Role of Innovation and Entrepreneurship in the social and economic development in the Arab Region

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BEIRUT – APRIL 9, 10 2013

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Introduction

- Arab Region: the ‘dark’ side
  - High unemployment rates
    - youth unemployment at 34% in Egypt or 31% in Tunisia
    - young women are now close to 50 percent or more
  - Poor innovation stream
    - Spend 0.3% of GDP on global R&D, compared to 2.3% in OECD countries
    - Over past 13 years, filed around 3,000 patents, compared to some 1 million in Japan only
    - More consumers than creators of technology
  - Low startup creation rates
    - Five Arab countries (Algeria, Jordan, Oman, Morocco and Egypt) have created an average of only 0.9 startups per 1000ppl/annum, far behind countries such as France (3.08), Finland (3.37), Singapore (7.4) and the UK (8.05) (2004-2009 average)

- Arab Region: the ‘bright’ side
  - Poor macro-performance means opportunity for growth
    - first mover advantage for new startups & investors
    - Little competition exist
  - Great education system
    - The World Competitiveness Report 2010-2011 scores the ‘Quality of Math & Science Education’ as follows: Lebanon (5.6) in 7th place, Canada (5.4), Sweden (5), UAE (4.9), Jordan (4.4), Kuwait (3.5)
  - Arab Springs
    - Brings hope & aspiration
    - ‘Unleashes’ Youth potential - Generation Y or the ‘iPod Generation’
Introduction

- Arab Region: the challenges
  - Need to create 75-80M jobs within next 10 years
  - Can’t rely on governments as employers
  - The US creates at best 3M jobs/year, so all things being equal there are still 50M jobs to create, else
    - More migration
    - More poverty
  - Create a society of entrepreneurs
    - sources of innovation; increased competition; efficiency and productivity; economic flexibility and adaptation; job creation; supply chain development; seedbeds for future growth; wealth generation
  - Use ICT as an enabler for the above

Impact of ICT on entrepreneurship, start-ups & SMEs, innovation & incubation models
Entrepreneurship in Arab Region: Introduction

- Entrepreneurship is now a buzz-word
- There has never been a time more favorable for Innovation & Entrepreneurship
  - Favorable demographics (population of about 300 million, by 2050: 692 million)
  - Strong Internet Commerce (more than 100 million Internet users will be online by 2014; 260 million by 2020)
- Growing access to ICT & lower barriers to entry
  - Open Source (for developers), Social Networks (for outreach & marketing), Mobile Platforms (access & connectivity), low cost of developing in the Internet space
  - Proliferation of techno-preneurs
- How to capture & engage this talent?
  - Provide a conducive environment comprising of education, incubation, & access to capital

Entrepreneurship in Arab Region: Regional Initiatives

- ESCWA Digital Arabic Content Competition
  - The ICTD launched the National DAC Competitions in cooperation with technology incubators in Jordan, Lebanon, Palestine, Syria and Yemen mid 2008
  - 55 applications from 5 Arab countries
  - Applications addressed a number of subjects such as language processing tools and establishing portals for education, culture, employment, tourism, and e-commerce
  - 8 winning projects that benefited from one year incubation (equivalent to 10k$)
- MIT Pan Arab Startup Competition (since 2006)
  - Targeting 21 Arab countries & more than 4,000 applications every year
  - Winner gets 50k$ + visibility + exposure + mentoring
- Stars of Science, by Qatar Foundation
  - Pan-Arab reality-TV program (now in its fourth edition) dedicated to innovation & next generation of young Arab innovators, with more than $500,000 in cash prizes for the top 3 finalists
Entrepreneurship in Arab Region: Regional Initiatives

• Regional Support programs
  ○ Wamda, TechWadi, Mowgli (mentorship & networking), INJAZ (youth)

• Regional Funds
  ○ Wamda, Intel Capital, Malaz Capital, Riyada Enterprise Development, Saffar, Sawari Ventures, Siraj Capital, RisingTide Fund, Tuninvest-AfricInvest, Jabbar Internet Group, Silicon Oasis Ventures, Sindbad Ventures

More on
http://en.wikipedia.org/wiki/List_of_Arab_entrepreneurship_initiatives

Entrepreneurship in Arab Region: Per-country eco-systems for supporting entrepreneurship
Entrepreneurship in Arab Region: QRCE impact in Jordan

