

# IPR Issues in collaborative research and technology transfer

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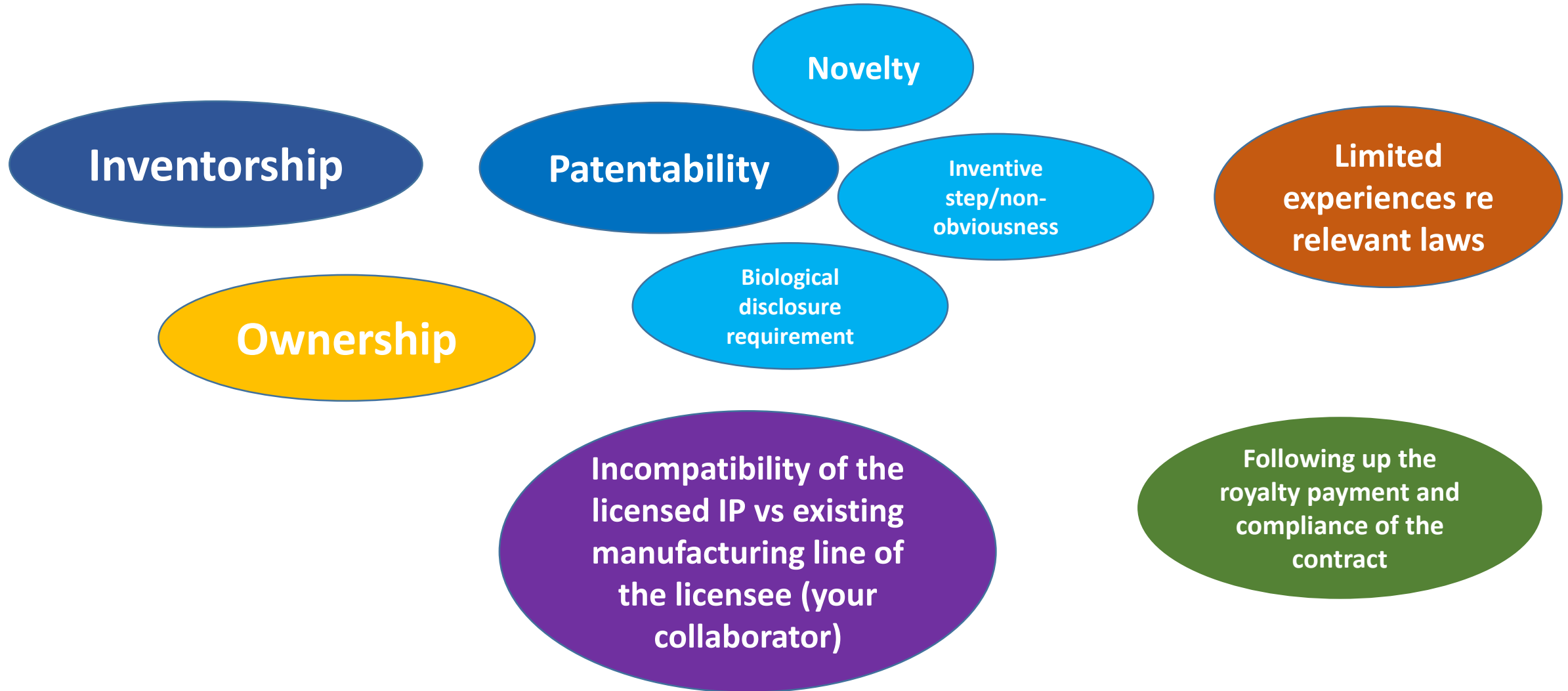
IP Policy Manager, Technology Licensing Office (TLO)

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What are common IPR issues in educational and research environment?



