of 800 entries. Two other III patents, "Method and Apparatus for Filtering Vibration Signal of Machine and Computer Readable Storage Medium for Storing the Method" and "Method for Processing Time Series and System Thereof," also received silver and bronze awards, respectively.

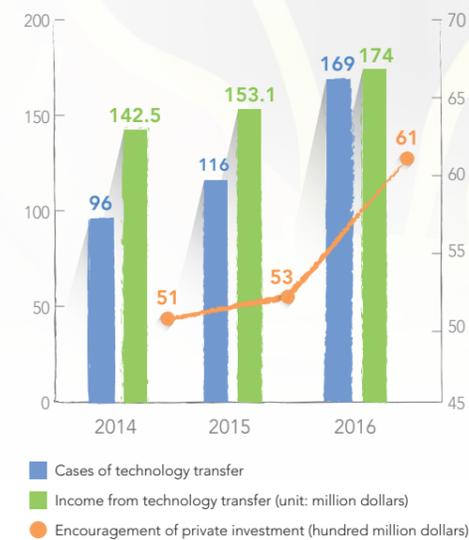


Fig. 1: Cases of technology transfers and income over the past 3 years

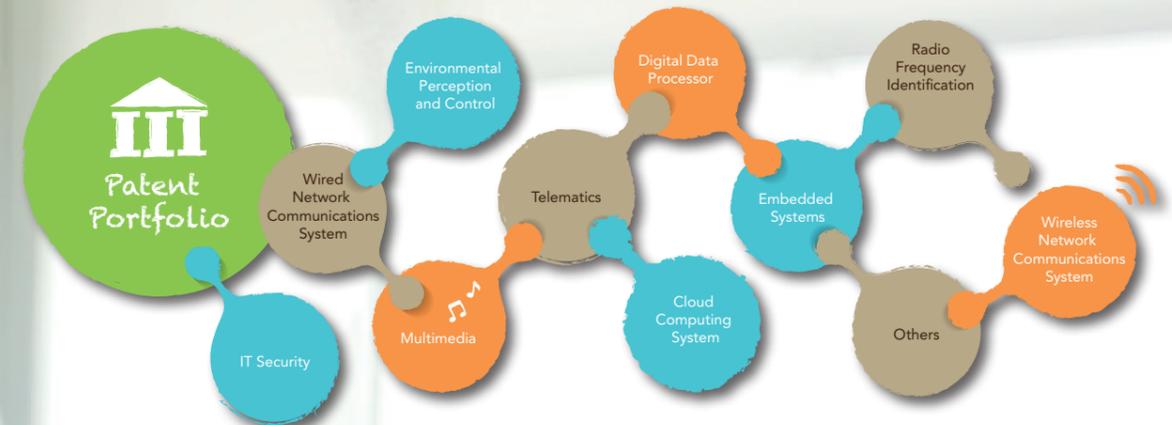


Fig. 2: III Patent Portfolio

Table: The number of national and international patent applications and certified applications over the past 3 years.

Country / Area	2014		2015		2016	
	Number of applications	Number of certified applications	Number of applications	Number of certified applications	Number of applications	Number of certified applications
Republic of China	74	98	86	101	92	88
People's Republic of China	86	29	64	13	80	32
Hong Kong	0	0	0	1	1	0
Japan	9	5	7	3	3	7
Korea	0	12	3	6	0	1
Thailand	0	0	1	0	0	0
Philippines	0	0	2	0	1	0
Malaysia	0	0	0	0	1	0
United States	84	61	83	31	100	59
Canada	3	3	2	1	1	2
European Union	3	2	7	0	5	3
United Kingdom	6	5	5	1	2	3
Germany	1	0	0	1	0	0
France	0	1	0	0	0	1
Switzerland	0	1	0	0	0	0
Finland	0	2	0	0	0	0
Netherlands	0	1	0	0	0	0
<b>Total</b>	<b>266</b>	<b>220</b>	<b>260</b>	<b>158</b>	<b>286</b>	<b>196</b>

# Integration & Transformation

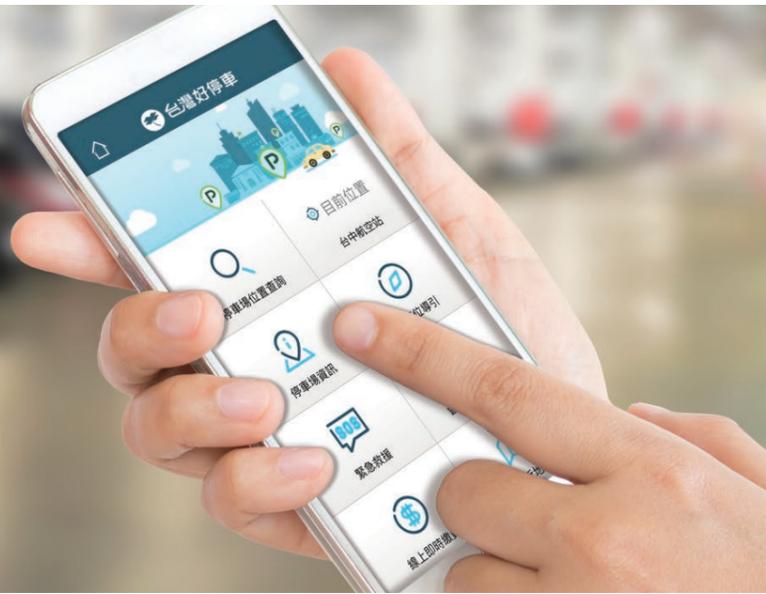
## Software-hardware integration

Digital economy is characterized by the combination of advanced digital technologies, cross-domain integration and innovative service models, which is bound to reshape the structure and values of products & services to the years to come.

