

# Innovation

*Reflections on linking research with society*

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Critical Success Factors

# iPARK Introduction

*Enabling Entrepreneurship and  
Innovation since 2003*



**At iPARK  
We**

**Innovators  
Entrepreneurs**

- Focus on **JOB CREATION** & deliver **ECONOMY EVOLUTION**

Since 2003,  
more than:



**75**

*Companies incubated*

**1300**

*Jobs created*

**85%**

*Export products & services*

**\$1.2 M**

*First round investments  
for local and regional deals*

**12k**

*People participated in  
awareness and networking  
activities*

**3.5k**

*Received in Training*

**20<sup>+</sup>**

*IP Policies Drafted and  
enacted*

**500<sup>+</sup>**

*IP Assets Handeled*

*If iPARK were a company, it would have been among the  
largest 10 companies in Jordan*



# iPARK Operations



Innovation Support:  
Innovation related  
advisory services



Entrepreneurship Support:  
Incubator and incubation  
operations management



# Graduated Companies



3/14/2016

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# Incubation and Incubation Management

## iPARK Technology Incubator

- Since 2003, not at KHBP
- Providing infrastructure
- As well as logistical, strategic, legal and networking support

## Third-party Incubation Services

- Incubator establishment
- Management and Quality Systems
- Recruitment
- Mentorship



# Innovation Services

## Innovator Support

- Partnership planning and Route to market
- IP strategy and implementation
- Business and financial planning
- Business development and matchmaking

## Strategic services:

- Framework, legal, governance, operational, resource management, financial outlook, sustainability

# Institutional Innovation/Technology Transfer Support



## Strategic planning services including:

- **Review** of the institutional mission, vision and objectives, with the institution's leadership, and how they link up with an operating technology transfer office
- **Mapping** of the institution's research activities, IP portfolio, and innovation capabilities
- Drawing up the basic success criteria for the new technology transfer office along with enabling initiatives and policies
- Designing an optimal **operational model** along with internal processes and staffing options
- Outlining a five year **operational and financial plan** including sustainability options

## Rollout services including:

- University **IP policy** updating and awareness at the leadership level as to policy implications
- Assistance with the **recruitment** process
- Staff essential **training** including internship or virtual internship at IPCO
- Developing the institutional technology transfer **manual**
- **Awareness** sessions at the researcher level

## Ongoing support:

- Induction into the national **technology transfer network**
- Full **IP services** including patent drafting and registration
- **Business planning/development and commercialization support**
- **Spinout support** including incubation or virtual incubation
- Periodic **training** on innovation, commercialization and technology transfer
- **Innovation enablement** initiatives targeted at the academic researchers
- **Entrepreneurship enablement** initiatives targeted at the student body



# The Technology Transfer Network

A centralized network with IPCO as its central office

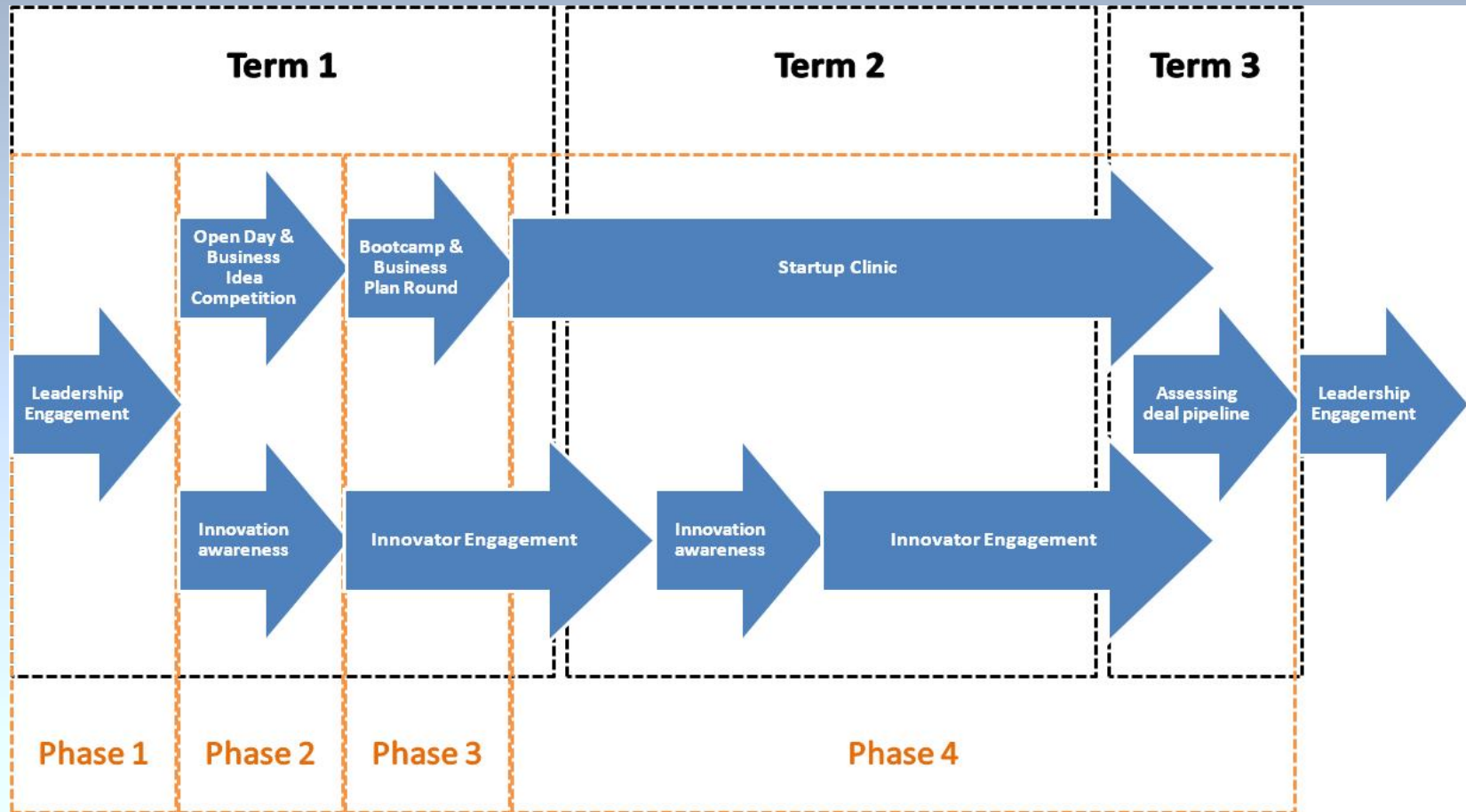
~15 members, growing to 20

Free accession, but the institution must “name” a technology transfer office and officer

## Complementary services to network partners

- engagement and brainstorming session with leadership
- capacity building and engagement for researchers on innovation and commercialization, IP, ... etc
- Drafting an IP policy that serves the strategic needs of the university
- Any quick consultation

