



Intellectual Property Management As A Strategy for Competitiveness and Business Success- Perspectives from Thailand

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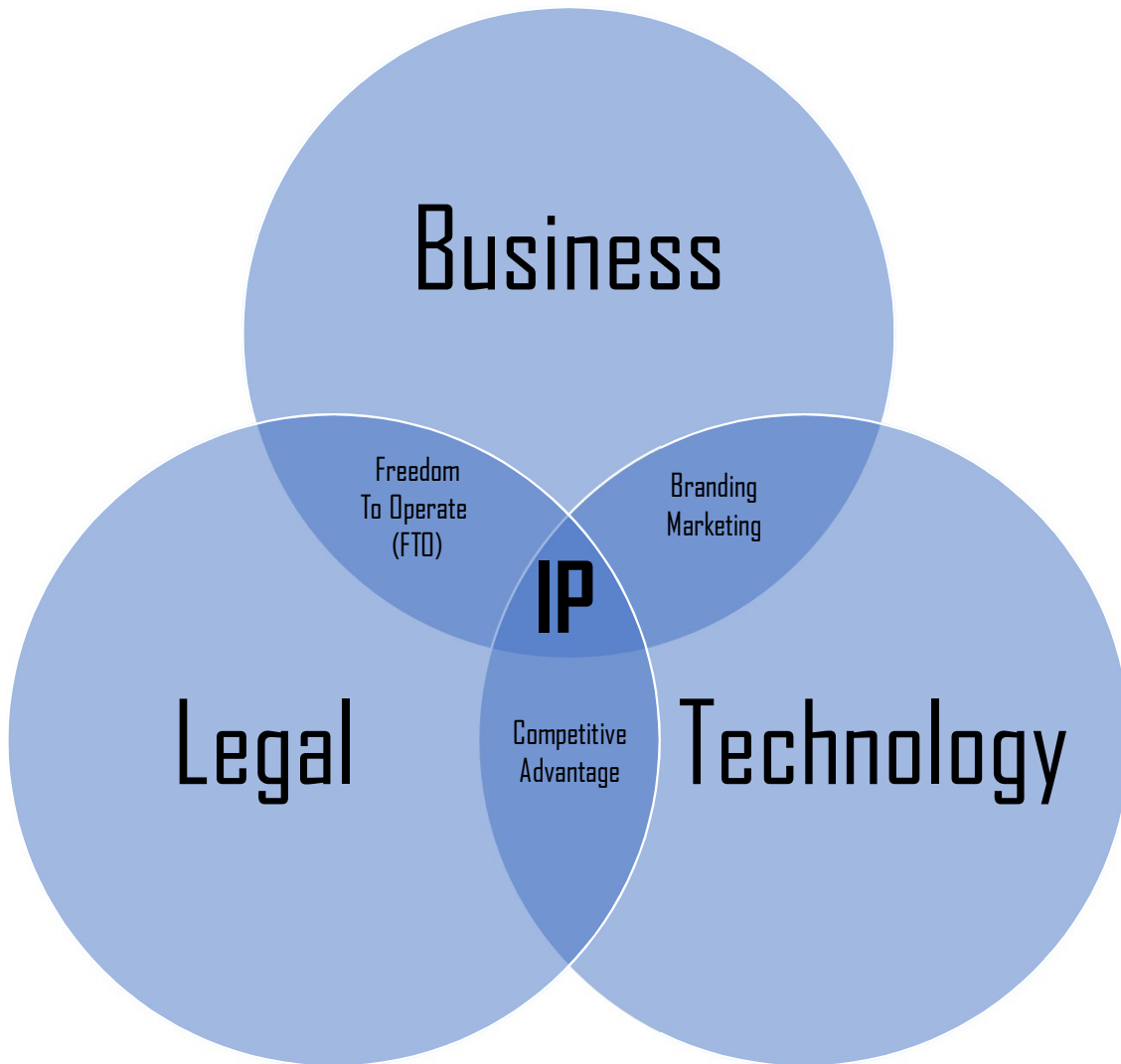
International Workshops on Intellectual Property Management and Technology Licensing
Asian Pacific Center for Transfer of Technology
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You Cannot Manage What You Don't Know

Challenges for IP Management in Thailand



IP Awareness

Perception/Understanding

Policy (National/Institutional/Personal)

Law & Regulations

Resources (Personnel, Tools, Incentives, etc.)



