

An Innovation Driven Triple Helix Cooperation at NTUST (Taiwan Tech)



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NTUST (Taiwan Tech)

Agenda



Introduction



Office of Research and Development
(Bridge/Connector)



Intellectual property



Incubator

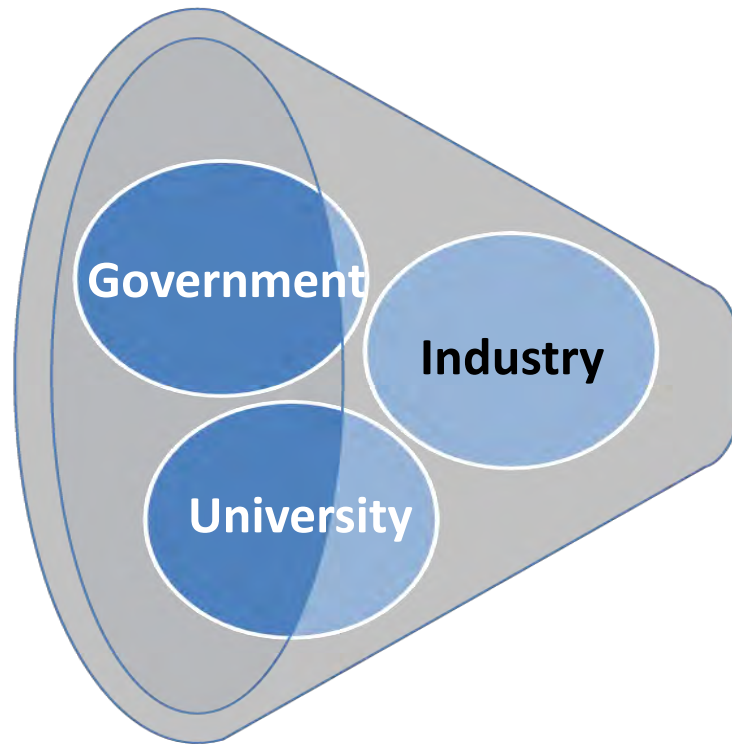


Northern Technological and Vocational
Major League



Pivotal Role

Innovation



Qualified
members of
the industry
and society

Innovation



Rankings of Taiwan Tech

QS World University Rankings by Subject 2014	World Rankings
Computer Science and Information Systems	51-100
Mechanical Engineering	101-150
Chemical Engineering	151-200
Electrical and Electronic Engineering	101-150
Education and Training	151-200
Civil and Structural Engineering	101-150
Environmental Studies	151-200



EU FP NCP Taiwan & FP7 Projects; Horizon 2020



**Serving as National
Contact Point Taiwan**



Bridge Taiwan and Europe in
jointly participate in Framework
Program to enhance the
collaborations with EU

Project full title: “FP7 sustainable and customized project“

Project full title: “NCP-Taiwan Project“

Project acronym: NANOCOOL

Project full title: “An Energy Efficient Air Conditioning systems with Temperature and Humidity independent controls based on the combination of a Liquid Desiccants Cycle with an adapted conventional air cooling system “

Project Partners: 12 partners from 7 nations

Project acronym: SUS-CON

Project full title: “Sustainable, innovative and energy-efficient Concrete, based on the integration of all-waste materials “

Project Partners: 17 partners from 11 nations

Project acronym: CETIEB

Project full title: "Cost-Effective Tools for Better Indoor Environment in Retrofitted Energy Efficient Buildings“

Project Partners: 14 partners from 7 nations

Project acronym: HOLISTEEC

Project full title: “Holistic and Optimized Life-cycle Integrated Support for Energy-Efficient building design and Construction“

Project Partners: 16 partners from 7 nations

Project acronym: DHISGLCB

Project full title: “Development of Heat Insulation Solar Glass for Low Carbon Buildings“

Project Partners: 2 partners from 2 nations

Project acronym: Robot-Doc

Project full title: “Robotics for Development of Cognition“

Project Partners: 13 partners from 8 nations

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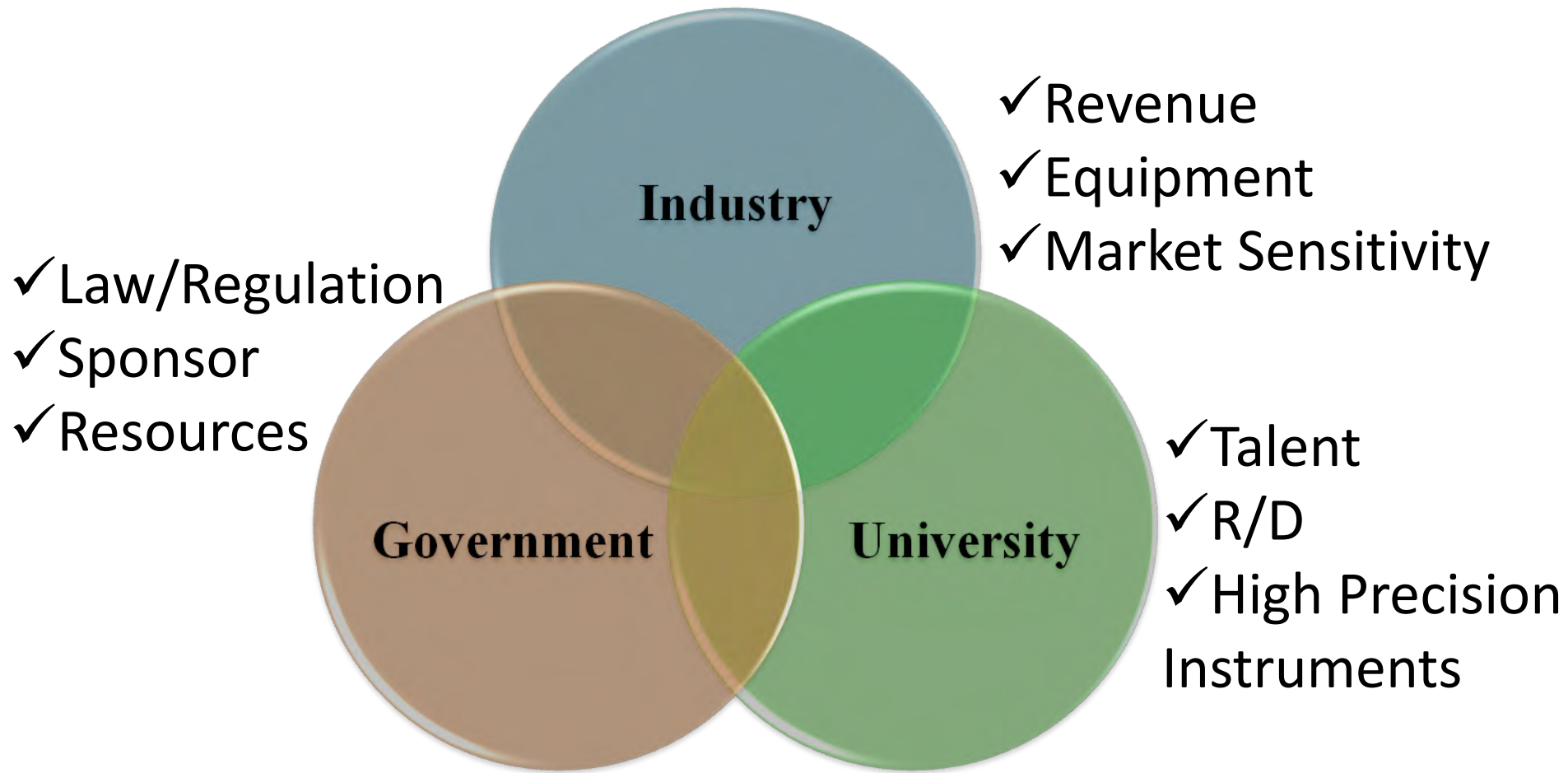
Incubator