# A Model University Program: pre incubation + innovation support



# Enabling and Supporting Innovation and Entrepreneurship in Jordan - 2015



Strengthen the Jordan Technology Transfer Network

Create a National Deal flow Catalogue and Portal

Review, update and enact IP and innovation policies



**USAID**  
FROM THE AMERICAN PEOPLE

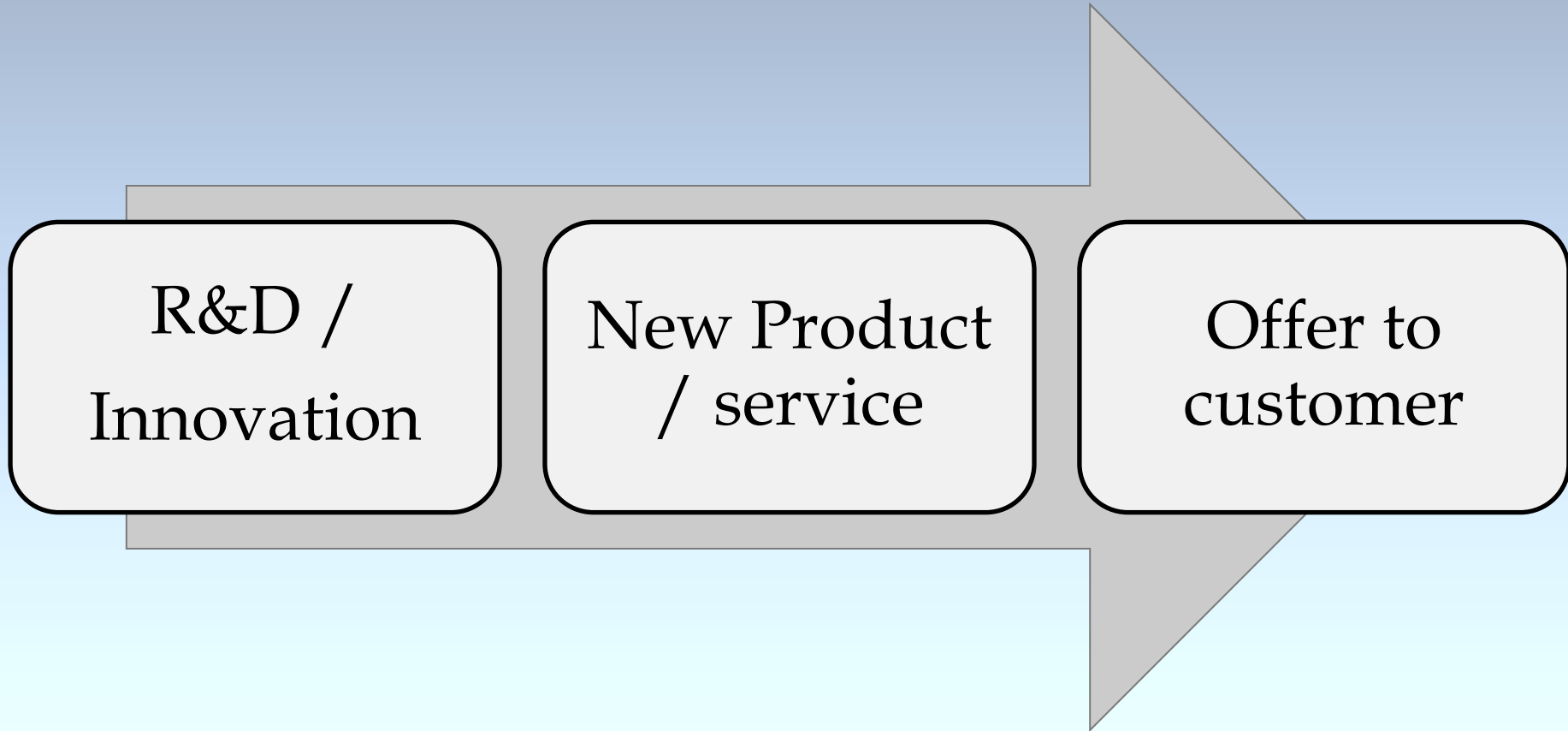
Jordan Competitiveness  
Program (JCP)



