

Innovation

Reflections on linking research with society

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iPARK Introduction

*Enabling Entrepreneurship and
Innovation since 2003*

**At iPARK
We**



Support Train
Enable Encourage
Ground Mentor
Care for Guide Develop
Back Nurture Protect
Maintain Teach
Appreciate
Aid

**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+

*IP Policies Drafted and
enacted*

500+

IP Assets Handled

*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



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3/14/2016



Incubation and Incubation Management



iPARK Technology Incubator

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

Third-party Incubation Services

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

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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

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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

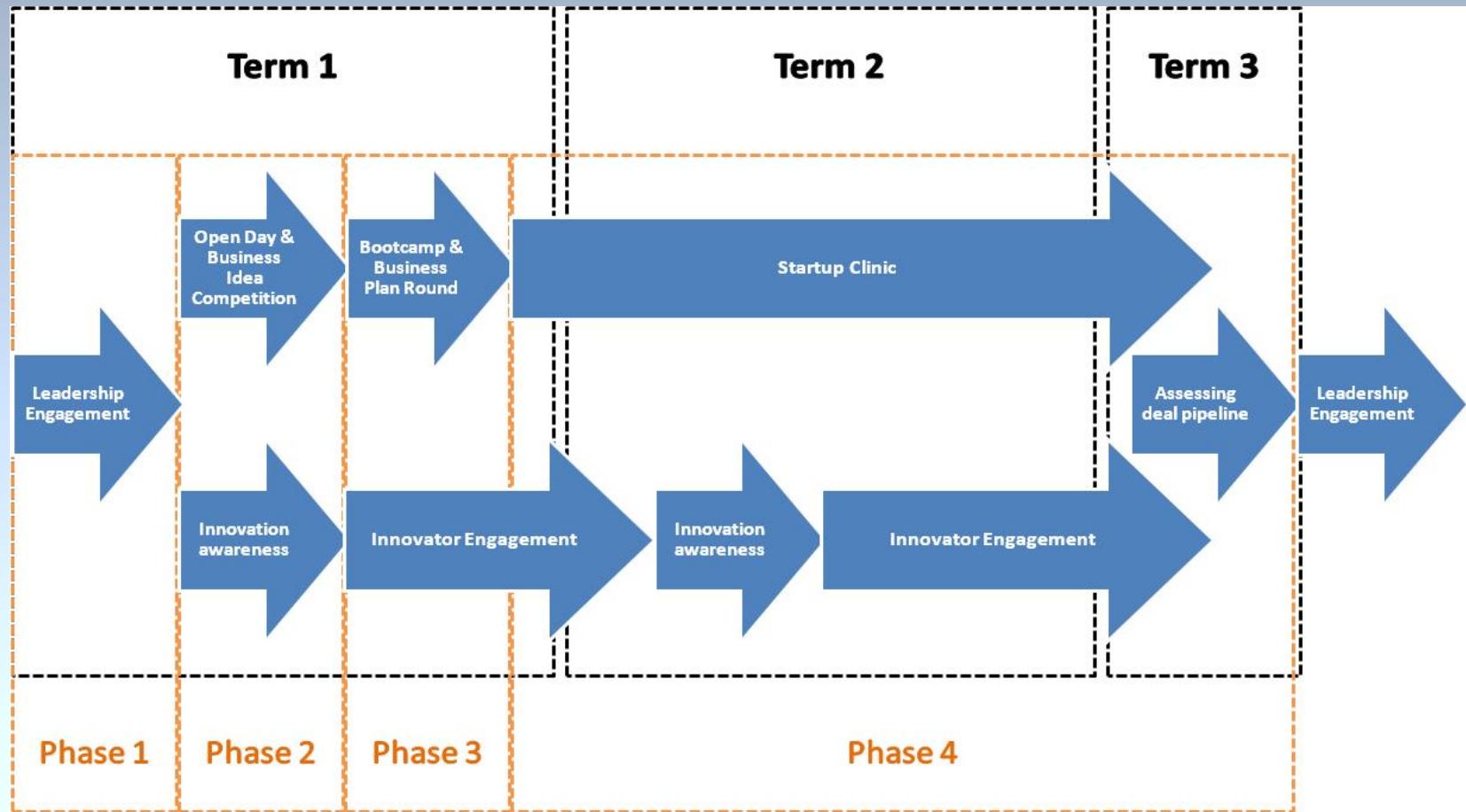
