



**United Nations**

**ESCWA**

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# **Promoting the Arabic Digital Content in the ESCWA Region**

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**Incubation Requirements and Training Needs**

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# Content

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- Introduction
- Opportunity of DAC incubators
- Infrastructure Needed
- Services, Maintenance and Support
- Training

# Traditional Disablers (late 90's)

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- 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

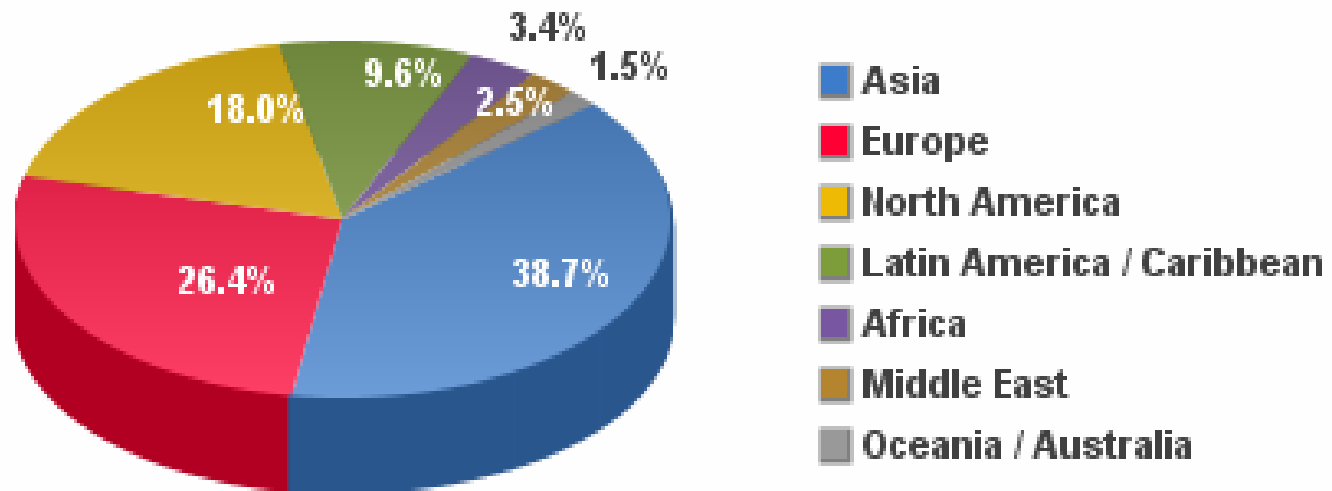
# Status of the Arab World

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- 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