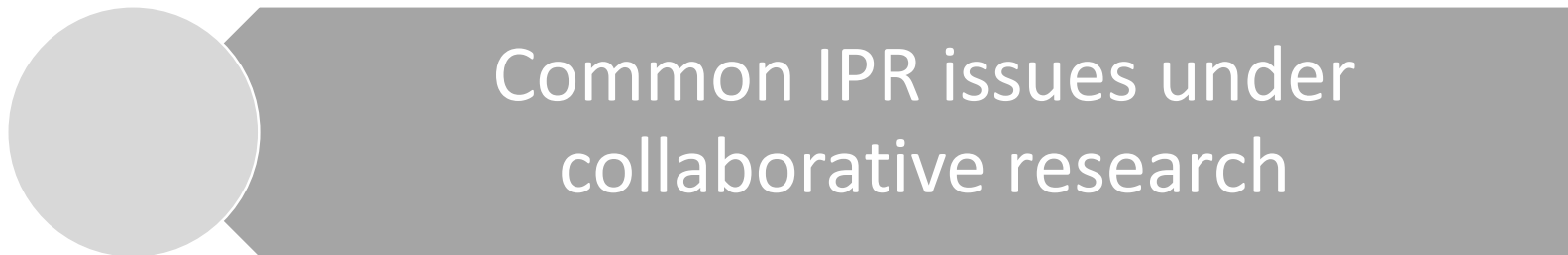
# Selected common IPR issues in the educational and research environment



# Points of Discussion

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Model of knowledge exchange and transfer

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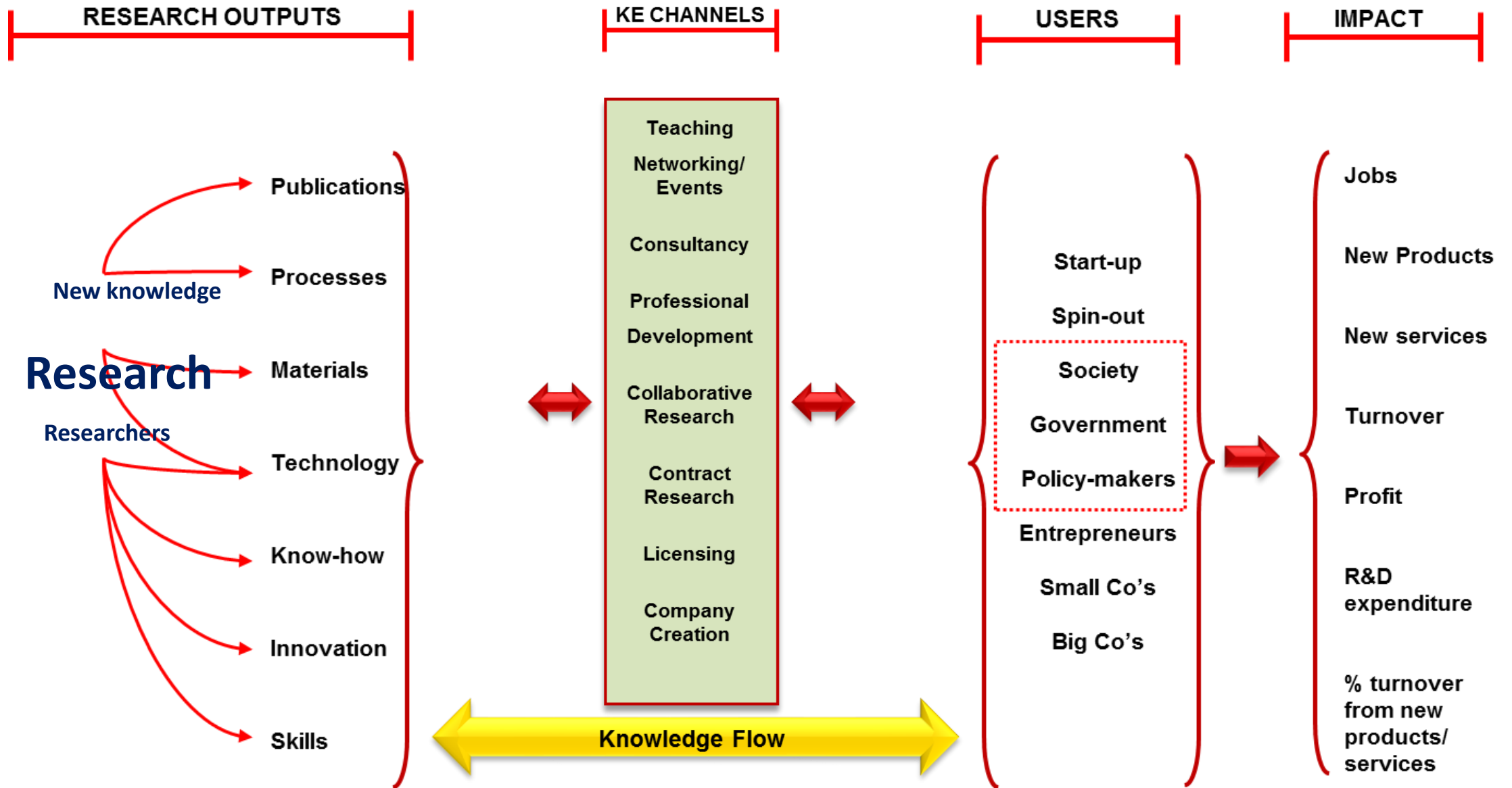
Common IPR issues under collaborative research