~15 members, growing to 20

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



R&D /
Innovation

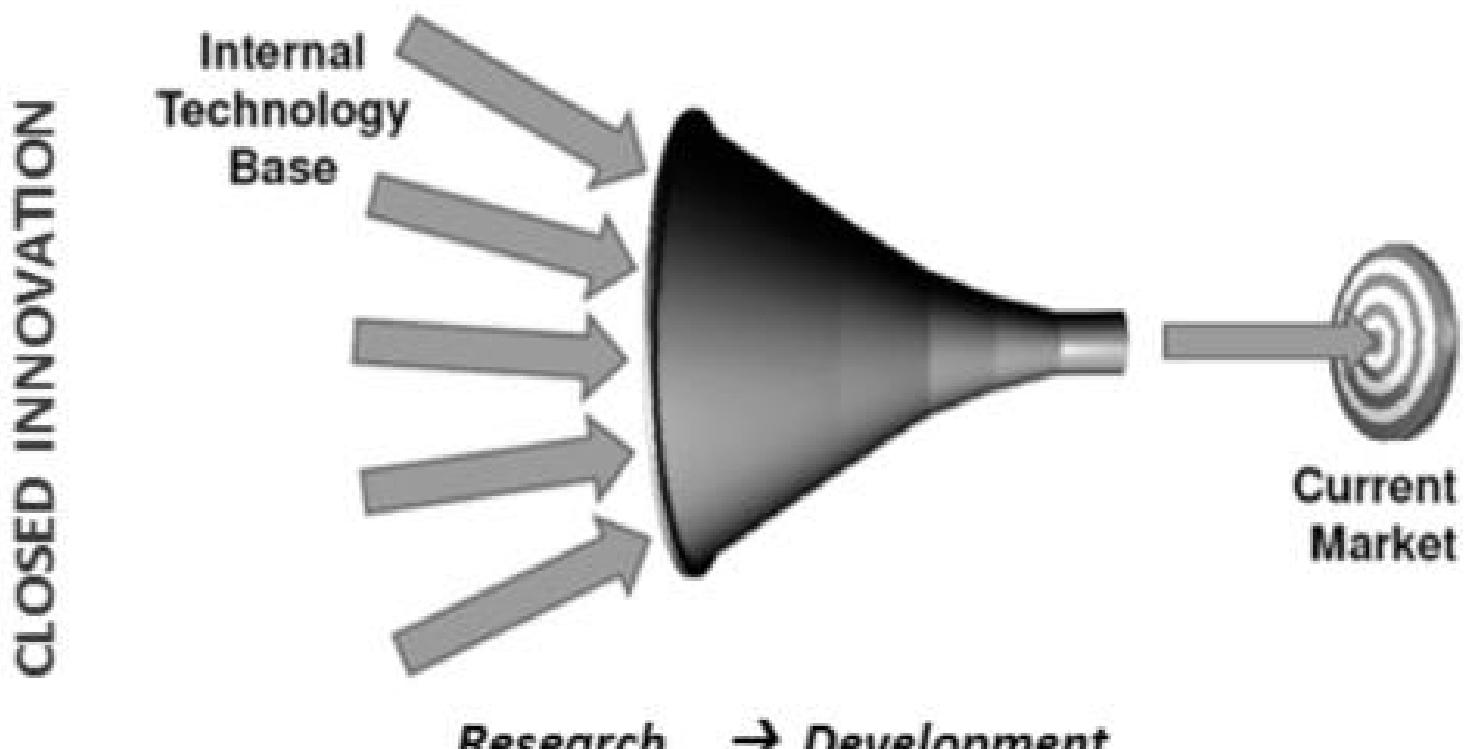
New Product
/ service

Offer to
customer

Internal R&D, Funnel Approach

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The Old General Model



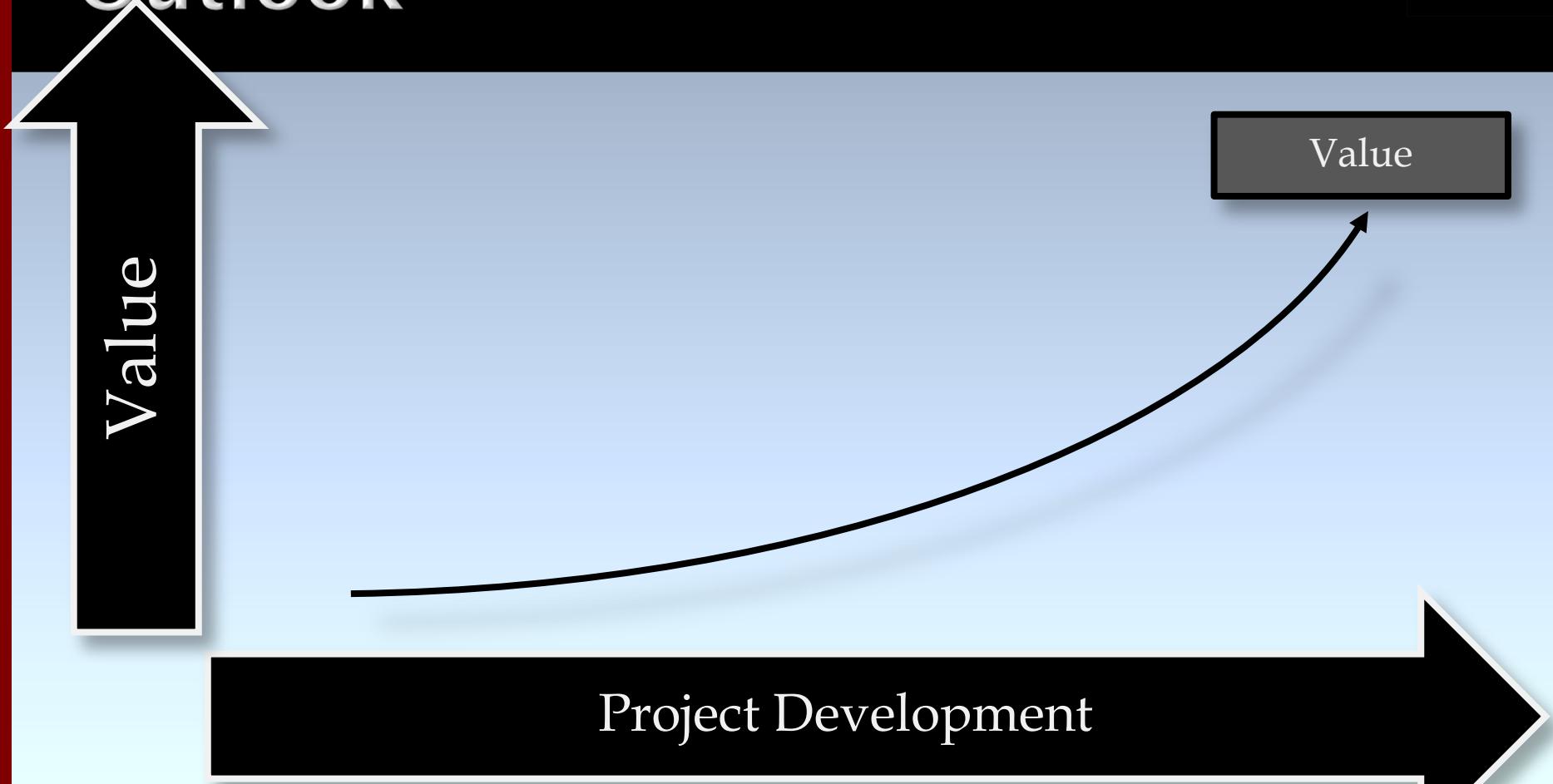
Closed Innovation

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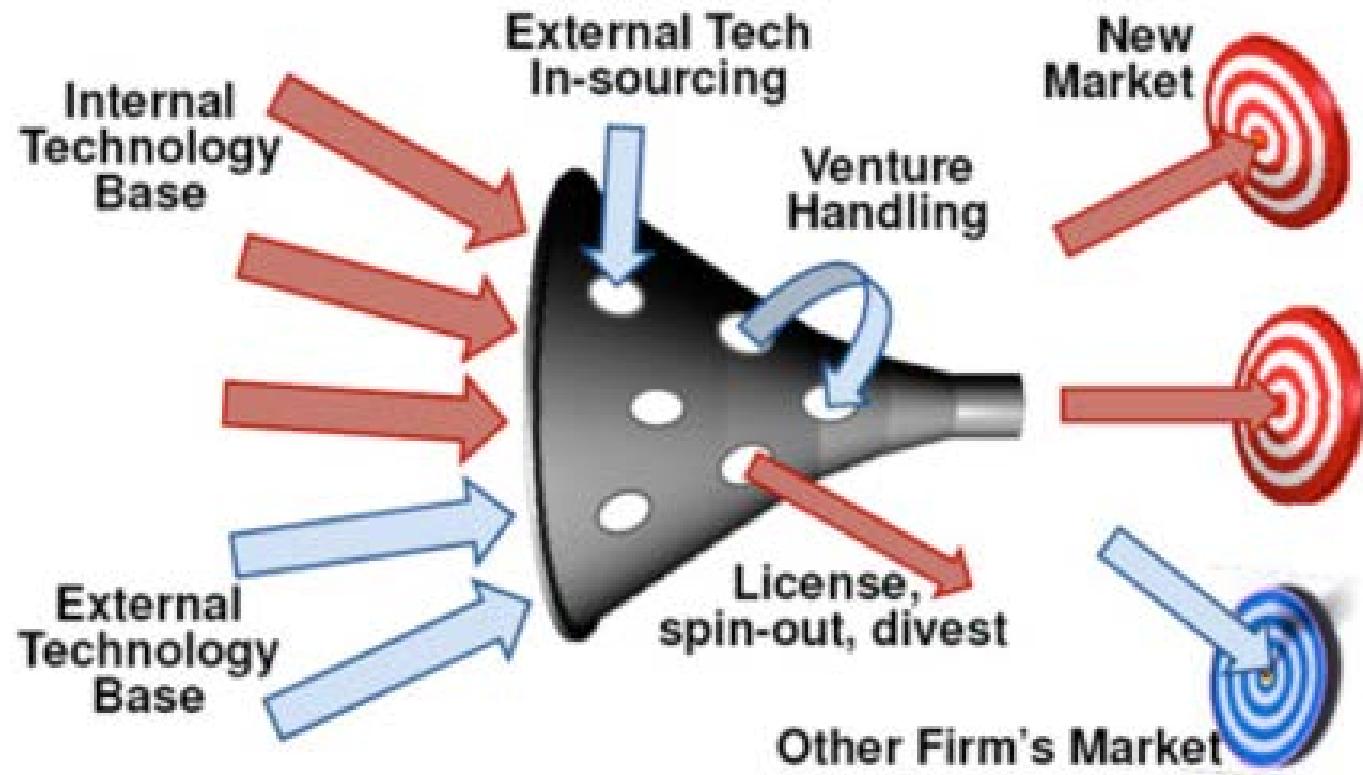
Traditional Technology Value Outlook



