



INNOVATION STATISTICS OF THAILAND

International Workshop
on Innovation Statistics
16 – 18 July, 2019
Xi'an, China

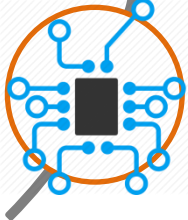
Innovation Statistics Survey and Related



The Annual Survey of Research and Development And Innovation Activities in Industrial Sectors of Thailand (**RDI Survey**)



Industrial Census 2012



Information of Manufacturing, Business trade and Services

Establishment in Super-cluster provinces 2017 (**Super-cluster 2017**)



RDI Survey 2018



National Science Technology and Innovation Policy Office (STI)
Ministry of Science and Technology

Scope: Establishment in Manufacturing, Services and Wholesale and Retail trade Sector (conduct annually from since 2008)

Method: Sample survey 5,762 from 95,430 establishments
(Sampling from establishment which their have totally income >12 million baht and STI database of high potential establishment)



RDI Survey 2018 (Cont'd)

Objective: To study status and operation of RDI in establishment for monitoring and planning the policy to develop the potential of establishment in RDI

Classification Standard:

Definition of R&D: Frascati Manual 2002

Definition of Innovation Activity: Oslo Manual (OECD) 1997

Definition of Research Field: Field of Science (FoS 2007)



RDI Survey 2018 (Cont'd)

Questionnaire: Consist of 4 Parts

Part 1: General Information

- **Name of Establishment or owner**
- **Address and Contact information**
- **Domestic/Export Revenue**
- **Number of Person engaged**
- **Technology Activity**
- **Innovation Outcome**
- **Knowledge Absorption**



RDI Survey 2018 (Cont'd)

Questionnaire: Consist of 4 Parts

Part 2: R&D

- Structure of R&D in establishment
- R&D maker in establishment
- R&D Investment
- R&D Expenditure and Source of R&D Budget
- Proportion of R&D Expenditure

(Objective/Type of Research/Field of Research)

- Head count of R&D Personnel and R&D Outsource



RDI Survey 2018 (Cont'd)

Questionnaire: Consist of 4 Parts

Part 3: Innovation Activity

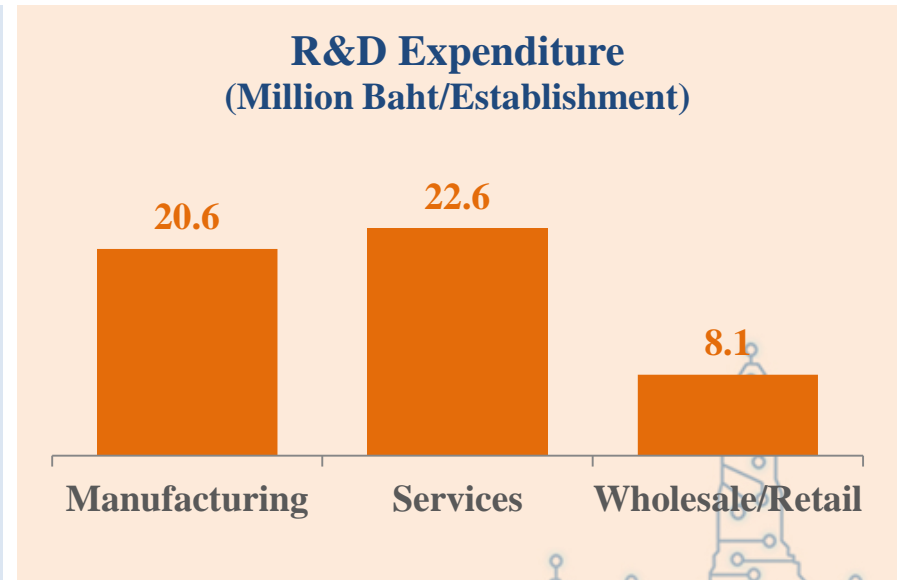
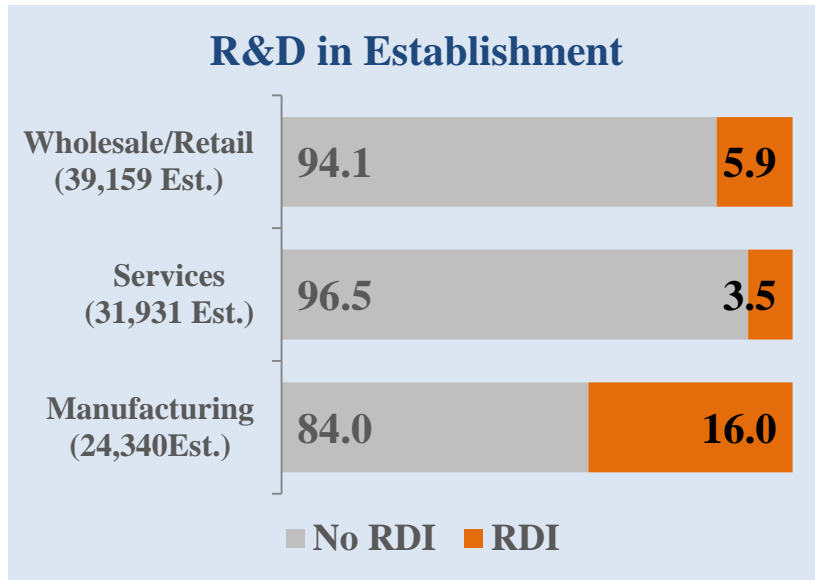
- Type of Innovation Activity
- Activity for Develop the Creativity
- Strategy of Management and Marketing
- New product and Services development