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NSTDA Case study

# Model of Knowledge Exchange and Transfer

# Model of Knowledge Exchange and Transfer



# Common IPR issues under collaborative research

# Value Chain of Collaborative Research

## Pre-collaboration

## Collaboration

## Post-collaboration

Due diligence of your Research partner

Objective & goals

Project proposal: scope

Extension/  
Completion/Termination of  
the Contract

idea

Negotiation

Obligation

Monitoring

Next step

Technology-base

Institutional Policy

Roles and responsibility

Goes as planned?

IP-base

Any background IP?

IP Ownership, Management, & Benefit Sharing

Any improvement on the existing IP?

Any license needed?

NDA  
MTA

Any foreground IP?

Collaborative  
Research  
Agreement

Service-base

# Pre-collaborations

## Research Agreements

- Are you or your research partner obligated to any sponsor of your research?
  - It is important to clear the ownership issue with your research sponsor (s).
- Any national law requirement/compliance?
  - E.g. The Thai Patent Act: a written prior consent from the joint owner for any commercialization of the jointly owned patent is required.
- What does your institutional IP Policy say?

## Materials Transfer Agreements (MTAs), Confidentiality Agreements (CDAs)

Key issues: “obligation under the MTAs”

- Does your invention contain any 3<sup>rd</sup> party materials?
- Was your invention developed from the 3<sup>rd</sup> party confidential information?
- Do terms of any relevant MTAs or CDAs restrict any use of the materials, licensing, or commercialization of the invention?
  - MTAs for research use vs commercial use

**Licensing Agreements:** Is the invention already licensed ?

# Collaborative Research

## Collaboration

- Scope of the work -> Background IP and Foreground IP
- Management of any IP arising from the collaboration
  - IP relevant costs: Patent filing (national vs PCT), litigation, infringement
- Benefit Sharing: monitoring?

## Post-Collaboration

- Monitoring the use of the licensed IP (if any)
- Any improvement of the existing IP?
- Treatment of the residual parts of the transferred materials after the agreement is over.

# NSTDA Case Study

# Case Study One: A license of the formula of Thai Economic Preservative for Rubber Sheet “BeThEPS”



BeTHEPS provides the same benefit of extending Shelf life by eliminating the coagulation and putrefaction problems. It does not have the detrimental side effects associated with ammonia and sodium sulfite.