Value accumulates as a project develops

Internal R&D, Funnel Approach

OPEN INNOVATION

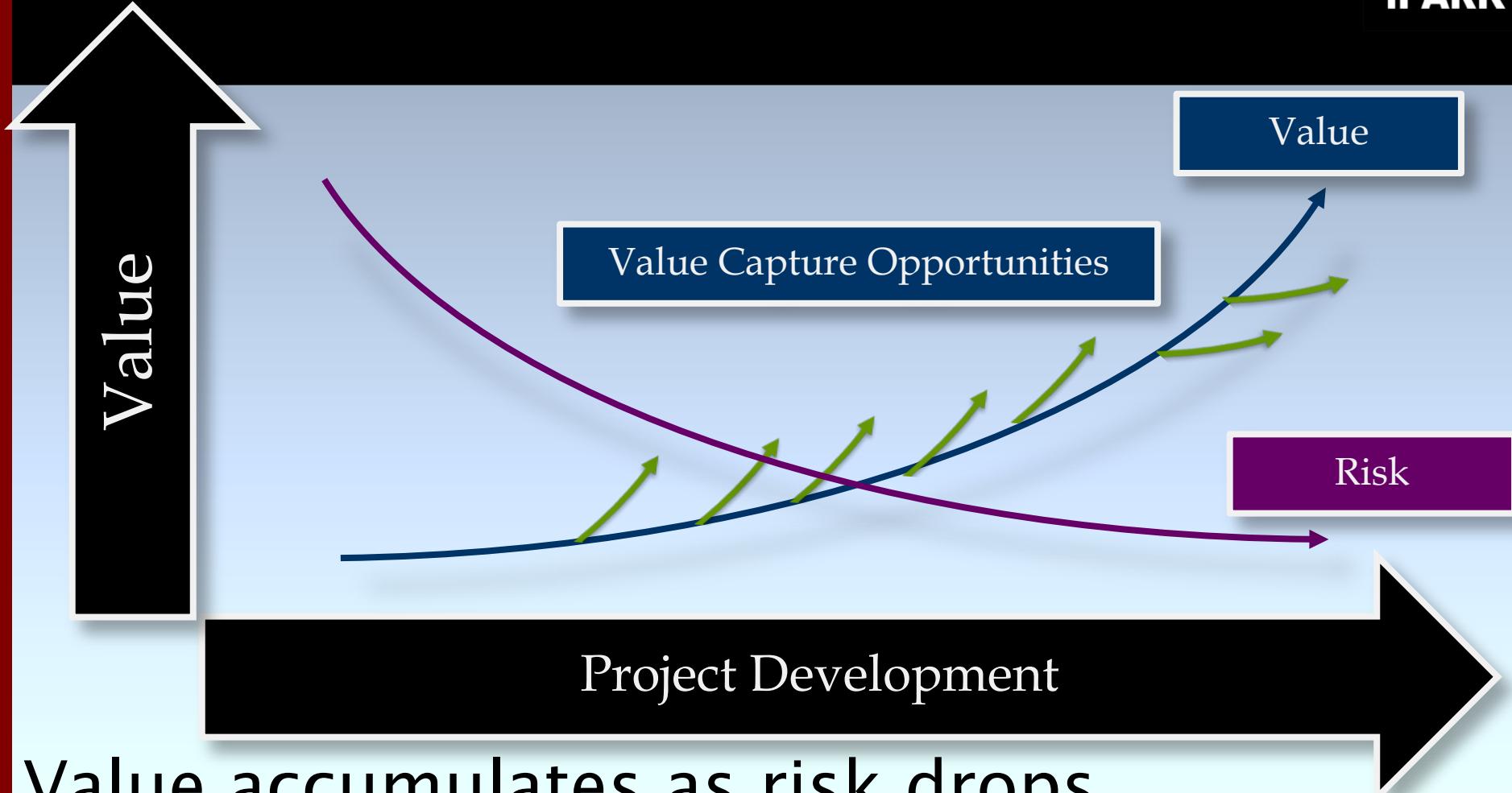


Smallest innovator in smallest institution in smallest economy can find a role

H. Chesborough



Network Implication of Innovation and Value



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

Global Paradigm Shifts



Open innovation

Gaps are everywhere

Innovation as a production element

They are dynamic

Tools/links/borders from globalization

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

New technological/social/communication tools

Success is never guaranteed

The rapid rate of change

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

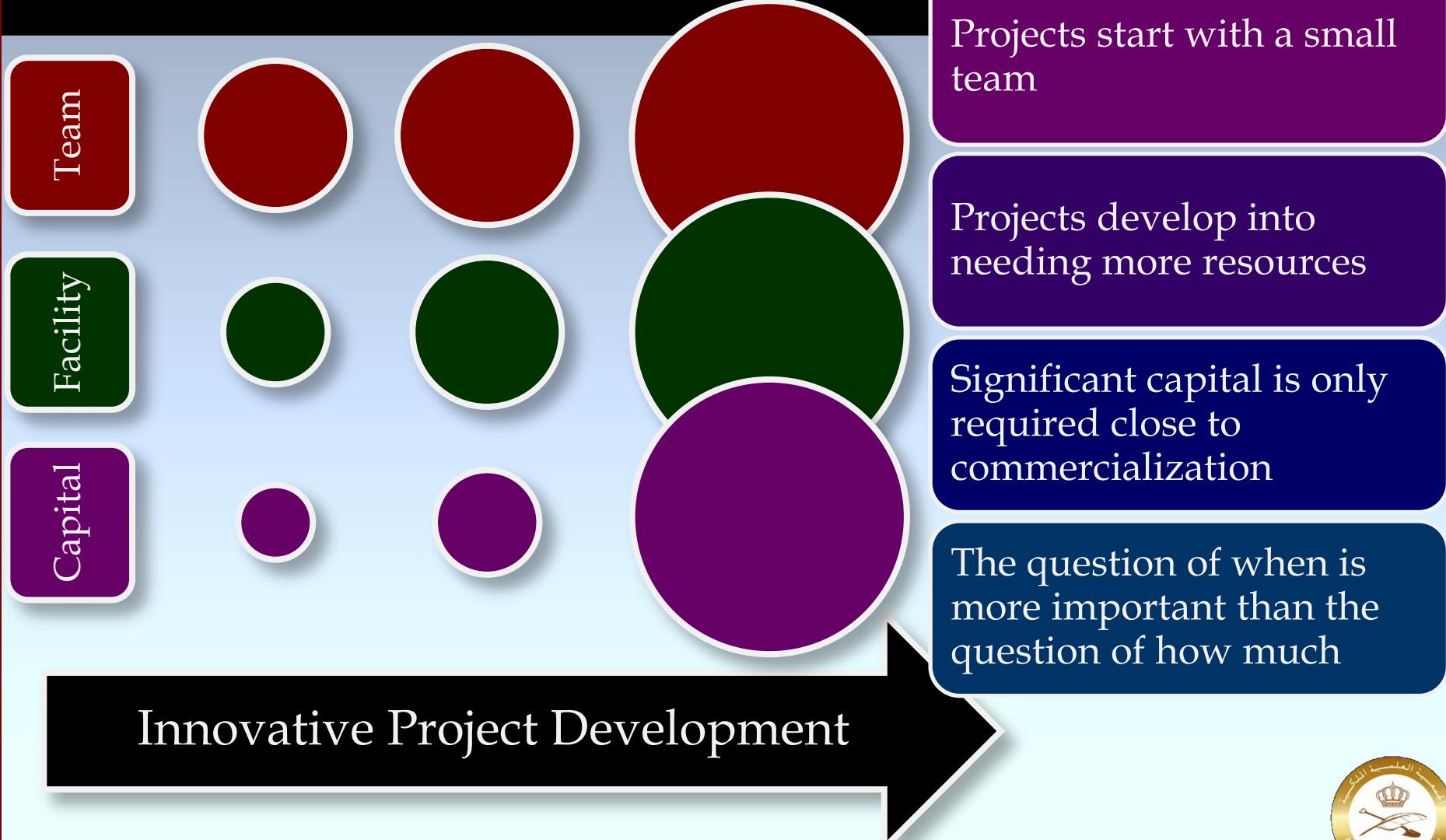


Have we reached 'peak food'? Shortages loom as global production rates slow



TOM BAWDEN | Wednesday 28 January 2015

How much must an innovator invest?



