



University Technology Transfer, Innovation Ecosystem and EIE Project

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About Me



- 27+ years at World Intellectual Property Organization (WIPO)
- 15 years dealing with Patent Cooperation Treaty (PCT)
- Supervised PCT Japanese operations of processing PCT international patent applications
- Trilateral (EPO, JPO and USPTO) Technical Cooperation Coordinator from WIPO
- PCT IPER technical translation (10+ years)
- 15+ years dealing with Innovation, Technology Transfer and IP Commercialization
- Assisted 300+ universities worldwide in IP and Technology Mgt.
- Assisted in development of 30+ Institutional IP policies/ 50+ establishment of TTOs
- 200+ IP Mgt. training workshops/seminars/conferences
- Dealt with governments of 185 countries
- IP Consultant/PM WIPO/Partner “ET Cube International” - IP commercialization/Entrepreneurship consulting and training services
- LLM in Intellectual Property Law
- MBA specialized in Management in International Organizations

Over 80% of market value of S&P500 companies today is based on their intangible assets

Intangible assets

(knowledge based assets)

e.g.

- Patents
- Trademarks
- Design
- Brand Value

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Tangible assets

(physical assets)

e.g.

- Real estate
- Equipment
- Cash

Roles of University

In the past.....

- Education
- Generate new knowledge through research
- Transfer the knowledge generated to the public for the benefit of society



Today, additional roles of university include....

- Research funds management
- Drafting research contracts and agreements
- Evaluation of technology
- Protection of research results
- Due diligence
- Technology marketing
- Licensing negotiation
- Increased collaboration with industry
- Entrepreneurship development
- Incubation of spin-offs/start-ups
- IP training for researchers
- Administration of institutional IP policy
- Monitoring deals etc.

IP & Tech. Management

Globalization - Business Paradigm Shift

- **Internet/ Social media/ Smartphone → Easy access to information/ Easier communication**
- **Limited geographic barriers**
- **Global market (e.g. online commerce)**
- **Competitive market**
- **Need to improve efficiency**
- **Need to improve quality**
- **Constant generation of new technologies**
- **Fast technology cycle**
- **Technology interdependency → Need to collaborate**
- **Highly knowledge/technology driven economy**



NEED TO INNOVATE !!!!

What is IP Assets?

1. Industrial property

- Patents (Inventions)
- Utility Models
- Trade Secret
- Trademarks (TM)
- Industrial Designs
- Geographic Indications (GI)
- New Plant Varieties
- Traditional Knowledge (TK)

2. Copyrights

IP rights

Protected by National and International Laws

IP = Assets

IP can be:

- traded
- sold
- licensed
- Inherited

IP provides:

- Competitive advantage
- Can block competitors/prevent competitors from entering the market

Benefits of IP

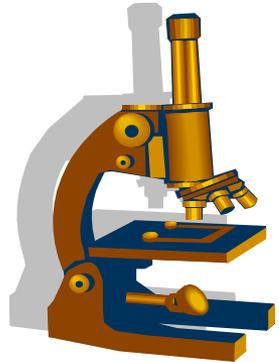
Micro level

- Build strong portfolios of IP as a source of competitive advantage
- Strong and effective tool for branding and marketing
- Enhance corporate value
- Provide incentives and recognition of creativity
- Enables to distinguish your products from others (products/services of high value)
- Avoid and defend against litigation

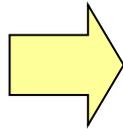
Macro level

- Increase national competitiveness and GDP
- Enhance exports of high value
- Stimulate R&D and Promote S&T
- Reduce brain drain by providing incentives
- Help address national/global issues
- Develop national brand, cultural identity and reputation
- Attract FDI and local investment
- Job creation

