The Next Technology Hub: MENA

Presentation to Stanford Student Associations

By Minah Ventures

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Learning from the Pioneers
Taiwan, Israel, India, China …

- Being a pioneer is a high-risk endeavor …

*Circa early 1990:*

- No startup tradition
- Lackluster technology infrastructure
- Political instability
- Low GDP/head and high poverty rate
- Untested IP protection
- No local IT market
Taiwan, Israel, India, China …

Early investors however, achieved significant returns …

Note:

(1) Israel:
- Amount invested = IT venture capital raised (1995 to 1999)
- Amount returned = All IT liquidity events (1999 to 2003)

(2) India:
- Amount invested = All private equity investments (1998 to 2000)
- Amount returned = Returns to investors in WIT/INFY/SAY (at IPO)

(3) China:
- Amount invested = All private equity investments (1998 to 2000)
- Amount returned = Returns to investors in SOHU/SMI/SNDA/UTSI/KONG (at IPO)

Source: Thomson Venture Source, SEC, Company filings, Yahoo Finance
Taiwan, Israel, India, China …

- Now investors are increasing their commitments to these regions …
- Early investors helped establish a self-sustaining ecosystem
- Governmental and individual investors are giving way to professional investors

Source: Thomson Venture Source, PWC Money Tree Survey 2003
Taiwan, Israel, India, China …

…And helped create a self-sustaining startup ecosystem
Taiwan, Israel, India, China …

**Common drivers of success in these regions:**

- Generation of entrepreneurs educated and “proven” in the US
- Well educated, technical, local talent pool
- Emerging technology wave
- Improving technology infrastructure
- Motivated and savvy venture capital investors
- Government incentives (legal and financial) for technology investments
Adapting the Model
MENA Region Is Poised

- **MENA region is experiencing the same drivers of success as India & China 10 years ago:**
  - Generation of entrepreneurs educated and proven in the US
  - Solid local technical talent pool
  - English language proficiency
  - Lower cost of labor
  - New emerging technology waves
  - Government incentives (legal and financial) for technology investments
  - Improving technology and business infrastructure

*But the region currently lacks motivated and savvy venture capital investors…*

*... US venture capital talent and connections need to be brought to the MENA region*
World-Class Talent Pool

- **Talented technical human resources are abundant …**

![Pyramid Diagram]

- Top 10% MS / PhD
- Educated in MENA
- MENA “Technology Diaspora” in North America
- World Class Technology Startups

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Diaspora – Silicon Valley Elite

- Siebel, CEO
- Yahoo, CTO
- Yahoo, CDO
- CSFB, Technology Banking
- Google, Senior VP Sales
- Raza Foundries, Founder
- Microsoft, Corporate VP, MSN
- Ebay, Founder
- Cirrus Logic, Founder
- Cisco, GM EMEA
Diaspora – Entrepreneurs

- Region has yielded a generation of successful technology entrepreneurs ...
Diaspora – Entrepreneurs

<table>
<thead>
<tr>
<th>CrossTest, Inc.</th>
<th>PIX Technology</th>
<th>ipdynamics</th>
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<tbody>
<tr>
<td>M27</td>
<td>white pajama</td>
<td>VERNIER</td>
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<td>K2 Optronics</td>
<td>skybeam</td>
<td>INTERTRUST</td>
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<td>SECURIFY</td>
<td>Enpirion</td>
<td>TaoSecure</td>
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## Diaspora – Entrepreneurs

<table>
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<tr>
<th>Aperto Networks</th>
<th>Centellism Communications</th>
<th>Chelsio Communications</th>
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<tr>
<td>Niku</td>
<td>SAVVION</td>
<td>XL Optics</td>
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<td>Zhone.</td>
<td>Arzoon</td>
<td>Apilan</td>
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<td>ADEXA</td>
<td>AuroraNetics, Inc.</td>
<td>BizRate.com</td>
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Diaspora – Academia & Researchers

Some of the top minds at US Universities…

![Bar chart showing foreign scholars in US by country](chart.png)

- **China**: 14,000
- **Taiwan**: 2,000
- **India**: 4,000
- **Israel**: 1,000
- **MENA**: 2,000

Source: International Education Network

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MENA Talent – Local Universities

- Region continues to produce outstanding technical talent…

Source: International Education Network

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MENA Talent – Technology Expertise

- Region excels at fundamental sciences & core technologies …

**Areas of Excellence**

- Algorithmic Math
- Physics / Materials
- Analog Circuits
- Mixed Signal Design
- Radio Frequency (RF) Comms.
- Wireless
- De/Compression Algorithms
- Advanced Logic
- Cryptography

**Representative Graduates**

**Professor, Caltech:**
- Chair of Physics department
- Nobel Prize winner
- Director of NSF Molecular Lab

**Professor, Stanford:**
- Head of Ultrasonics research
- 50 patents
- IEEE Fellow

**Professor, UCLA:**
- Chair, Electrical Eng. Dept.
- IEEE 3rd Millennium Medal
- NASA certificate of recognition

**Professor, UCLA:**
- Director Fusion Technology Cntr.
- 300 publications
- Fellow, American Nuclear Soc.

**Professor, U. of Pittsburgh:**
- Head of EE dept.
- Member, Nat. Acad. of Eng.
- IEEE Fellow

**Professor, Caltech:**
- Assoc Editor IEEE Solid State
- ISSCC 1998 Jack Kilby Award
- NSF Career Award

**Professor, Royal Military College:**
- Canada Research chair in electromagnetic Engineering
- IEEE Fellow

**Professor, U. of Michigan:**
- VP for Research
- 650 publications
- IEEE Fellow

**Professor, Caltech:**
- NSF Career Award
- Presidential career award
- Associate editor, IEEE comms

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Talent Pool – Cost of Labor

Region offers significant cost advantages, even if it’s not the lowest cost region …