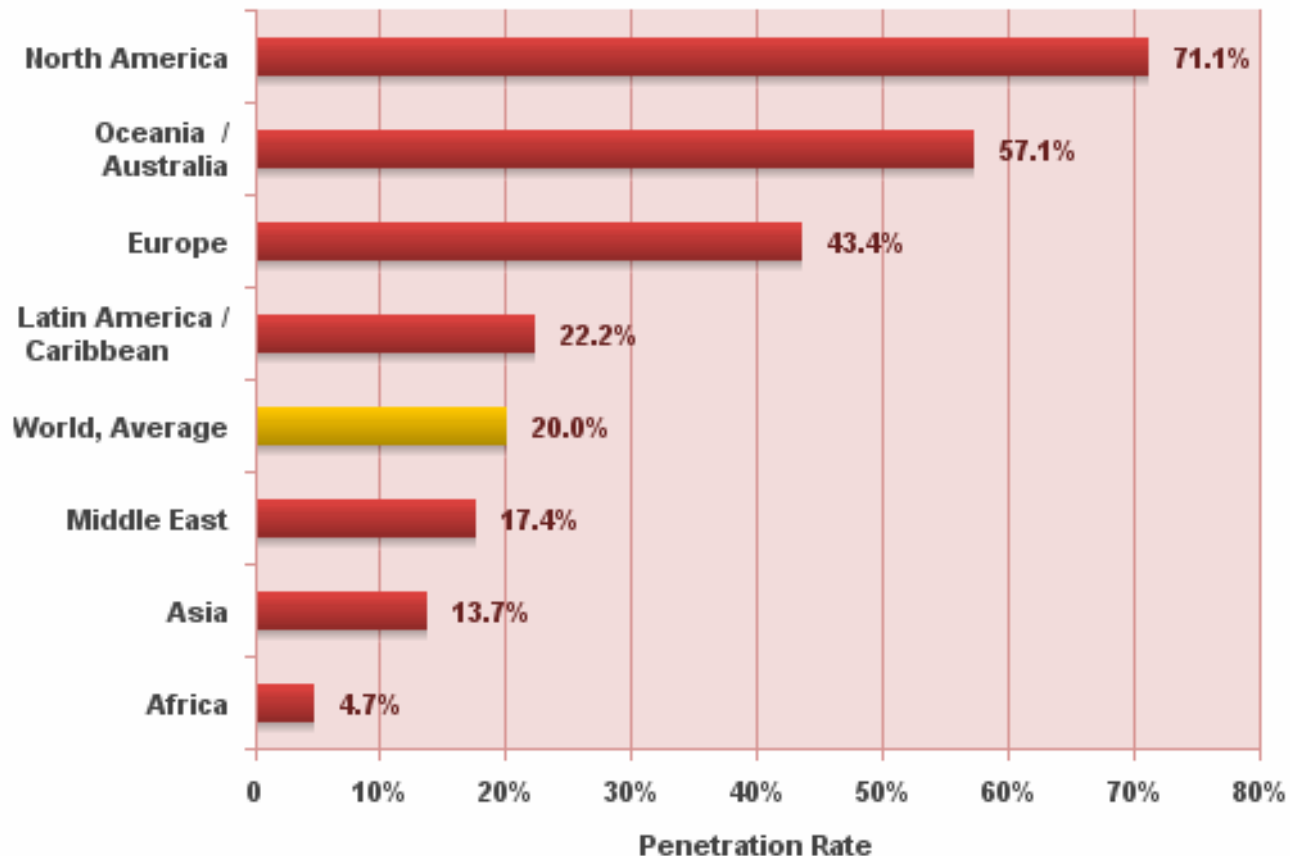
## World Internet Users December 2007



Source: [www.internetworldstats.com](http://www.internetworldstats.com)  
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# Internet Penetration

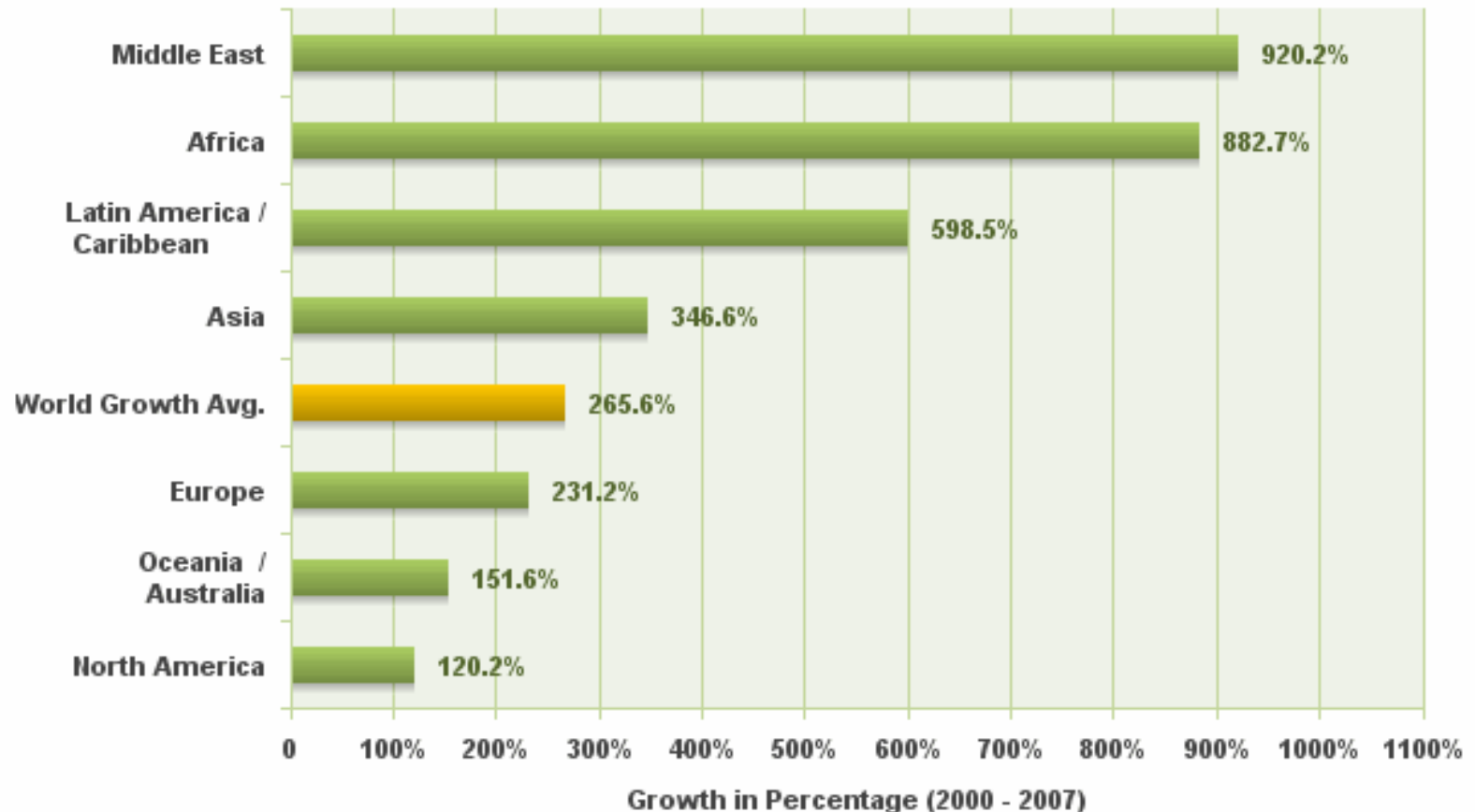
## World Internet Penetration Rates December 2007



