Promoting the Arabic Digital Content in the ESCWA Region

Incubation Requirements and Training Needs

Gabriel Deek
April 2008
Content

- Introduction
- Opportunity of DAC incubators
- Infrastructure Needed
- Services, Maintenance and Support
- Training
Traditional Disablers (late 90's)

- High Cost of Telecommunications
- Weak Legal Framework (IPR, eTransaction, eSignature, …)
- Low Incubation facilities, Financing, VC
- Arabic enablement of the Internet
- No R&D in specialized development
- Size of the Local Market
Status of the Arab World

- Propagation of the Internet (>17%)
- ICT Growth in ME > 16% YoY
- Value and accessibility of E-Content
- Countries prolific in Printing, Publishing
- Media sector is showing dynamism (hundreds of Sat. TVs)
- Advertising sector is showing dynamism (presence in all capitals)
- Oil prices leading to substantial Economic Growth
Internet Penetration

World Internet Users
December 2007

Source: www.internetworldstats.com
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World Internet Penetration Rates
December 2007

- North America: 71.1%
- Oceania / Australia: 57.1%
- Europe: 43.4%
- Latin America / Caribbean: 22.2%
- World, Average: 20.0%
- Middle East: 17.4%
- Asia: 13.7%
- Africa: 4.7%

Source: www.internetworldstats.com
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Internet Growth

Internet Users in the World Growth Between 2000 and 2007

- Middle East: 920.2%
- Africa: 882.7%
- Latin America / Caribbean: 598.5%
- Asia: 346.6%
- World Growth Avg.: 265.6%
- Europe: 231.2%
- Oceania / Australia: 151.6%
- North America: 120.2%

Note: Total World Internet Users estimate is 1,319,872,109 for year-end 2007.
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## Internet Usage

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahrain</td>
<td>708,573</td>
<td>40,000</td>
<td>157,300</td>
<td>22.2 %</td>
<td>0.5 %</td>
<td>293.3 %</td>
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<tr>
<td>Iran</td>
<td>65,397,521</td>
<td>250,000</td>
<td>18,000,000</td>
<td>27.5 %</td>
<td>53.7 %</td>
<td>7,100.0 %</td>
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<td>Iraq</td>
<td>27,499,638</td>
<td>12,500</td>
<td>36,000</td>
<td>0.1 %</td>
<td>0.1 %</td>
<td>188.0 %</td>
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<td>Israel</td>
<td>6,426,679</td>
<td>1,270,000</td>
<td>3,700,000</td>
<td>57.6 %</td>
<td>11.0 %</td>
<td>191.3 %</td>
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<tr>
<td>Jordan</td>
<td>6,053,193</td>
<td>127,300</td>
<td>796,900</td>
<td>13.2 %</td>
<td>2.4 %</td>
<td>526.0 %</td>
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<td>Kuwait</td>
<td>2,505,559</td>
<td>150,000</td>
<td>816,700</td>
<td>32.6 %</td>
<td>2.4 %</td>
<td>444.5 %</td>
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<td>Lebanon</td>
<td>3,925,502</td>
<td>300,000</td>
<td>950,000</td>
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<td>2.8 %</td>
<td>216.7 %</td>
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<td>Oman</td>
<td>3,204,897</td>
<td>90,000</td>
<td>319,200</td>
<td>10.0 %</td>
<td>1.0 %</td>
<td>254.7 %</td>
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<tr>
<td>Palestine(West Bk.)</td>
<td>2,535,927</td>
<td>35,000</td>
<td>266,000</td>
<td>10.5 %</td>
<td>0.8 %</td>
<td>660.0 %</td>
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<td>Qatar</td>
<td>907,229</td>
<td>30,000</td>
<td>289,900</td>
<td>32.0 %</td>
<td>0.9 %</td>
<td>866.3 %</td>
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<tr>
<td>Saudi Arabia</td>
<td>27,601,038</td>
<td>200,000</td>
<td>4,700,000</td>
<td>17.0 %</td>
<td>14.0 %</td>
<td>2,250.0 %</td>
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<tr>
<td>Syria</td>
<td>19,314,747</td>
<td>30,000</td>
<td>1,500,000</td>
<td>7.8 %</td>
<td>4.5 %</td>
<td>4,900.0 %</td>
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<tr>
<td>United Arab Emirates</td>
<td>4,444,011</td>
<td>735,000</td>
<td>1,708,500</td>
<td>38.4 %</td>
<td>5.1 %</td>
<td>132.4 %</td>
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<tr>
<td>Yemen</td>
<td>22,230,531</td>
<td>15,000</td>
<td>270,000</td>
<td>1.2 %</td>
<td>0.8 %</td>
<td>1,700.0 %</td>
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<tr>
<td>TOTAL Middle East</td>
<td>192,755,045</td>
<td>3,284,800</td>
<td>33,510,500</td>
<td>17.4 %</td>
<td>100.0 %</td>
<td>920.2 %</td>
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</tbody>
</table>
Contents quality **difficult to judge** – Technology is easy

