

# The Road that KAIST Global Commercialization Center sees

OCT 23. 2015.



# Vision, Mission, and Core Value with Strategy

<sup>⊥</sup> VISION

• Creating innovative economic value through the technology transfer and global technology commercialization

**MISSION** 

- Transferring technology for commercialization into value creation
- Bridging the R&D Institutes, SMEs to the demands of emerging countries

**S**GOAL

- Satisfying partner countries' demand and potential needs, not givers
- Revitalizing ICT R&D performances of Korea into value creation of demands

STRATEGY

Pursuing strategic development and cooperation among R&D Institutes,
 SMEs, Ventures, KAIST ITTP program, and developing countries

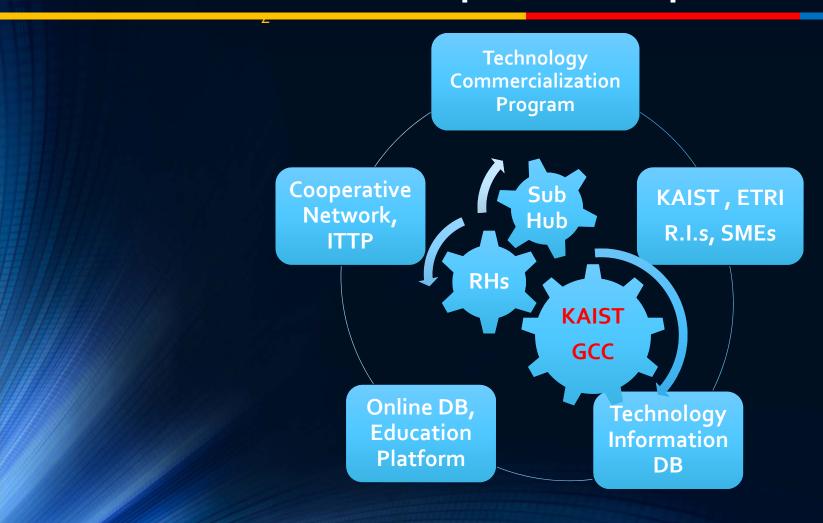


# Why KAIST GCC begins and what thinks.

- It is required to develop integrated technology commercialization support system for developing countries
  - Finding demands of technology transfer in developing countries to benchmark successful
    cases of technology commercialization
  - Lack of integrated support system of technology transfer, commercialization, education and consulting for global technology commercialization
- It is necessary to establish the cooperative network
  - Needs construction of global cooperative network between Korea and developing countries to provide systematic support system for global technology transfer and commercialization
- It needs to be focused on ICT, Science \$ Technology fields

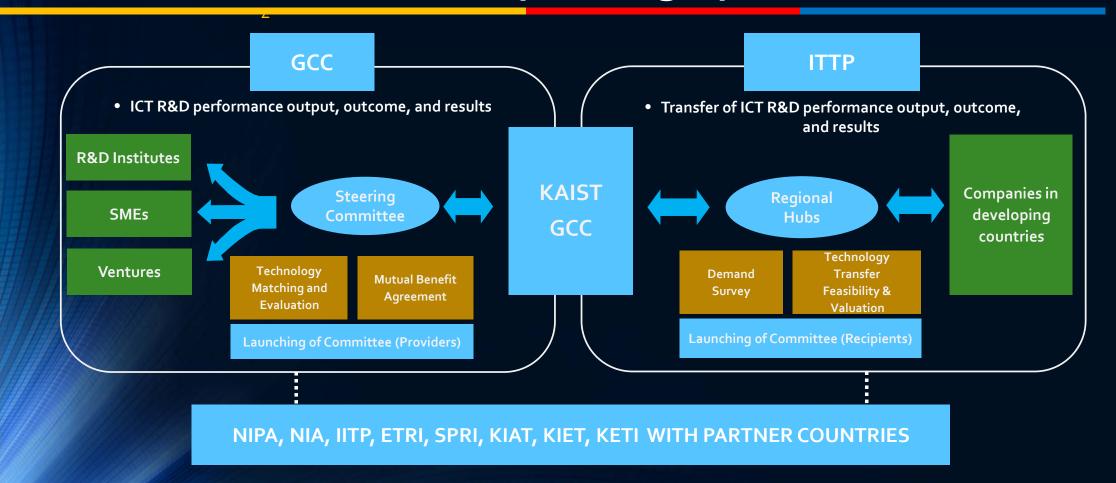


# How KAIST GCC operates: Operation Process





# KAIST GCC Operating System.





## What KAIST GCC activates.

## Construction of global technology commercialization system

- Establishment of Global Commercialization Center, April 2015.
- Set-up of technology information DB from R&D institutes and companies
- Development of technology evaluation system for global technology commercialization, transfer and diffusion
- Searching technology demands of developing countries and matching domestic technologies for promotion global technology commercialization
- Construction of technology cooperative network between Korea and developing countries
- Development of training and education system for technology commercialization
- HRD and HRM, expert training for global technology transfer of ICT R&D performance



