Opportunities For Investors In MENA/GCC Education?

MEED Conference Presentation Of Honorary Consul Dr. Axel Goehler

Hamburg, November 2012
Dr. Axel Goehler
Founding Partner & MD Europe

As off 1998, Founding Partner and Managing Director of Newmex International Advisory Group offices in Germany and Kuwait.

20 years of strategy consulting, 10 years with The Boston Consulting Group (BCG) & BCG Recruiting Director.

University degrees in International Business from Germany, Switzerland, and USA; PHD International Business.

~ 50 high level strategy projects in GCC/MENA.

Education, book distribution, logistics, life sciences & hospital management in Germany / US / GCC.

Board Member (“Aufsichtsrat”) in several international stock-listed companies.


Since 2010, Supervisory Board Member of ConsulAqua/Hamburg Wasser (#2 water supply & treatment company in Germany).
Mahmoud K. Al-Jassar
Partner & MD MENA/GCC

Joining Newmex as shareholder, **Partner and GCC Regional Director** in June 2012; Advisory Board member.

Board Member **GCC health conglomerate** from 2007 until 2012.

13 years of strategy and business with **various GCC multinationals**.

Various **senior executive positions (CEO, COO) in oil & gas industry**; VP Strategy for multinational downstream oil company

2006, 2007 with **Agility Logistics as President Oil & Gas**.

From 2007 to 2010 as **consultant to the Chairman of Kuwait Finance House (KFH)**.

CEO of **KFH related investment holding company** with ~ US$ 2 billion asset portfolio.

A Kuwaiti, engineering with **Operational Management and MBA postgraduate degrees** from UK, Brunel University, Thames Valley University and AST College Scotland.
Opportunities in Education in MENA/GCC

Key Questions

1. **Relevance**
   How do international investors evaluate the GCC region?

2. **Education Investments**
   Why is merely pouring-in money not helping?

3. **Educational Content Distribution**
   Why are digital media applications the blockbusters for GCC education?

4. **Opportunities**
   What is a closed loop educational system?

5. **SWOT Profile**
   What are the opportunities and threats for investors?

6. **Your questions ...**
Strong GCC Market Growth Is Globally Outstanding
Governments (globally) are spending fortunes on education ....

Gross domestic product, current prices - bn US$

2008/09 crisis in GCC countries.

GCC development CAGR 7.5%

<table>
<thead>
<tr>
<th>Country</th>
<th>% of allocation of national budget on education 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAE</td>
<td>23%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>25%</td>
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<tr>
<td>Qatar</td>
<td>21%</td>
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<tr>
<td>Oman</td>
<td>12%</td>
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<tr>
<td>Bahrain</td>
<td>11.7%**</td>
</tr>
<tr>
<td>Kuwait</td>
<td>12.9%*</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund; Data Outlook Oct. '11; MEED report; * data for 2006; ** data for 2008, Newmex analyses
More Pupils Are A Blessing And A Challenge
US public spending per pupil doubled since 1970s: US$ 10k per pupil

Population is young and growing strongly
Expatriate workers flocking in GCC region

⇒ # of students projected to increase by 19% within next 10 years

Sources: Alpen Capital, Newmex analyses
The Real Challenge Lies in Schools **Not** Universities
Different regions with differing systems and educational approaches ...

**Largest education markets are Saudi Arabia and UAE**

**Primary and secondary education is core**
**Tertiary is projected to grow stronger**

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Sources: Alpen Capital, Newmex Analyses
How Can US$ 9.2 billion Not Pay Off …
Simply pouring in technology & money does not help

GCC total schools: 2010 to 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Total schools</th>
<th>Private schools share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>49,528</td>
<td></td>
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<tr>
<td>2015</td>
<td>53,005</td>
<td>11%</td>
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<tr>
<td>2020</td>
<td>55,704</td>
<td>14%</td>
</tr>
</tbody>
</table>

~6,200 additional schools required by 2020 to meet demand

80% of all schools will be located in Saudi Arabia

Additional need for around 163,000 teachers during 2010 to 2020

Student-teacher ratio getting closer to Western country ratios (US, UK: ~15:1), but many teachers don't have sufficient skills

→ ICT solutions are expected to cover problem of teaching skills insufficiency

### Additional teachers’ requirement: 2010 to 2020

<table>
<thead>
<tr>
<th>Countries</th>
<th>Overall</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
<th>Overall</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahrain</td>
<td>12,9</td>
<td>13</td>
<td>11,2</td>
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<td>Kuwait</td>
<td>9,7</td>
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<td>18,9</td>
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<td>Saudi Arab.</td>
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<td>UAE</td>
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<td>15</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

Projected Student Teacher Ratio 2010 and 2020

Source: UNESCO, World Bank, Alpen Capital, Newmex Analyses
Textbooks In Schools Still Are The Key Learning Devices
GCC has a disadvantage in what children read ...

Schools curricula are not adapted to the digital technologies

Digital friendly curricula are of key importance

Teachers can spent more time on coaching and less on giving information

Globally, the majority of primary and secondary classrooms are still under the dictate of textbooks

Teaching with textbooks in the digital age is like using ...