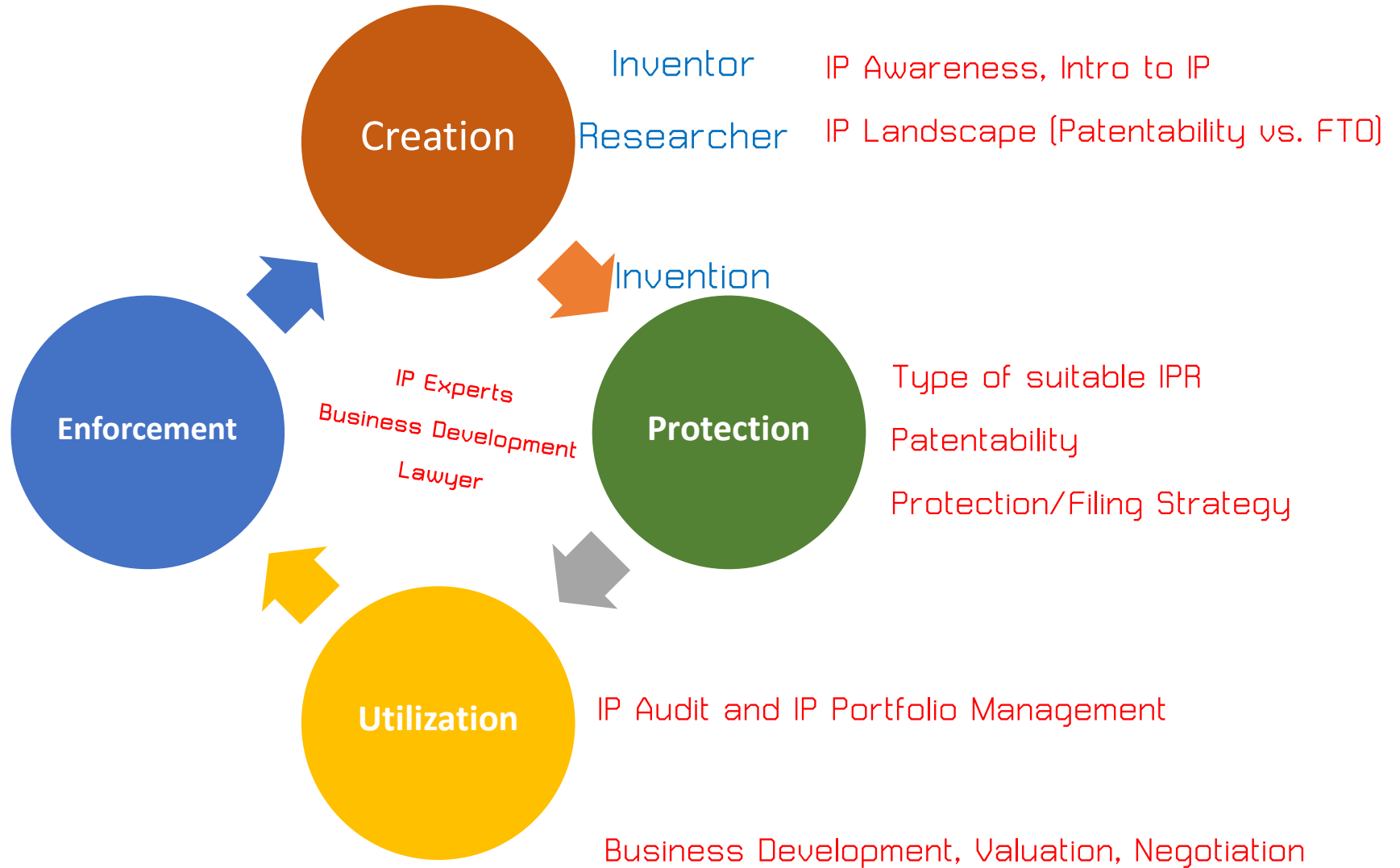
Marketing Advantage

- First Mover
- Distribution & Logistics
- Time to Market
- Manufacturing & Cost
 - Resources

Competitive Advantage

- Innovation and IP

IP Management





IP As Toolbox

Patent/Petty Patent

Design Patent

Copyright

Trade Secret

Trademark

Circuit Design

GI

Plant Variety

Traditional Knowledge

Trade Secret VS. Patent



Patent

- High cost of protection & maintenance
- Limited time of protection
- Patentability issue
- Protected against reverse engineering

Trade Secret

- Low cost of protection but may be high cost of maintenance
- Unlimited time of protection (as long as secrecy was kept)
- Regardless of patentability issue
- Reverse engineering is allowed
 - Cost to reverse engineer?