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

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Conclusion



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

A culture, policy and talent gap is present and widening

Innovation is driven by people, not cash

Commercialization is a network-centric activity

Industry of innovation is no longer an A-Z story

Innovation and its projects are incremental



The Exploitation of Research Results

Perspectives and Success Factors

Value Creation Vs Value Capture



Value Creation

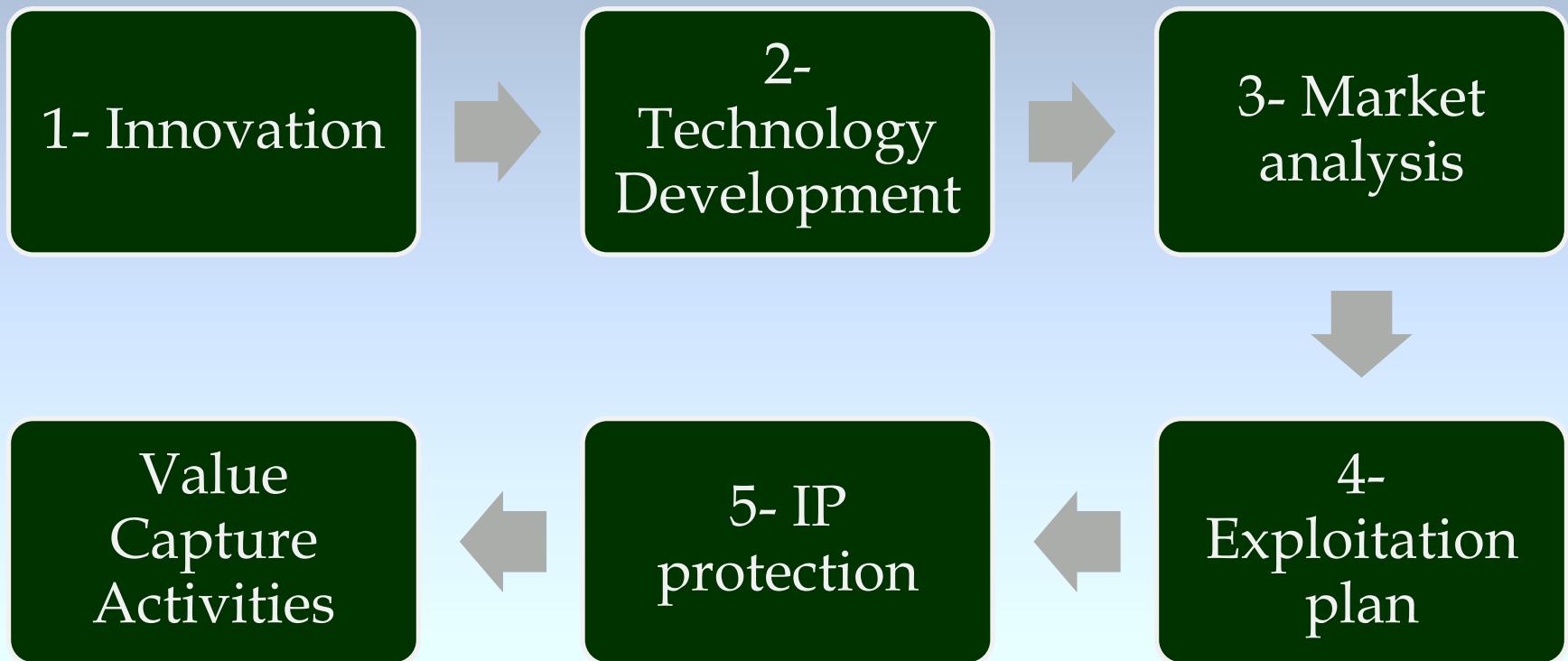
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Value Creation

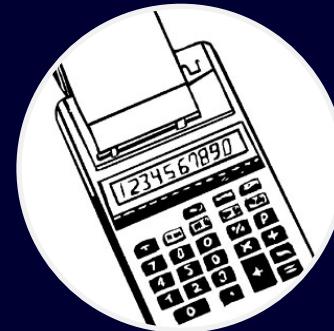


1- Creativity Vs. Innovation



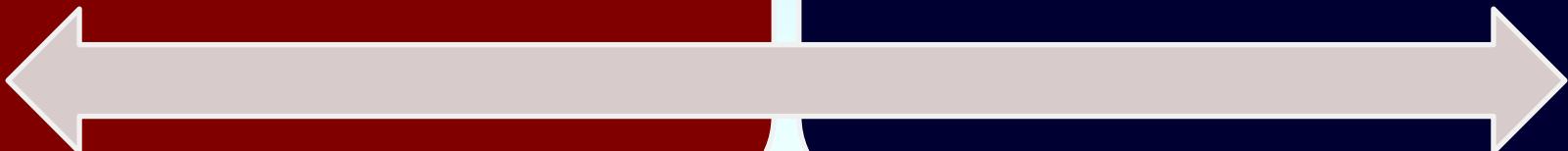
Creativity

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



Innovation

- Products, process... etc
- Largely tangible



1- Invention Vs. Innovation



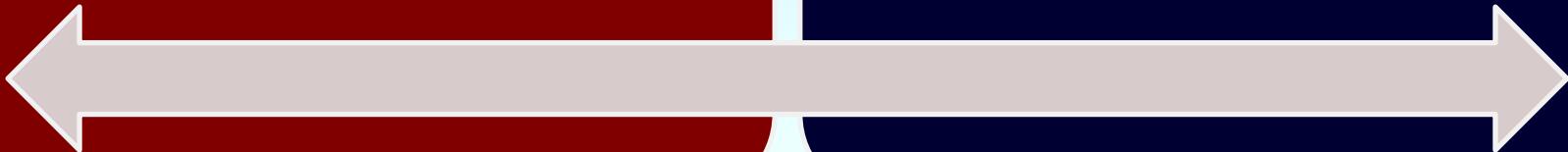
Invention

- 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
- Algothithms
- Processes
- Business models
- Management models
- Brands