**Trade Secret: TS<sub>60</sub>MT<sub>00104</sub>**

Title: Formula to extend shelf life of NR liquid for the purpose of rubber sheet production



**Trade Secret:  
TS<sub>60</sub>MT<sub>00105</sub>**

Title: Process to prepare BeThEPS

Conventional way to preserve the natural rubber liquid

ammonia

บอแรกซ์

ฟอร์มัลดีไฮด์

sodium sulfite

โซเดียมคาร์บอเนต



Blue Moon Studio

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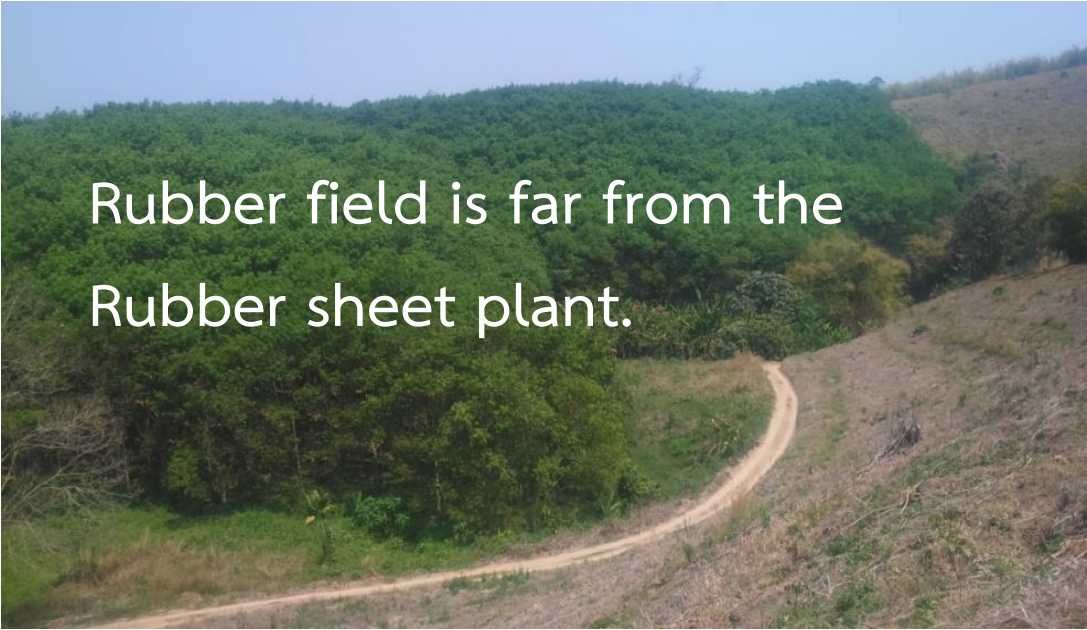
# Rubber Sheet Production Process



# Cause of the property loss before converting to a rubber sheet



Commuting issue



Rubber field is far from the Rubber sheet plant.