The Queen Rania Center for Entrepreneurship is a Non-Profit organization established in 2004 to help develop Technology Entrepreneurship in Jordan. The Center plays the role of a national Center of Excellence for Entrepreneurship. To date:

+25K people participating in networking activities
+100 Training workshops & seminars organized
+3,7K People participated in bootcamps, workshops & mentoring programs
+300 Jobs created
+15 National conferences & competitions organized
+$20M Valuation for the supported companies
+$2M Annual incomes for the supported companies
+5K Participants in public seminars
+1K participants in training courses
Incubators in Arab Region: Introduction

- Offer a conducive environment for the development of startups
- Lower the risk of failure of startups through proper screening and support mechanisms
- The MENAinc network (www.menainc.org) is a regional network of business incubation & entrepreneurship with 25 support institutions spanning 15 countries, including Egypt, Tunisia, Jordan, Libya, Iraq, Syria, Morocco, Bahrain, Saudi Arabia, Lebanon, as well as Palestinian territories
- Arab region also lagging
  - 1,500 (US), 1,300 (EU), 180 (Canada), 600 (Mexico), 450 (Brazil), 8 (New Zealand), 24 (for our neighbor in south with budget of $50M/year from gvt. since 1991!)

Incubators in Arab Region: Impact on startup & job creation

- No regional benchmark or consolidated numbers available
- 3 Arab incubators (Berytech in Lebanon, PICTI in Palestine, AlUrdonia in Jordan) are accredited with the EU-BIC label (Business Innovation Center) from EBN (European Business Network) and hence use the EBN Quality Benchmark for Key Performance Indicators
**Incubators in Arab Region**: Impact on job creation KPI: *Berytech (Lebanon)* as compared to EU-BICs in EBN Network

**Number of jobs created in SMFs** (client companies of BICs)

- **Berytech**
- **Network average**
- **Network median**

- 2005: 65
- 2006: 60
- 2007: 62
- 2008: 56
- 2009: 50
- 2010: 45
- 2011: 48

**Incubators in Arab Region**: New Nascent initiatives

- **Yemen, 2009**: The Aden ICT Incubator established as a direct result of the ESCWA Digital Arabic Content Competition with 3 successful incubated projects & more than 10 jobs created
- **Oman, 2013**: Information Technology Authority (ITA), Muscat, launched ‘Sas Incubation Programme’
  - 12 projects in incubation already
- **Bahrain, 2013**: Women Incubator Center (expected to be launched within a couple of months). Also, the University Incubator is planned to be launched in the same time frame
- **New in 2013**: Social Incubators
  - KSA: Tasamy, an “initiative incubator” program that supports projects created by youth
  - Libya: the New Libya Foundation CSO civil society incubator center;
  - Lebanon: NABAD, by ArcEnCiel NGO & funded by USAID
- **Current trends**: Seed Accelerators more focused on quick-to-market startups using off-the-shelf technology with business model innovations (e.g., mobile apps)
Funding in Arab Region: VC investment

• Arab region has been reluctant to invest in innovation and venture capital to date
  ○ Tradition of investing in low-risk activities such as real estate or the stock market, where exits are much easier.
  ○ According to the Global Entrepreneurship Monitor 2009 MENA report, almost 80% of entrepreneurs in seven Arab countries are financed by family members and only about 10 percent benefit from government programs

• Data is hard to get
  ○ Given the nature and size of VC investments, a significant portion are either not publically announced or, if they are announced, the value of the investment is not

Funding in Arab Region: VC investment

• The past two years have seen a significant increase in VC-related transactions with 33 transactions compared to just 16 in the period 2006 to 2008, with more than 50% in ICT:
  ○ 45% IT & Software
  ○ 8% Telecom
  ○ 12% Media
  ○ 12% Industrial Manufacturing
  ○ 21% Other

• Egypt and the UAE are the locations for more than half of the total transactions since 2006 (56 per cent)
  ○ Egypt benefits from a large and fast-growing population
  ○ UAE is a popular destination for fund managers given the size and dynamic nature of the economy

Source: MENA Private Equity Association "Venture Capital in the MiddleEast & North Africa 2012"
A 2012 independent survey was conducted among 16 portfolio technology companies of 3 Lebanese Venture Capital funds to estimate the impact of their investments on job creation.