Generally not ready yet

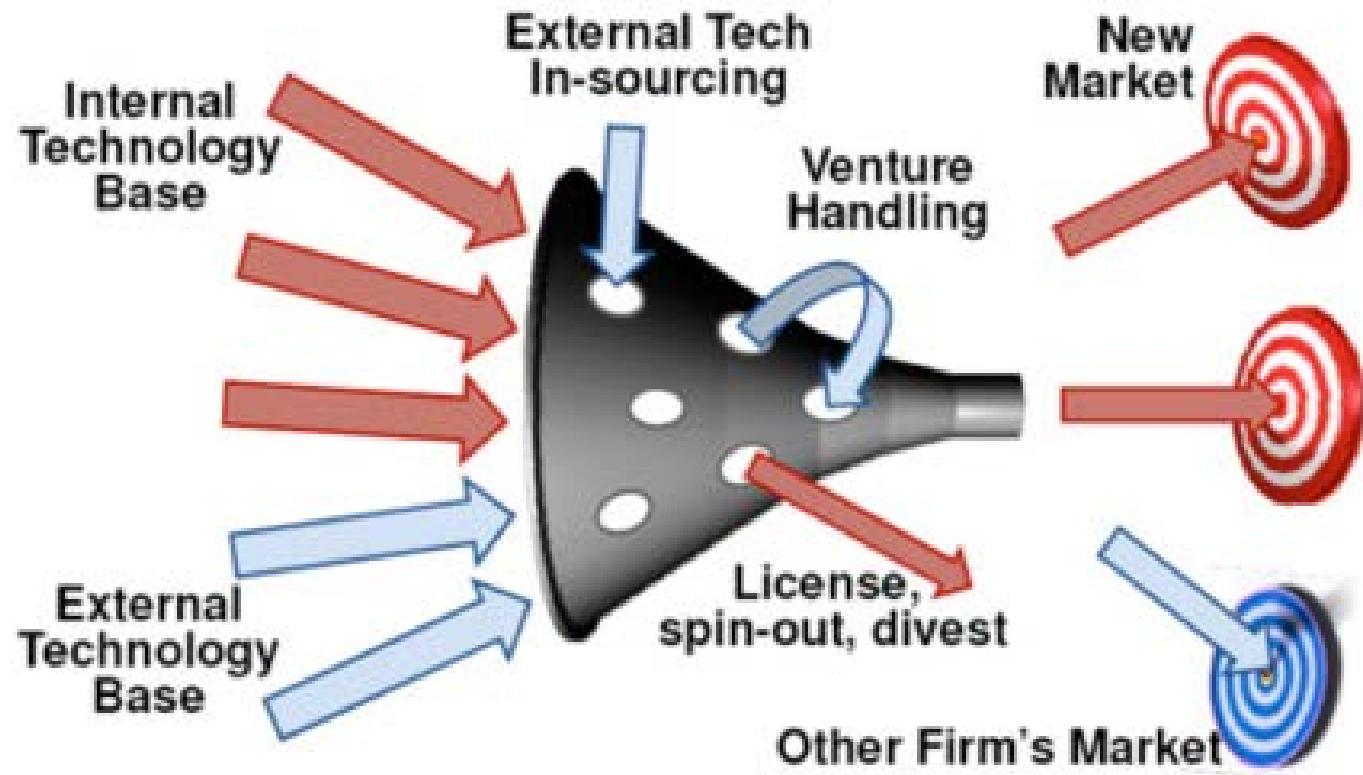
- Idea
- Theory
- Lab result

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

- TRL 1. • basic principles observed
- TRL 2. • technology concept formulated
- TRL 3. • experimental proof of concept
- TRL 4. • technology validated in lab
- TRL 5. • technology validated in relevant environment
- TRL 6. • technology demonstrated in relevant environment
- TRL 7. • system prototype demonstration in operational environment
- TRL 8. • system complete and qualified
- TRL 9. • actual system proven in operational environment