Limited production capability



# Timeline: "BeThESP"

Technology Transfer



Licensee#1

Dec 2017

Licensee#2

Mar 2018

Seminar @  
NAC2018

Licensee#3

April 2018

Licensee#4

May 2018

Technology  
Awareness and  
growing market  
demand

Talk and Training for  
user in different  
location

Field  
Test

Research  
Finished

PR &  
Marketing

# Mechanism for Tech Transfer at NSTDA

# NSTDA: National Research Centers

National Center for  
Genetic Engineering  
and Biotechnology



**BIOTEC**  
a member of NSTDA

National Metal and  
Materials Technology  
Center



**MTEC**  
a member of NSTDA

National Electronics  
and Computer  
Technology Center



**NECTEC**  
a member of NSTDA

National  
Nanotechnology  
Center



**NANOTEC**  
a member of NSTDA

# NSTDA S&T Infrastructure

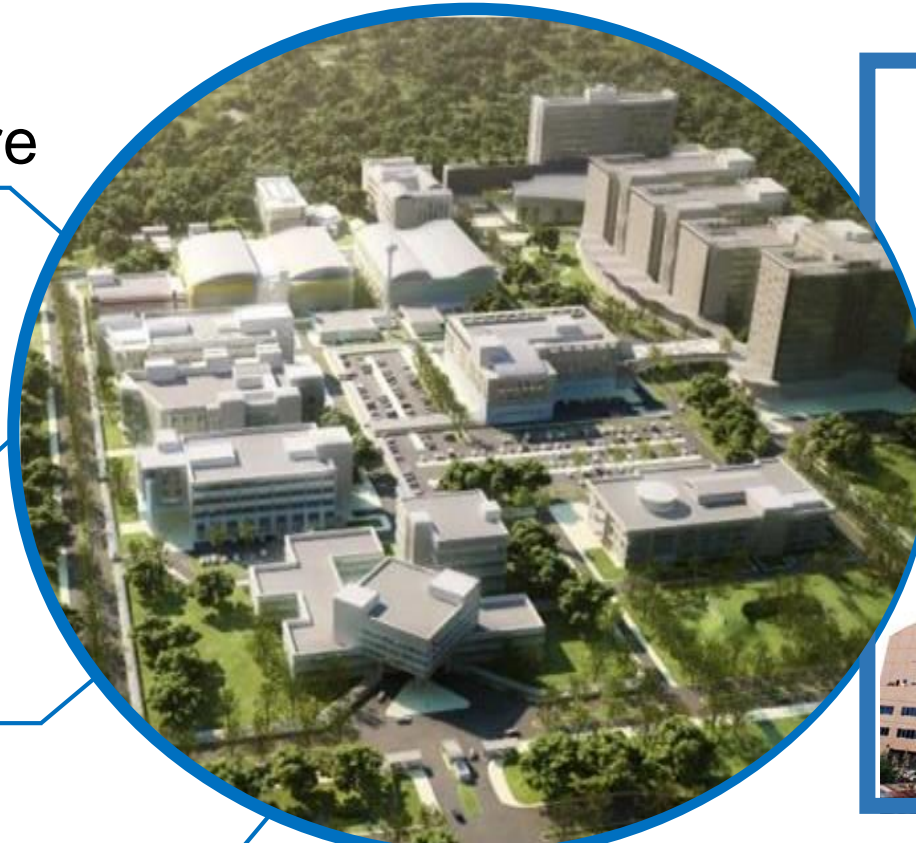
Promoting Innovation in Thai industries - Physical Hubs