Software-hardware integration facilitates such a paradigm shifts, and will be the new focal points for building smarter systems and boosting competitiveness.

## Smart Parking Makes Parking A Breeze!

**X**-Parking, a smart parking solution, was developed by III and incorporates two key technologies-“smart sensing” and “indoor dynamic navigation.” The solution integrates various software components, hardware devices, and vehicles information through multiple communication technologies, providing customers with innovative services through a smartphone app that includes dynamic parking-spot navigation, dynamic parked - location navigation, emergency assistance, anti-theft for registered users, entertainment/news broadcasts, and online payment. It is the world's first integrated smart-parking service that combines convenience, safety, and energy conservation.

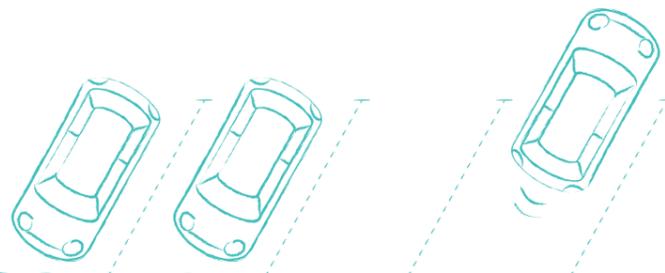


X-Parking was first deployed at the underground parking facility at Banqiao Station. The service's outstanding performance has attracted many foreign interests in investing in parking-management companies using X-Parking technology with the intention of introducing the system to Japan, Malaysia, Singapore, etc. The domestic parking-management industry also intends to introduce the service to northern and central Taiwan. So far, X-parking has been deployed at 6 parking facilities, including Taichung International Airport, National Taichung Theater, and Xinzhuang Sports Park.

The core technology of X-Parking System has already received two awards from the 2016 APICTA Awards and the 2016 Taiwan Cloud Computing and IoT Association.

It was also granted 4 international patents in the Netherlands, U.S., Taiwan, and Mainland China. Banqiao Station, which has deployed the X-Parking system, also received the Golden Thumb Award.

Looking forward, III will continue its collaboration with the hardware and software vendors to provide innovative integrated solutions with an eye toward the international market. Possible application areas for the precision indoor-navigation systems include retail and healthcare.



## With WebHound, No More Hacker Scares

**III** has been developing WebHound information security threat analysis and surveillance technology, which helps companies conduct internal threat analysis and malevolent behavior tracing. WebHound can be installed on premise in the companies' internal gateway and/or network servers. It executes highly efficient automatic pattern analysis on web server access log to identify potential cyberattacks, providing large companies with high defense capability against information-safety risks. For medium and small companies without in-house IT infrastructure, WebHound provides a cloud service alternative at the expense performance.



Attack pattern gathering is an important element in any cyberattack countermeasure. WebHound incorporates an automatic attack pattern gathering technology, obviating the manual process of information gathering and allowing the system to accommodate more and more new attack patterns and thus the robustness of the defense. The system also provides enough feedback to allow manufacturers of information security products and SOCs to strengthen their security measures.

WebHound technology has been licensed to Trend Micro, a technology leader in cybersecurity. Patents for WebHound technology have been filed in Taiwan, U.S., Europe, and many other countries. So far, WebHound has detected 4 real life information security incidents and has been instrumental in both forensics and crisis management, reducing the response time by more than 90%. The system also identifies offending source IPs often overlooked by security personnel, thus significantly improving the efficacy of managing information security incidents.

## Made in Taiwan, Taiwan ICT Solutions deployed in Central America and Africa Successfully

Targeting the regions of Central America and Southern Africa, III has successfully promoted Taiwan's home-grown solutions for traffic control systems, e-Government services and internet infrastructure to these regions with a total revenue of 150 million NTD (5 million USD). These projects also led to the establishment of our first field office in Africa.

In Swaziland, a 24/7 real-time traffic control system is deployed to manage one of the most dangerous roads in the world. IP cameras and Changeable Message Sign (CMS) systems are set up along the expressway and the data are carried by optical fibers to the backend cloud servers, which provide GIS-based real-time information to the control center, allowing the proper authority to react instantly to hazardous conditions such as traffic accidents or bad weather by adjusting messages on CMS and dispatching emergency personnel to the scene. With the first field office in Africa, our consulting service is able to advise Swaziland government in planning and executing the upgrade and migration of their National Data Center further enhancing the business opportunity for server related purchases from Taiwanese vendors.