Source: [www.internetworldstats.com](http://www.internetworldstats.com)  
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# Internet Growth

## Internet Users in the World Growth Between 2000 and 2007



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

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# Internet Usage

## Middle East Internet Usage and Population Statistics

<u>MIDDLE EAST</u>	Population ( 2007 Est. )	Usage, in Dec/2000	Internet Usage, Latest Data	% Population (Penetration)	(%) of M.E.	Use Growth (2000-2007)
<u>Bahrain</u>	708,573	40,000	157,300	22.2 %	0.5 %	293.3 %
<u>Iran</u>	65,397,521	250,000	18,000,000	27.5 %	53.7 %	7,100.0 %
<u>Iraq</u>	27,499,638	12,500	36,000	0.1 %	0.1 %	188.0 %
<u>Israel</u>	6,426,679	1,270,000	3,700,000	57.6 %	11.0 %	191.3 %
<u>Jordan</u>	6,053,193	127,300	796,900	13.2 %	2.4 %	526.0 %
<u>Kuwait</u>	2,505,559	150,000	816,700	32.6 %	2.4 %	444.5 %
<u>Lebanon</u>	3,925,502	300,000	950,000	24.2 %	2.8 %	216.7 %
<u>Oman</u>	3,204,897	90,000	319,200	10.0 %	1.0 %	254.7 %
<u>Palestine(West Bk.)</u>	2,535,927	35,000	266,000	10.5 %	0.8 %	660.0 %
<u>Qatar</u>	907,229	30,000	289,900	32.0 %	0.9 %	866.3 %
<u>Saudi Arabia</u>	27,601,038	200,000	4,700,000	17.0 %	14.0 %	2,250.0 %
<u>Syria</u>	19,314,747	30,000	1,500,000	7.8 %	4.5 %	4,900.0 %
<u>United Arab Emirates</u>	4,444,011	735,000	1,708,500	38.4 %	5.1 %	132.4 %
<u>Yemen</u>	22,230,531	15,000	270,000	1.2 %	0.8 %	1,700.0 %
<b>TOTAL Middle East</b>	192,755,045	3,284,800	33,510,500	17.4 %	100.0 %	920.2 %

# Technology and Content

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- 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

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Good Consumer

Bad Producer

What to produce?

To whom?

Target Audience?

# Digital Arabic Content by Arabs

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- 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

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- 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

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- Office Space Facilities
- Office Services Facilities
- Shared Facilities
- Strategic Support Services
- Operational Support Services

# eContent Development Cycle



# Incubator action: Services rendered

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## ■ 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

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## ■ 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

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

# E-Content Focus Topics and Applications

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- **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