Internal R&D, Funnel Approach

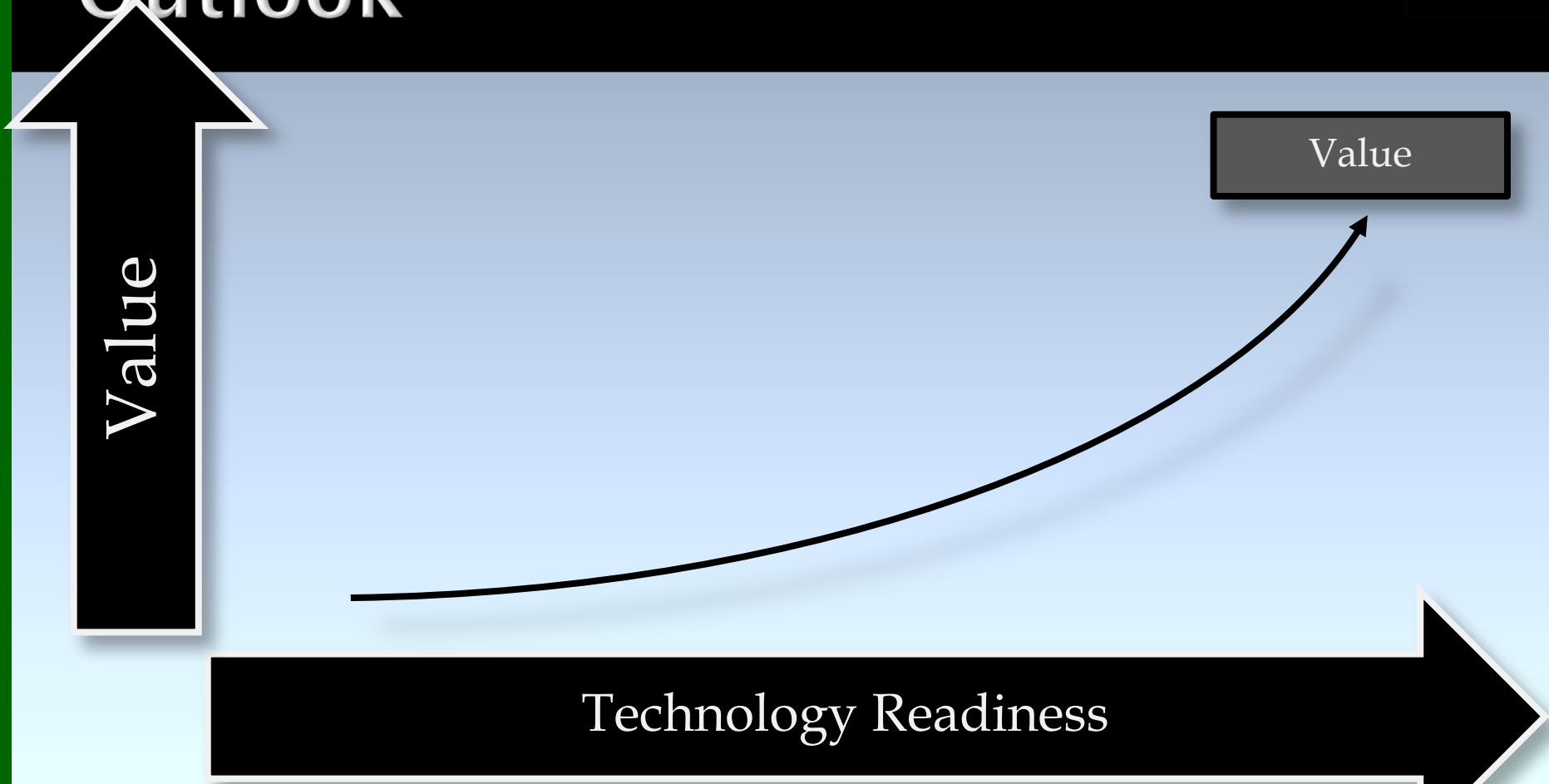
OPEN INNOVATION



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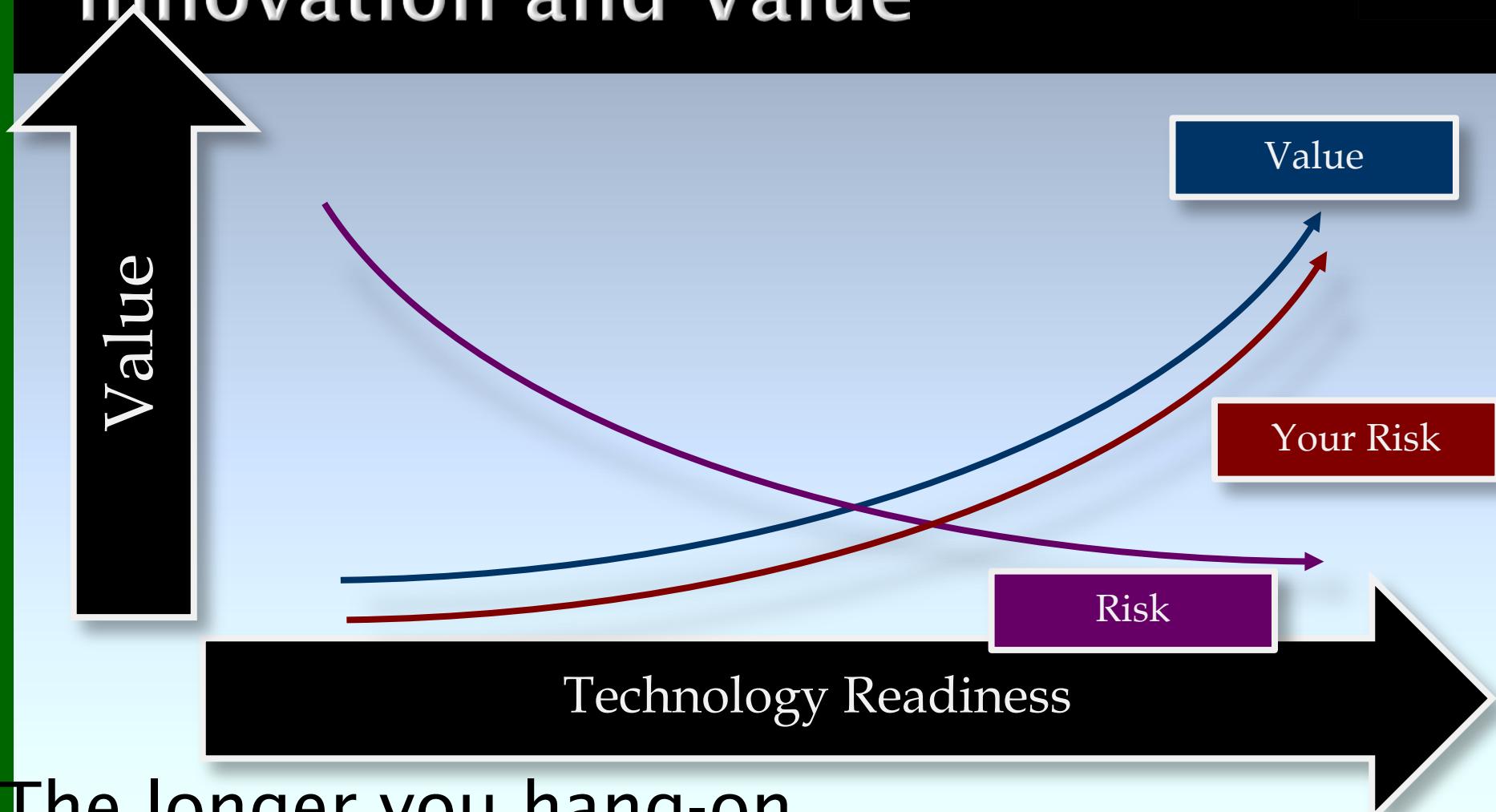


Traditional Technology Value Outlook



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.