Part 4: Cooperation and coordination of RDI



RDI Survey 2018 (Cont'd)

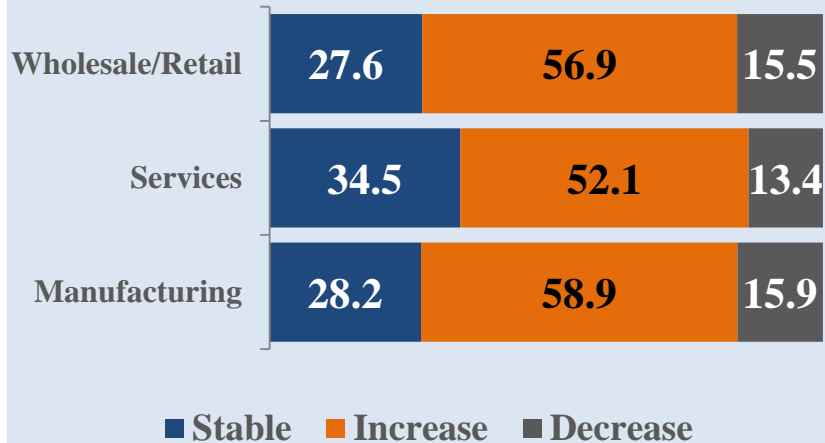
Major Findings:



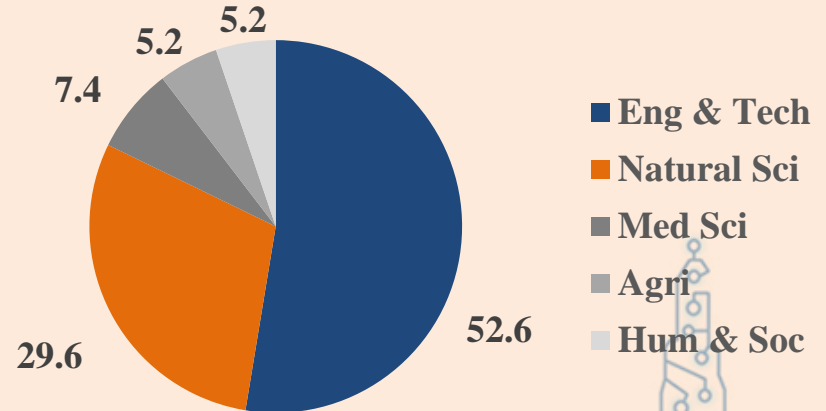
RDI Survey 2018 (Cont'd)

Major Findings (Cont'd):