Challenges for Trade Secret Protection

- Greater employee mobility
- High-technology startup
- Out-sourcing
- Increasing possibility to reverse engineer with new technology
- Legal obligation to reveal ingredients, raw materials or manufacturing process for greater transparency

Concerns & Challenges for University

- University Culture
 - Knowledge dissemination
 - Career path for professor
- Research compliances
 - Conflict of interest
 - Conflict of commitment
- University-Industry Collaboration



R&D Commercialization Stages

Pain Points of Customers
Voice of Customers

Challenges

Opportunity
Canvas

Problem to be solved	Value	For Whom?

Technology Foresights

Technology Landscape

IP (Patent) Landscape

Opportunity Identification

Market Research
Industry Research
Competitive Analysis
Access to Resources
Human Capital of Team

Product Design Requirement
Concept/Product Innovation
Fabrication
Preproduction Prototype
Determine Production Process
Market Validation
Branding

Distribution
Supply Chain Management
Marketing for ROI
Employee Training
Ongoing R&D
Customer Support
Monitoring Trends

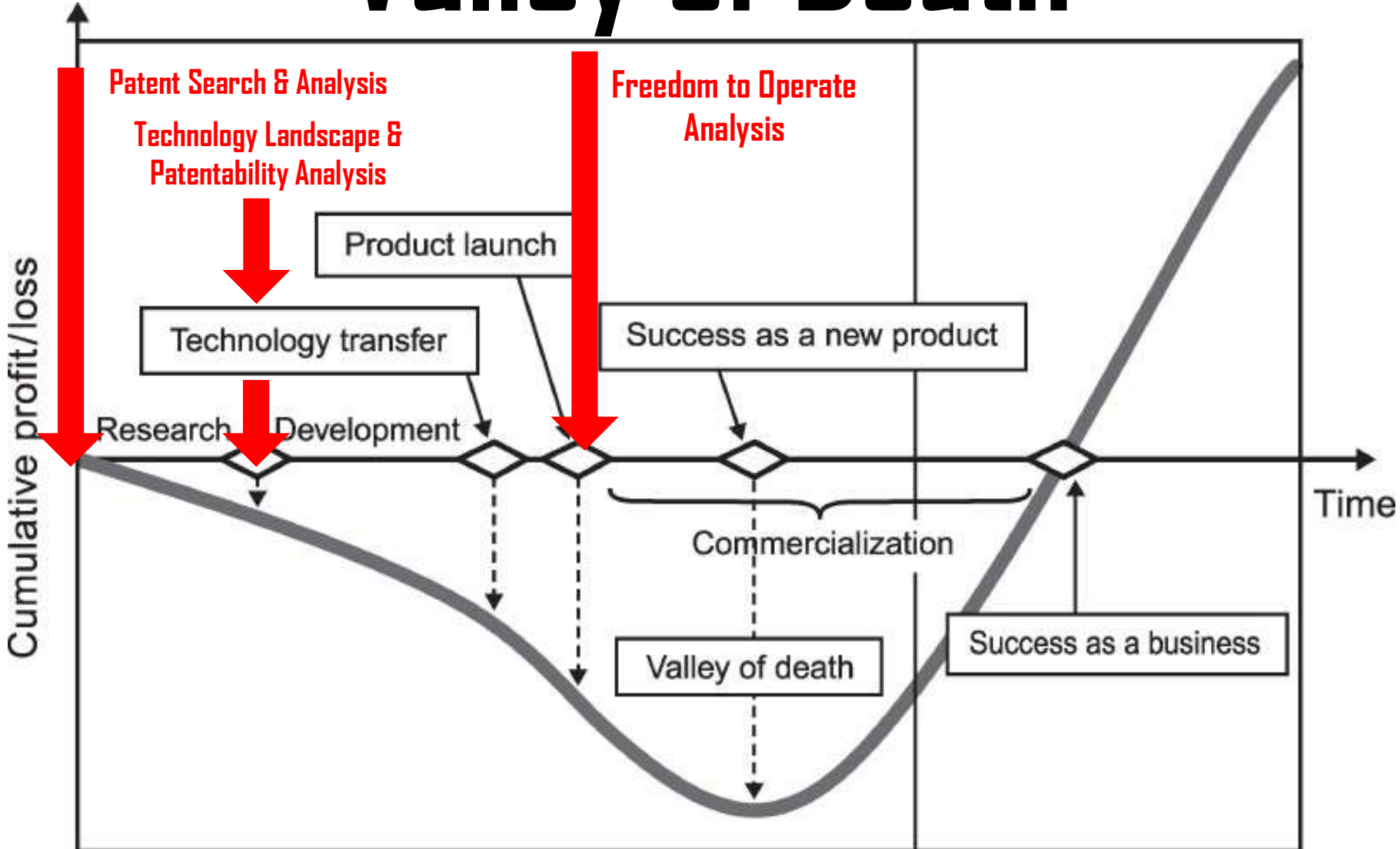


Product Feasibility

Proof of Concept
Select Business Model
IP Strategy
Source and Raise Seed Funding

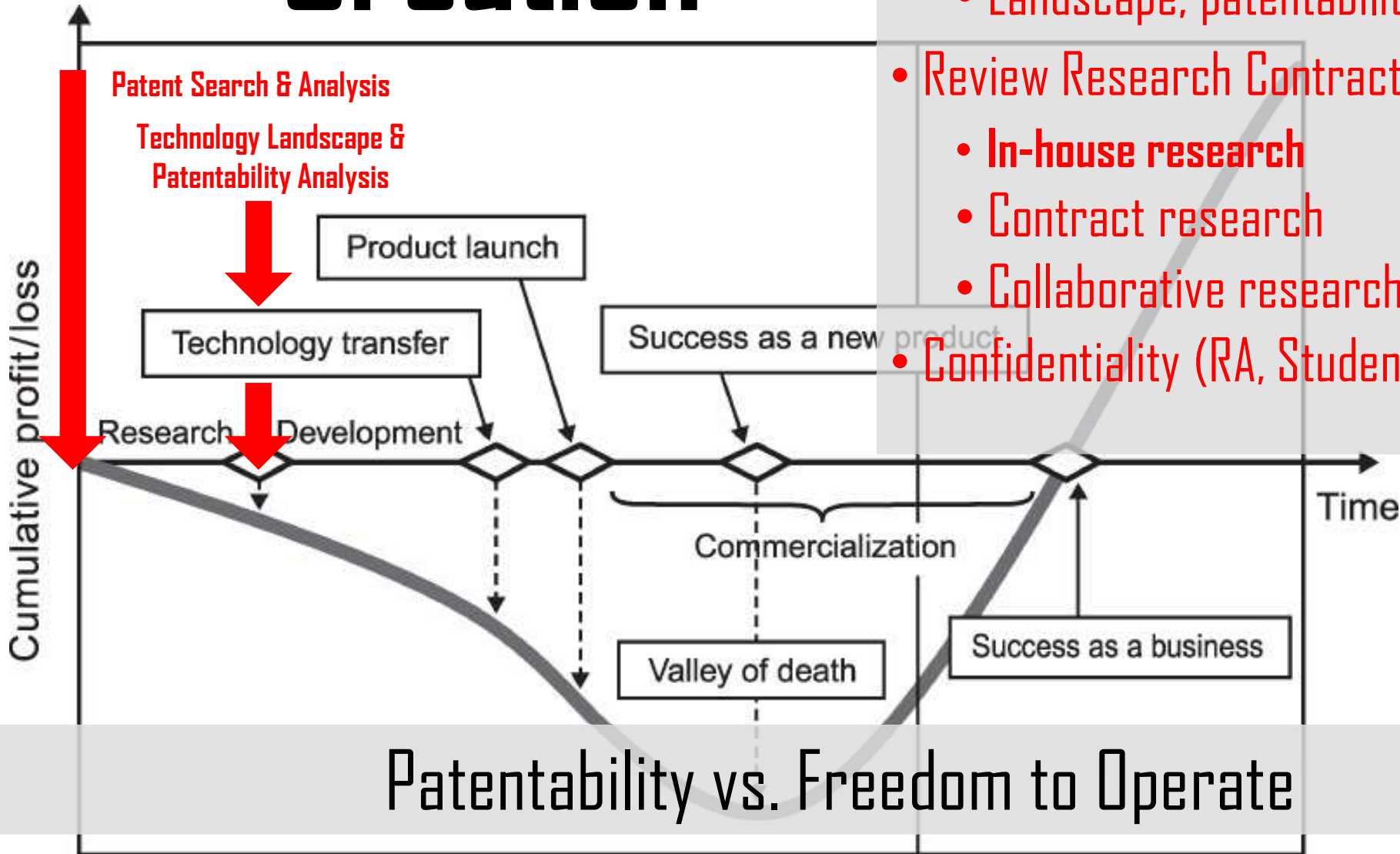
Scale up Manufacturing
Hiring Employee
Commercial Prototype
Product Testing/Quality Control
Raising Capital/Business Structure
Business Launch/Product Launch
Competitor Response