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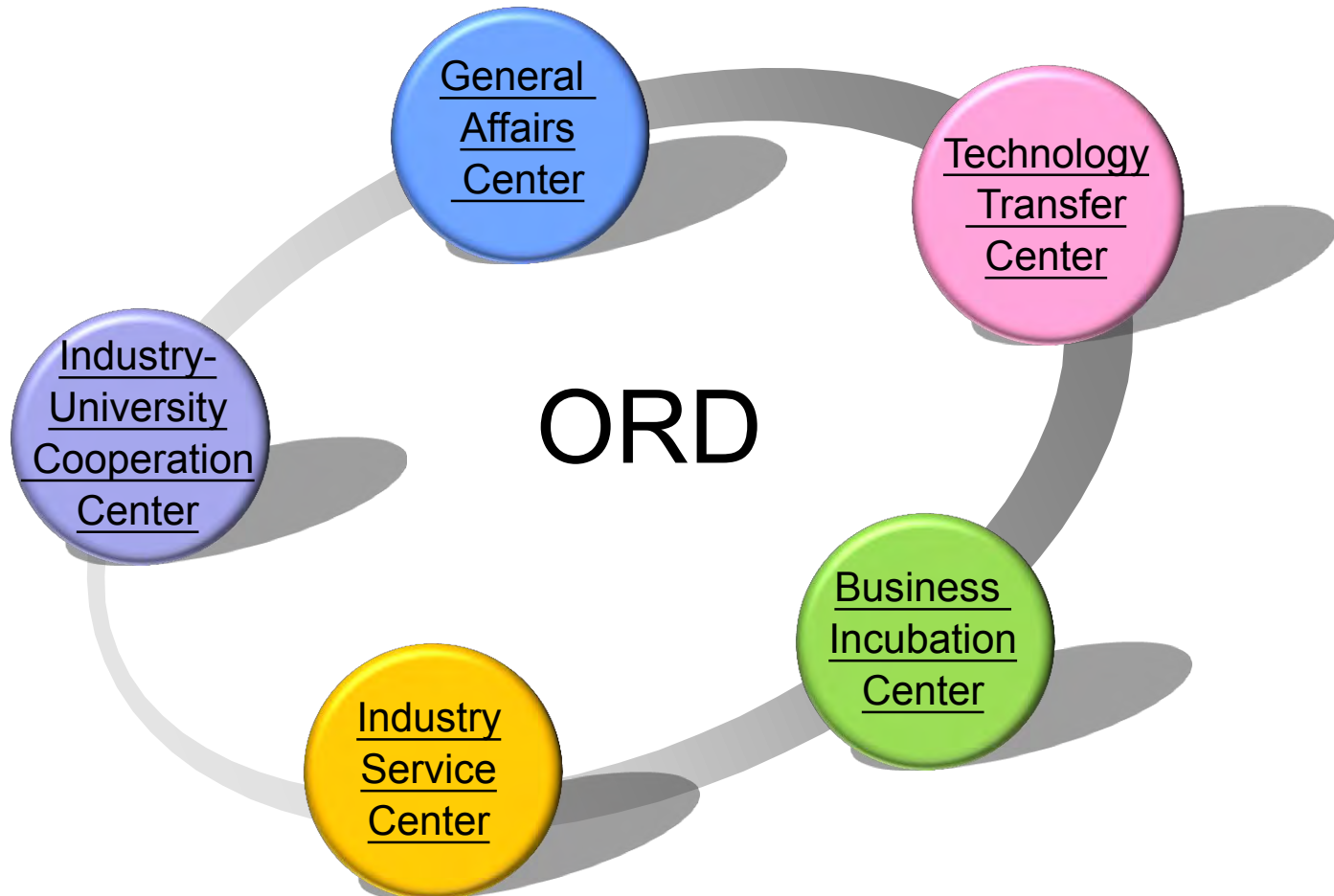