Trend of R&D Expenditure

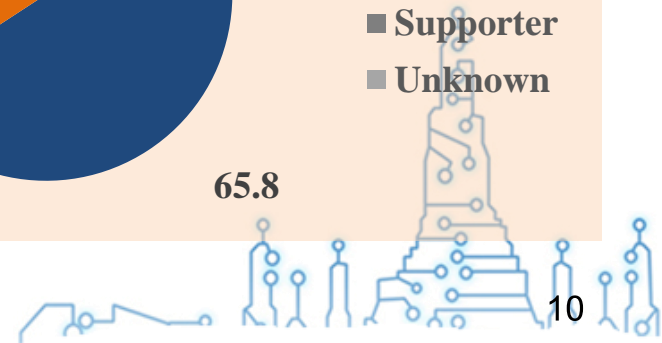
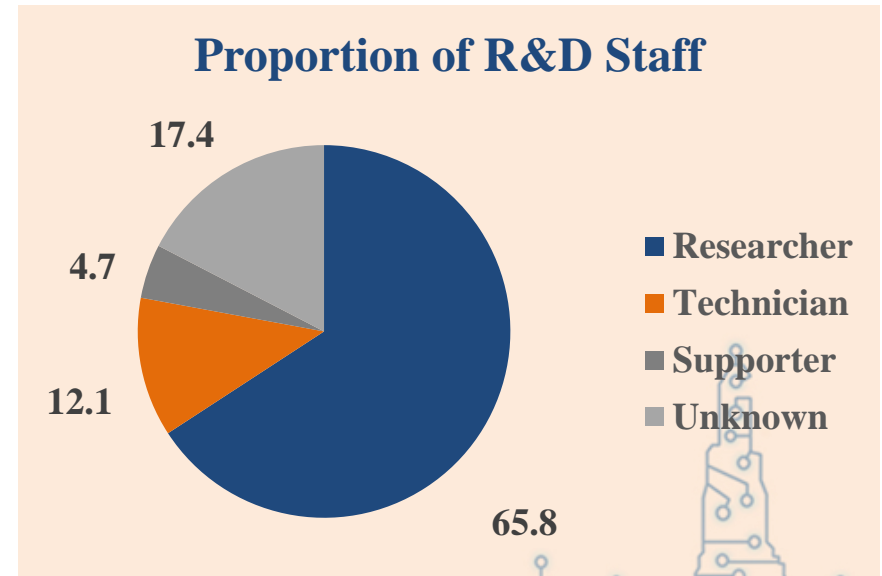
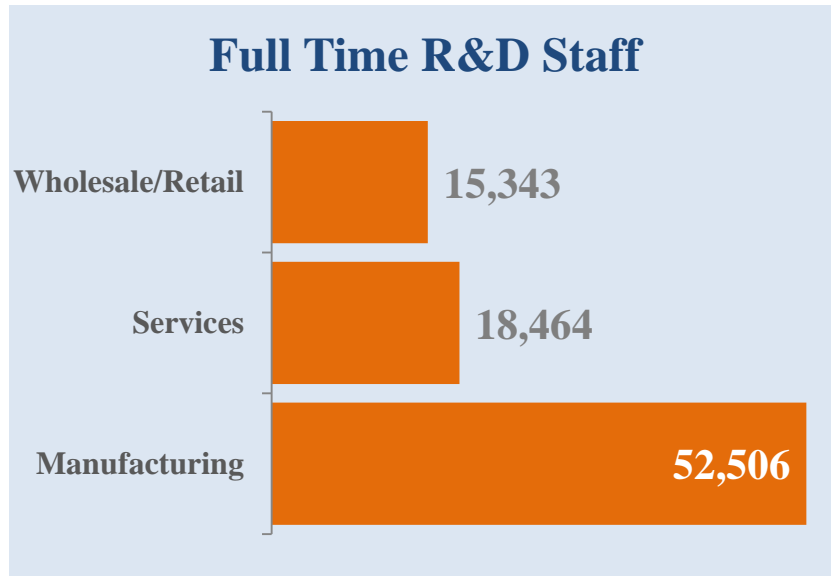


Proportion of R&D Expenditure



RDI Survey 2018 (Cont'd)

Major Findings (Cont'd):