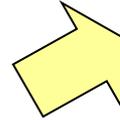
From Laboratory to Market



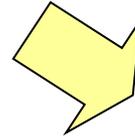
R&D



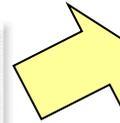
Patent application



Licensing



Start-up/ Spin-off



Commercialization

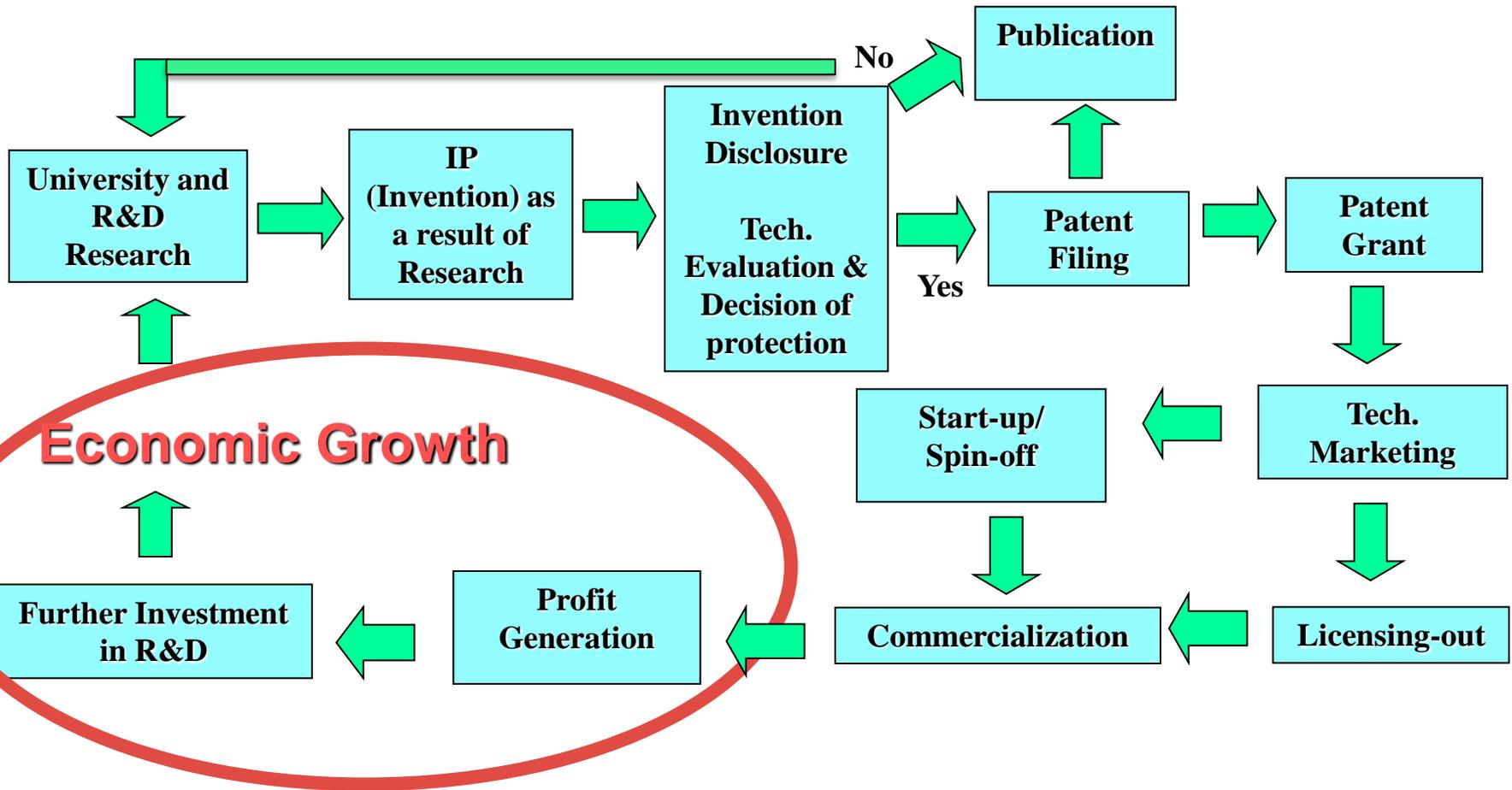