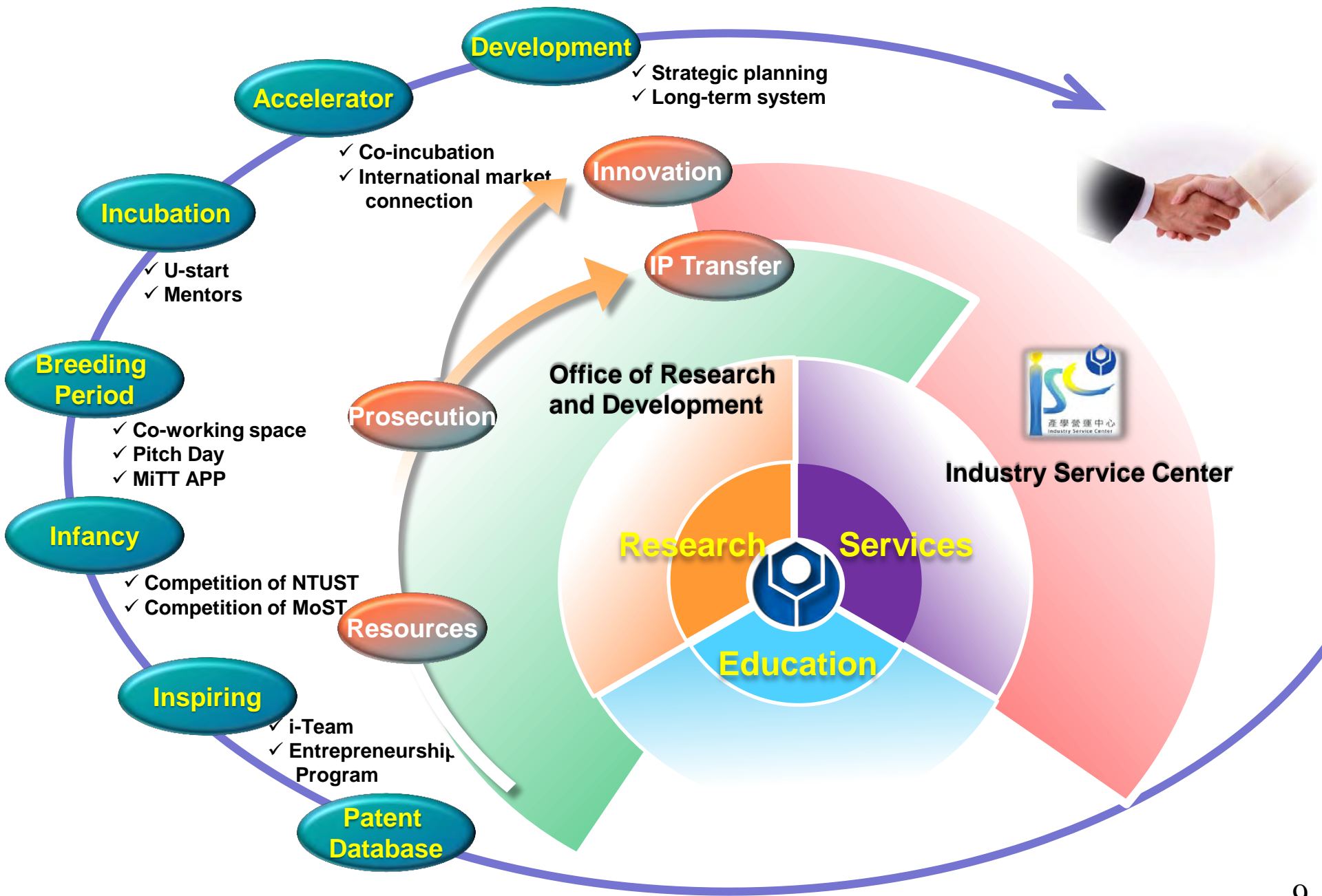
Triple Helix Cooperation





Structure of Industry-University Collaboration support





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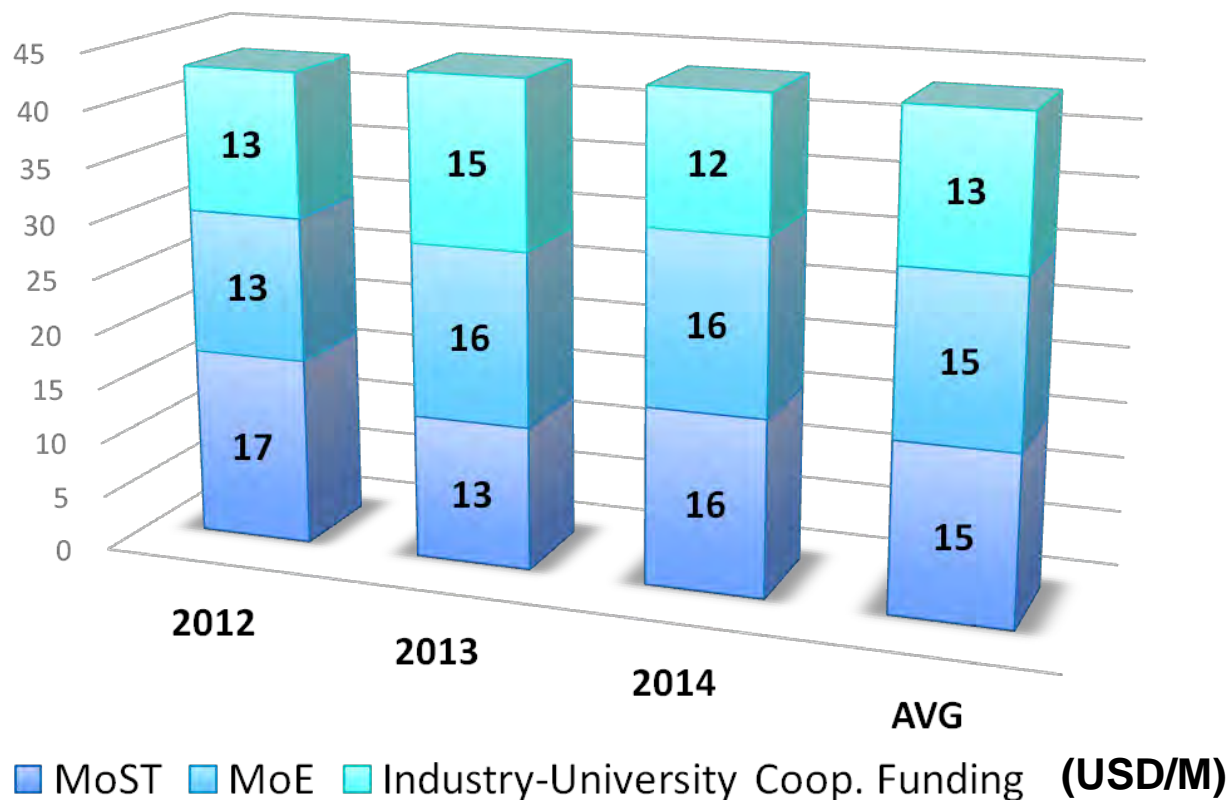
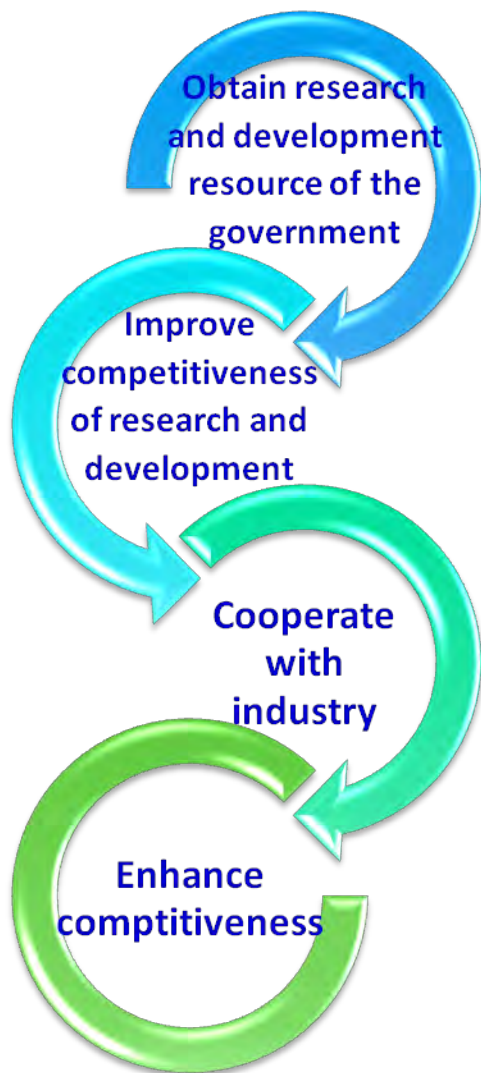
Incubator



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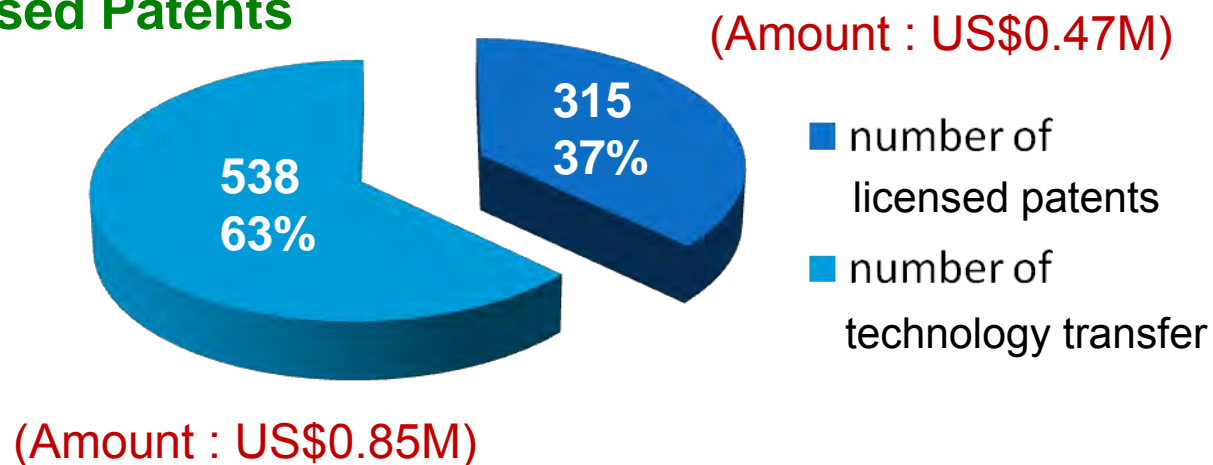
Intellectual property