RDI in Industrial Census 2012



National Statistical Office, Ministry of Digital Economy and Society

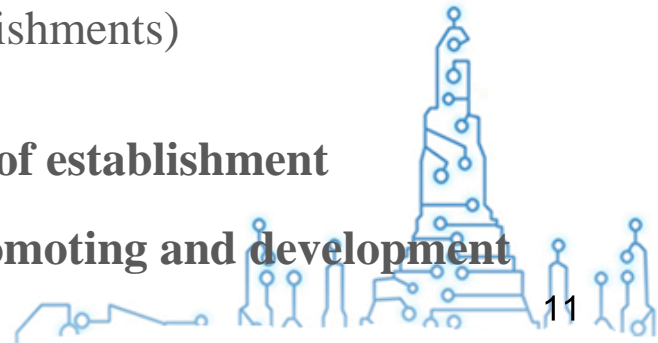
Scope: All Establishment in Manufacturing Sector

(R&D question apply for establishment which >10 person engaged)

Method: enumerated 424,196 establishments in scope

(Establishment in R&D scope 36,444 establishments)

Objective: To collect the operation data of establishment
in manufacturing sector for planning, promoting and development



RDI in Industrial Census 2012 (Cont'd)

Classification/Definition: TSIC for classified economic activity (base on ISIC)

RDI Questions: Added R&D of Science, Technology and Innovation Questions in Section 6th of Industrial Census 2012 Questionnaire (Cooperated working with STI for updating the information of R&D in Establishment)

RDI Activity

Current RDI Expenditure and in the next 5 years

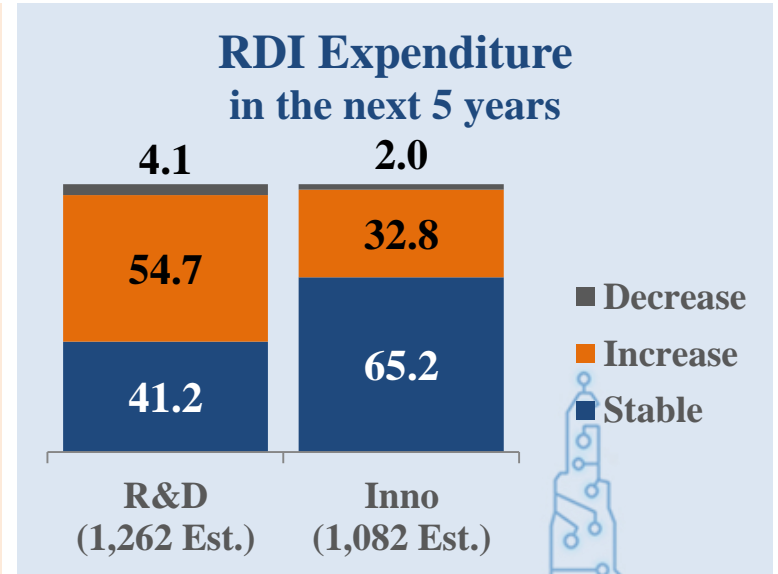
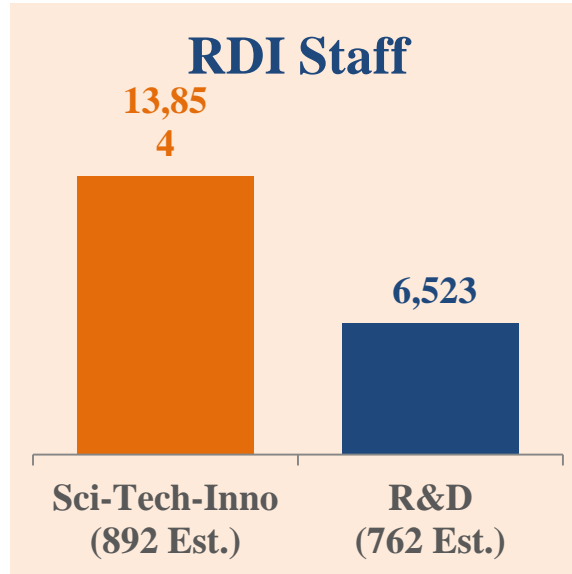
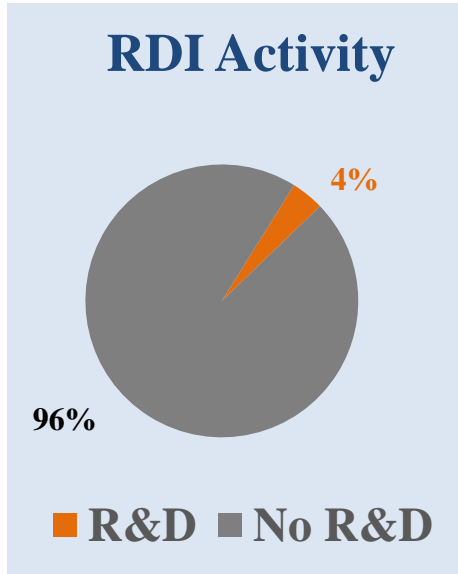
Current RDI Staff and characteristics