Technology Transfer

CREATION

PROTECTION

UTILIZATION

Innovation and Economic Growth Cycle

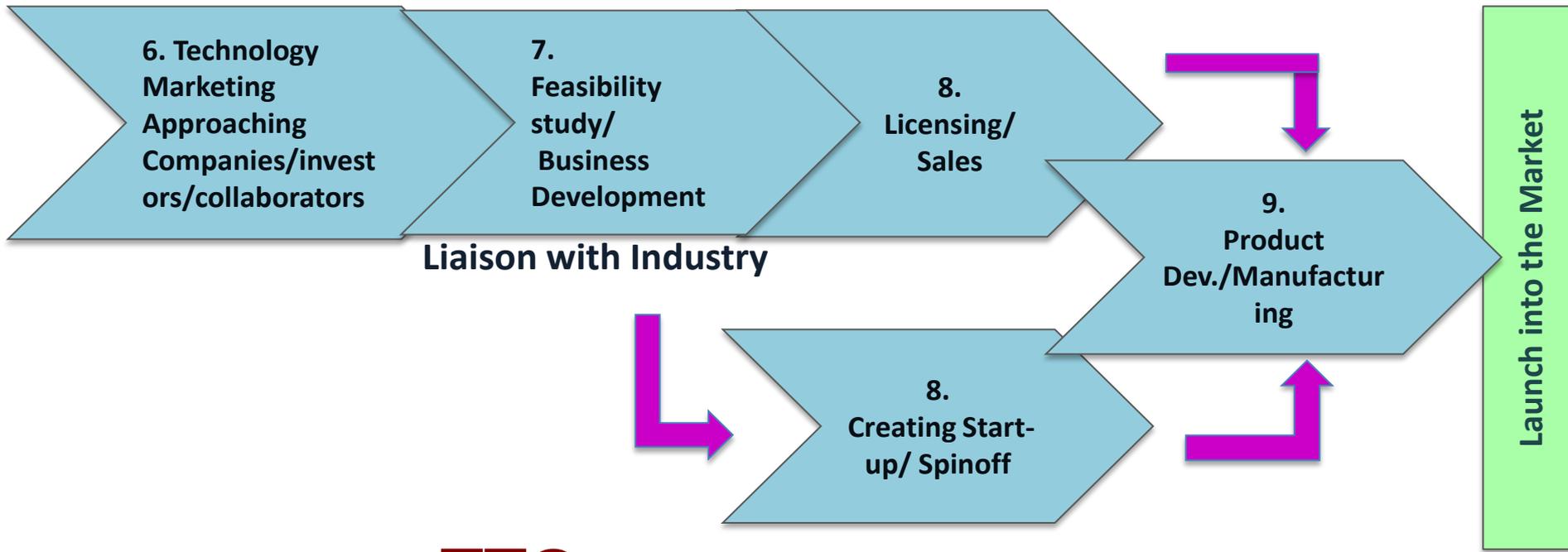


Source: Yumiko Hamano, "Innovation and Economic Growth Cycle"

TTO & Technology Management Process



TTO (Supported by Univ. IP Policy)