10,000 km away from Swaziland, Taiwanese solution providers also find their footing at Saint Vincent and the Grenadines (SVG) and Saint Lucia. By integrating several software components, III help build SVG government's e-document system, by adopting the hybrid architecture of "Foreign Certificate Authority (CA) + Local Registration Authority (RA)" for system management. In San Lucia, the integrated solution provided by Taiwanese Wi-Fi system vendors mapped out the wireless backbone of the country's internet infrastructure, which is now under construction. The widespread Wi-Fi hotspots throughout the country are expected to benefit millions of students and visitors on this tourism-oriented island.

Increasingly, components or partial solutions command less and less value, particularly in the ICT field. Only total solutions tailored to the problems at hand can command a premium. Taiwanese ICT vendors have been very successful in offering components or partial solutions, particularly in the hardware area. But in today's competitive landscape, that is not nearly enough. With the successful implementation and deployment of these projects, it is expected that a new thinking and new trend of providing integrated total solutions will take hold in Taiwan's ICT vendors.

## Smart Campus, Innovative Education

III has always been committed to the provision of integrated smart-campus solutions. Since 2014, we have helped major E-learning enterprises explore the new market of smart campuses, going from smart-learning and smart classrooms to creating integrated smart-campus solutions, including iLearning, iSocial, iGovernance, iManagement, iHealth, iGreen, etc. Through expansion to the ASEAN and emerging economies, our work has helped Taiwan play an increasingly important role in the global arena.



By incorporating teaching content from live-streaming classes participated in by more than 10,000 students and 100 schools-enabled by the alliances between domestic and international smart campuses and smaller schools-we integrated resources from 50 domestic educational institutions and forged 10 innovative alliances. Transcending long distances, scarcity of resources, and infrastructure, we bring innovative O2O experience, long-distance teacher training, stratified live-streaming curricula, and shared class schedules to campuses in remote regions. At the same time, we deliver innovative applications to educational programs through educational resource-sharing solutions, such as Maker Education and VR training.

The development of smart campuses in the future entails the creation of demands and scenarios by schools themselves for the application of innovative educational services, while vendors and service providers in the industry will assist in developing relevant products to be tested on campus and adjusted as needed. While the realization of smart campuses will undergo large-scale testing, the development of the projects will be based on the collaboration between schools. Under the principle of resource sharing, smart-campus services will allow more teachers and students to sustainably make more progress in the various dimensions of innovative education.



## Global Presence and Experience

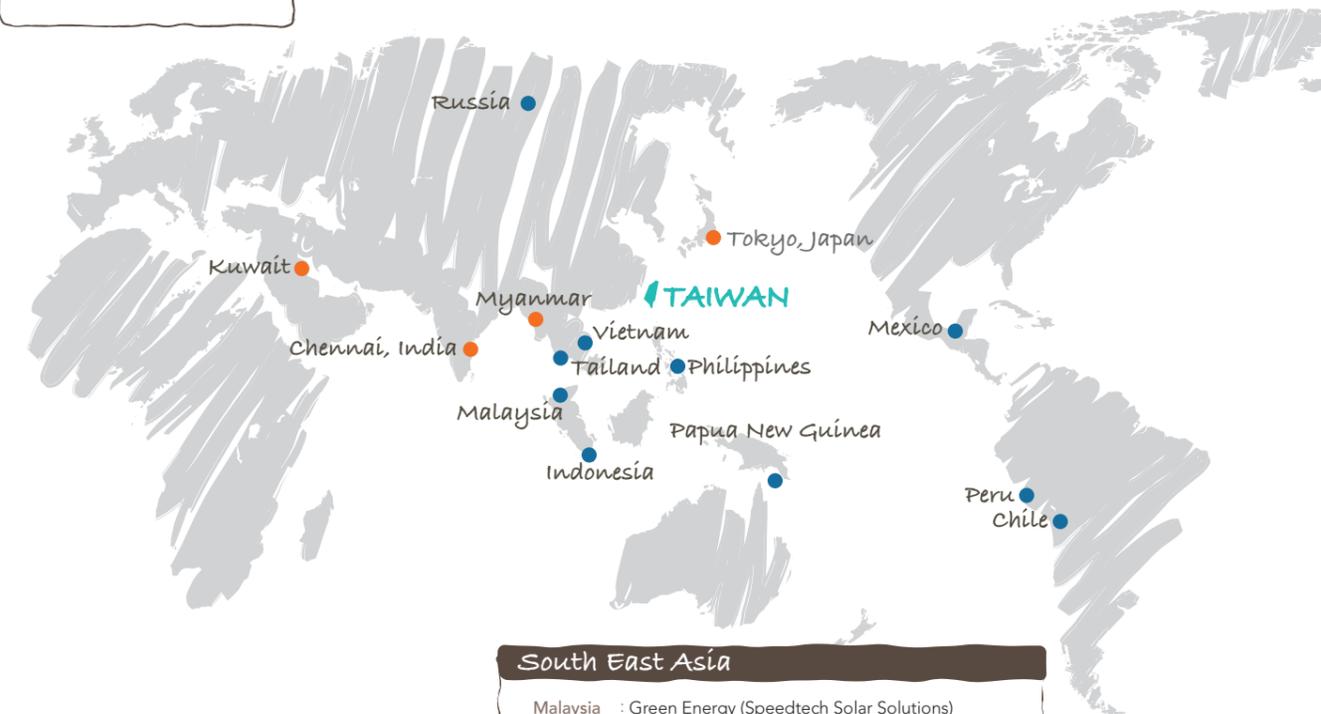
In order to actualize the vision of "Techno-Cultural Synergy, Innovation Unbounded", III actively engages in international collaboration to advance cutting-edge technologies and to elevate her R&D capabilities. III works with Taiwan's ICT industry to build an integrated marketing platform, aiming to accelerate business development in the regional markets of Southeast Asia, India, the Middle East, Africa, Japan, and Greater China, to name just a few.