...X-ray machines for watching Disney movies!

Source: Newmex 2009 GCC Publishing Industry Study
Textbooks Are Often Particularly Useless In This Region
Medieval book distribution is hampering GCC culture and education

**Today's Status**: Local/temporary/stand-alone

**Objective**: Pan-Arabic/permanent/interlinked

Local book fairs in the course of the year
Numbering indicates months
Red color indicates months served
Temporary

Permanent distribution hub
Numbering indicates months;
Red color indicates months served → permanent service provided;
Radius indicates radius served;
Intersections indicate interlinkage of different hubs.
Arab Internet Usage Is Still Lagging Behind
World Bank Conference 2009
However, Some Countries Are Leading The Way
Good backbones, new fiber optic networks, high bandwidths ...

Middle East Internet Users
September 2009

- Iran: 32.2
- Saudi Arabia: 7.7
- Israel: 5.3
- Syria: 3.6
- U.A.E.: 2.9
- Jordan: 1.5
- Kuwait: 1.0
- Lebanon: 0.9
- Oman: 0.5
- Qatar: 0.4
- Bahrain: 0.4
- Yemen: 0.4
- Palestine: 0.4
- Iraq: 0.3

Africa Top 10 Internet Countries
June 2009

- Egypt: 12.6
- Nigeria: 11.0
- Morocco: 10.3
- South Africa: 4.6
- Sudan: 3.8
- Algeria: 3.5
- Kenya: 3.4
- Tunisia: 2.8
- Uganda: 2.5
- Zimbabwe: 1.4

Current country scope: 29 m users
Arab League total: 54m users (3.1 % of World users)
Arab League total + Iran: 86m users (5 % of World users)
GCC Kids Love Being Online!
Four key facts why the situation will change:
Industry initiative, progress, cost awareness, and digital routine

<table>
<thead>
<tr>
<th>Country</th>
<th>Facebook</th>
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<th>YouTube</th>
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<th>Orkut</th>
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</table>
Investing In ICT Infrastructure Is A Good Start ... ... but it should not end here!

GCC ICT rankings and improvement

<table>
<thead>
<tr>
<th>Country</th>
<th>Network readiness index rank</th>
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<tbody>
<tr>
<td></td>
<td>2008</td>
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<tr>
<td>UAE</td>
<td>29</td>
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<tr>
<td>Bahrain</td>
<td>45</td>
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<tr>
<td>Qatar</td>
<td>32</td>
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<tr>
<td>Saudi Arabia</td>
<td>48</td>
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<td>Oman</td>
<td>53</td>
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<td>Kuwait</td>
<td>52</td>
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</tbody>
</table>

As GCC countries have missed investments in ICT in education in the past the state started to invest substantial capital in improvement of education.

Example Oman
- Investments in new ICT learning tools
- Teachers are encouraged to use computers in class rooms

Example UAE
- Interactive websites in Arabic and English for students to access information on science, sports and student welfare
- Computer-training initiatives
  - International Computer Driving License (ICDL) – IT awareness program (overall computer expertise and applications)
  - IT Education Project (ITEP) – Specialized e-learning solutions and learner oriented curriculums for secondary schools

Example Kuwait
- Government is adopting a national strategy for ICT usage in educational process

Source: Global IT Report – WE Forum http://www.weforum.org, Newmex Analyses
ICT-Related Educational Initiatives
Case example: UAE

- **In April 2012**, the government of the UAE launched the Mohammed Bin Rashid Smart Learning Initiative program
- **US$272 million** to integrate information technology in classrooms
- Reaching about **13,000 students** at Zayed University, the Emirates University and the Higher Colleges of Technology
- **iPads will be used** by the students in the implementation of the programme

"Optimum use of technology ... will bring about a qualitative leap in the science and knowledge ... that will open up new scopes for innovation and excellence and allow building a knowledge-based community"
ICT-Related Educational Initiatives
Case example: KSA

- **Founded in 2005**, the National Center for e-learning and distance learning
- Research, development and implementation of e-learning architectures and infrastructures using open standards
- Contract with **METEOR, a Malaysian company worth 47 million riyals** for the first stage only
- **Selected projects**: Educational portal, Jusur system for e-learning administration, national repository for e-learning objects, excellence award University e-learning, Saudi digital library, center for support and counseling

⇒ „The Kingdom of Saudi-Arabia has joined the international race to make use of the products of the information revolution by broadening the role of technology in education“
ICT-Related Educational Initiatives
Case example: Bahrain

- **King Hamad School of the Future** project launched in 2005 with 11 pilot secondary schools
- **Focus areas:** self learning, cooperative learning, interactive learning, creative skills, life long learning, technological understanding, and self motivation
- **Main components** include e-classes, multipurpose e-teaching systems, linking schools electronically, e-learning resources to facilitate teacher training
- Despite the objective for roll out to all schools there are **wide variations in the implementation and efficacy**

> “By 2011, all 200 schools in Bahrain are required to implement a comprehensive e-learning course of study, giving every student nationwide access to the numerous benefits of an education driven by IT”
ICT-Related Educational Initiatives
Case example: Jordan