Planning for RDI Staff



RDI in Industrial Census 2012 (Cont'd)

Major Findings about RDI:



RDI in Super-cluster 2017



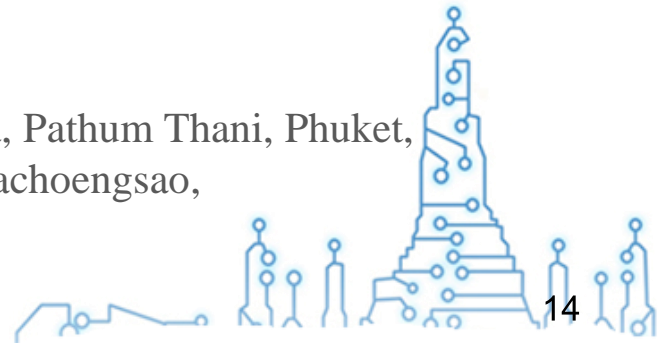
National Statistical Office, Ministry of Digital Economy and Society

Scope: Establishment in 4 high potential industries

1. Automotive and Parts Cluster (**APC**)
2. Electrical Appliance Electronics and Telecommunication Equipment Cluster (**ETC**)
3. Eco-friendly Petrochemicals and Chemicals Products Cluster (**EPC**)
4. Digital-based Cluster (**DBC**)

In 9 super cluster provinces

Chiang Mai, Phra Nakorn Si Ayutthaya, Pathum Thani, Phuket, Nakorn Ratchasima, Prachin Buri, Chachoengsao, Chon Buri and Rayong



RDI in Super-cluster 2017 (Cont'd)

Method: Listing all establishment in 9 super cluster provinces

(392,385 establishments)

Enumerated in 4 high potential industries

(6,200 establishments)

Objective: 1) To develop basic data of establishment

2) To lift up the potential in RDI and human resource

Classification/Definition: TSIC for classified economic activity (base on ISIC)



RDI in Super-cluster 2017 (Cont'd)

RDI Questions: Added RDI Technology Questions in Section 7th of Super-cluster 2017 Questionnaire