## How to do Commercialization of Technology

- Searching technology supply (KAIST, ETRI, etc)
- Identifying target tech. at business and product level
- Constructing DB for target technology and obtaining basic information about target technology

1<sup>st</sup> Phase Target Tech.

## 2<sup>nd</sup> Phase Matching Tech.

- Surveying specific technology demand in developing countries (through ITTP Channel)
- Constructing cooperative network between regional hub and local agent
- Matching technology to technology demand

- Selecting participating companies based on matching technology
- Commercializing business tech. in local community
- Suggesting business model
- Consulting service

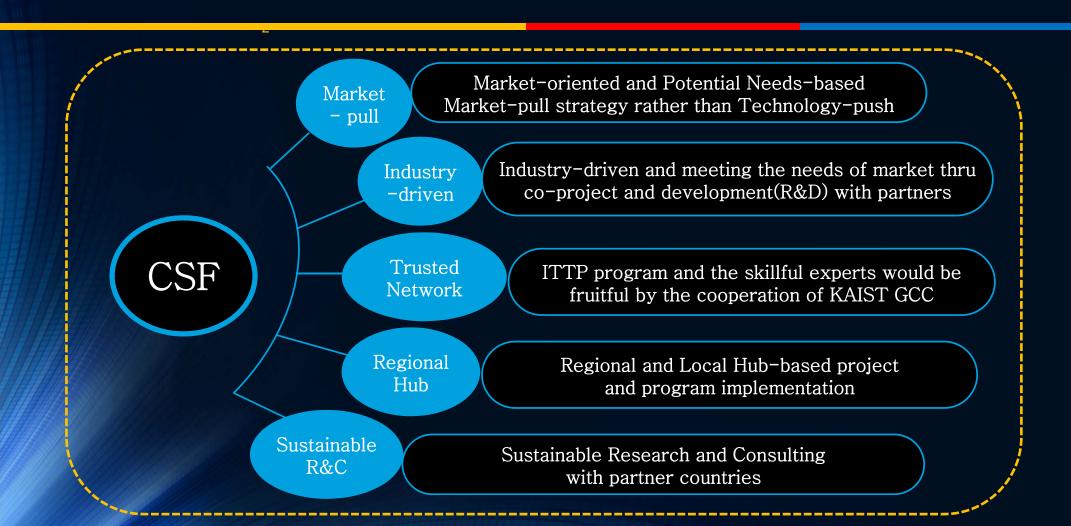
3<sup>rd</sup> Phase Business Tech.

# R&D, Education for Technology Transfer





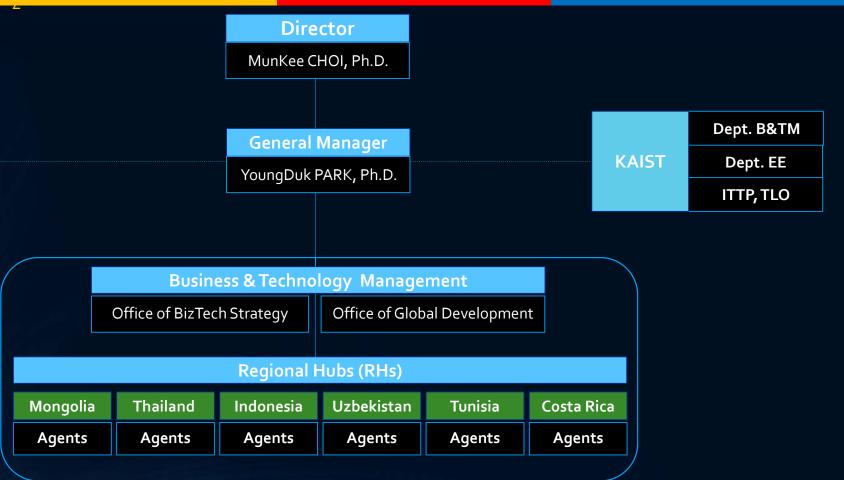
## Critical Success Factors of KAIST GCC