# Innovation & Commercialization

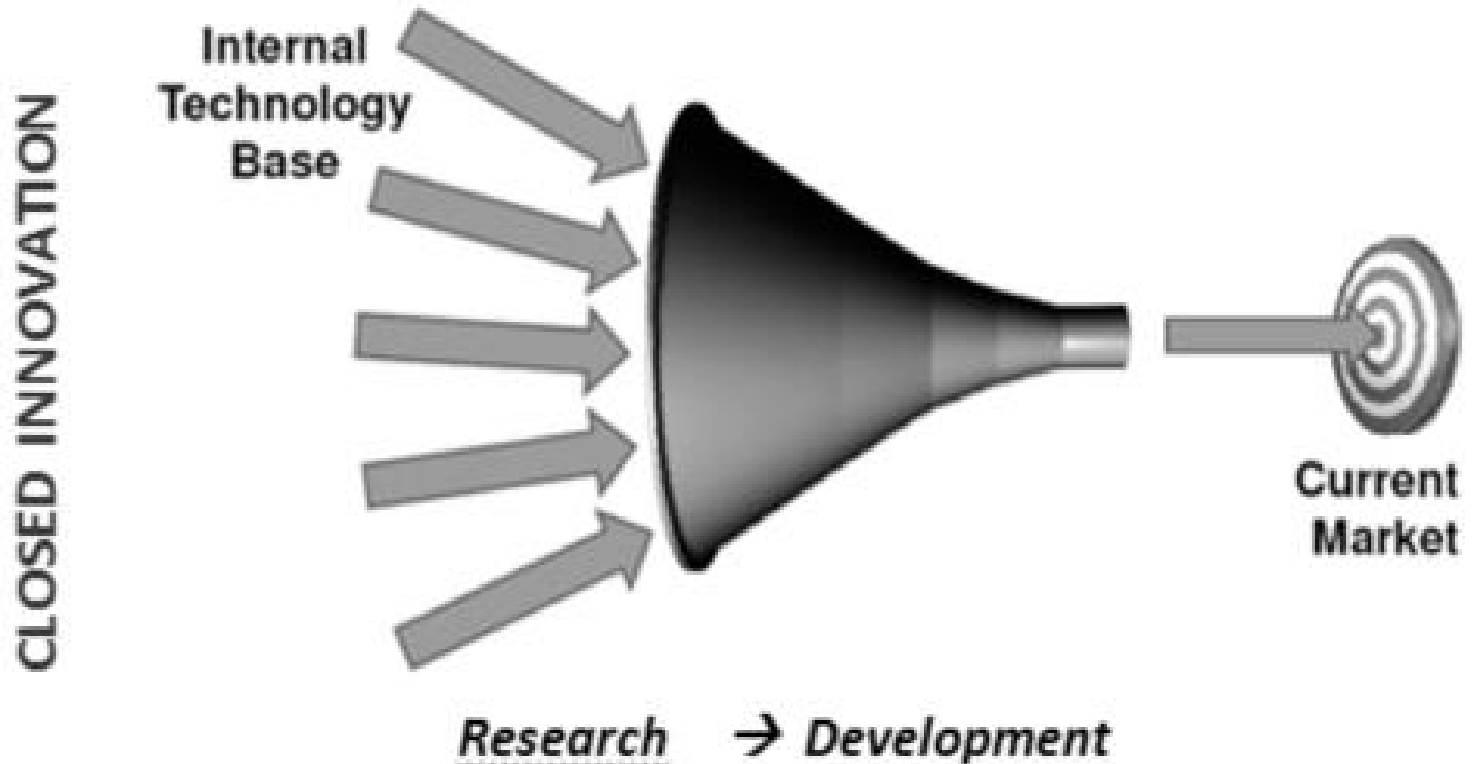
*Trends, tools and the role of IP*

# The Old General Model



# The Old General Model

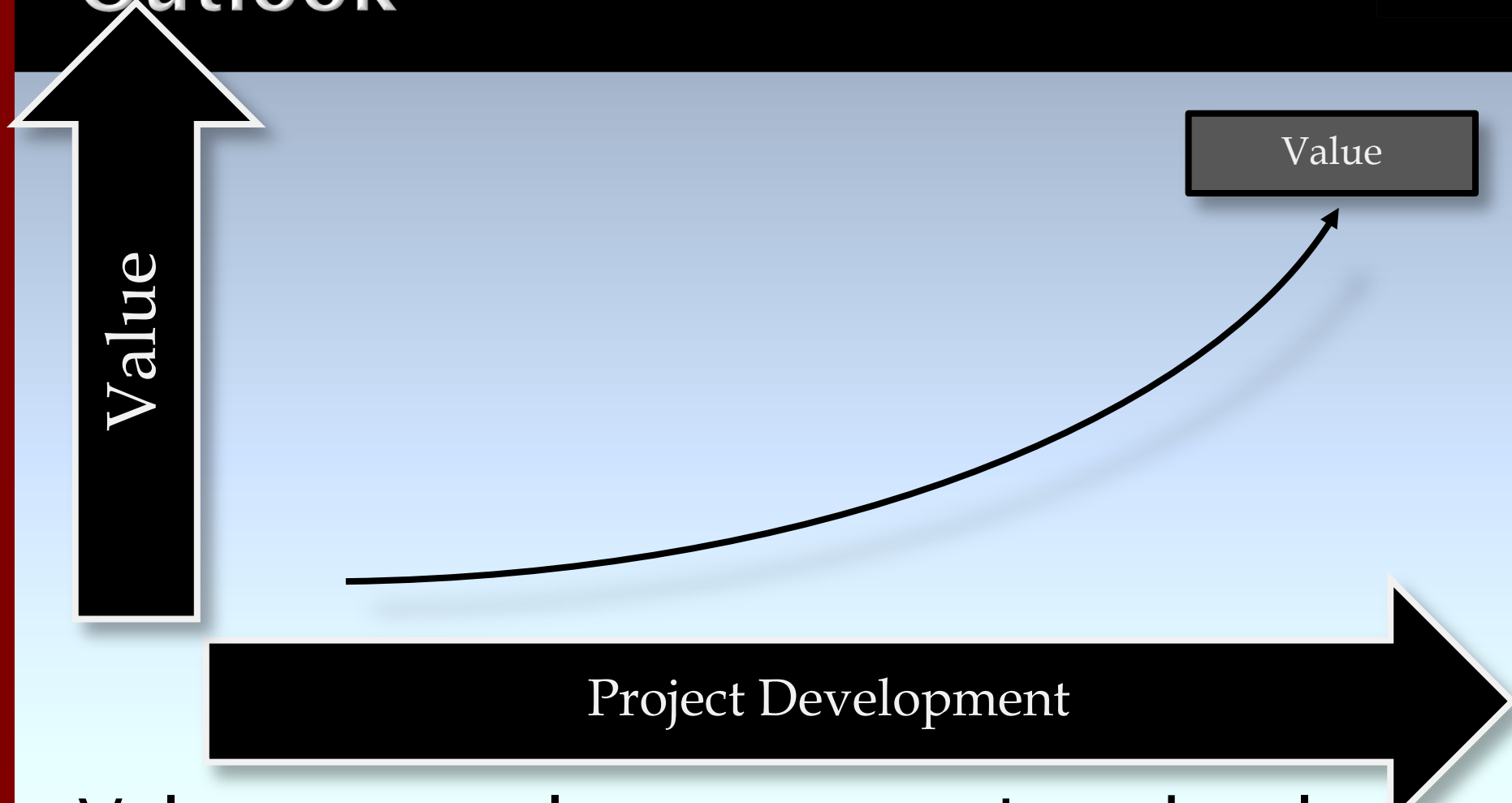
## Internal R&D, Funnel Approach



## Closed Innovation



# Traditional Technology Value Outlook



Value accumulates as a project develops

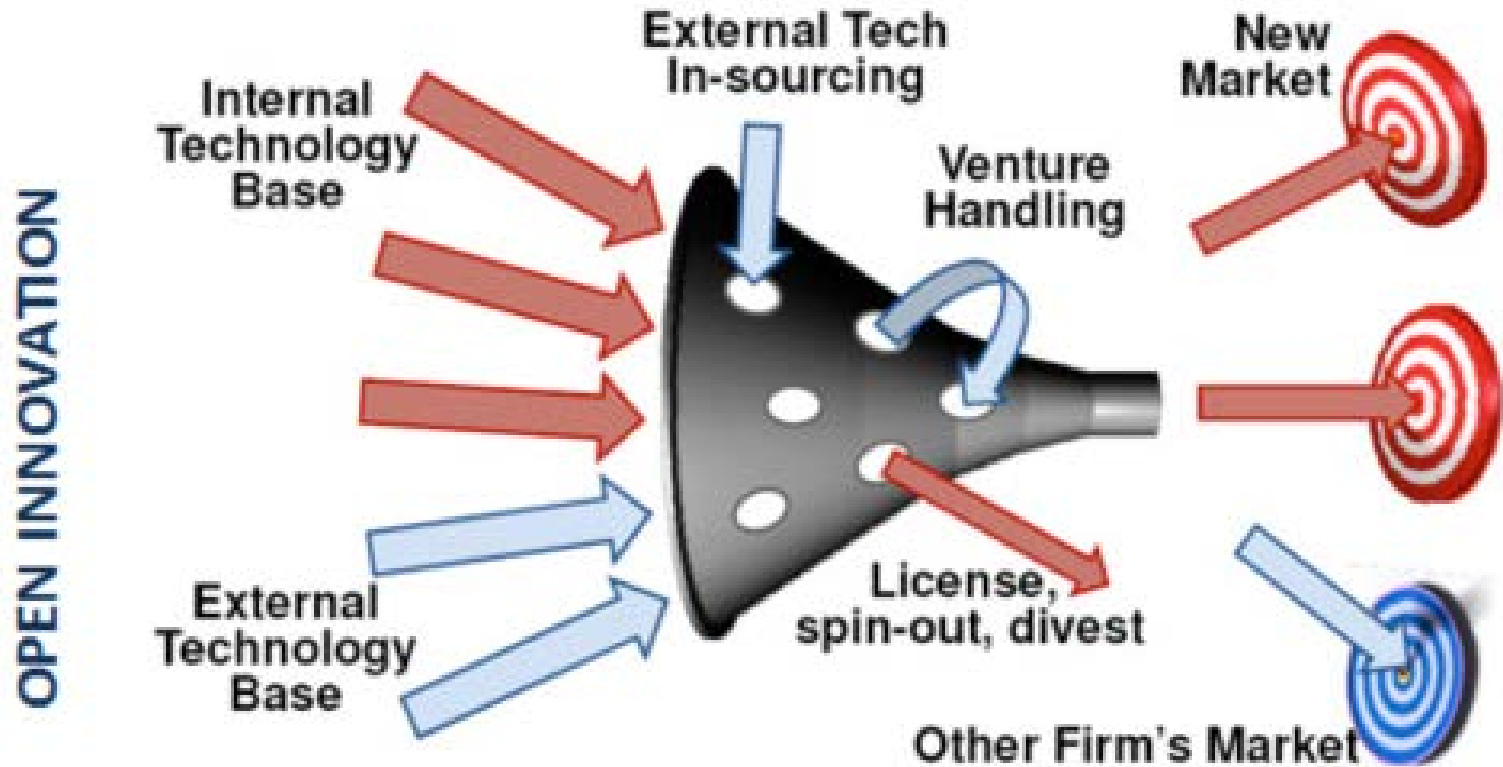
# The New Innovation Model

## Open Innovation

H. Chesborough



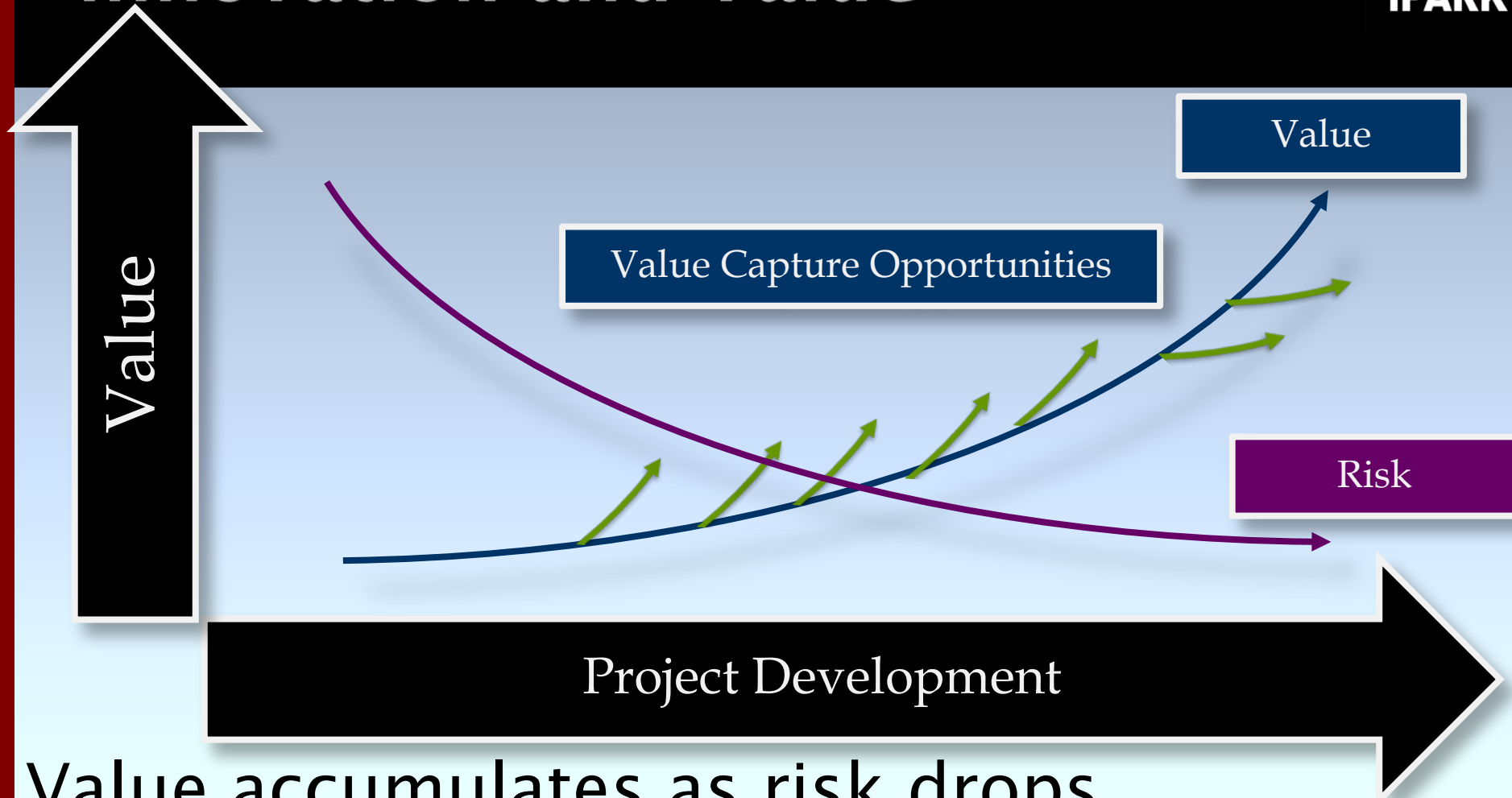
Internal R&D,  
Funnel Approach



Smallest innovator in smallest institution in smallest economy can find a role



# Network Implication of Innovation and Value



Value accumulates as risk drops  
As risk drops partners become more accessible

# Global Paradigm Shifts

Open innovation

Innovation as a production element

Tools/links/borders from globalization

New technological/social/communication tools

The rapid rate of change

Gaps are everywhere

They are dynamic

Those who are quicker at adaptation, have improved success potential in the long run

Success is never guaranteed

Knowledge economy? Green economy?  
Commodity economy? Agile economy!

# Emergent gaps

## National

- Strategies