**Eastern Europe**

- Czech Republic
  - Appointment/Registration System
  - iiiGuide Solution
- Poland
  - iiiGuide Solution

**Caribbean & Central America**

- St. Lucia
  - e-document
  - PKI system
- St. Vincent
  - Consultancy for ISO 27001 (Info Security)
  - Programming Training



### Global Presence and Experience

- Headquarters
- Global Office
- ADOC Project

**South East Asia**

- Malaysia : Green Energy (Speedtech Solar Solutions)
- Thailand : E-Govt Exchange Training Program
- Singapore : ATE (Auto Test Equipment) Station for SMRT (Singapore Mass Rapid Transit)
- Vietnam : E-Govt Consulting for Ministry of Communication

**Middle East & Africa**

- Bahrain : E-Govt Training Course and Workshop
- Saudi Arabia : Healthcare Training
- Kuwait : ICT & Science Park Consulting, GIS Training, Attendance System
- Oman : Virtual Innovation Center Consulting
- Swaziland : Network Forensics Training, Mobile Commerce Consulting
- Burkina Faso : ICT Training

## INTERNATIONAL COLLABORATION

III engaged in international collaboration projects, bringing benefits of its engineering expertise and management skills to ICT projects across the globe.

To support internationalization of Taiwan's ICT & information service industries, III expands its global network and develops exchange platforms to create business opportunities through collaborations with significant strategic partners. Promoting international collaboration and business as well as bridging the global digital divide are III's main goals.

The focus of collaboration is to expedite R&D undertakings, research progress and the expansion of joint international technology research through close collaboration with foreign enterprises and research institutes to advance technology, set technological standards, and elevate the competitiveness of ICT applications

To boost international business for Taiwan's ICT and information service industries, III cultivates professional talent for the domestic industry, promotes business incubation, market development, and technology exchanges. Besides supporting businesses, III also works closely with the government to help bridge the global digital divide by setting up more than 100 APEC Digital Opportunity Center (ADOC) for the disadvantaged people in many regions throughout the world. Besides achieving its intended goals, the ADOC network also helps promote the visibility of Taiwan's ICT technologies and their penetration into the emerging markets of the Asia Pacific region.

III has also been active in promoting the exchanges and cooperation between Taiwan and Japan, for both private enterprises and local governments, based on the principle of reciprocity and mutual benefits with an aim to invigorate local economies as well as create win-win situations for both countries. To date, many new technology alliances have been forged between the enterprises of the two countries, and there is a significant increase of Japanese investment in Taiwan's technology sector due to such effort, and this trend will be continued.

## International Partners

III has partnered with the leaders from Governments, Industry and Academia worldwide to establish international networks and platforms for collaboration in both technology and business development to benefit all parties involved. With international partners and overseas offices in Tokyo, Kuwait City, and Chennai India, III is well connected globally, and primed to assist Taiwan's ICT industry in extending their global reach.

R&D Partners				
				
				
Business Partners				
				
Venture Capital Partners				



## International Research Cooperation

III collaborates with research institutes in the United States, Europe, Japan, and other part of the world for joint research and standard setting in areas such as smart cities, internet of things, 5G communication, and big data analytics.

In the recent years, under the support of the Ministry of Economic Affairs (MoEA) Taiwan, III has forged alliance with European research institutes and companies. Currently, III has maintained a close relationship with more than 30 EU research institutes such as INRIA, TNO, Fraunhofer, CEA-Leti and VTT, etc, and have participated or facilitated Taiwan ICT enterprises in more than 10 EU projects. In 2013, the IoT Forum was established and III was invited to become one of its founding members. Through this network, III's research teams also joined the EU-funded IoT projects in the area of Smart Energy and Smart Commerce.

There are 3 types of international research collaboration models that III engages in:

### Joint Research Collaboration

This type of research collaboration includes bilateral and multilateral international collaboration projects where individual participants contribute to the project goals collaboratively set by all participating parties, and each party is responsible for its own budget.