- Jordan Education Initiative (JEI) launched in June 2003
- Around 100 so called Discovery Schools
- In these schools, ICT infrastructure upgrades, e-curricula, and innovative staff trainings
- Partnership between the Kingdom of Jordan and world leading IT firm Cisco Systems
- “Blendid learning approach” for teachers to help them integrating ICTs into every day classroom teaching
- Discovery Schools are equipped with computers, laptops, multimedia projectors, and computer labs

“...The Jordanian Education Initiative introduces the digital age to teachers and students in Jordan through an ambitious e-Learning and Internet education program..."
Lack Of Arabic Digital Content Is A Critical Issue For All Educational Initiatives

1. Efforts aimed at ICT infrastructure development have not been matched by Arabic content development relevant to knowledge creation and implementation

2. Available content rarely pertains to enhancing the stock of knowledge

3. Problems inherent in the use of Arabic delay wider dissemination of content (complex grammar, word structures, diacritics)

4. Search engines, machine translation, and generally handling the Arabic language on the Internet still a field with open questions

5. Educational content is particularly deficient in quantity and relevance to development issues

World Bank International Conference 2009
Coming Back To Foreign Investors ...
Local governments must guarantee the political frame

Pros

- Co-operation potential with locally well established companies (e.g. publishers)
- Large number of pupil & young and growing populations
- International – English speaking community
- IT infrastructures highly developed
- People are Internet & smart phone “addicted”
- Innovations are welcomed
- No harmonized curricula in schools
- Inefficient education infrastructures
- Opportunities

Cons

- Lack of tools in Arabic language
- National hurdles prevent free flow of educational products
- WWW social platforms heavily used
- Lack of well trained and “e-educated” teachers
- Short term orientation of GCC decision takers
- Limited attention span of key decision makers
- Little co-operation in GCC educational systems
- Increasing competition in ICT market – GCC tends to be more price driven
- Politics often hard to predict from the outside
- Challenges
Closed Loop Education Ensures Technology, Usage, Progress, And Constant Improvements

Closed-Loop of Education

- Building 21st century skills in Arabic region
- Collaboration, critical thinking, synthesis

Set 21st century objectives for learning & education

- Real-time data enabling detailed analyses at multiple levels
- Better-informed decisions about strategy and resources

Develop curricula & strategies

- High quality Arabic content
- Timely, relevant, modular, multimedia
- Tools to sort, share, validate and retrieve information

Deliver 1:1 instruction

- Global reach customized to Arabic needs
- In-person, virtual, and blended learning
- Multiple channels for interaction and collaboration meeting regional habits (smart phone usage, social networks)

Embed frequent and ongoing assessment

- Real-time feedback to students, parents, and teachers
- Identify gaps, enabling tailored approach

Provide appropriate interventions

- Adaptive, “smart” interventions based on assessment feedback
- Considering Arabic and Islamic cultural behaviors and traditions
- Automated and live

Track outcomes and learnings

ICT infrastructures
# Newmex Work In GCC Education

<table>
<thead>
<tr>
<th>Description of Institution</th>
<th>Newmex Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abu Dhabi Authority of Culture and Heritage</strong></td>
<td>• Development of concept for Pan-Arabic book distribution</td>
</tr>
<tr>
<td>Administers cultural heritage in the Emirate of Abu Dhabi by facilitating exhibitions, planning museums, education initiatives etc.</td>
<td></td>
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<tr>
<td><strong>Abu Dhabi National Library</strong></td>
<td>• Concept for establishment of an e-Library for Arabic books</td>
</tr>
<tr>
<td>• Library of more than 300,000 titles in Arabic and 100,000 titles in other foreign languages</td>
<td></td>
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<tr>
<td>• 25,000 rare Islamic heritage manuscripts</td>
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<tr>
<td>• Documentation of Arabic folklore</td>
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<tr>
<td>• Promotion for reading Arabic literature</td>
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<tr>
<td>• Development of e-publishing</td>
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<tr>
<td>• KALIMA annual translation of 100 classic, contemporary and modern titles</td>
<td></td>
</tr>
<tr>
<td><strong>Abu Dhabi International Book Fair (ADIBF)</strong></td>
<td>• Evaluation of ADIBF 2010</td>
</tr>
<tr>
<td>• 6 days fair having 150 events</td>
<td>• Budget &amp; financial planning</td>
</tr>
<tr>
<td>• Reaching 225 schools, 840 exhibitors, 236,000 visitors from 60 countries exhibiting 500,000 titles</td>
<td>• Concept &amp; design for new venues 2011</td>
</tr>
<tr>
<td></td>
<td>• International Sales for ADIBF 2011</td>
</tr>
</tbody>
</table>
Historically, The Region Has The Potential To Catch Up Fast ...
... Which Is Why Investors Are Convinced That In Arab Education Systems e-Reading Will Grow Very Quickly!
There are many opportunities in Education in MENA/GCC!

For any further questions:
Dr. Axel Goehler
agoehler@newmex.de