- Laws and regulations
- Centralized funding initiatives & incentives

## Institutional

- Strategies
- Policies
- Mobility
- Focus
- Culture
- Network

## Individual

- Knowhow
- Culture
- Reward

# Odd Valuations

Have we reached 'peak food'? Shortages loom as global production rates slow



Staples such as wheat, chicken and rice are slow to recover from drought consequences

TOM BAWDEN | Wednesday 28 January 2015

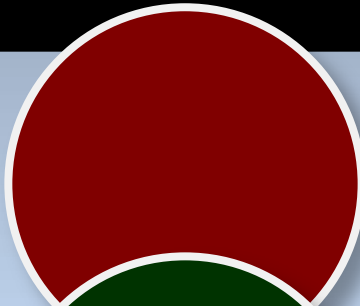
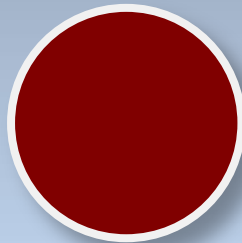
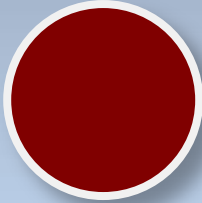
Social Responsibility



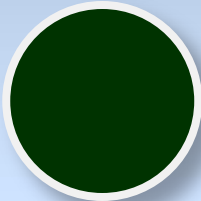
Sustainability as Business Excellence

# How much must an innovator invest?

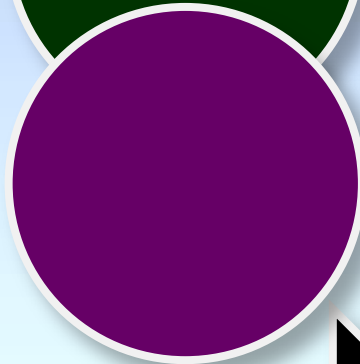
Team



Facility



Capital



Projects start with a small team

Projects develop into needing more resources

Significant capital is only required close to commercialization

The question of when is more important than the question of how much

Innovative Project Development

# Value Creation Vs Value Capture

Value Creation  
Develop,  
build,  
acquire,  
seed, invest,  
patent,  
innovate...

Value Capture  
Harvest,  
cash-out,  
sell,  
license...