## KAIST GCC Organization and Current Status 2015







# KAIST GCC's Cooperative Partners: R&D Networks in Korea





















# Who are Partners in developing countries



	Asia-Pacific	Middle East	Eastern Europe & CIS	Africa	Latin America & Caribbean	
No. of Countries 13		5	7	22	7	
No. of Persons	45	7	16	58	16	

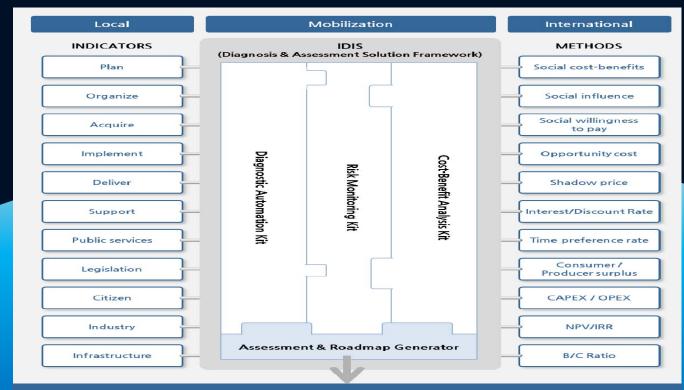


# Who are ITTP Partners in developing countries

Region	No. of Countries	No. of Persons	Country (No. of Persons)
Asia	13	45	Nepal(5), Laos(3), Mongolia(7), Myanmar(1), Bangladesh(3), Vietnam(5), Bhutan(3), Sri Lanka(3), Afghanistan(2), Indonesia(6), Cambodia(2), Thailand(2), Pakistan(2)
Central & South America	7	16	Dominica(2), Brazil(3), Ecuador(1), Chile(2), Costa Rica(3), Colombia (1), Peru(4)
Eastern Europe And CIS	7	16	Moldova(1), Bulgaria(1), Azerbaijan(2), Uzbekistan(6), Czech(1), Kazakhstan(3), Kyrgyzstan(2)
Africa	22	58	Ghana(4), Nigeria(9), South Africa(2), Rwanda(3), Morocco(1), Algeria(2), Ethiopia(5), Egypt(2), Kenya(3), Tunisia(3), Burundi(2), Sudan(3), Uganda(4), Swaziland(1), Lesotho(2), Zambia(2), Tanzania(1), Zimbabwe(1), Malawi(1), South Sudan(1), Guinea Bissau(1), Liberia(1)
Middle East	5	7	Jordan(2), Syria(1), Oman(1), Qatar(1), Yemen(2)

# Current Status: ICT Demand & Diagnosis Solution Framework

# Development of ICT Demand & Diagnosis Solution Framework



[Deliverables]
Diagnosis Report, Vision, Roadmap, Priority, Replication toolkits

# Current Status: Developing Demand Analysis Tool Kit[1]

# Fundamental Overviews of Partner Countries In terms of Demand Analysis of Tool Kit Web Site

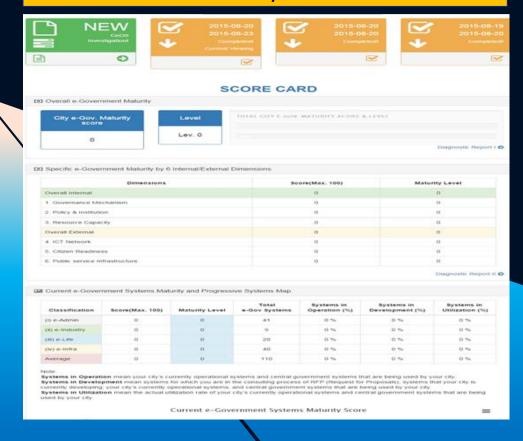


₩ W	eGO Members'	Average
	Maturity Level	Maturity Score
	Lev. 2	39
	our City	
- Y		
₩ Y-	A[] Maturity Level	A[] Maturity Score

	W Members	L. Watable	A13		
Dimensions	Score(Max. 100)	Maturity Level	Score(Max. 100)	Maturity	
Overall Internal	29		0	1	
t. Governance Mechanism	1.5	- 1	0	0	
2. Policy & Institution	9		0	0	
3. Resource Capacity	62	2	0	4	
Overall External	60	3	40	2	
4. ICT Network	06	5	20		
6. Citizen Readiness	60		0	. 0	
6. Public service Infrastructure	44	.0	100		