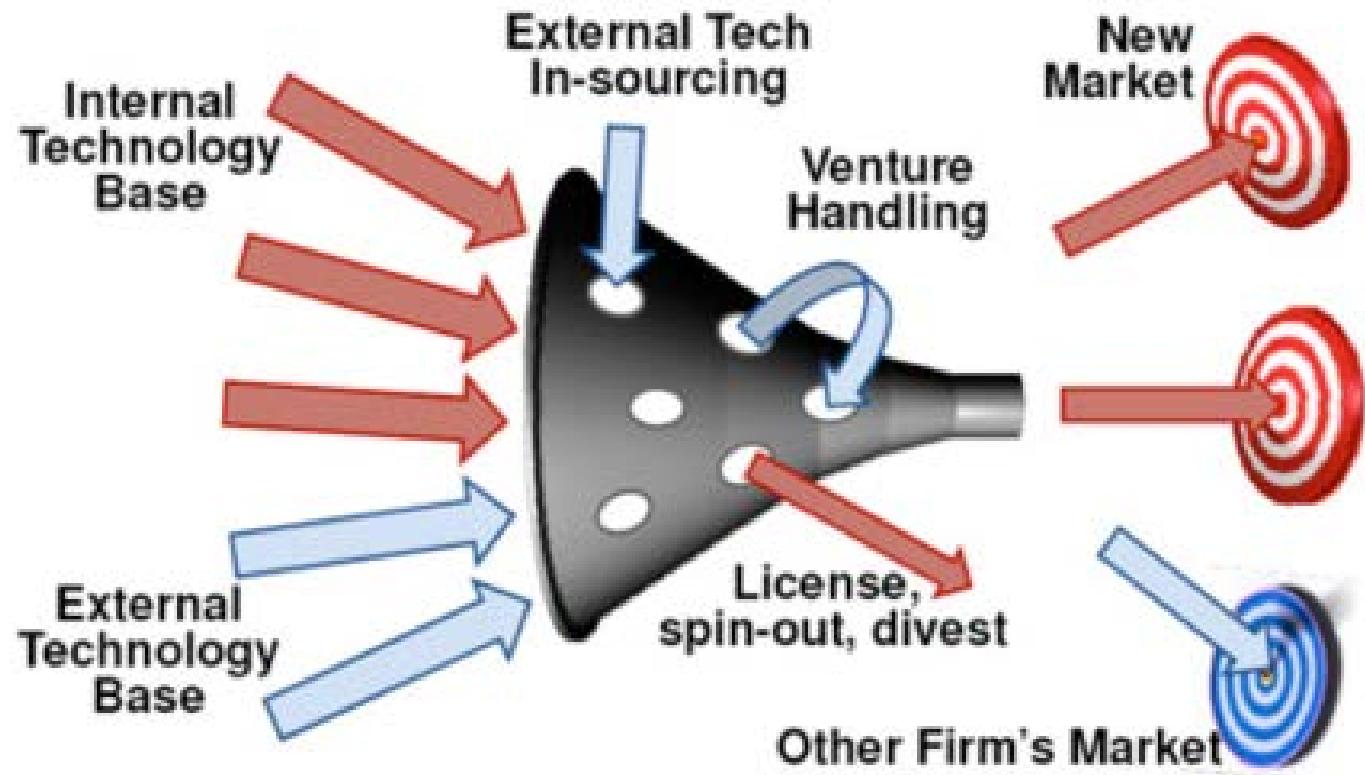
4- Exploitation Plan



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

Internal R&D, Funnel Approach

OPEN INNOVATION



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5- Protection

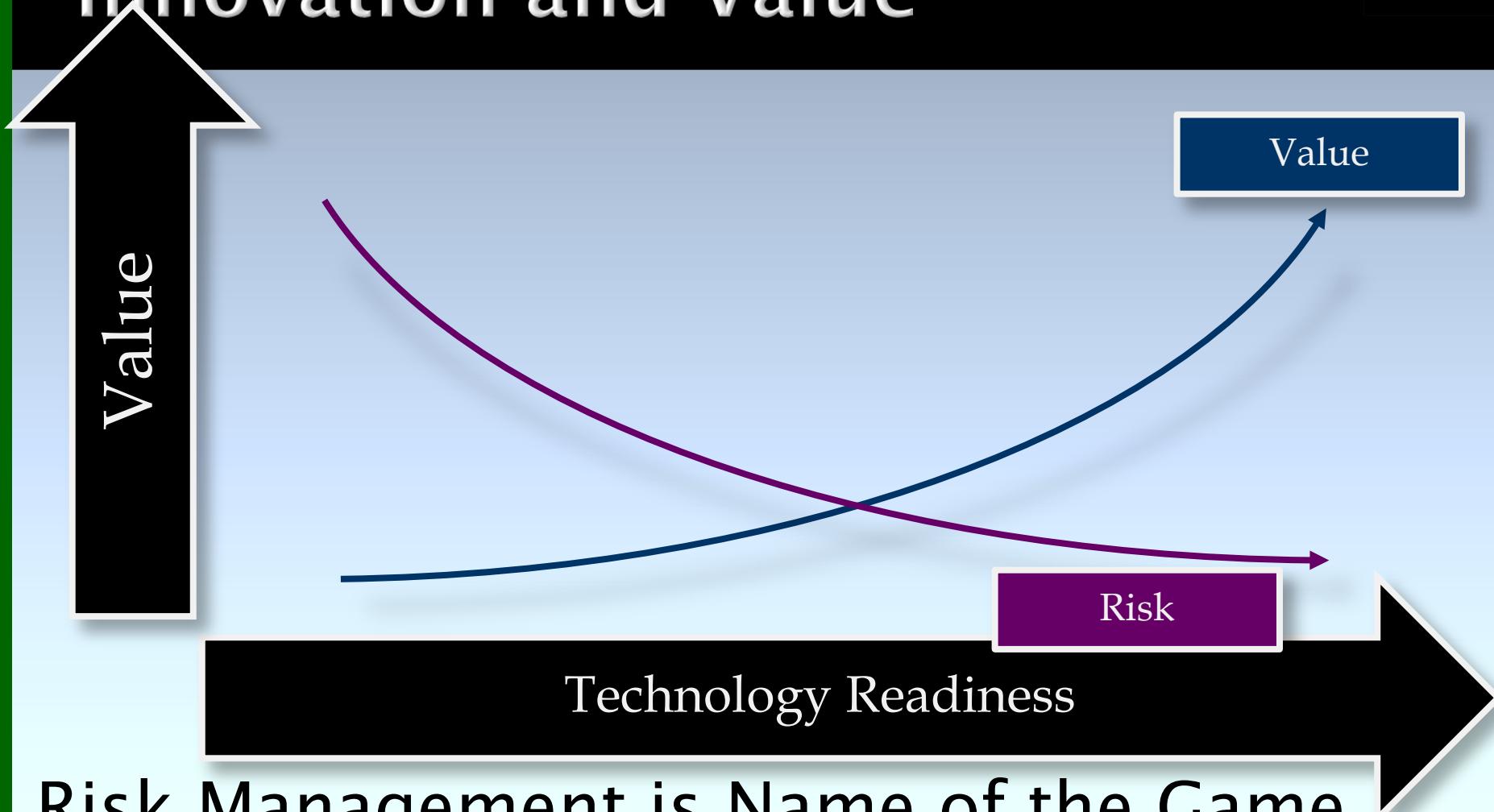


the basic truth on IP protection (e.g. patenting)

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).

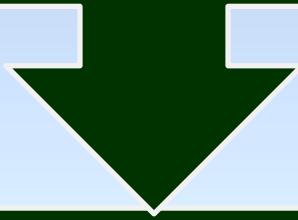
IP is proprietary, generally speaking, somebody owns it

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?

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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?

1st 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..