S. Michel, Harvard Business Review Oct 2014



# Conclusion

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**The world is changing, and so must we and so must our institutions**

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**A culture, policy and talent gap is present and widening**

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**Innovation is driven by people, not cash**

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**Commercialization is a network-centric activity**

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**Industry of innovation is no longer an A-Z story**

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**Innovation and its projects are incremental**

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# The Exploitation of Research Results

*Perspectives and Success Factors*

# Value Creation Vs Value Capture

Value Creation

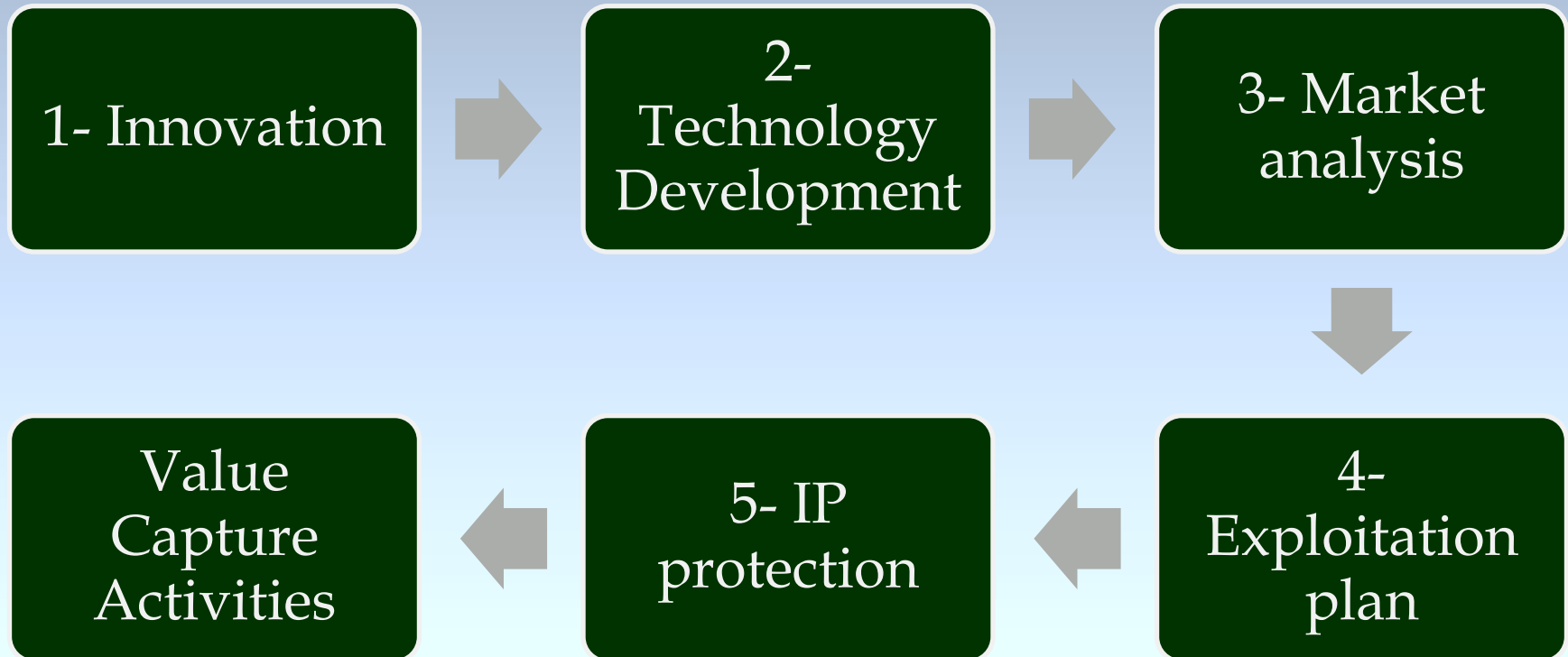
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# Value Creation

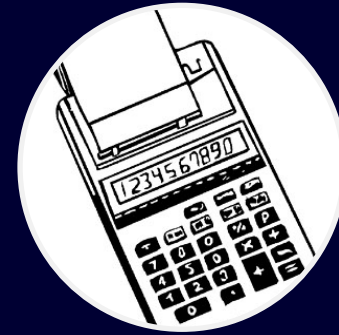


# 1- Creativity Vs. Innovation



## Creativity

- Something new and in some way valuable is created
- Largely intangible



## Innovation

- Products, process... etc
- Largely tangible



# 1- Invention Vs. Innovation



## Invention

- Happens once
- No clear commercial aspect



## Innovation

- Incremental Development
- Clear Commercial Aspect



# Generally speaking, what can be exploited?

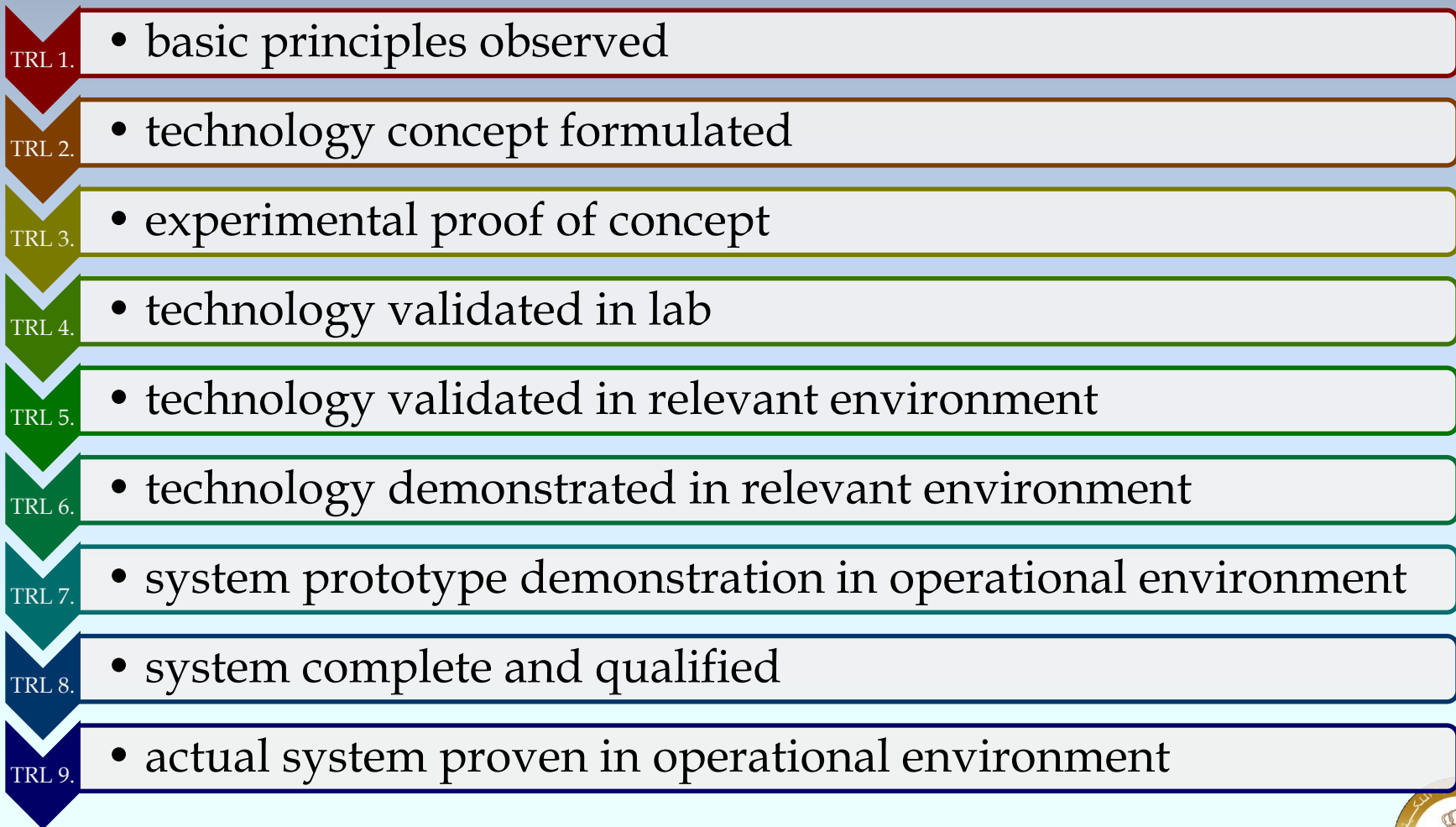
## Valuable

- Product
- Equipment
- Technology
- Program, script
- Interface
- Prototypes
- Algorithms
- Processes
- Business models
- Management models
- Brands