ICT is exponentially **more powerful**

and radically cheaper and smaller.

People **invest far less in quality stories**, knowledge and insight.

Content industries are local and regional, technologies are global

Content industries: development for local and regional economies

Contents are tied to culture and language
Digital Arabic Content by Arabs

Good Consumer
Bad Producer
What to produce?
To whom?
Target Audience?
Digital Arabic Content by Arabs

- DAC market is the Arab World at large
- Arabic speakers more comfortable in Arabic
- Arabic citizens who wants to access Arabic applications: government, learning, culture,…
- Diaspora: interested in culture and information about the Arab world
- Intl. community, interested in culture and information about the Arab world
E-Content Incubators landscape

- Young entrepreneurs develop an idea
- Transform it into a sustainable business
- Focused methodology to attract talent
- Scouting and Competitions
- Incubator runs on limited number of resources
- Rely on third party and volunteer community
Incubator action: Services rendered

- Office Space Facilities
- Office Services Facilities
- Shared Facilities
- Strategic Support Services
- Operational Support Services
Incubator action: Services rendered

- Strategic Support Services
  - Management team support, mentoring and coaching
  - Content relevance and harmonization
  - Quality standards, ergonomics and usability
  - Strategic planning, Competitive analysis,
  - Focus groups, orientation and market positioning
  - Organizational structure
  - Business plans and feasibility studies support
  - Partners and outsourcing relationships
  - Fund raising, Venture Capital, Mergers & Acquisitions
Incubator action: Services rendered

Operational Support Services
- Branding, Packaging
- Marketing, Advertising, Sales Channels
- Accounting, procurement, auditing
- Financial issues and Banks relationships
- Press and Public relations
- Market research
- HR and recruitment assistance
- Legal services
- Insurance
- Technical assistance
- Training and Capacity building
E-Content categories

- e-Learning
- e-Culture
- e-Media
- e-Government
- e-Health
- e-Business
- e-Entertainment
- e-Inclusion

<table>
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<tr>
<th>Sector</th>
<th>2002</th>
<th>2006</th>
<th>2011</th>
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<tbody>
<tr>
<td>K-12 Academic</td>
<td>1.8</td>
<td>11.0</td>
<td>18.0</td>
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<tr>
<td>Higher Education</td>
<td>1.5</td>
<td>23.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Recruiting and Staffing</td>
<td>0.8</td>
<td>4.6</td>
<td>11.7</td>
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<tr>
<td>Corporations and Business</td>
<td>4.6</td>
<td>16.4</td>
<td>42.6</td>
</tr>
<tr>
<td>Government</td>
<td>0.6</td>
<td>2.7</td>
<td>13.4</td>
</tr>
<tr>
<td>E-Learning Simulation</td>
<td>0.3</td>
<td>6.1</td>
<td>37.0</td>
</tr>
<tr>
<td>Vocational</td>
<td>0.4</td>
<td>8.6</td>
<td>19.2</td>
</tr>
<tr>
<td>Consumer</td>
<td>0.2</td>
<td>7.3</td>
<td>16.0</td>
</tr>
<tr>
<td>Associations</td>
<td>0.1</td>
<td>3.4</td>
<td>11.0</td>
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<tr>
<td>Totals (B$)</td>
<td>10.3</td>
<td>83.1</td>
<td>212.9</td>
</tr>
</tbody>
</table>
E-Content Focus Topics and Applications