Technology used in manufacturing processes

Technology development within next 5 years

Proportion of RDI Expenditure and within next 5 years

RDI Staff

Source of RDI budget

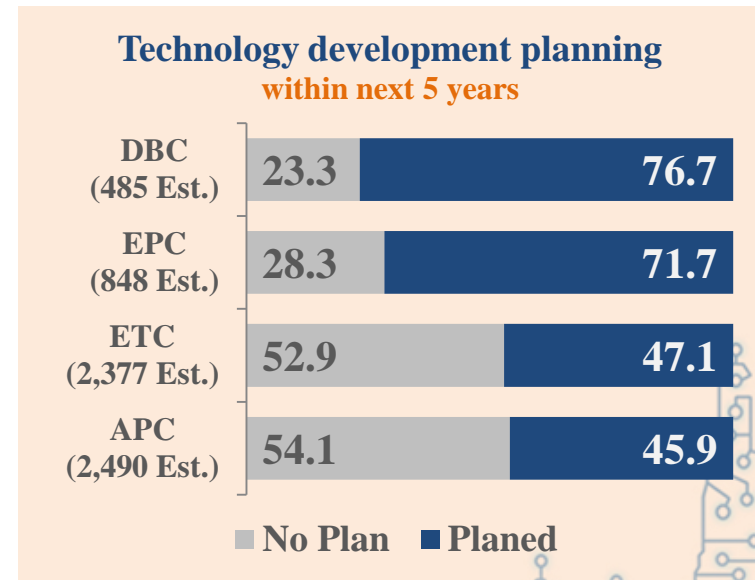
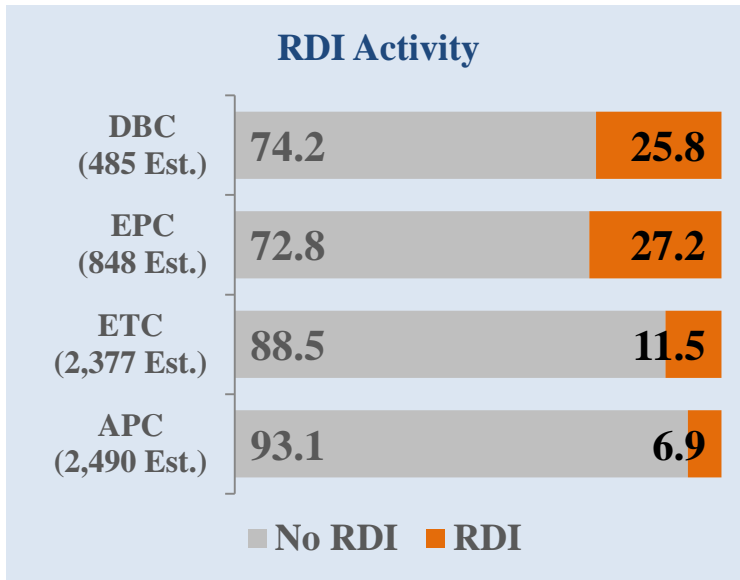
RDI planning within next 5 years

Cooperation of RDI within next 5 years



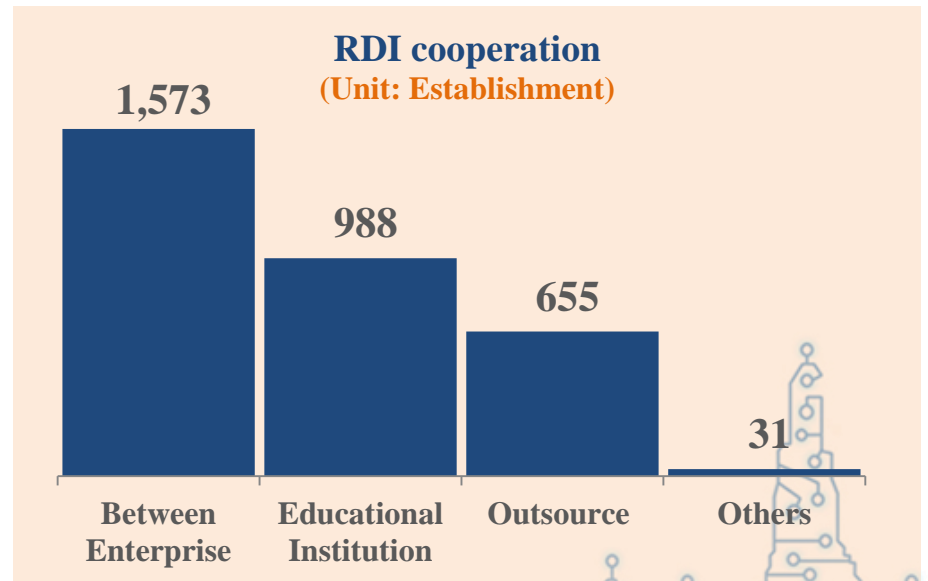
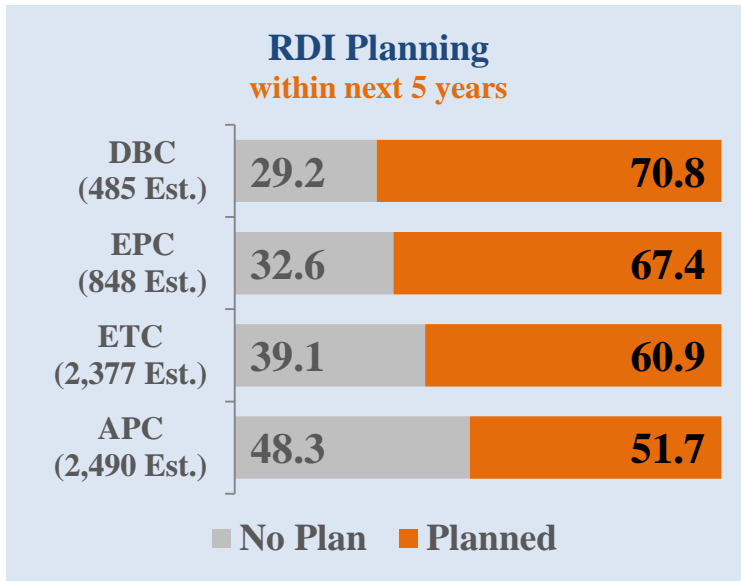
RDI in Super-cluster 2017 (Cont'd)