Offshoring of R&D (not outsourcing) is the way to go for MENA

Note: MENA – Weighted Average

Source: CIA World Factbook
Achieving Success
MENA Risks & Challenges

No dearth of challenges …

- Engineering talent is dispersed across multiple countries in the region
- Top academic talent is located mostly in Western countries
- Entrepreneurial talent is located mostly in North America
- Technology infrastructure is not developed enough in most countries
- Local IT markets represent relatively small revenue opportunities
- Local capital markets / firms are not mature enough for venture capital, M&A or IPOs
- Startup & risk-taking mindsets are not prevalent
Israel’s Success

318 Startups
Created in last 5 years...
The Long Road Ahead

NOTE: MENA region statistics are best guesses. Little data is kept or made available.

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Building Startup Friendly Environment

- Absence of corruption
- Rule of law
- Protection of IP
- Streamlined immigration
- Low taxation
- Efficient business setup

- Ethics / Business culture
- High quality of life
GCC Technology Clusters

“Dubai – Open for Business”:

- “... Committed to creating the world’s most integrated microelectronics technology park... end-to-end shared turnkey facilities for the semiconductor industry...”

- Subsidized office costs, server farm and EDA tools...

- “Dubai Internet City is a rapidly expanding international community of ICT companies...”

- Regional headquarters today ...
- R&D centers in the future

- June 15, 2004 - DIC announces Dubai Outsource Zone (DOZ)
- April 7, 2004 - AMD to set up Middle East headquarters in Dubai Internet City
- October 21, 2003 - Cupola Teleservices to expand BPO services from DIC facility
- October 7, 2003 - Chancellor Schroeder opens Siemens’ new campus

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Hybrid Development Model

- “Best of Breed” approach is required to maximize success …

- Entrepreneurial talent
- Technological innovation
- Access to venture capital
- Access to public markets
- IT customers / partners

- USA/CND
  - Top 10% technical talent pool from across region

- MENA
  - HQ
  - Recruiting

- GCC
  - R&D
  - Physical infrastructure
  - Communications / IT
  - Legal framework
  - Academic R&D
  - Immigration
  - IT Fortune 500

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MENA Technology Niche

- No need to compete with India / China startups:
  - Our investments will focus on technologies adapted to actual expertise of MENA’s talent pool

(e.g. Qualcomm, Google, Netscape ...)

MENA
- Core Technologies (HW & SW)
- Focus on Innovation
- Low “body count” / Higher wages

INDIA
- Software / Services
- Focus on Execution
- High “body count” / Low wages

CHINA
- Hardware / Manufacturing
- Focus on Execution
- High “body count” / Low wages

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## Improving Chances of Success

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<tr>
<th>Major Risks</th>
<th>Strategy</th>
<th>Comments</th>
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<tr>
<td><strong>Time to exit</strong></td>
<td>Emphasis on M&amp;A friendly investments (3 to 5-year exits)</td>
<td>Focus on core technologies that can fit in existing portfolio of large IT companies&lt;br&gt;US HQ means easier access to US IT companies&lt;br&gt;Leverage Minah partners’ IT company contacts</td>
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<tr>
<td><strong>Revenue growth / Earnings multiples</strong></td>
<td>Sole focus on technology investments developing IP</td>
<td>Fundamental technologies always yield very high PE even if not completely proven&lt;br&gt;Revenue growth of technology companies has always been superior to most other industries&lt;br&gt;Access to worldwide markets thanks to hybrid structure</td>
</tr>
<tr>
<td><strong>Capital efficiency</strong></td>
<td>Focus on technology IP creation&lt;br&gt;Lower cost basis in MENA</td>
<td>Spend capital on core technology development rather than productization (multiple PhDs rather than 100s of programmers)&lt;br&gt;Deliver world class productivity by combining US management expertise with MENA technical expertise</td>
</tr>
<tr>
<td><strong>Deal pricing</strong></td>
<td>Early stage valuations&lt;br&gt;Majority ownership position</td>
<td>High-risk, low-valuation deal structures&lt;br&gt;Aggressive terms consummerate with risk</td>
</tr>
<tr>
<td><strong>Corp. governance</strong></td>
<td>US HQ and legal framework even for MENA R&amp;D</td>
<td>Portfolio companies will be just as accountable as any other US company&lt;br&gt;Dubai allows incorporation under US laws in certain technology parks</td>
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CALL TO ACTION!
We’re All in This Together

- Study Hard!
  - We need more engineers not less

- Think Regional, Act Regional
  - Together we are much stronger, than alone

- Embrace Entrepreneurship
  - Go out and start a technology company!

- Spread the word
  - Tell everyone you meet that this will happen!
Tell The World …

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