Access to Infrastructure

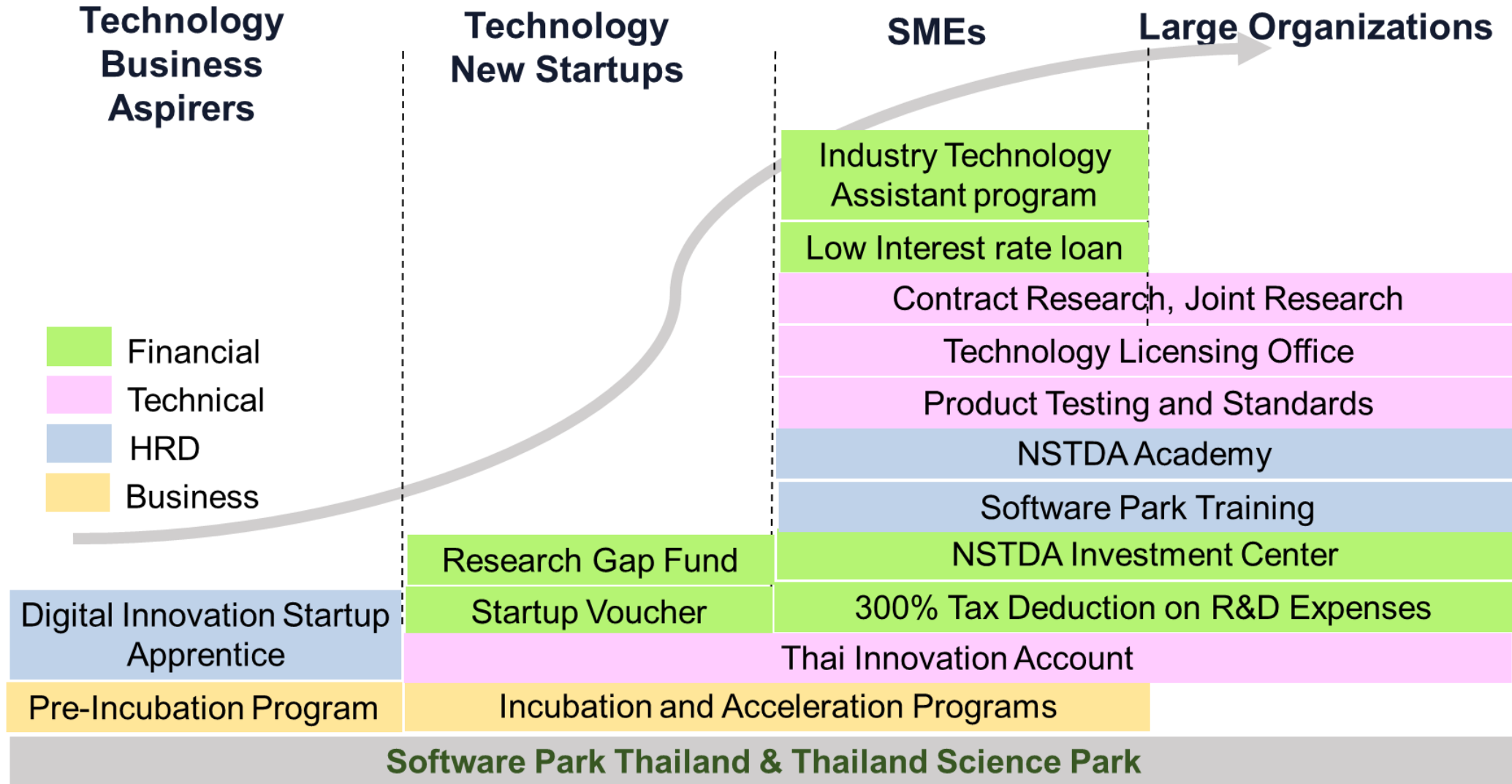
Access to Knowledge

Access to Capital

Access to R&D Network



# NSTDA Supporting Mechanisms for STI & TTO



# Technology Transfer

An in-wall Incubatee



## Innovation of KEEEN Ltd.

**Innovation: Bioremediation Agent to resolve the industrial waste treatment problem prior to discharge to nature.**

### Awards:

- **Awards from International Technology Expo 2012, Malaysia, May 2012**
  - Gold Medal
  - Excellent Biotechnology Innovation from Japan
  - Excellent Environment Innovation from China
- **Gold Medal from 8<sup>th</sup> Taipei International Invention Show and Technomart, Taiwan, September 2012**
- **Grand Prize 2012 from Asian Science Parks Association, October 2012**



# Technology Transfer

An out-wall Incubatee



## GIB: Green Innovative Biotechnology

**Innovation:** Natural ingredient Agricultural related products for plants and animals without chemical or Antibiotic



Year	Agencies	Activity	Result
2006-08	NSTDA/ITAP	Formulation, Product Development and testing	Commercilization Product
2014-15	NSTDA/BIC	Consultant on Operation, Organizational and Marketing	Effective Org structure and clearer marketing strategy and plan
2015	NSTDA/LIF	Business Model, Internationalization and Pitching workshop	Business model Revision with international mindset. Becoming effective presentation and
2015-16	NSTDA/BIC	Pitching on domesic and International competitions stages	Won reputable domestic and international Awards. Expanded market into China.

# Take away messages

- “Trust” in your research partner is important
- Make sure you have your ideas/invention protected properly
- Ownership should be clear no matter you go for collaborative research, work for hire, or other forms of business transaction
- Check your institutional policy (IP policy, Conflict of Interest Policy, National IP laws)
- Seek for professional advice if needed



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