Commercialization of Innovation in Industry and Academia

First innovate, then...
New research into the desert city of Petra has discovered evidence of highly advanced irrigation systems that would have allowed the city to flourish – and be adorned with lavish water features including a huge, 44-meter wide swimming pool. Penn State Behrend College associate professor of anthropology Leigh-Ann Bedal
Capturing the Value of Creativity

Value Creation
- Develop, build, acquire, seed, invest, patent, innovate…

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

The more creative you are in value creation

The more creative you must be in value capture!

Traditional Industry

- **Product Development Process**

  - Obtain legal license
  - Build lab
  - Install coffee machine
  - Hire research team
  - Hire admin assistants

  - Proofs of principles
  - New concepts 1-8, yay
  - Conceptualize and more coffee
  - Brain storm with coffee
  - Study

  - Seeking holiday
  - Fall concept 1,2,3,5,6,7
  - More testing and more coffee
  - More proof
  - More proof
  - Introduce dental plan due to industrial action

  - Customer testing
  - Beta version ok, smells funny
  - More product development
  - Prototype 8 works ok, maybe
  - Concept 4 fail

  - New Product offering
  - Open shops
  - Provide Finance
  - Compete for Customers
  - Profit??

  **Development is Long, Expensive, and Risky**
Product Development Process

Obtain legal license — Build lab — Install coffee machine — Hire research team — Hire admin assistants

Proofs of principles — New concepts 1-8, yay — Conceptualize and more coffee — Brain storm with coffee — Study

Seeking holiday — Full concept 1,2,3,5,6,7 — More testing and more coffee — More proof — Introduce dental plan due to industrial action

Customer testing — Beta version ok, smells funny — More product development — Prototype 8 works ok, maybe — Concept 4 fail

New Product offering — Open shops — Provide Finance — Compete for Customers — Profit??

Development is Long, Expensive, and Risky

Copying Process

Wait — Wait — Wait — Wait — Wait

Wait — Wait — Wait — Wait — Wait

Wait — Wait — Wait — Wait — Wait

Wait — Wait — Wait — Wait — Copy — Profit

Unfair competition punishes innovators
the basic truth on IP protection (e.g. patenting)

| Seeking IP protection is not a technical decision | Seeking IP protection is a commercial decision |
New Industry/Economy

Technology moves forward through **partnerships**

Industry reduces risk and cost by shifting early development to the wider global community

The smallest innovator in smallest institution in smallest country can have a **BIG** role in development and enterprise
Critical Success Factors

Create → Deal → Deal

Deal → Deal → Deal

Deal → Deal → Industry

More Important
- Small developments
- Good science
- Partner-friendly
- Agility

Less Important
- Marketing
- Size
- Capital
- Geography

Identify a partner to absorb technology and unlock value

Identify a viable value chain to reach this partner
A partnership plan is the only plan worth making!
New Paradigm

Modern Industry

Knowledge is a factor of production, just like raw materials

Knowledge Economy

Technology is a product!
Transforming the Role of Patents

For large industry/multinationals
  • Patent to protect

For everyone else
  • Patents as a means for partnership!
Patents reduce the investment risk in a technology by delaying competition.

- Reduced risk = higher valuation
- Reduced risk = more likely to partner
- Redefine your role as industry
- Thought become assets
Patenting for Commercialization

Plan A: Home country patent
Plan C: Only attractive markets
Plan D: Only the biggest market and home?
Why are you patenting???

For large industry/multi nationals
• Patent to protect

For everyone else
• Patents as a means for partnership!

Dr. Mohammed Aljafari
IPC-IPARK Royal Scientific Society
m.aljafari@ipark.jo
Patenting for Partnerships

IP Partnership Zone

Partnership Potential

Cost of IP

Submit 1st patent: 12 Months, 16-18 Months, 30 Months

Paris convention + PCT filing

Search Report

National Stage (big industry)
The critical need for seatbelts

A seatbelt is a good idea, no?
## Automatic market uptake?

- Invented in the early 19th century
- First patent in 1885
- 1910: Automotive safety problem identified
- 1959: Congress passed legislation for automobile makers
- 1970: The world's first seat belt law in Victoria, Australia

A need is not the same as a market pull
Example: what about software?

- **Software: a thing?**
- **Code: a process?**
- **Apps: a product?**
Conclusions

Innovation is all about finding that added value

Innovations move forward through partnerships

Great technical innovations require great commercial innovations

IP is an investment, and returns must be anticipated

Some innovations can enjoy legal IP protection

IP is a legal tool, but more importantly it is a partnership tool