- **Information services**: news, Financial, sport etc.
- **Entertainment**: games, music, videos
- **Marketing com.**: online campaign site, e-mail marketing campaign
- **Corporate com.**: financial information service, company intranet
- **Learning solutions**: online learning environments; simulation software
- **Community**: loyal customer clubs; registration-based online communities, user generated content
- **Self-service**: downloading software updates; support areas, online tutorials, forums
- **Business**: online shops, banking, business-to-business exchanges
Infrastructure Needed

- Hardware, Software, Network and Connectivity

- Specific needs for demanding applications:
  - eLearning
  - Gaming, multimedia and Graphics
  - Video, IPTV, Video On Demand (VOD)
  - Grid – High Performance Computing
  - E-Services platforms: Financial eTransactions, eBusiness
  - E-Government
Sample Configuration
SLA: common understanding about services, priorities, responsibilities, guarantees
- Levels of availability, serviceability, performance, operation,
- Billing and penalties in the case of violation of the SLA.
- The technical specifications of an SLA are commonly described through either a Service Level Specification (SLS) or a Service Level Objective (SLO).

Service performance metrics with corresponding service level objectives: ABA (Abandon Rate), ASA (Average Speed to Answer), Average time (usually in seconds), TSF (Time Service Factor) e.g. 80% in 20 seconds, FCR (First Call Resolution):
- Uptime Agreements are another very common metric, often used for data services such as shared hosting, virtual private servers and dedicated servers. Common agreements include percentage of network uptime, power uptime, amount of scheduled maintenance windows etc.
- Many SLAs track to the ITIL specifications
- SLAs commonly include segments to address: a definition of services; performance measurement; problem management; customer duties; warranties; disaster recovery; termination of agreement
Training Needed

- Basic IT trainings
  - Operating Systems
  - Relational Databases
  - Development Frameworks
  - Service Oriented Architecture (SOA)

- Graphics/Design trainings
  - Color/Photo handling
  - 2D/3D Modeling - 2D/3D Animation
  - Desktop Publishing
  - Web Design

- eLearning design standards
  - eLearning Platforms
  - SCORM Development

- Video over IP networks training
  - IPTV and Digital Rights Management

- Languages training
  - Business Writing

- Application Usability training
  - Web Usability By Design

- Business trainings
  - Brand Management
  - Selling Skills
  - Human Resources
  - Marketing Essentials
  - Accounting and Finance
  - Business Plan writing

- Legal trainings
  - Incorporation
  - Labor Law
  - Taxation
  - IPR law
Thank You
Sample Resources from WW and EU

- Access Nova - Chile
- Acorn Technologies - South Africa
- Ankara Cyberpark Inc. - Turkey
- ANPROTEC - Brazil
- Bahia Blanca Technopole - Argentina
- Chinese Business Incubation Association - Taiwan
- CIE-TEC - Costa Rica
- Corporacion Parque Tecnologico de Quito - Ecuador
- Ghana Multimedia Incubator Centre - Ghana
- InfoCon Co., Ltd - Mongolia
- Information and Telecommunication Technologies Development Association (INFOTEK) - Azerbaijan
- Intermediate Technology Development Group (ITDG) - South Asia - Sri Lanka
- Internet Works Sp. z o.o. - Poland
- Isfahan Science & Technology Town (ISTT) - Iran
- IT Professional Forum (ITF) - Nepal
- IT@AB Network - Namibia - Namibia
- Kharkov Technology Business Incubator (Kharkov Technologies) - Ukraine
- Kulim Technology Management Sdn Bhd - Malaysia
- MICTI technology and Business Incubator - Mozambique
- National Association of Technological Software Parks of Colombia - Colombia
- Regional Management Office - IBM / Integra - Saint Vincent and the Grenadines
- Rooyesh ICT Incubator - Iran
- Softstart BTI - South Africa
- Technology Park Varazdin - Croatia
- Universiti Teknologi Malaysia (UTM) - Malaysia
- Vellore Institute of Technology (VIT) - India
- Viasphere Technopark - Armenia
- YES Incubator - Former Yugoslav Republic of Macedonia