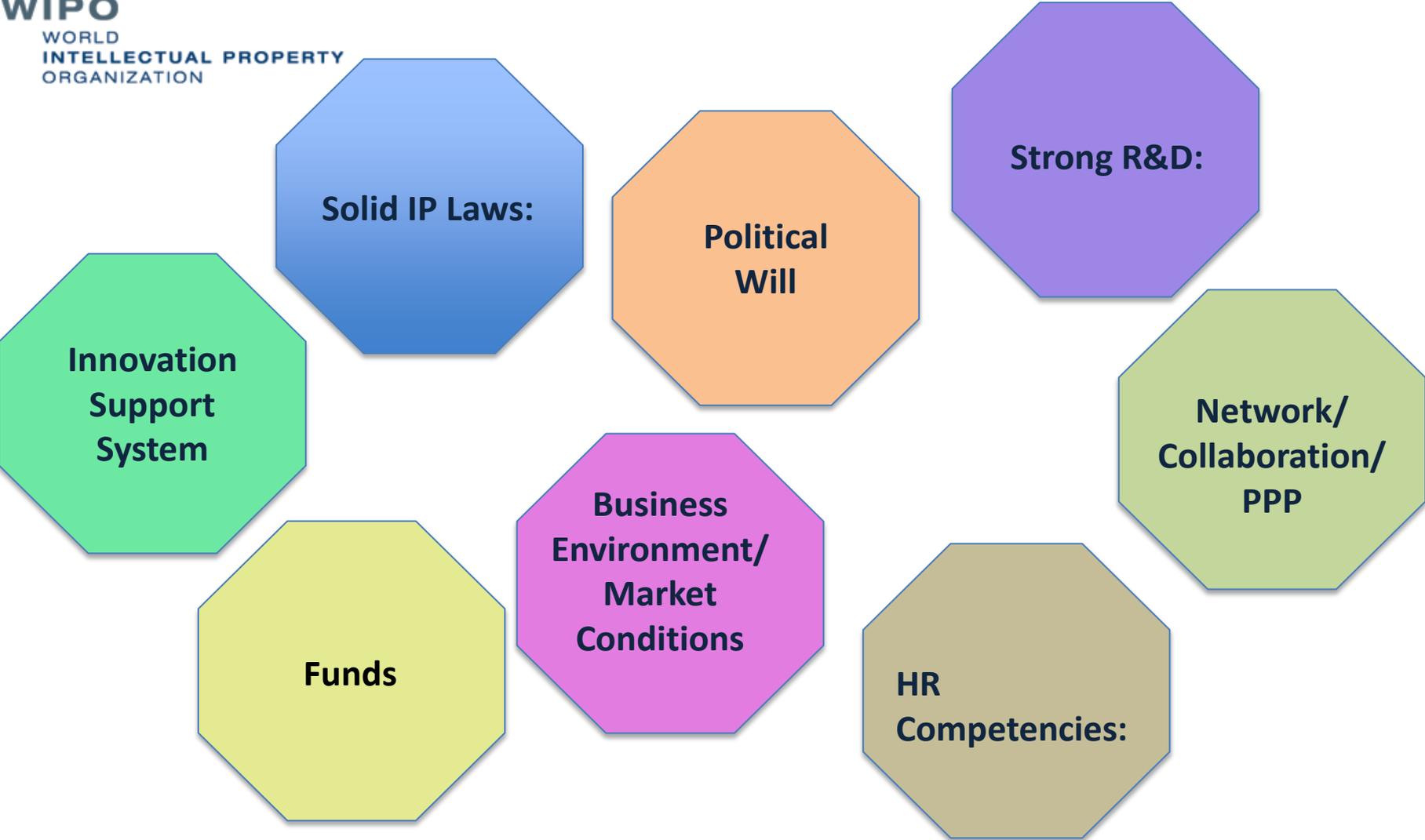


TTO (Supported by Univ. IP Policy)

IP & Technology Commercialization

- **Sales of IP (Acquisition)**
- **Donation**
- **Licensing**
- **Start-up and Spin-off**

Necessary Ingredients



Effective Innovation System

Political Will

- Innovation Policy and Strategies
- IP Legal System

Funds

- R&D (Gov. and Private budget)
- Innovation Funds

Innovation Support System

- Gov. Support
- Education/ training
- Incentive
- Coordination

Solid IP Laws: Protection/ Enforcement
Protection/ Enforcement

Strong R&D

Marketable technologies and IP

HR Competencies

Qualified Scientists/ Creators
Innovation Mgt. (IP, Business)