## Generally not ready yet

- Idea
- Theory
- Lab result

# 2- From idea to product, Technology Readiness Level (TRL)





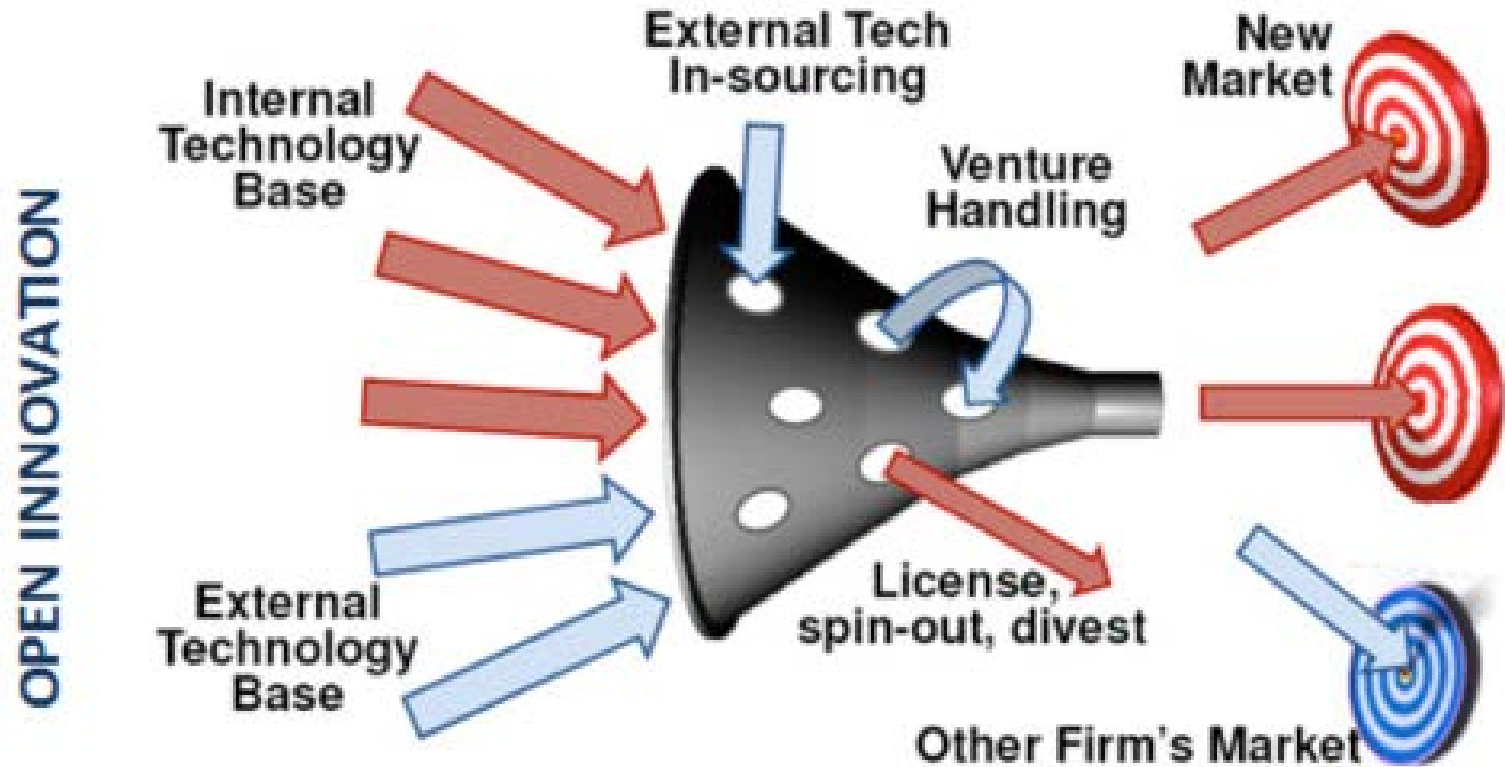
# The New Innovation Model

## Open Innovation

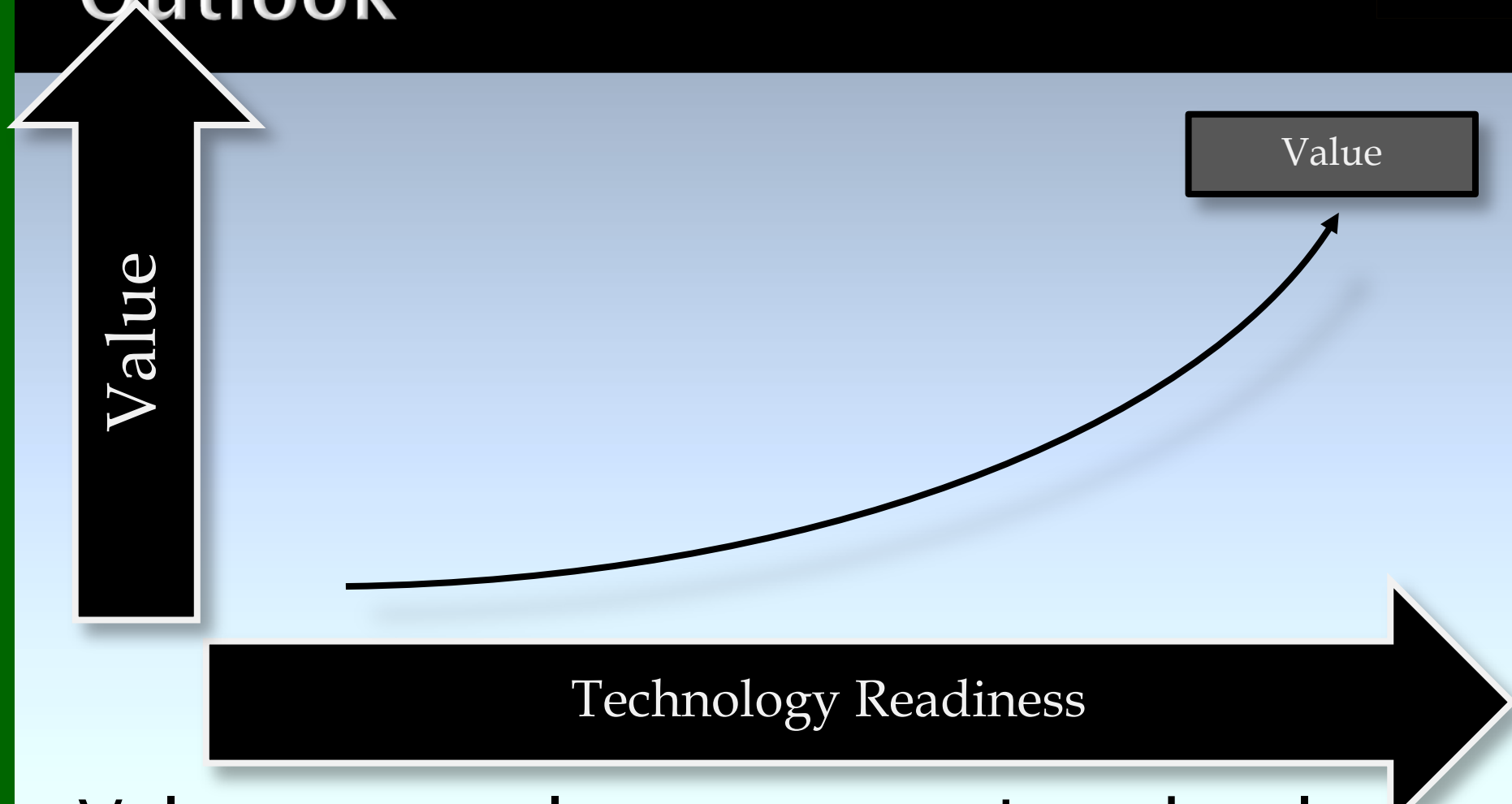
H. Chesborough



Internal R&D,  
Funnel Approach

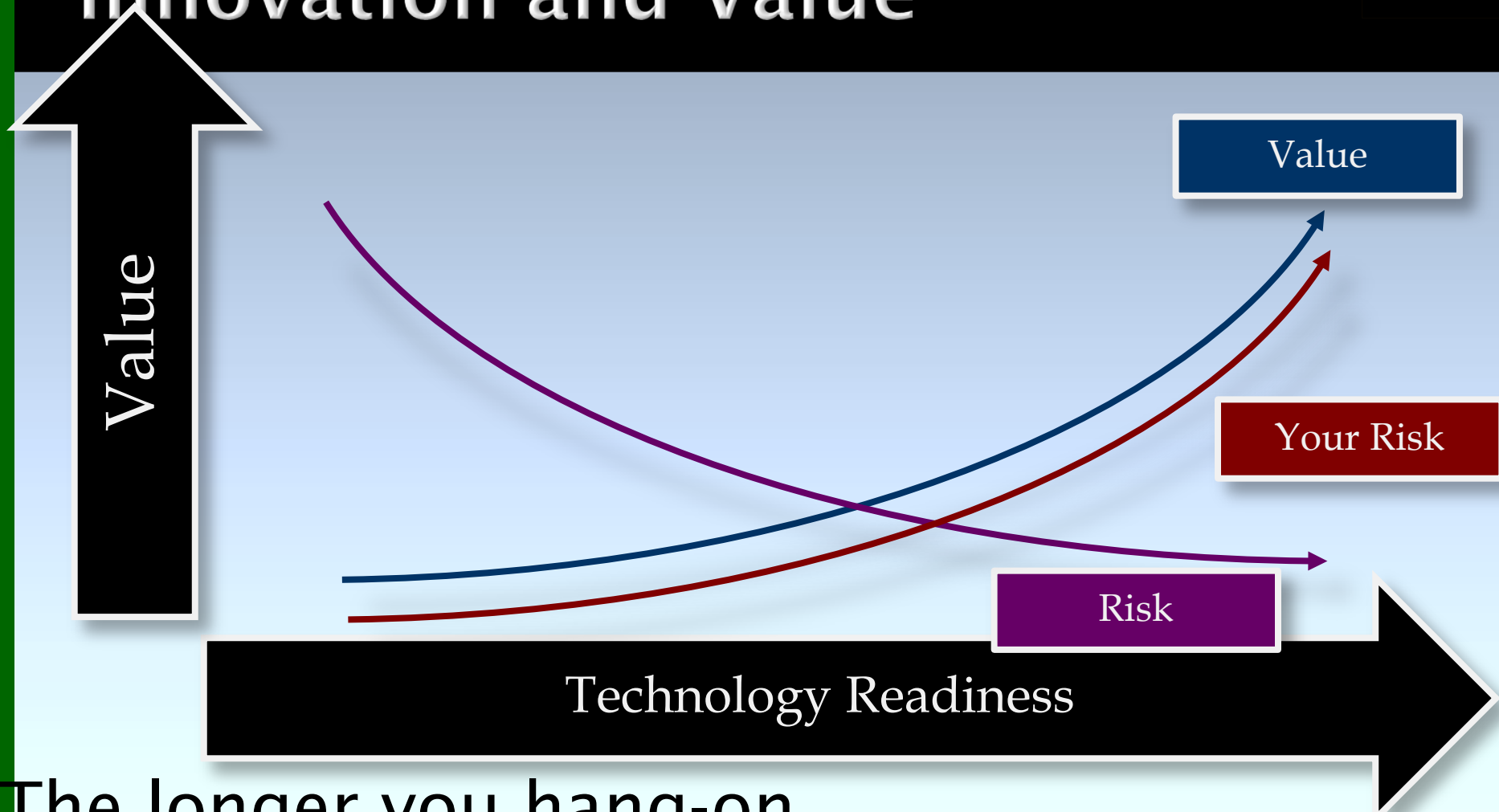


# Traditional Technology Value Outlook



Value accumulates as a project develops

# Risk Implication of Innovation and Value



The longer you hang-on...  
...the higher the accumulated risk you take

# 3- Market Study

Competing technologies

Competing systems

Uptake barriers

Operational considerations

Legal/regulatory questions

Analysis tools (PEST... etc.)

Size

Competition profile

Etc. etc. etc. etc. etc.