Major Findings about RDI:



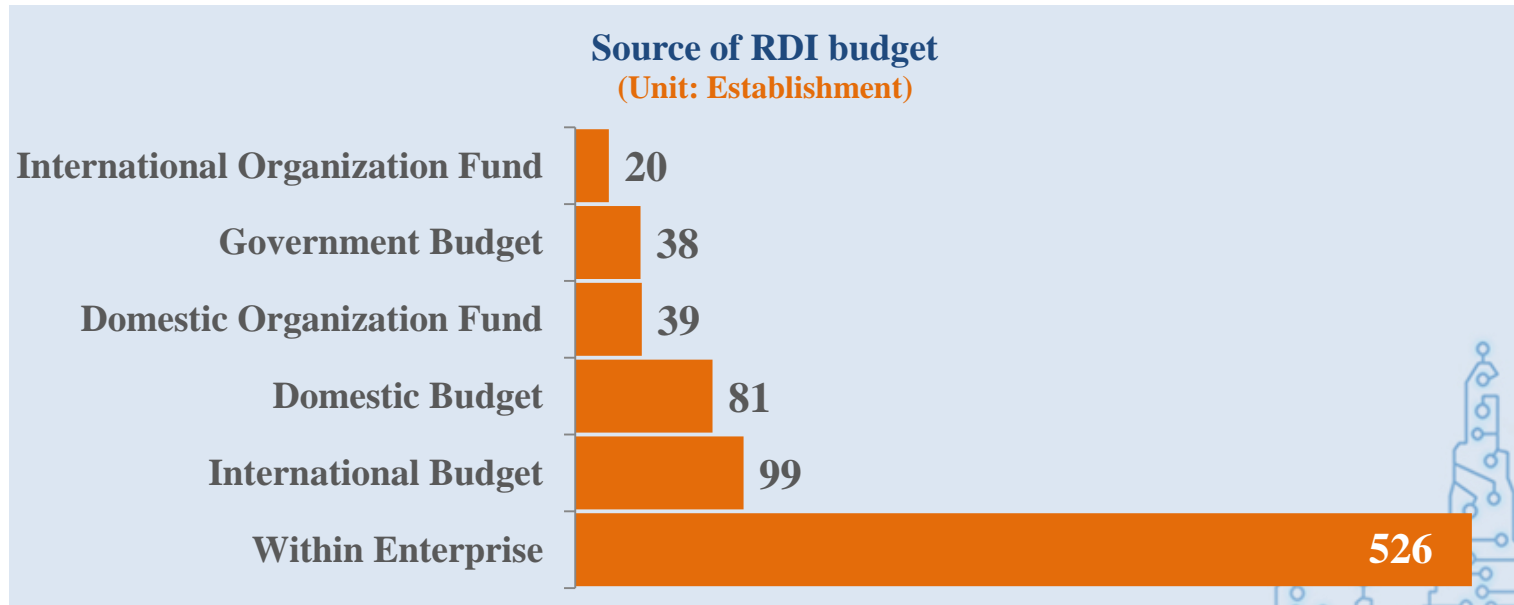
RDI in Super-cluster 2017 (Cont'd)

Major Findings about RDI (Cont'd):



RDI in Super-cluster 2017 (Cont'd)

Major Findings about RDI (Cont'd):





THANK YOU

FOR YOUR ATTENTION