- 11 startups and 5 in growth stage

**Results**

- Aggregate number of jobs almost tripled since the investment!
  - From 55 to 150 employees
  - More to hire in next quarter (of survey)
- Number of freelancers (for out-sourced projects) increased 2.35 times (indirect employment)
  - From 17 to 40
Funding in Arab Region: Impact on job creation - Lebanon case

Strategic Actions for Promoting, Facilitating & Implementing Sustainable Development
Strategic Actions

- Choose Sectors with High Potential
- Research & Inventions
- Improve Public Policies & Regulations
- Enlarge Sources of Finance
- Infrastructure
- Create a Talent Pool

Strategic Actions:
Choose Sectors with High Potential

- The fifth World Telecommunication Development Conference of the ITU identified an Action Plan that adopted five Arab States Regional Initiatives intended to address 5 specific telecommunication/ICT priority areas:
  - Broadband access networks
  - Digital broadcasting
  - Open-source software development and deployment
  - Arab digital content
  - Enhance Cyber security
**Strategic Actions:**

**Research & Inventions**

- Enhance R&D at both public and private level
- Governments should specify innovation priority axes and provide adequate funding (grant schemes) for applied research in scientific institutions
- Develop Technology Transfer Offices in Universities to commercialize research
- Provide incentives for corporations; their R&D should be tax-deductible

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**Strategic Actions:**

**Improve Public Policies & Regulations**

- Effective policies and regulations regarding IPR protection
- Strengthen dispute resolution and contract enforcement laws
- Advanced bankruptcy laws (to attract investors)
- More transparency & accountability
- Foreign ownership laws more relaxed (not just in business parks)
- Labor & immigration laws to attract scientists and engineers to settle in the region
- Equal opportunities for women (in entrepreneurship & education)
Strategic Actions:
Enlarge Sources of Finance

- Create national funds for innovators & entrepreneurs
- Develop angel and seed investing (more risky)
- Encourage large ICT corporations to invest in startups (and be tax deducted)
  - Create innovation programs to stimulate their services

Strategic Actions:
Infrastructure

- Build modern infrastructure (high quality and affordable) efficient to support innovation in ICT
  - Technoparks, business centers, etc.
- Deploy technological & robust telecom infrastructure and broadband network in place
- Engage Public-Private Partnerships to develop specialized clusters or tech zones
  - R&D labs, specialized incubators such as mLabs, Internet eXchange Points, etc.)
Strategic Actions: Create a Talent Pool

- Despite some exceptions (Jordan, Lebanon, Egypt), Arab countries score poorly when it comes to availability of scientists and engineers
- Develop specialized educational programs to build the skills needed in key areas
- Work with universities to develop curricula
- Establishment specialized agencies, and developing centers of excellence.
- Programs should include courses on entrepreneurship and closely linked with a business incubator
- Import talent – tap in diaspora
- Spread mentorship culture across the region
- Promote entrepreneurial culture
  - Established entrepreneurs should give time & advise to aspiring entrepreneurs.
  - Change behaviours and evolve the culture. Discuss entrepreneurship every day and generate hype around a handful of success stories
  - Bring entrepreneurship to the classroom. Everyone in high school and university should learn entrepreneurial principles
  - Bring entrepreneurship to the office. Companies should encourage employees to unleash their own talent.
- Favor exchanges, networks and lessons from experience (share the stories)

Conclusion
Conclusion

- Their has never been a time when the supply of capital did not overwhelm the supply of opportunity
  - VC / incubation industry in the region still relatively nascent, but trends show significant increase in both deal activity and fund raising
  - Perfect timing for regional technology development and transfer for proven business models
  - Arab Spring movement have created the ideal market conditions for investing in young, fast-growing technology companies in the Arab region
- Adopt a holistic approach - dealing with all ecosystem components: identify key areas in ICT, establishing policies and regulations easier, improved funding, infrastructure modernization and develop talent local – will help the Arab countries generate a steady stream of innovative ICT products and services
- The need for a transparent consolidated data and quantitative benchmark is a must (role of ESCWA?)
  - Measure direct/indirect impact, cost of jobs created, RoI, business success, etc.

Thank You