### Contract-Based Research Collaboration

III conducts technology research services, personnel training, and market analysis for international organizations and government agencies on a contractual basis.

### Talent Exchange

The purpose of the talent exchange is to give engineers from III and partner institutes exchange opportunities so that participants can gain new experiences, competencies and relationships. Talent exchange projects provide hands-on experience for engineers from both sides of the participating parties.

## International Business Collaboration

III, in cooperation with Taiwanese institutes and industry partners, endeavors to promote and deliver ICT technologies, solutions and services to the international markets. The focus of the business collaboration includes training, consulting services, proof of concept, proof of services, and proof of.

### Training and Marketing Events

III and our industry partners have conducted technology training and marketing events in many fields and topics ranging from e-Government, Smart City, Internet of Things (IoT), Cybersecurity, Big Data and Cloud Systems, to name a few.

### Proof of Concept/Service/Business

III and our industry partners have implemented many successful international proofs of service projects in the fields of smart agriculture, e-Marketing, smart energy solutions and e-learning.

### Project Consultancy Services

III and our industry partners have provided consultancy services for e-Government initiatives, Government network solutions, IT project management systems, reverse engineering workshop, and numerous other topics.

## Other Cooperation and Exchange

### Professional Cultivation

The goal is to increase the technology proficiency of ICT professionals in Taiwan and to help these individuals succeed in their personal careers by using the most effective learning methodologies.

III has been conducting ICT training programs to help provide skilled workforce for the rapid development of the information technology industry in Taiwan since 1979. With decades of experience in education and training, III has trained more than 460,000 professionals in various technical fields. The impact has spread to the government, academia and research institutions.

### Multinational Talent Exchange

To foster the continual growth and competitiveness of the gaming industry, III sets up an exchange platform for the young entrepreneurs and game developers in both Taiwan and Japan to collaborate and tap into one another's ideas and talents while instilling a sensitivity to and awareness of other cultures which are critical in gaming design for the global market. Coupling this platform with an incubation program, III helps aspiring young entrepreneurs to start their own business by providing necessary coaching in technical and management aspects of running a business as well as other assistance.

### Market Intelligence Consultancy

III's Market Intelligence & Consulting Institute (MIC) is positioned to provide intelligence, insight, and unique perspective on ICT industry which are necessary for our clients in the government and industry to make winning strategic decisions. In a dynamic ICT environment, its regional insight uncovers nascent trends and untapped opportunities-regional insight is the core competence of MIC's research.

### Research Reports

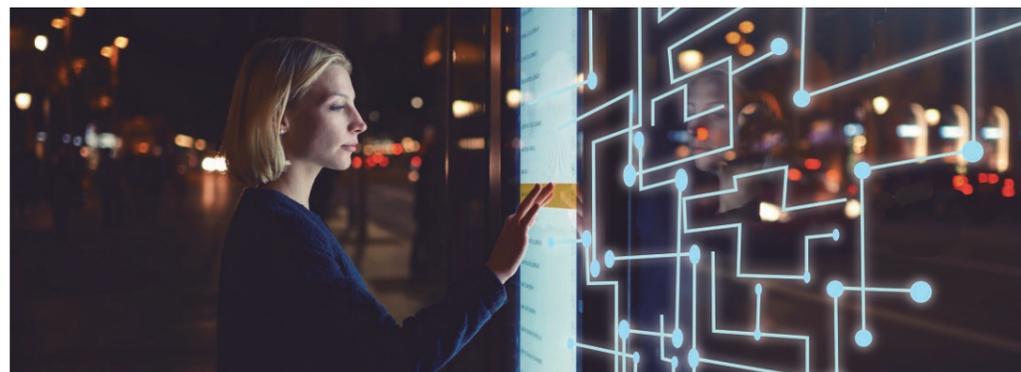
Research reports are available for purchase, which contain selected publications from our Industry Intelligence Programs. MIC's Research Reports are presented in several report types, including statistical reports, topical reports, and Monographs-a comprehensive collection of researches that help our clients to have a full spectrum of knowledge on various topics.

### Industry Intelligence Programs

MIC's Industry Intelligence Programs (IIP) are subscription-based programs that provide an in-depth look at a wide range of ICT sectors, including communication, computing, consumer electronics, and display. Subscribing to these programs is the best way for our clients to be kept informed of the latest industry development in their business area. IIP subscriptions are valid for one year and subscribers are also entitled to many of MIC's regularly issued practical and informative intelligence reports.

### International Events

As an internationally recognized advanced information society, Taiwan can be a development model for many countries aspired to quickly transform themselves into advanced information society. To this end, III organizes various events/ workshops to share the "Core Competence and Experience" with international partners, focusing primarily on government policies, R&D, business development, and entrepreneurship programs, etc.