Business Environment/ Market Conditions

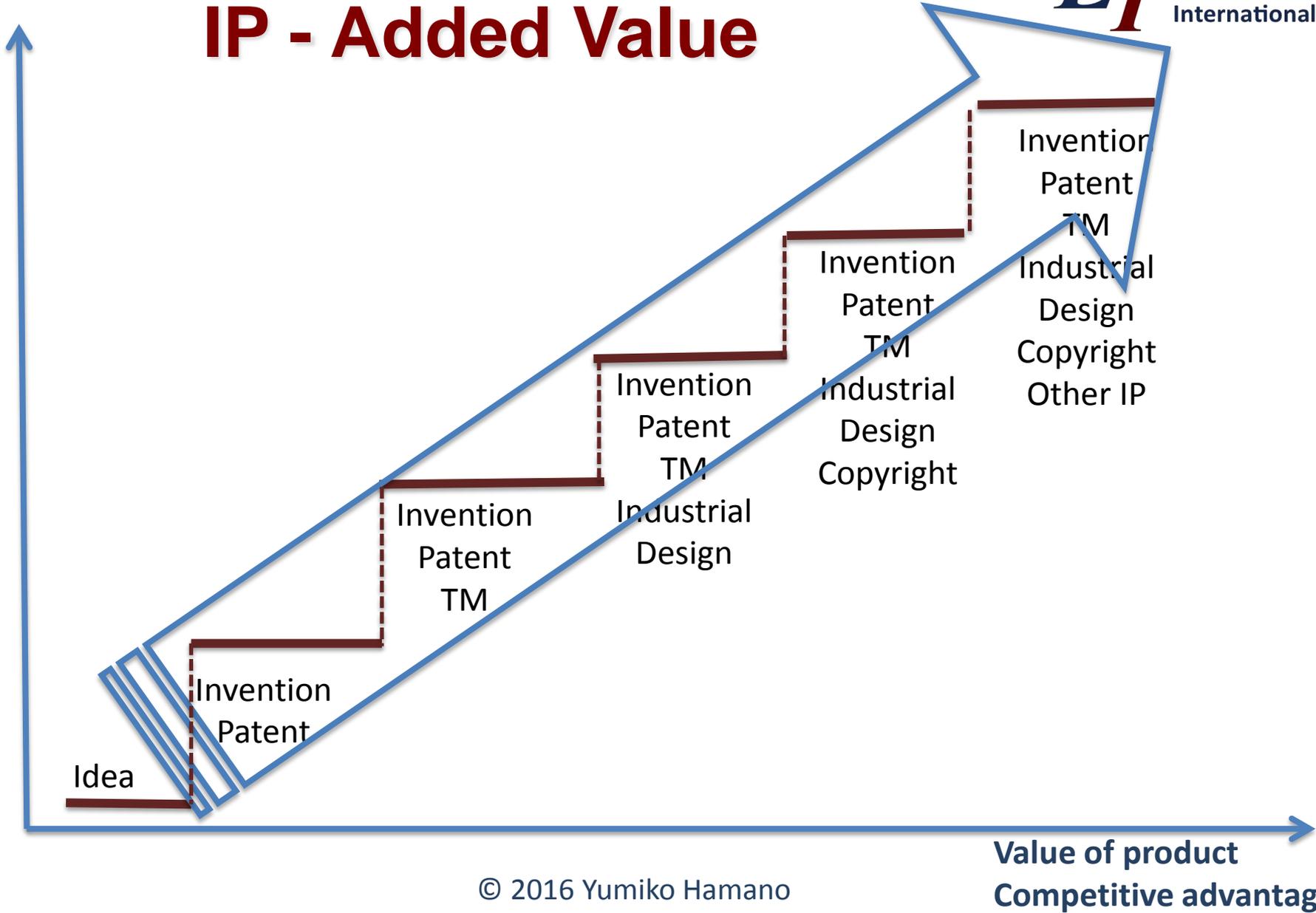
Tax incentives
ICT Development

Network/Collaboration

Participation of Private Sector
PPP

IP rights

IP - Added Value



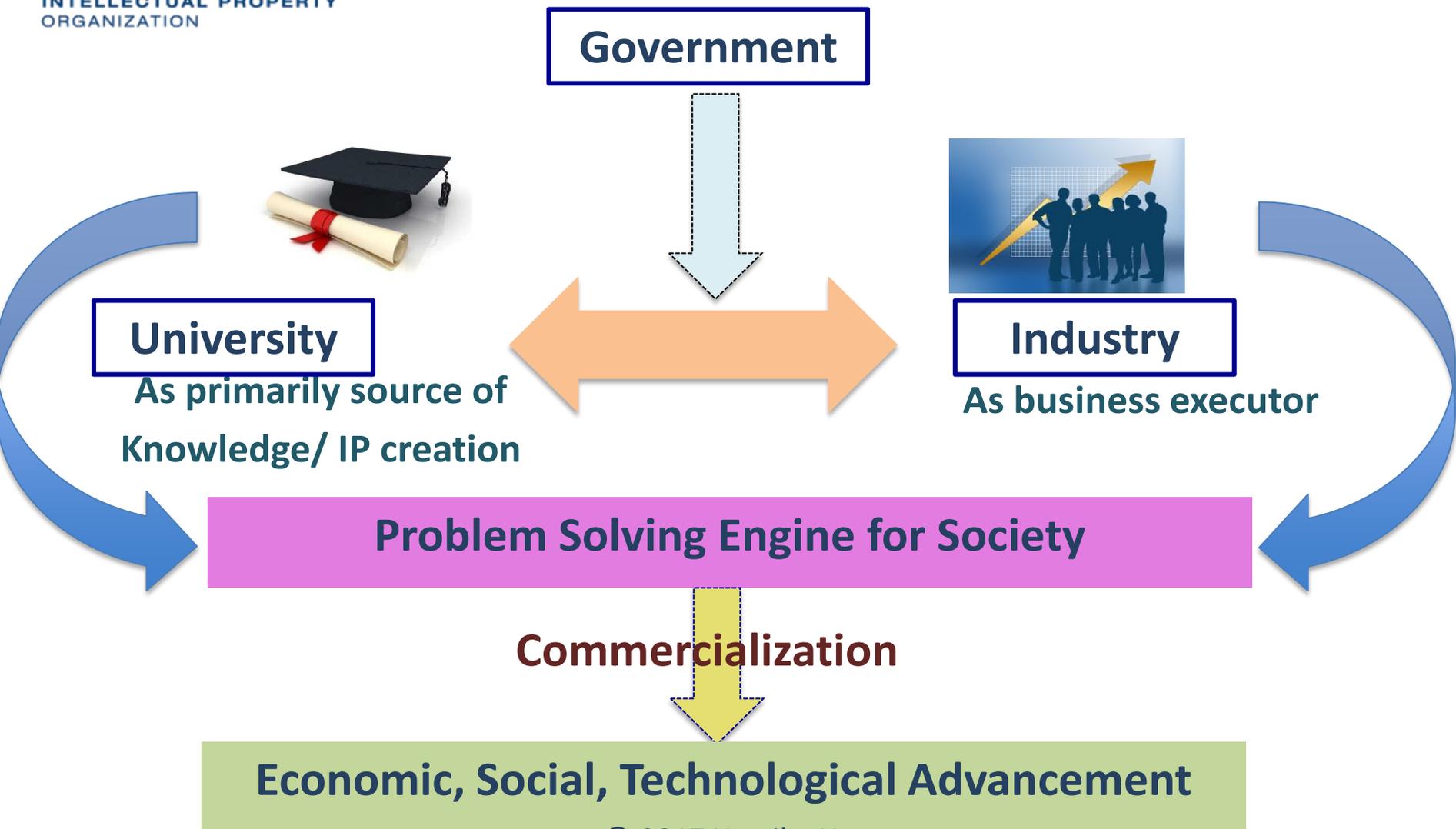
WIPO Enabling IP Environment Project

- Enhancing Institutional Capacity: IP & Tech Mgt. infrastructure, system and process
- Developing HR (technology managers) competencies in the fields of IP & Tech Mgt.
- Building solid linkages among stakeholders
- Building strong university– Industry collaboration
- Creating a sustainable innovation value chain
- Better coordination of innovation support system

Toward successful commercialization through effective use of IP systems

**Creation of Innovation Ecosystem in the
Country**

PPP in Innovation Ecosystem



Conclusion

- TT as University mission
- IP is a powerful tool for technology commercialization
- University plays an important roles in innovation ecosystem
- PPP, especially university-industry collaboration is essential for effective commercialization
- EIE Project aims to enhance innovation capacity in universities



**Thank you for your
attention**

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