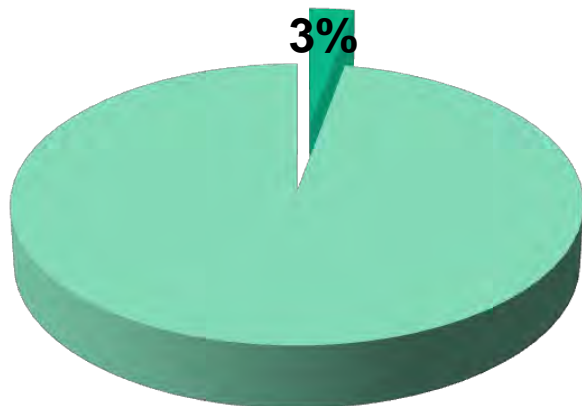


Output

Cases of Technology Transfer and Licensed Patents



Number of Patent Licensed



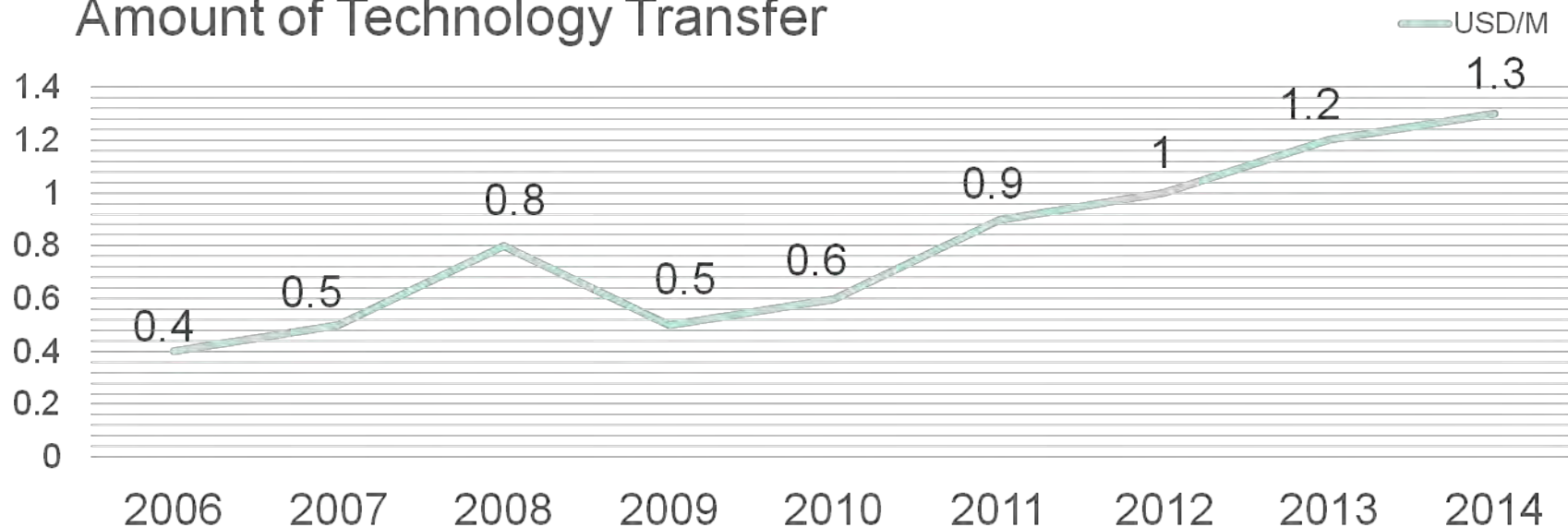
Accumulated Patents: 1,266



Intellectual property

Key Items	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of Patents (Granted)/year	24	59	34	61	46	75	120	182	188
Number of Technology Transfer Case	32	30	77	67	65	101	134	163	143

Amount of Technology Transfer





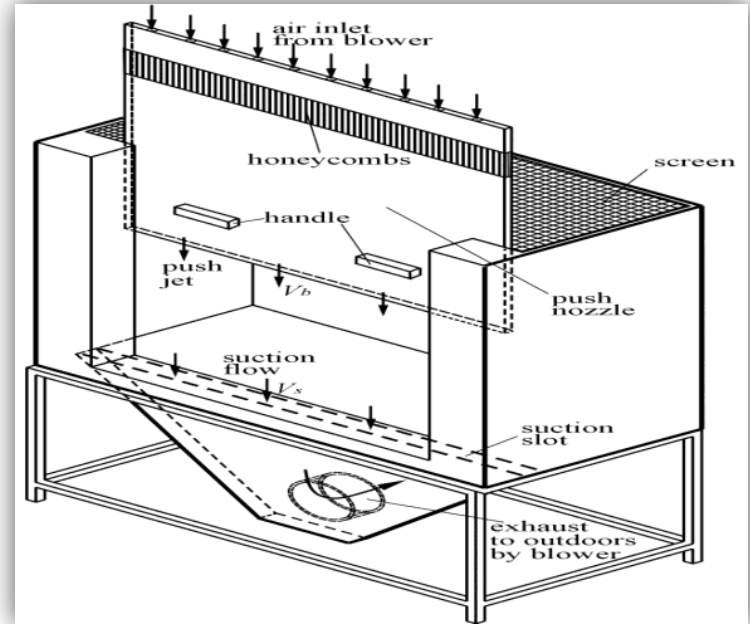
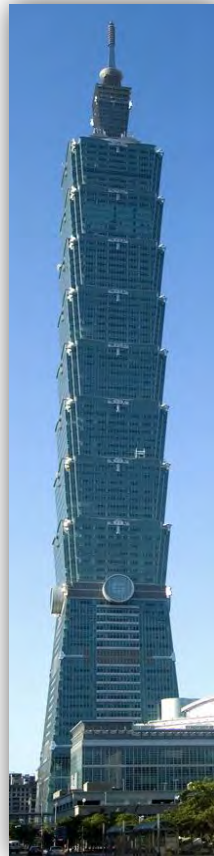
Achievements

- ◆ The nation-wide most famous TT case –
Ductile steel column-beam connection, generating 10M NT\$ income/year.



Steel beam-to-column connection

No. 1 in Taiwan Seismic connection patent for steel structures



- ◆ International Technology Transfer –Draft Chamber technology
Fume hood to a Japanese company.