Here are some examples:

#### · IDEAS Show

Launched in 2008, IDEAS Show serves as a significant annual event to cultivate entrepreneurship of innovative online services in Taiwan. Through a 6-minute demo/pitch, each team showcases their idea and business plan to a panel of veteran entrepreneurs, business owners and investors as well as media and a large audience, allowing them to gain publicity and press coverage, increase users, and most importantly attract investment. In the past 2 years, the IDEAS Show also partners with international incubators and global venture capitals, allowing the nascent start-up to gain international exposure, foreign investment and potentially international market. To date, this program has incubated more than 1,000 teams and accumulated a total investment of NTD 4.36 billion. III aims to provide the best support for startups and facilitate their development globally. This event has been recognized and sponsored by APEC since 2016.

#### · Smart City Delegations

European cities are normally densely populated with rich cultural life, active citizen participation, and highly developed and convenient public transportation systems. In the past decades, sustainability and low-carbon footprint figure prominently in the awareness and pursuit of the citizens and planners of many of these cities. All these are important hallmarks of smart cities, and the success of many European cities has also made them the models for the promotion of smart cities around the world. To promote smart city development and business opportunities for related ICT solution vendors, III organized several delegations to visit some of the model smart cities in European (i.e. Rome and Amsterdam), held international conferences and hosted many multilateral visits.

#### · Facilitating major Japanese companies to invest in Taiwan

Japan's fourth largest steelmaker Nisshin Steel partnered with Taiwan's Jie Jin Material Science Technology and Marubeni-Itochu Steel, to found Jie Jin Nisshin Precision Metal Co., Ltd. via a joint venture in January 2011, targeting markets such as Taiwan, Mainland China and Southeast Asia for the distribution and sales of precision stainless steel calendaring products. Building on this experience of successful cooperation from 2011, Taiwan Japan Industry Center of III has also helped remove obstacles to investment, streamline administrative procedures, and expedite Japan's investment in Taiwan. In February 2016, the center went on to successfully facilitate the two sides to establish the joint venture in Tainan-"Taiwan Nisshin Precision Steel Co., Ltd." Nisshin Steel contributed 50.5% of the capital, and Jie Jin Material Science Technology contributed 44.5%, while Marubeni-Itochu Steel contributed 5%. The new company will primarily handle the manufacturing, distribution and sales of precision calendaring products with stainless steel spring materials.

## International Projects



### Swaziland Intelligent Transportation System (SWITS) Project

- Location** ▶ Kingdom of Swaziland
- Project name** ▶ Swaziland Intelligent Transportation System (SWITS) Project
- Client** ▶ Swaziland Government
- Project Duration** ▶ 2016-2018

The main purpose of the project is to assist Swaziland Government in establishing Intelligent Transportation System (ITS). Through the incorporation of a full-fledged ITS (including real-time traffic monitoring and traveler information, Changeable Message Sign (CMS), traffic control center, smart traffic data collection, etc.), when the traffic is congested, information can be collected, messages can be distributed, and accidents can be avoided. The goals of enhancing the traffic and public security/safety can therefore be achieved.



### Kuwait KISR Reverse Engineering Unit (REU) Project

- Location** ▶ Kuwait
- Project name** ▶ Reverse Engineering Unit Consulting Project
- Client** ▶ Kuwait Institute for Scientific Research (KISR)
- Project Duration** ▶ (2014-2016)

The Kuwait Institute for Scientific Research (KISR) is a longstanding partner with III.

The main goal of this project is to establish a highly professional and fully functional reverse engineering unit. Adhering to ISO standards, at the conclusion phase of this project, KISR's Reverse Engineering Unit (REU) will be equipped with the latest equipments, instruments, softwares such as 3D, CAD, CAM, CAE, and the know-how to deliver high quality prototypes for mechanical components as well as the blueprints for their potential commercialization opportunities.

The REU consulting team has completed the SOPs for producing over 20 major equipment parts and trained REU staffs during the course of the project.

Three model cases were completed for the following research centers within KISR as the seed projects. These centers are Energy and Building Research Center (EBRC), Water Research Center (WRC), and Petroleum Research Center (PRC). Upon the successful completion of these projects, we plan to collaborate with other research centers within and without KISR for future projects and business opportunities.



### Facilitating the signing of a memorandum of understanding between Taitung County and Mie Prefecture

- Location** ▶ Mie Prefecture, Japan
- Project name** ▶ Facilitating the signing of a memorandum of understanding between Taitung County and Mie Prefecture
- Client** ▶ Taitung County Government; Mie Prefecture, Japan
- Project Duration** ▶ 2016

In order to drive overseas development for Taiwan's local industries, III's Taiwan Japan Industry Center, after six months of planning and coordination, successfully facilitated the signing of a memorandum of understanding between Taitung County and Mie Prefecture's Iga City & Shima City. Both parties agreed to cooperate in areas including tourism, industry, culture and sports. Going forward, both sides will first set up dedicated areas for displaying and selling goods and products in an attempt to boost bilateral exchanges. Taitung County magistrate Justin Huang also paid a follow-up visit to Mie Prefecture. As Iga City and Shima City each sets up a dedicated Taitung area at the entrance to their office buildings for the normal exhibition of Taitung's mascots, aboriginal cultural creative products, and promotional tourism literature for Taitung, local people who visit there for business are offered the chance to get to know more about Taitung. Moving forward, the parties will follow this model to promote more bilateral exchanges and cooperation between the governments and local industries from the two countries.