Valley of Death



Creation

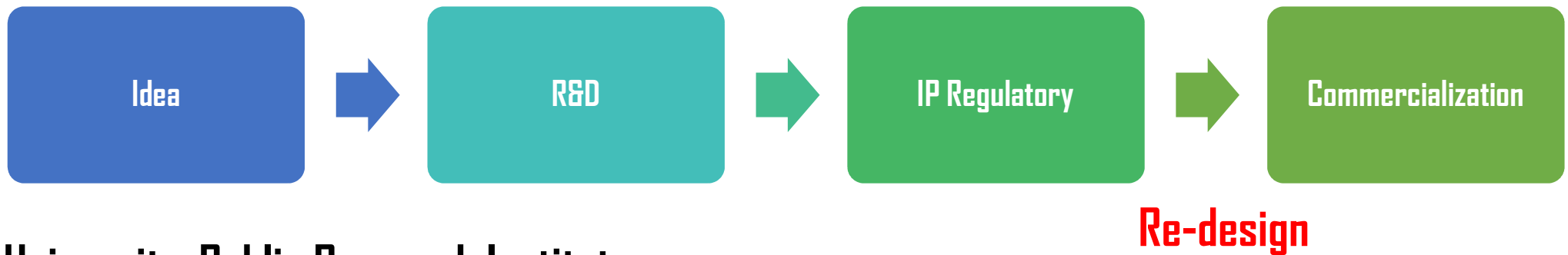
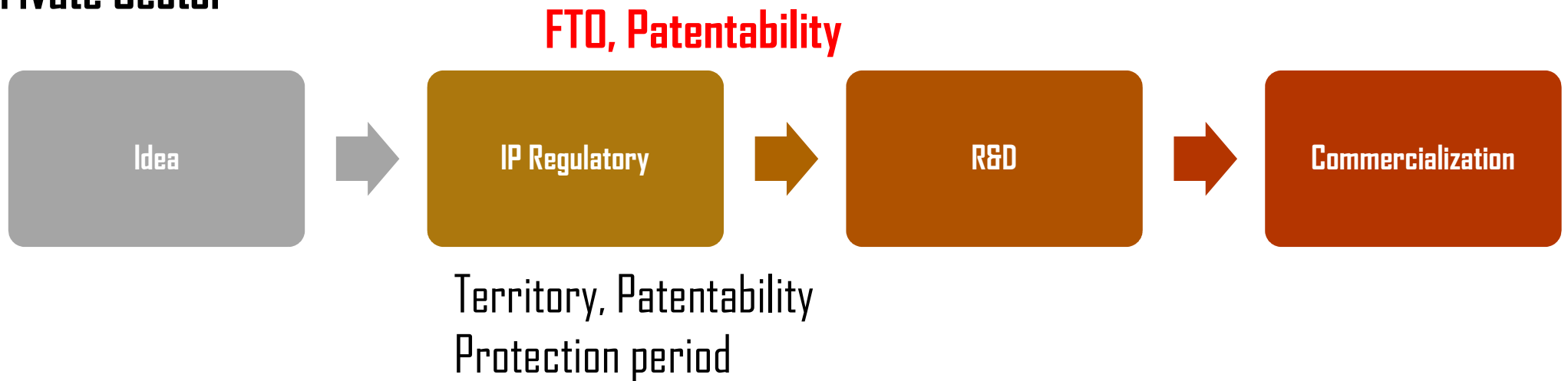
- Patent Mapping
 - Landscape, patentability
- Review Research Contract/Agreement
 - In-house research
 - Contract research
 - Collaborative research
- Confidentiality (RA, Students)