Achievements

- Ranking of STRIKE, MoST
(Ministry of Science and Technology)

IP/Technology Transfer	Ranking
Professors' cases	1
University's cases	5
Income	8

- Best Performance IP/Technology Transfer Center (award NT 2,000,000) and the only university with vocational system background

行政院國家科學委員會
National Science Council

科技研發成果資訊系統 (STRIKE)
Scientific & Technological & Resources, Information, and Knowledge Exchange

績優技轉中心獎助

年度	機關名稱	獎勵金額(新台幣元)
2002	國立臺灣科技大學	1500000元
2003	國立臺灣科技大學	1500000元
2005	國立臺灣科技大學	1500000元
2006	國立臺灣科技大學	1800000元
2007	國立臺灣科技大學	2000000元

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獎牌展示：兩枚金質獎牌，一枚刻有「國立臺灣科技大學」，另一枚刻有「績優技轉中心」。



- 2011 Industrial-University Cooperation Evaluation: Best performance university of R&D funding from industry
- 2012 Intellectual Property Best Management Award, Ministry of Economic Affairs
- 2013 Transparent Evaluation on Valuation Creation from Intellectual Property : A++



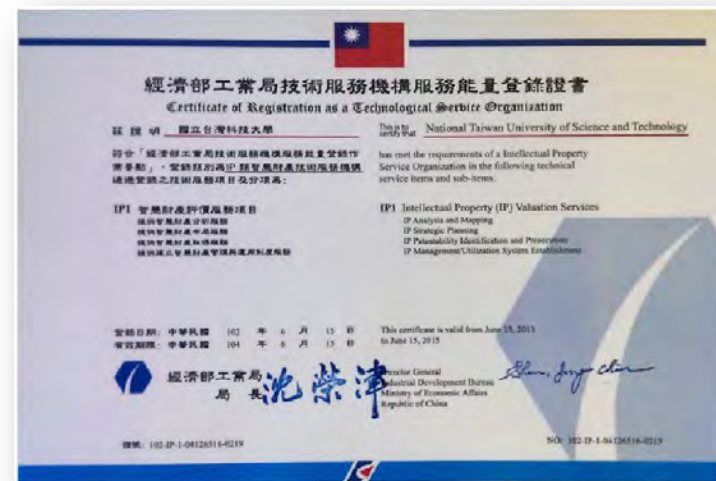
Achievements



- National Academy of Inventors (NAI):

Top 100 Worldwide University in U.S. Patents Granted in 2013: 48th.

- 2013 Certificate of Registration as a Technological Service Organization Intellectual Property Valuation Services:
 1. IP Analysis and Mapping
 2. IP Strategic Planning
 3. IP Patentability Identification and Prosecution
 4. IP Management/Utilization System Establishment



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Incubator



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Incubation Center





Achievements

- Incubated 128 companies with 70% startups ratio
- Total investment capital over NT\$52 billions.
- 6 out of 75 IPO companies (among 130 incubators) in Taiwan.
- Awards
 - National Award of Small and Medium Enterprises
 - National Quality Award
 - Business Startup Award
 - Taiwan SMEs Innovation Award
 - Rising Star Award

SOE

Weltrend

PRESCOPE

普格科技股份有限公司

FineTek

ABBA
Linear Tec

TAIFLEX



TAIWAN TECH

National Taiwan University of Science and Technology



Achievements

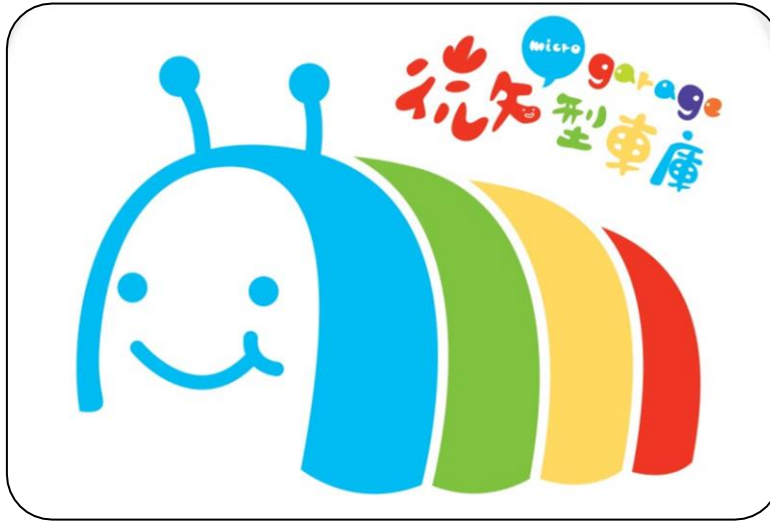


Awarded with

**2011-2013
The Best
Incubator
Center**



Dare to think outside the box





Business Innovation Competition



Demo/Pitch Day





Achievements



【DailyView網路溫度計】
dailyview.tw

2013

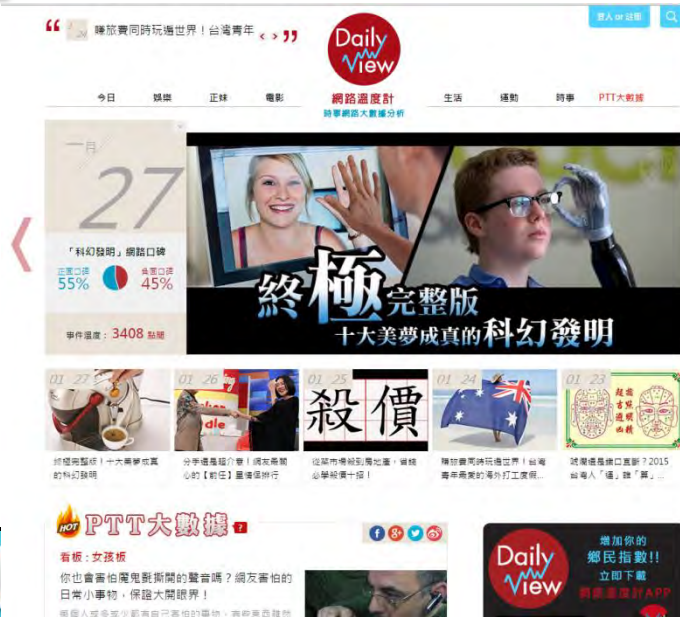
The team-人生創意引導有限公司
participated U-start program and won NT\$600,000.

2013

The team-台科超音波
was the champion of FITI program and won NT\$2000,000.