### France Taiwan IoT Collaboration Project

- Location** ▶ France
- Project name** ▶ France Taiwan IoT-LAB collaboration Project
- Client** ▶ INRIA, UPMC
- Project Duration** ▶ (2013-2016)

One of III's research institutes has signed a collaboration MOU with INRIA and UPMC of France to set up an IoT-LAB in Taiwan. In August 2015, III's test lab has established connection with UPMC's Onelab, becoming the very first one in Asia. This cooperation can help the network of local companies, universities and research institutes in Taiwan to conduct largescale testing for IoT applications and services leveraging the network's extensive 3,000 node testing infrastructure.

III built a small-scale IoT-LAB testbed through INRIA assistance and collaborating with the Strasbourg iCube lab and INRIA Urbanet team to work on Low Power Communication (LPC) and Delay Tolerant Network (DTN) Technologies in Wireless Sensor Network.

# 2016 HONORS

• **2016 R&D 100 Awards**

III Received 2016 R&D 100 Awards with "Smart Glasses Guides" solutions. **1 2**

• **2016 APICTA Awards.**

III "An eXcellent Smart Parking Solution" won the Communication Application Merit of 2016 APICTA Awards. **3**

• **Red Dot Award 2016**

SaFePlay, designed by Innovative DigiTech-Enabled Applications & Services Institute (IDEAS) of III, won the Red Dot Award 2016.

• **NASA Tech Briefs-Create The Future-Design Contest 2016**

CopperPak, developed by Smart Network System Institute of III, recieved NASA Tech Briefs - Create The Future-Design Contest 2016 Top 100 Entries.

• **ESNC 2016 Asia Overall Champion**

III Smart Network System Institute R&D Managing Director Frank Chee-Da, Tsai, Group Leader HsinYi, Lai, teamed up with the group constructed by one of the students of associated unit NCTUEE, Mr. Yun Chen, Tsai, to come up with the service "Digital Media Convergence and Drone Video Capturing with Social Networking-Sharing & Profiting", which out stood in rigorous competition and won ESNC 2016 Asia Overall Champion.

• **World Genius Convention Golden Medal**

iFamily-Home Energy Management Solution, developed by Smart Network System Institute of III, won World Genius Convention Golden Medal. **4**

• **European Identity & Cloud Awards 2016**

A Cloud Computing Adoption Framework (CCAF) as part of the large scale systems between universities and industries, implemented by III & Leeds Beckett University, received a Special Award for Best Project in Research.

• **INPEX 2016 Silver Medal**

"In-Light" smart lighting management system, developed by Smart Network System Institute of III, received INPEX 2016 Silver Medal. **5**

• **EUROINVENT 2016 Gold Medal and INOVA 2016 Special prize**

Cloud Smart Strip, developed by Smart Network System Institute of III, won EUROINVENT 2016 Gold Medal and INOVA 2016 Special prize. **6**

• **49<sup>th</sup> Annual WorldFest-Houston Platinum Remi Award & Gold Remi Award**

Lang Shining New Media Art Exhibition won Platinum Remi Award in New Media Interactive-Adult (Professional) category and Lang Shining Website won Gold Remi Award in New Media Website category of the 49th Annual WorldFest-Houston.

• **Silver Muse Award: Interpretive Interactive Installations**

"Giuseppe Castiglione-Lang Shining New Media Art Exhibition" presented cooperatively by III and National Palace Museum received the Silver Award in competing for 2016 Association of American Museum (AAM) Muse Award in the category of interactive implementation.

• **NTCIR-12 Lifelog**

"Semantic Deep Learning", developed by Innovative DigiTech-Enabled Applications & Services Institute of III, won the Second Prize in NTCIR-12 Lifelog.



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# 2016 Major Events

2016/01/10

Researched and developed collectively by Massachusetts Institute of Technology (MIT) and III, the first Persuasive Electric Vehicle (PEV) on Earth made its debut at TAF on 10<sup>th</sup> January.



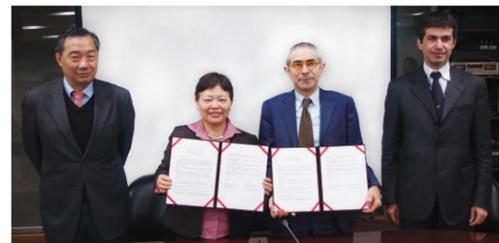
2016/02/26

2016 APEC Electronic Commerce Steering Group (ECSG) officially agreed Chinese Taipei's proposal to hold IDEAS Show at APEC Social e-Commerce, an international conference directed by Department of Commerce, Ministry of Economic Affairs (MOEA) and conducted by III.



2016/03/24

III signed MOU with Lazio Innova of Italy to facilitate the collaboration and match business opportunities for Italian and Taiwanese companies in the Smart City industry on March 24<sup>th</sup>.