Patentability vs. Freedom to Operate

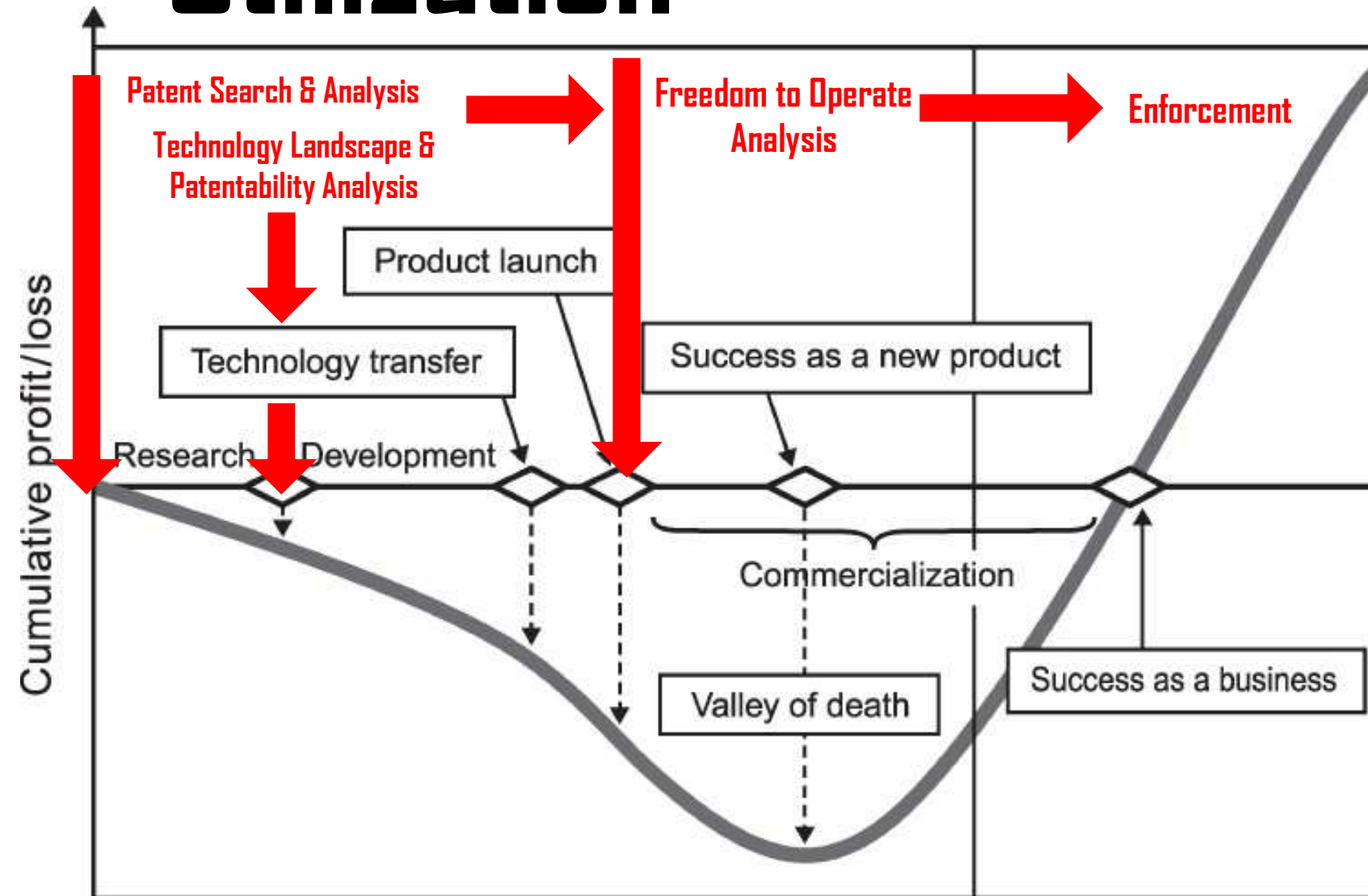
When to Conduct Patent Landscape?

Private Sector



University, Public Research Institute

Utilization



- IP Portfolio
- Feasibility study
- Business matching
- IP valuation
- Negotiation
- Licensing
 - Sole right
 - Exclusive
 - Non exclusive

Business Success

Business & Revenue Model
Branding

R&D Commercialization: From Lab to Market

Research and Development

IP Protection Strategy

Invention Disclosure

Non Disclosure Agreement

IP Valuation, Licensing

Access and Benefit Sharing

Material Transfer Agreement

VC (Venture Capital)

Determine Production Process

Clinical Trials

Market Validation
Branding

Safety and Regulations
Standardization

Pilot Plant

Proof of concept fund

Prototype fund

Sharing Value

Licensee

Negotiation

Licensors

Maintenance fee

Milestone fee

Royalties

Research Funding

Up-front fee



"The ultimate benefits of technology transfer, however, are the public benefits derived from the products that reach the market and the jobs that result from the development and sale of products."

Source: AUTM