Classification	Score(Max	100)	Maturity	Level	Total e-Gov	Total Systems		Systems in Development (%)		in Utilization Rate (%)	
	Average	Gity	Average	Ony	Systems	Average	City	Average	City	<b>₩</b> Average	& City
(i) e-Admin	22	10	2	- 1	41	0 %	0%	0%	2%	0%	0%
(iii) er-lindustry	22	10	2	1	. 9	0.%	0 %	0%	0.76	0.%	0 %
(W) e-Life	4.4	32	3	2	20	1.%	12 %	5 %	13.%	50.%	71 %
(iv) e-infra	40	10	2		40	1.76	0%	3 %	0.76	46.%	0 %
Average	39.25	10.	2:	- 1	110	0.76	3.%	2%	4.%	20 %	10.%

# Score Card of Partner Countries In terms of Demand Analysis of Tool Kit Web Site



# Current Status: Developing Demand Analysis Tool Kit[2]

Fundamental analyses results of Partner Countries
Using Tool Kit for demand analysis

# | Color | Colo

LAW & REGULATION

## Sectorial Maturity Level

#### e-Administration

	LEVEL	CLASSIFICATION	DEFINITION AND SIGNIFICANCE
		Definition	Laying foundation for administrative ICT and Maintenance
1	LEVEL 1	Contents	Building foundations for implementing e-Government. Building organizations, personnel, systems, infrastructure environment, and maintain them. Distributing personal PCs for officials and building the infra such as communication network or security equipment for seamless information sharing. Developing and conducting basic IT training programs for all employees, and maintaining the existing systems and practices such as internal communication and services procedures relating to civil services for introducing ICT

#### √ e-Citizen

LEVEL	CLASSIFICATION	DEFINITION AND SIGNIFICANCE
	Definition	Building and maintaining foundation for e-life
LEVEL 1	Contents	Building and maintaining foundations for life information services.  Maintaining the existing environment, systems and practices such as the service  procedures relating to civil services, for introducing e-Government.

### √ e-Enterprise

	LEVEL	CLASSIFICATION	DEFINITION AND SIGNIFICANCE
	LEVEL 1	Definition	Building foundation for industrial ICT
		Contents	Building and maintaining foundations for the implementation of industrial ICT
		contents	services, and establishing the directions for necessary policies.

#### √ e-Infrastructure

LEVEL	CLASSIFICATION	DEFINITION AND SIGNIFICANCE
LEVEL 1	Definition	Establishing directions for National(central government) based services and investigating policies
LEVEL I	Contents	Establishing directions and investigating policies for National(central government) based information services



# What KAIST GCC plans until 2020.

## 1st Phase: 2015~2016

- Establishment of Global Commercialization Center (GCC)
- Construction of global commercialization infrastructure in ICT and scientific technology fields
- Construction of technology cooperative network for global regional hub
- Selecting domestic company to participate global technology commercialization

## 2<sup>nd</sup> Phase: 2017~2020

- Expansion global commercialization to various developing countries
- Expansion the number of technologies transferred or commercialized
- Expansion cooperative network to regional hub and regional sub-hub



## **Road Map**



Infrastructure of Technology Commercialization

Performance Bring-up of Technology Commercialization

2015-2016

2017-2018

2019-2020

Demand Analysis Tool Kit Development and Application

Portal Web Construction for Education Contents of Technology Commercialization

Sustainable Research and Education Program with ITTP and R&D institutes

Highly level of demand analysis for Technology Commercialization using Tool Kit

Application of Educational Portal Site with partners of Emerging countries

Sustainable Research and Consulting among R&D institutes and partners of emerging countries Upgrading of Tool Kit for Demand Analysis of Technology Commercialization

Expansion of Portal Site Application of Technology Commercialization

Grand Seminar and conference for research and consulting for Technology
Commercialization

Cooperation and
Development with
International Organization
and Specialized Purpose
Organization

Technology Transferbased global HRD cooperation with emerging countries

Satisfying and mobilizing Stakeholders of Technology Commercialization for Sustainable Devellpment



# Concluding Remarks

To create a global commercialization of ICT and Science & Technology for developing countries, Global Commercialization Center (GCC) was established at KAIST.

KAIST GCC plans to construct global cooperative network between Korea and developing countries to provide systematic support infrastructure for global technology transfer and technology commercialization. To construct global cooperative network, KAIST GCC would like to collaborate with KAIST Global IT technology Program of KAIST (ITTP) which is an IT-customized international scholarship education program for foreign countries as well as R&D institutes and SME in Korea.

KAIST GCC would like to help many domestic institutes or companies to connect local partner companies in developing countries and open a new era of hope and happiness for our global development and cooperation of international society through global and innovative technology commercialization.

Thank you so much.

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