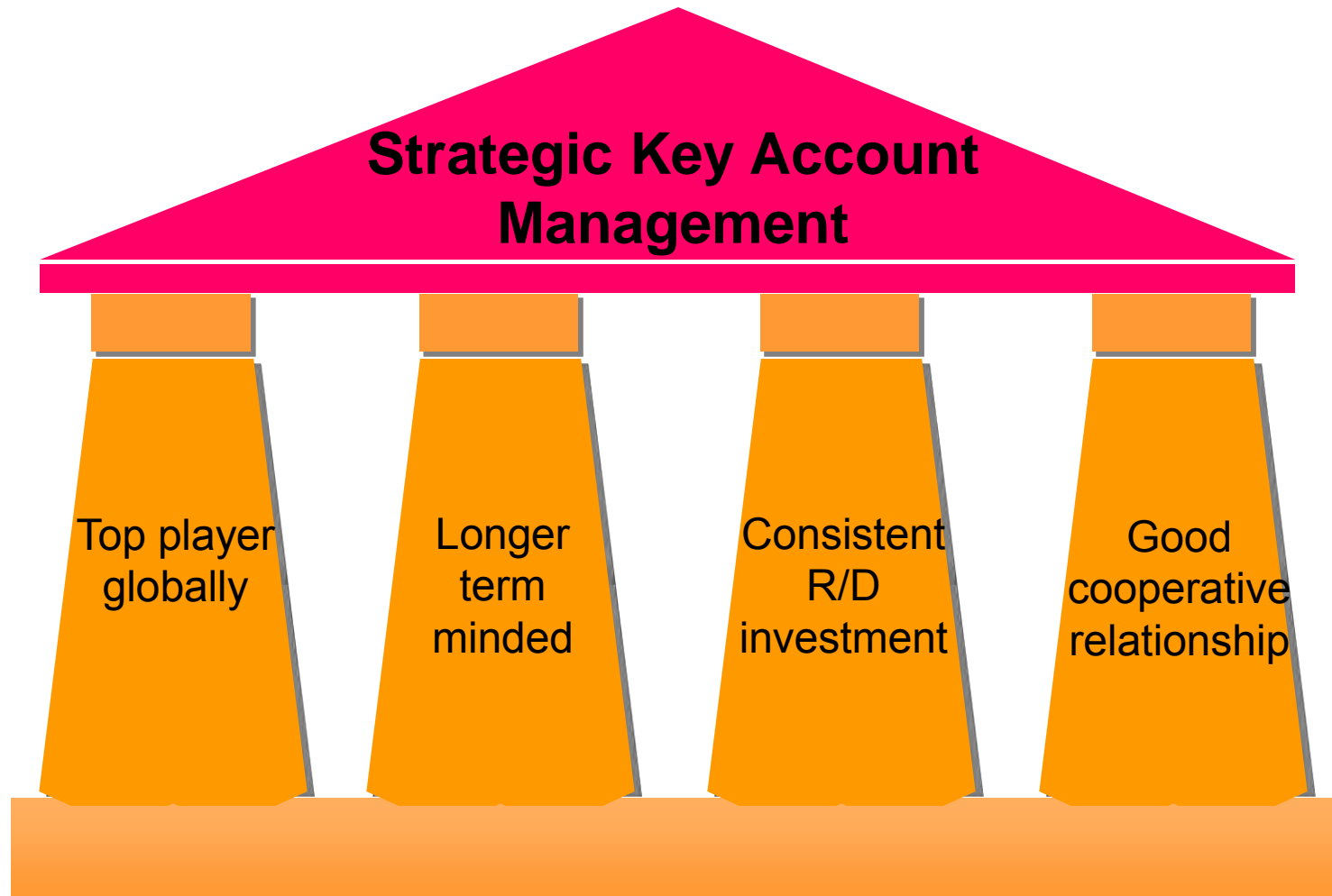
2014

The team- DailyView網路溫度計
won the prize and NT\$2000,000.