2016/05/20

III and MCF collaboratively launched the first solar container computer center in Myanmar in May.



2016/06/07

III and Toyota ITC signed MOU, joining forces to create new opportunities in the field of Internet of Vehicles.



2016/06/23

III and the SIPO partnered to bring Taiwan Stipendiary, Japanese company Panasonic, Japan's M&T Corporation and Daiwa House together to team up and establish "Taiwan-Japan Long-term Care Industrial Alliance".



2016/07/20

2016 IDEAS Show cooperated with APEC for the first time. 32 promising startups joined the well-known competition from around the world in July.



2016/08/16

III and Canada Wavefront Accelerator signed MOU to gear up the cross nation collaboration for the creative digital industries.



2016/09/01

III signed MOU with IEEE as an official member of the World Partner Program.



2016/10/13

The new generation Persuasive Electric Vehicle (PEV) Arrived! III, MIT Media Lab and Microsoft Taiwan created the new "Intelligent Mobility System Application Services" embedded in the new generation Persuasive Electric Vehicle (PEV).



2016/11/09

III assisted Allion Labs, Inc. establish the first lab in Asia providing IoT standard certification service with OCF certification.



2016/11/24

III signed MOU with 12 Japan and Taiwan enterprises such as Toyota ITC, Panasonic, etc. in November, to collectively open up a new prospect for Internet of Vehicles around the world.



# Domestic & International Offices



## Taiwan Offices

### Smart Network System Institute (SNSI)

7F., No.133, Sec. 4, Minsheng E. Rd., Songshan District, Taipei City 105, Taiwan ,R.O.C.  
886-2-6607-3888

### Innovative DigiTech-Enabled Applications & Services Institute (IDEAS)

<http://www.ideas.iii.org.tw/>  
8F., No.133, Sec.4, Minsheng E. Rd., Songshan District, Taipei City 105, Taiwan, R.O.C.  
886-2-6607-2000

### Data Analytics Technology & Applications Research Institute (D.A.T.A.)

Rm. D, 5F., No.133, Sec. 4, Minsheng E. Rd., Songshan Dist., Taipei City 105, Taiwan, R.O.C.  
886-2-6607-2900

### Cybersecurity Technology Institute (CSTI)

14F., No. 133, Sec. 4, Minsheng E. Rd., Taipei City 105, Taiwan, R.O.C.  
886-2-6607-8900

### Digital Education Institute (DEI)

<http://w3.iiiedu.org.tw/>  
11F., No.153, Sec. 3, Xinyi Rd., Taipei City 106, Taiwan ,R.O.C.  
886-2-6631-6666

### Market Intelligence & Consulting Institute (MIC)

<http://mic.iii.org.tw/>  
19F, No. 216, Sec. 2, Dunhua S. Rd., Taipei City 106, Taiwan, R.O.C.  
886-2-6631-1200

### Science & Technology Law Institute (STLI)

<http://stli.iii.org.tw/>  
22F, No.216, Sec. 2, Dunhua S.Rd., Taipei City 106, Taiwan, R.O.C.  
886-2-6631-1000

### International Division (ID)

9F., No.106, Sec. 2, Heping E. Rd., Taipei City 106, Taiwan, R.O.C.  
886-2-6631-8500

### Industry Development Augmentation Division (IDAD)

11F.-1, No.3-1, Park St., Nangang Dist., Taipei City 115, Taiwan R.O.C. (Nankang Software Park Building G)  
886-2-6607-6000

### Southern Industry Service Division (SID)

<http://sid2.iii.org.tw/main.php>  
3F-3, No. 2, Fuxing 4th Rd.,Kaohsiung, 80661 Taiwan, R.O.C.  
886-7-966-7299

### Central Industry Research & Service Division (CID)

No.2, Wenxian Rd., Nantou City, Nantou County 540, Taiwan, R.O.C.  
886-49-600-3775

### Taiwan Japan Industry Center (TJIC)

Rm. C, 5F., No.133, Sec. 4, Minsheng E. Rd., Songshan Dist., Taipei City 105, Taiwan ,R.O.C.  
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## Overseas Offices

### Japan Tokyo

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### India

Flat #208 II floor, Eldams Square 167/36 Eldams Road, Alwarpet Chennai 600018, T.N. India  
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### Kuwait

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+965-9920-8895

### Myanmar

No.97/101(A), Dhamazedi Road, Kamaryut Township, Yangon, Myanmar  
+95-0945-5258-013

## Overseas Exhibition Center

### Nanjing

Nanjing City Innovation Park for Cross-Strait Small and Medium Sized Enterprises, Nanjing Zijin Technology Incubation Special Park, Nanwanying Street, Chuangyan Road, Jiangning District, Nanjing City, Jiangsu Province, China  
+86-25-8716-6292



We have succeeded by being strong in managing day-to-day operations while maintaining a long-term perspective on value generation.

This approach continued to guide our actions through a demanding 2016.

In particular, we kept a tight focus on three priorities – the need to *act decisively* and *protect value TODAY*, while *planning well ahead* for **TOMORROW**.



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