# 4- Exploitation Plan



**Map your Partners!!!!!!!!!!!!**

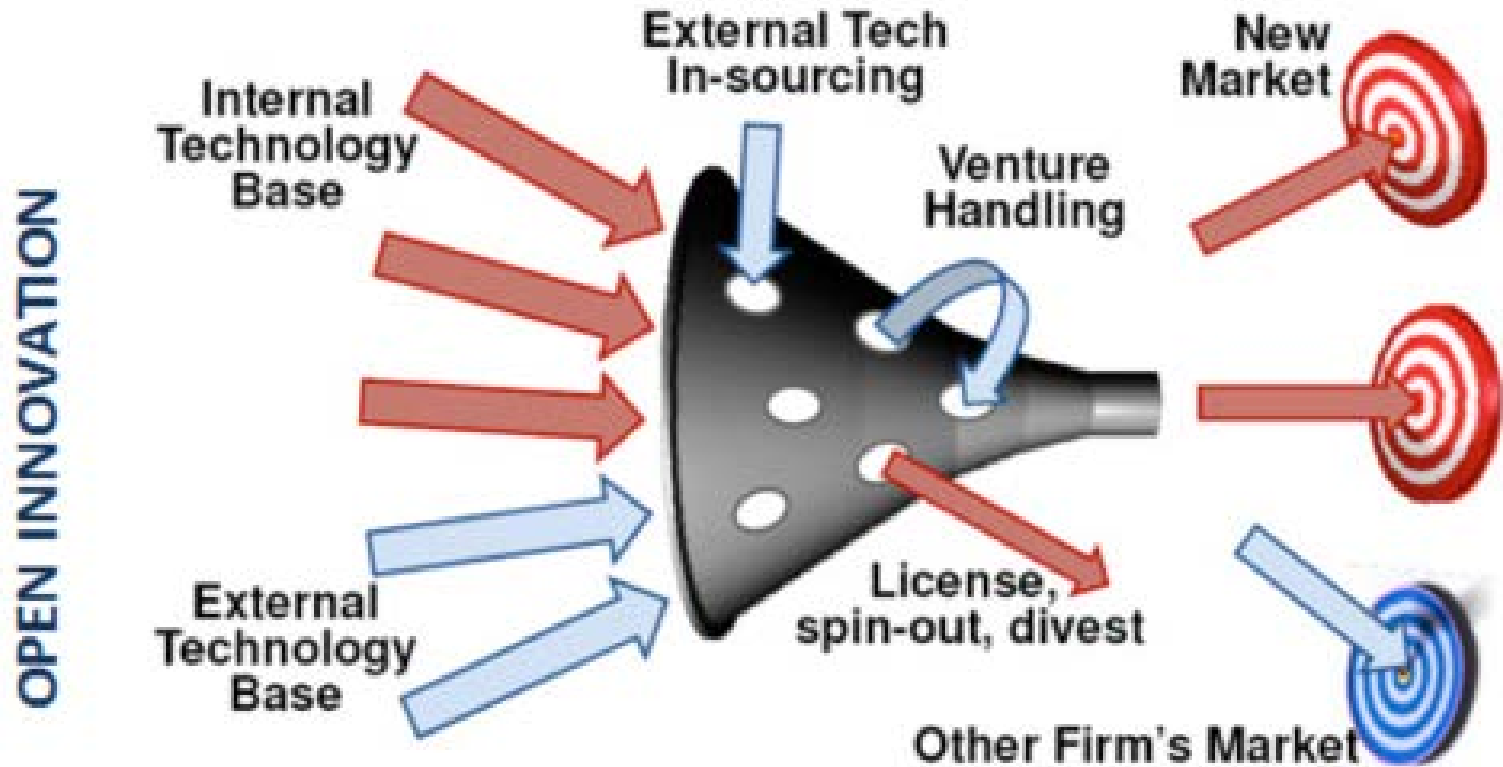
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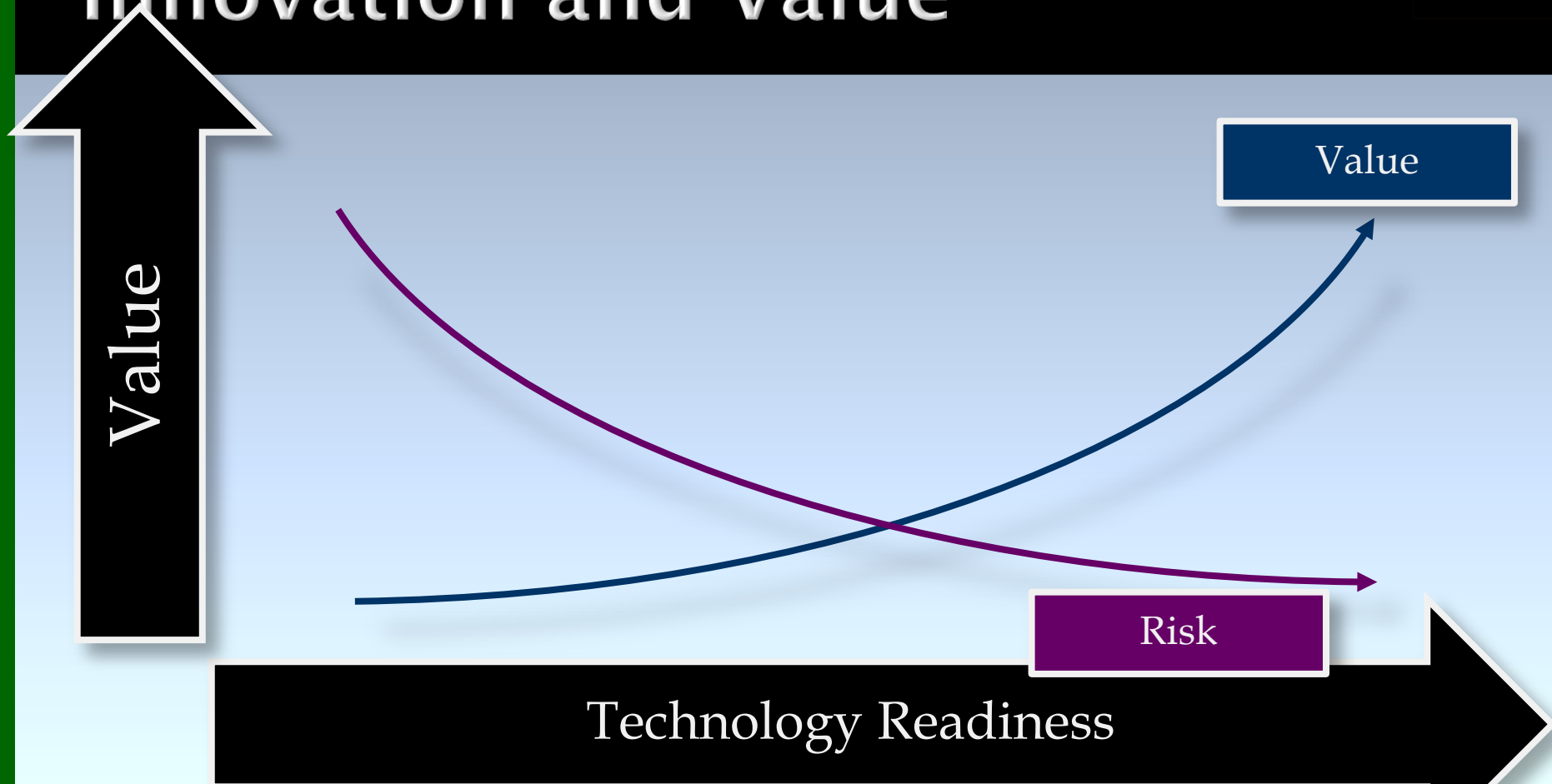
# 5- Protection

the basic truth on IP protection (e.g. patenting)

Seeking IP protection is a commercial decision

Seeking IP protection is not a technical decision

# Risk Implication of Innovation and Value



Risk Management is Name of the Game



# Intellectual Property

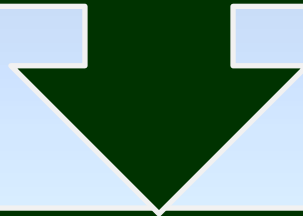
Creations of the mind: Inventions; Literature, Arts, Music, designs, symbols, names, images (used in commerce).

IP is proprietary, generally speaking, somebody owns it

The right to use certain IP may be protected by law

# Intellectual Property Rights

Intellectual property rights are the rights given to persons over the creations of their minds.



They usually give the creator an exclusive **right** over the use of his/her creation for a certain period of time.

# General Kinds of IP Rights

Patent

Design

Copyright

Trademark

Trade secret

Geographical  
indication

# Other Basic IP Protection Truths

temporarily  
blocks  
competition

reduces the risk  
of exploitation

achieved in  
different ways  
(country / law /  
technology)

one domicile at a  
time

# Basic IP Protection Questions

What do I  
gain?

Where do I  
want it

How is it  
linked to  
exploitation?

How do I  
achieve it?

# Pathways for Capturing Value

Exploitation, commercialization,  
capture

License out

Spin out

Industry  
Collaboration  
(supporting  
Research  
Students)

# In All Cases

## Get Help!

- University Licensing Officer
- Business/Technology Consultant
- Patenting Professional
- Business Advisor
- Industry Specialist
- Your Dear Mother

## Be Discreet!!!!!!

- Intellectual Property stops being yours the moment you start telling it to anyone, including your mother!

# Part 3: Critical Success Factors

*Trying not to guarantee failure*



# Critical Exploitation Success Factors



IP policy? What IP policy?

1<sup>st</sup> partner is essential

Ask strategic “why”s

bureaucracy is a potential killer, on both sides

Corporate Project Leadership

Simpler early cooperation (co-development)

Contractual resolution of IP, ownership, licenses, expenses, rewards..