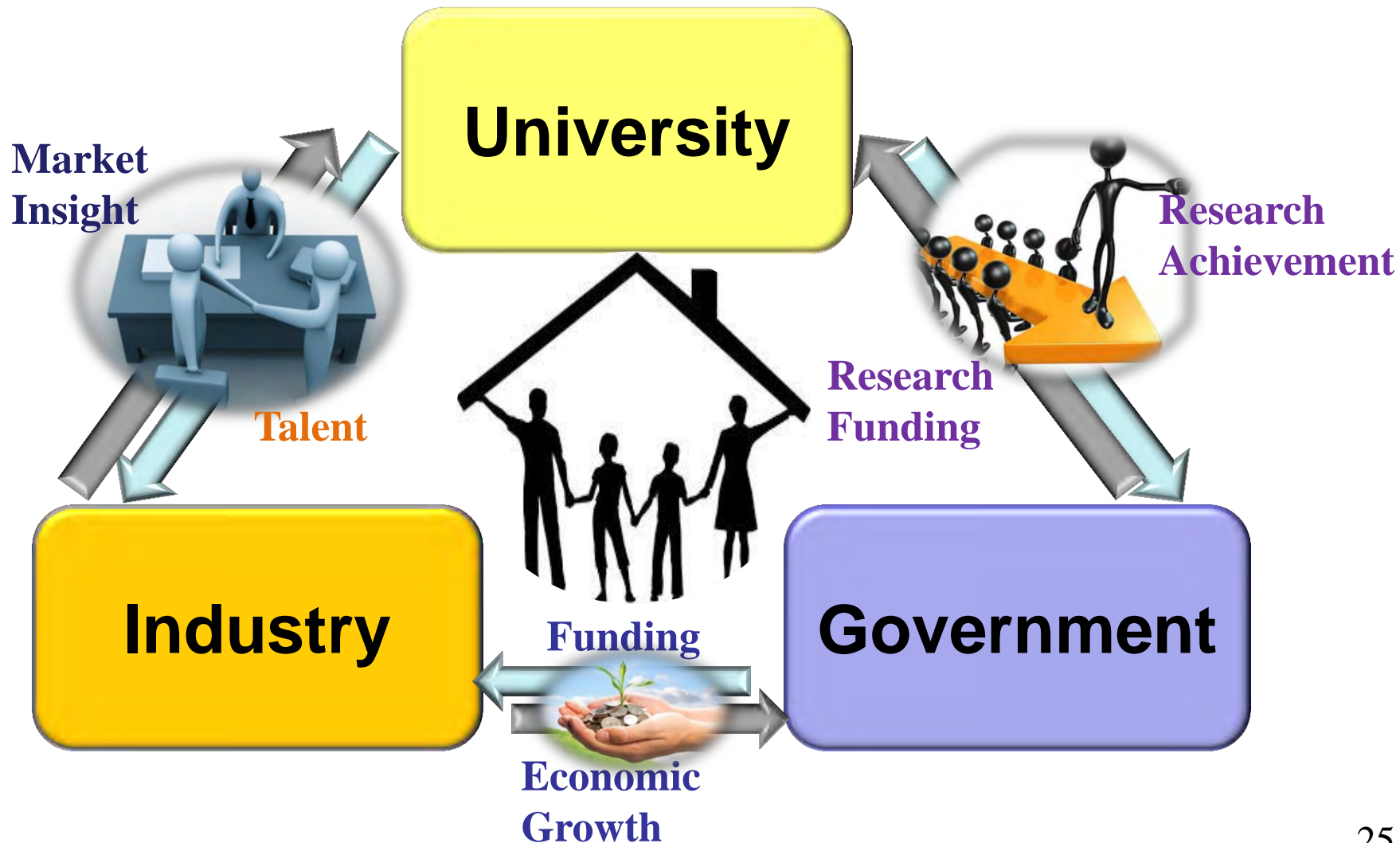


Management



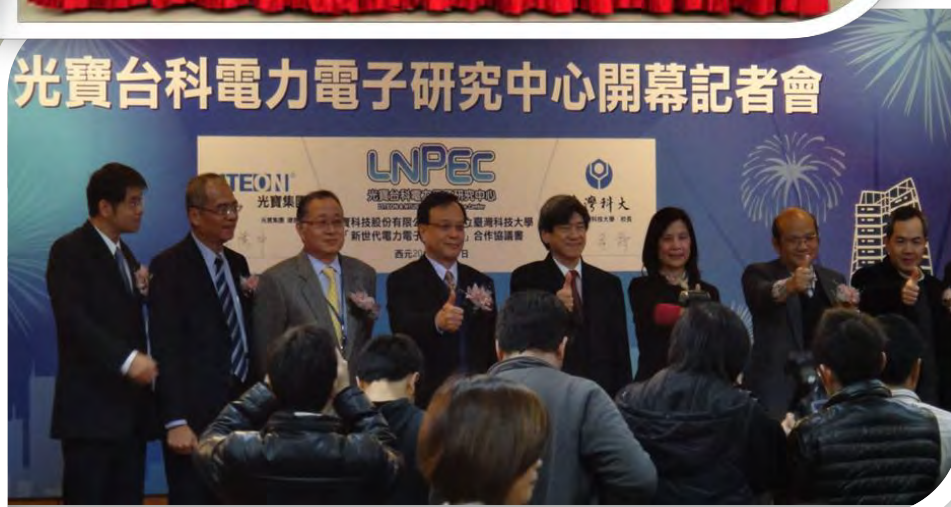


The Role of the Connector





Strategize Long-term Platform with Industries





Periodic Meetings and Regular Visits



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TVE Institutions

Institutions:

- National Taiwan University of Science and Technology
- National Taipei College of Business
- Hwa Hsia Institute of Technology
- Ming Chi University of Technology
- Chihlee Institute of Technology
- Jinwen University of Science and Technology
- Chang Gung University of Science and Technology
- Chien Hsin University of Science and Technology
- Taoyuan Innovation Institute of Technology
- Minghsin University of Science and Technology
- Hsin Sheng College of Medical Care and Management
- St. John's University
- Mackay Medicine, Nursing and Management College
- Taipei Chengshih University of Science and Technology
- National Taiwan Junior College of Performing Arts
- Ching Kuo Institute of Management and Health
- Kang-Ning Junior College of Medical Care and Management
- Lan Yang Institute of Technology
- China University of Technology
- Tzu Chi college of Technology
- Taiwan Hospitality & Tourism University

Ten (10) science majors are:

Icon	Major
	Electronics
	Precision Machinery
	Mechatronics Engineering
	Architecture
	Eco-Friendly & New Energy
	Business & Marketing
	Bio-tech & Medicare
	Hospitality & Tourism
	Art & Culture



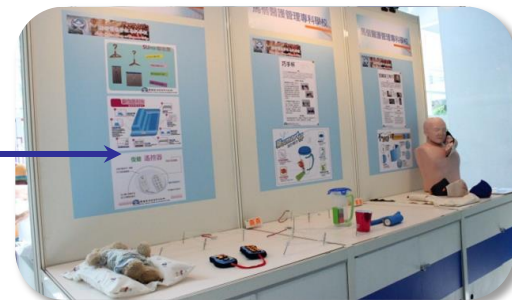
Mission

Promote
Industry-University
Cooperation.

Execute Phase 2 of the
Technological and Vocational
Education Reform Plan.



IUCC



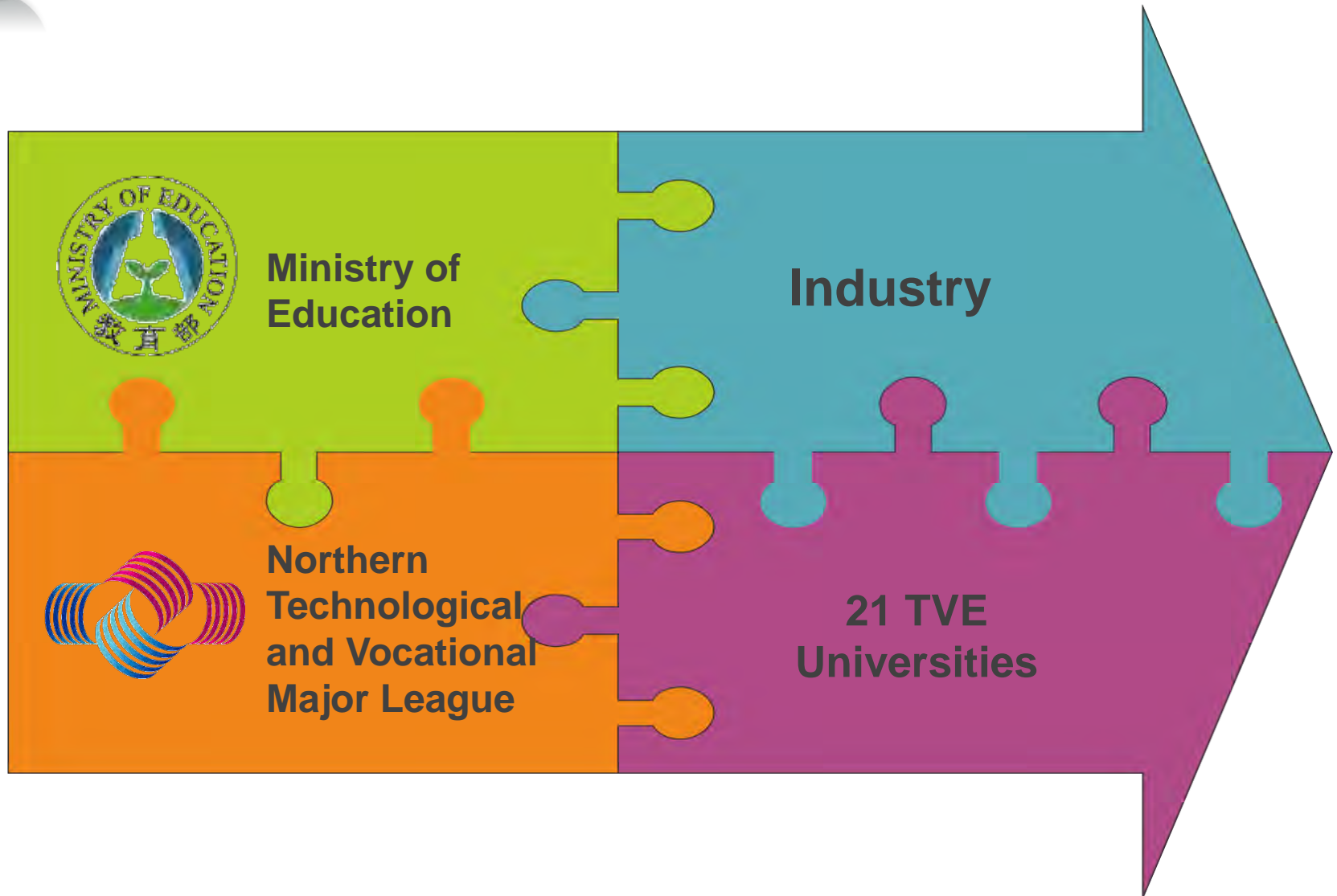
Encourage and support
entrepreneurship.

Build up a forum for
interaction with industry.

