Enabling environment for ICT Innovation and Economic Growth

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Agenda

• What is innovation?
• Seven Myths on innovation
• Favorable Innovation Environment :
  – How to foster creativity and innovation?
  – How to develop Human Resources?
  – Economic Transformation
  – Role of University, Research Centers & Industry
  – Role of Governments
What is innovation?

« Innovation is the only way to stay ahead of the curve »

Gary Hamel

Innovation

Innovation is:

– A new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method, business practice, workplace organisation or external relations

(Oslo Manual, OECD 2006)

– The successful exploitation of new ideas

(Innovation Unit, UK Department of Trade and Industry, 2004)
Innovation

Innovation is:

Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. It is capable of being presented as a discipline, capable of being learned, capable of being practised.

(Peter Drucker, 1985, Innovation and Entrepreneurship)

Seven Innovation Myths

“If at first, the idea is not absurd, then there is no hope for it”

Albert Einstein
Innovation is risky

“I have not failed I have just found 10,000 ways that won’t work”

Albert Einstein

Innovation is (only) about products

Business Model Innovation

- Southwest
- Dell
- UPS
- Toyota
Innovation is (only) about products

- **Product** innovation
  - changes in things (products / services) offered

- **Process** innovation
  - changes in the ways things are created or delivered

- **Position** innovation
  - changes in the context in which things are introduced

- **Paradigm** innovation
  - changes in the underlying mental models describing what the organisation does

- **Breakthrough** innovation
  - is a key component of the future strategies of companies looking to achieve sustainable growth
  - is the creation of a new platform or business domain that has high impact on current or new markets in terms of offering wholly new benefits and high impact on the firm through expansion into new market and technology domains

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"...the key to sustained success is business model innovation."
- Clay Christensen, Harvard Business School

![Business Model Canvas](image)
Innovation is about big ideas

Innovation can’t be taught
Innovation is a diversion

**AN INNOVATION PROCESS**

- **Discovery**
  - Building a foundation of truly novel insights
  - How widely & deeply understood?

- **Opportunity**
  - Generating a portfolio of game-changing ideas
  - How radical and coherent?

- **Innovation to the core**
  - Managing a pipeline of strategic experiments
  - How efficient in terms of risk reward?

Innovation is expensive

**Learn, Fail, Scale**

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<tr>
<th>Experiment #</th>
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<td>1. Do they want it?</td>
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<td>Customer Value Proposition</td>
<td>who, what, how differentiated?</td>
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<td>2. Can we do it?</td>
<td>Competencies? Operating Model?</td>
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Time
Innovation is expensive

For once, it’s not about money!

“There is no relationship between R&D spending and the primary measures of economic or corporate success, such as growth, enterprise profitability, and shareholder return”

Booz Allen Hamilton

Innovation is an exception

Leadership & organization

Processes & Tools

Innovation effectiveness

Culture & Values

People & Skills
Favorable Innovation Environment

“If you think about things the way you always thought about them then you will get what you always got”

“To do new things it is essential to think in new ways”

Albert Einstein

How to foster Creativity and Innovation

• Manage knowledge creation, storage, protection, as well as flows in and flows out.
• Encourage and stimulate creativity and innovation — especially in education at a young age
• Encouragement to take risks
• Try new ideas
• Ensure creativity is channelled into productive results               R&D+I=RD\text{I}
• Don’t re-invent the wheel
  • Do not hesitate to build on what is existing
  • Benefit from technology shortcuts
• A creative liberal education
How to develop Human Resources?

• An education that is free from constraints, broad in range, and is conducive to value creation in the modern world.
• Students should foster more innovative and creative mindsets
  – learning-by-doing
  – opportunity creation
  – problem-solving rather than just knowledge transmission

Economic Transformation

• Need to encourage creativity to all school students in all countries
• Foster the innovative and creative capacity of individuals, communities and institutions.
• Invest in stronger collaboration, partnership and linkages between universities, research centers, the public sector and businesses to create synergies in their activities.
Role of University, Research Centers & Industry

Key players in the National innovation systems

- University & R&D centers are good at research. Research is different from innovation.
- Industry is good at developing know how, at making products and selling them.

Role of Governments

- Increase investment in R&D and Innovation and measure results not only based on spent budget.
- Ensure that creativity and innovation takes a central role in all future policies.
- Boost skills and creative capacity recognising that this is more important for the future than concentrating on short-term objectives.
- Telecom infrastructure & services:
  - Up to date infrastructure and network services
  - Easy internet access with full openness of services (collaboration sites and tools, Visio conferencing, Web 2.0,...)
Role of Governments

• Develop meeting places for University, R&D and Industry: science parks & incubators
  – Science parks and incubators should be managed as private companies with specialist. The Management should be more reactive than tenants reactivity itself.
  – Separate between development and management.

• Accept to reserve part of the sourcing budget to SMEs and innovative solutions
  – US: Small Business Act: part of purchasing governmental and federal budget are reserved to SMEs.

Role of Governments

• Launch innovative Mobilizing projects and subsidize innovative projects
  – France: by the end 70’s early 80’s, France was the biggest producer of software in the world as a result of “plan calcul” and the large projects subcontracted by the Government and France Telecom
  – Iran: call for proposal for ICT projects in several fields, on 115 projects financed with an average of 50,000 USD per project, 100 succeeded and, as a result, 100 Iranian software are on the market

• Develop projects in PPP (Public Private Partnerships) scheme
Role of Governments

• Foster and support valorization of research results, their industrialization and marketing
  – NASA setup an incubator to market the research results that are not useful for NASA or after their usage
• Reinforce IPR (Intellectual property rights)
  – Not really to protect multinationals’ IP but more to attract them
  – To encourage domestic innovation by limiting piracy of national products
  – To develop believe in intangible products
  – To develop patent registration
  – Why not go into patented products to improve them or copy them (based on their territorial registration)

Role of Governments

• Accept failures
  – 96% of innovations always fails
  – In Israel innovative incubated SME can benefit from up to 800,000 USD to develop new products, amount to pay back only in case of success
• Setup a favorable business environment for SMEs and setup financing tools for innovation
  – US NIST (National Institute of Standards & Technology) subsidies SMEs as US is convinced that innovation results from SMEs and not from large companies.

No innovation and economic growth without ... Business
MENA Needs to be Creative & Innovative!

I recommend to develop
Regional innovation & Incubation
programmes and policies

Thank you for your attention

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