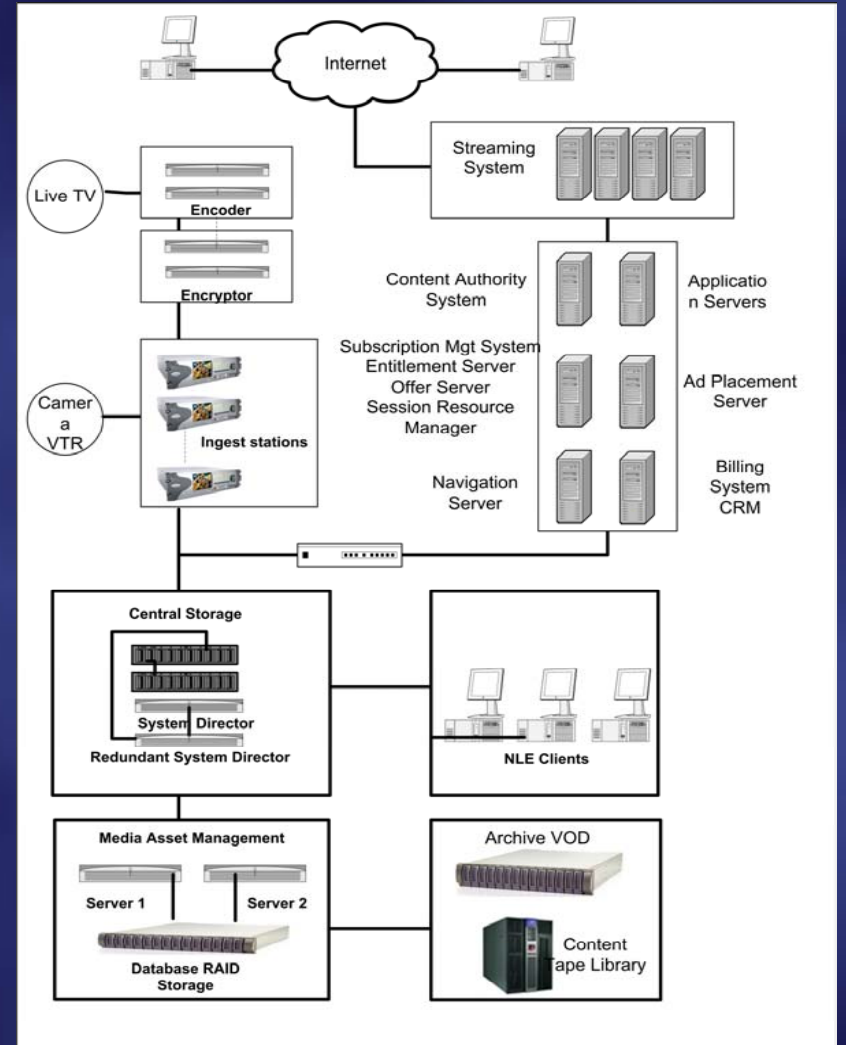
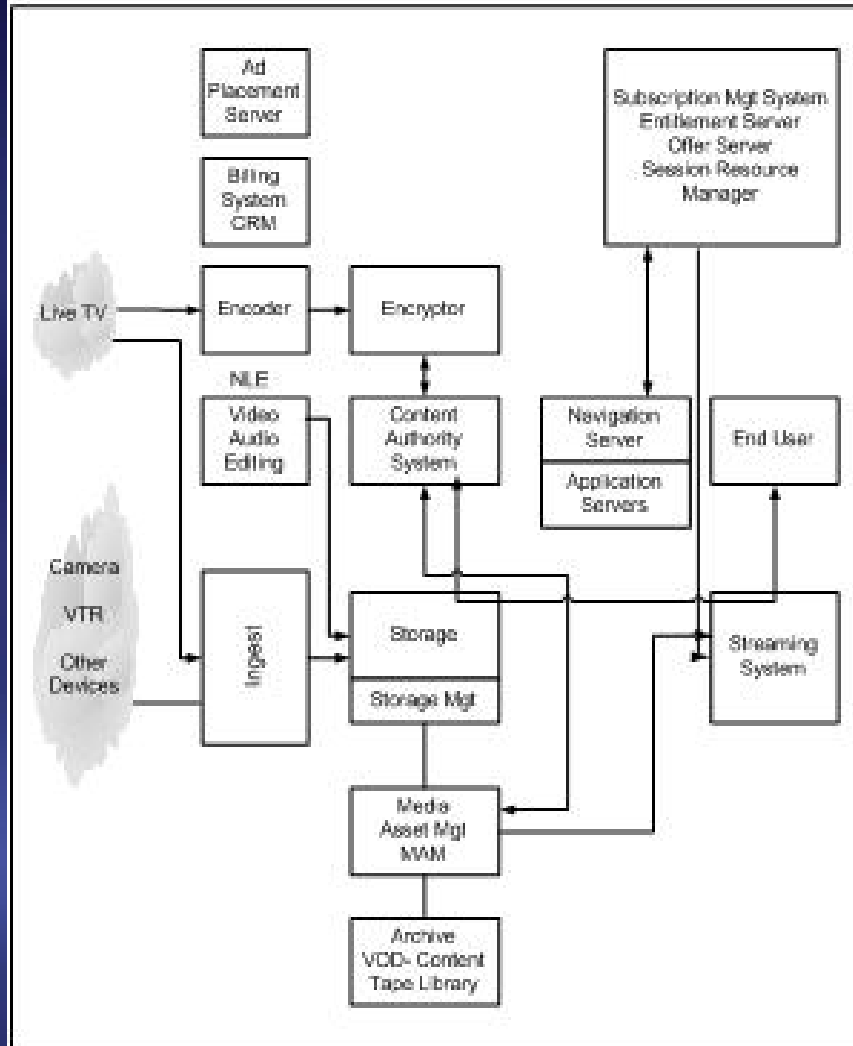
# Infrastructure Needed

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- 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

## Video - IPTV - VOD



# Services, Maintenance and Support

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- 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

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## ■ 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

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# 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