Perform universities' distinguished features;
establish the Regional Industry-University linkages



Operation Mechanism





Operation Mechanism



SUBMIT



Sign a contract

Searching and matching

Entrepreneur submit requests





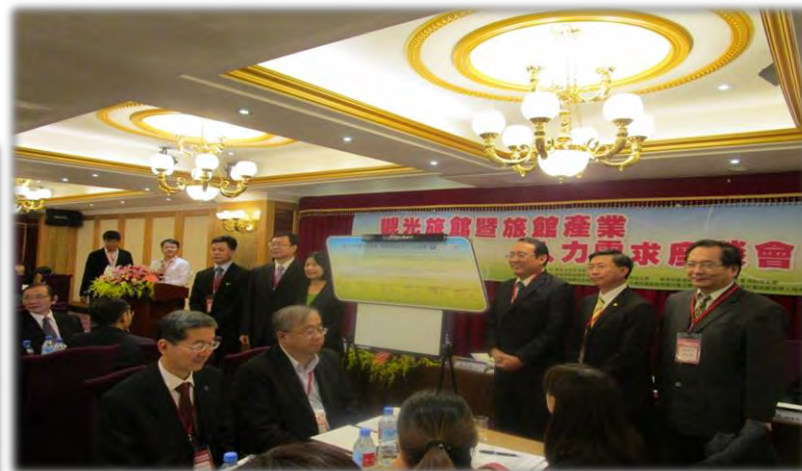
Manpower Demand Symposium

Design Industry



Information Industry

Service Industry

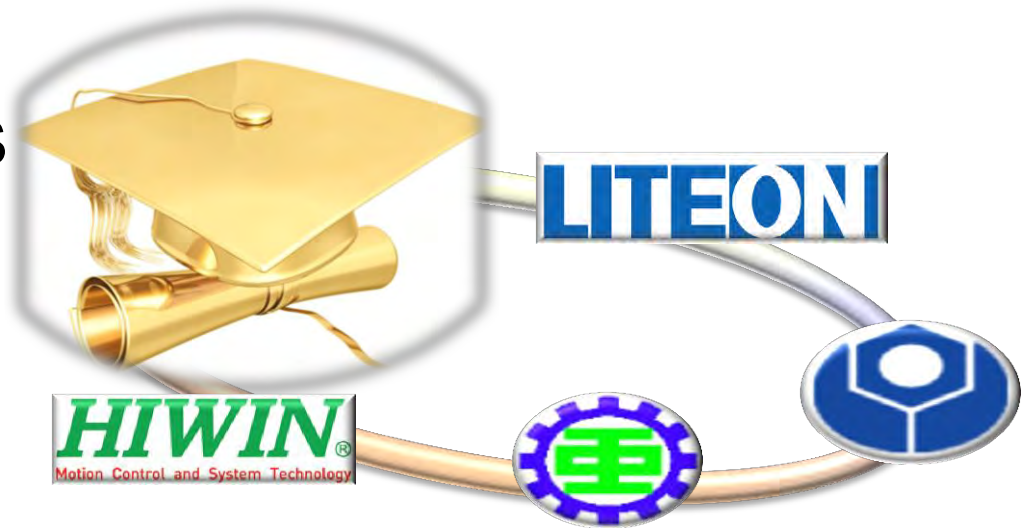


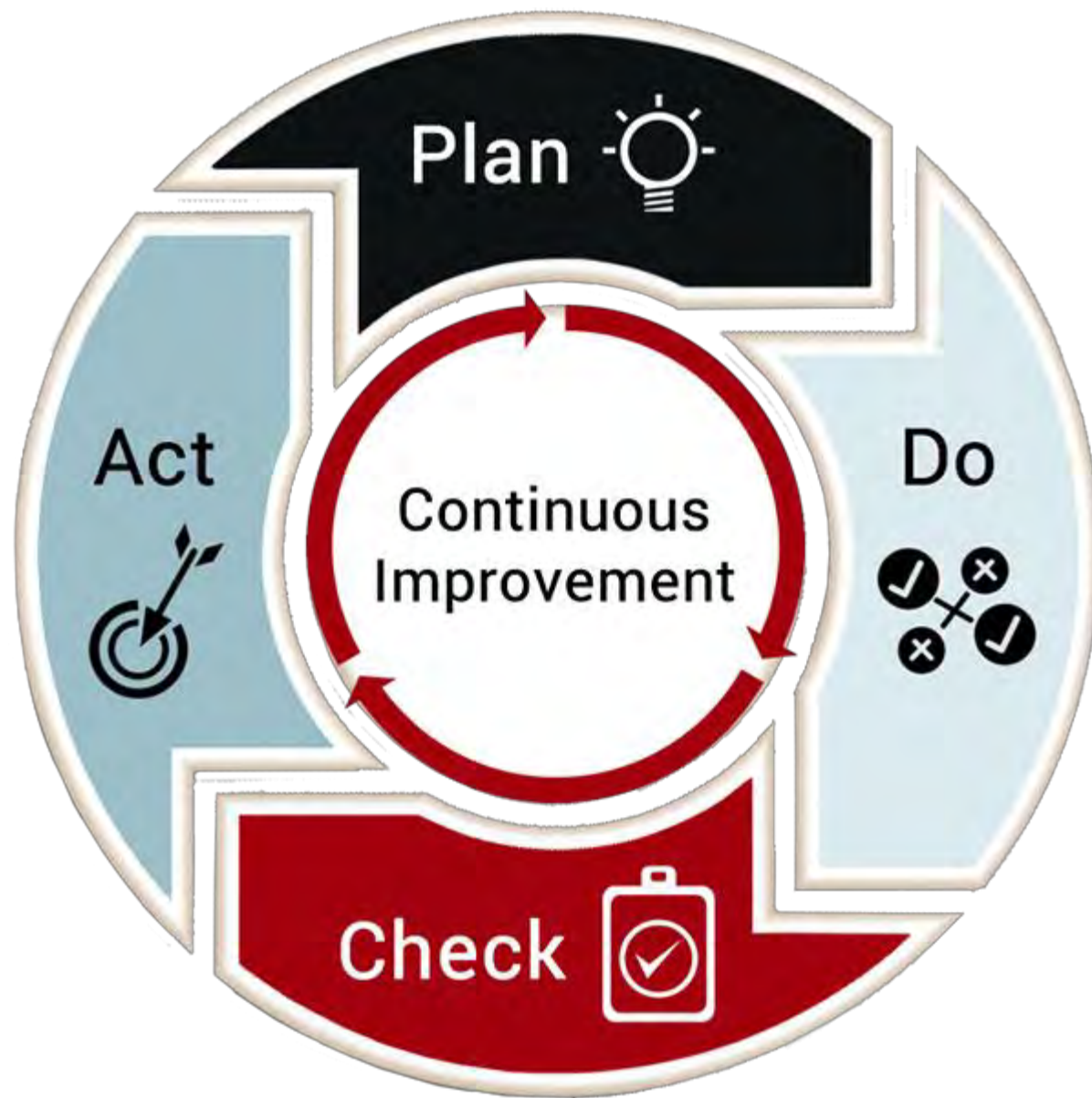
Tourism Industry



Enterprise College

Enterprise leaders and professors work together to ensure that curriculums are designed to meet the needs of industry.





改 Kai = Change

善 Zen = For the Better