Cost-Effective e-Government for Developing Countries

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Development Gateway Foundation
Global Conference on E-Government
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One Billion Worldwide Internet Users in 2005*

Over 55% are from Developing Countries

*Projection based on 2004 data. Source: Computer Industry Almanac, Inc.
Enabling factor: silicon economy

steep decline in prices of IC chips and computers
10,000→1 in 40 years - no parallel in history
...in packaged software 500→1
Digital Opportunity

• Networked IT may offer the best opportunity to narrow income gaps between rich and poor countries: 1850: 3:1
  2000: 15:1 (PPP)

 ....through

  • e-business
  • e-government
  • e-learning

• In the long run, e-learning will have the highest impact, in the short-run, transparency = e-government
e- Government
use of networked IT to accelerate development

...can play a leading role

...but - - e- Government can be very expensive

- **US:** $2.2 b per year (federal government only)
- **France:** $600 m
- **Germany:** $500 m
- **UK:** $460 m

- **main cost driver:** “business as usual”
  - develop **custom** software - - hugely expensive!
  - replication of the structure and function of the paper world - - “as- is”
  - re- inventing the wheel, e.g., US: 1,000+ procurement Web sites

- **e- business is more standardized:**
  - packaged software, hosted applications (search, CRM)
    e.g., adapt business processes to fit SAP or Salesforce.com
Saving money the “easy” way:

This works as long as requirements are simple:

### Software Piracy Rankings

#### Table 1

<table>
<thead>
<tr>
<th>20 Countries With the Highest Piracy Rates</th>
<th>2004</th>
<th>2003</th>
<th>2004</th>
<th>2003</th>
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</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>92%</td>
<td>92%</td>
<td>21%</td>
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<tr>
<td>Ukraine</td>
<td>91%</td>
<td>91%</td>
<td>23%</td>
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<td>China</td>
<td>90%</td>
<td>87%</td>
<td>25%</td>
<td>27%</td>
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<tr>
<td>Zimbabwe</td>
<td>90%</td>
<td>87%</td>
<td>26%</td>
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<tr>
<td>Indonesia</td>
<td>87%</td>
<td>88%</td>
<td>27%</td>
<td>29%</td>
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<tr>
<td>Russia</td>
<td>87%</td>
<td>87%</td>
<td>27%</td>
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<tr>
<td>Nigeria</td>
<td>84%</td>
<td>84%</td>
<td>28%</td>
<td>31%</td>
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<td>Tunisia</td>
<td>84%</td>
<td>82%</td>
<td>28%</td>
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<tr>
<td>Algeria</td>
<td>83%</td>
<td>84%</td>
<td>29%</td>
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<td>Kenya</td>
<td>83%</td>
<td>80%</td>
<td>29%</td>
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<td>Paraguay</td>
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<td>Pakistan</td>
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<td>Bolivia</td>
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<td>78%</td>
<td>31%</td>
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<td>El Salvador</td>
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<td>Nicaragua</td>
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<td>79%</td>
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<td>Thailand</td>
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<td>80%</td>
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<td>Venezuela</td>
<td>79%</td>
<td>72%</td>
<td>36%</td>
<td>35%</td>
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<tr>
<td>Guatemala</td>
<td>78%</td>
<td>77%</td>
<td>37%</td>
<td>36%</td>
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<tr>
<td>Dominican Republic</td>
<td>77%</td>
<td>76%</td>
<td>38%</td>
<td>41%</td>
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<tr>
<td>Lebanon</td>
<td>75%</td>
<td>74%</td>
<td>40%</td>
<td>41%</td>
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</tbody>
</table>
Long-term solutions:

Once requirements get more complex, one has to look for better solutions:

- **Open-standards (inter-operability!)**
- **Open-source solutions** (Linux, OpenOffice, MySQL, LAMP (Typo3, Zope, ERP5), J2EE (JBoss Portal, Compiere, Alfresco..))
- **Government interoperability frameworks** (eGIF...)
- **Software engineering capabilities?**

Avoid re-inventing the wheel!
Example: affordable e-Government

Estonia is ranked 8th in e-Government in Europe, spending $20 m per year (1% of budget), mostly on hardware ... How?

- use open standards & open-source, when possible
- prioritize applications by impact, standardize
- go for simple solutions first, upgrade
- avoid replicating bureaucracy
- common infrastructure (database, e-ID, etc.)
- top-level leadership (paperless e-Cabinet)
Outcomes:

- paperless e-Cabinet ($0.2 m)
- integrated financial management (SAP)
- e-Procurement portal
- e-Citizens portal (interactive, $2 m)
- electronic ID cards & e-mail for all citizens
- linked state registers (X-road) using e-ID ($2 m)
- 100% of schools connected ($25 m, 70% for hardware)
- 100% of public sector connected

Yes!

Advantage of latecomer:

- “enterprise-level” solutions are available in open-source with short-time lag - almost for free
- TCO very different (labor 1/10), no switching costs
- borrow solutions from others

• Examples:
  - Linux, OpenOffice, LAMP, JBoss, Alfresco, Google Talk
  - Development Gateway: dgMarket, AMP
The Development Gateway Foundation...

...puts the power of the Internet to work for developing countries in:

• e-Government
• e-business
• e-learning

• connect • collaborate • change your world •
Thank you!

Questions and suggestions?

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www.developmentgateway.org
Objectives

- Increase transparency: a global public good
- Build local enterprise and institutional capacity
- Act as a catalyst for development
Global Portal and Tools

- 160,000 registered users  
  - 55% from developing countries
- 40,000 tenders in dgMarket on any day
- Largest online directory of development projects from around the world
- Development information in 25 online communities managed by 200 partners

Local Activities and Tools

- 8 local dgMarket services launched
- 4 e-government grant pilots
- Support for 53 Country Gateways  
  - More total traffic than global portal
- Aid Management System deployed in Ethiopia
- 6 local project directories launched
- Research and training centers in China, India, Korea and Rwanda

Registered Users of Global Portal  
October 2003 - June 2005

“The Development Gateway is where the development community comes to collaborate”
Partnering Worldwide

Country Gateways
spark dgMarket – local implementation
e- Government Grants Program
triangle Aid effectiveness tools – local implementation
diamond Research and training centers
dgMarket: Increasing transparency in Government Procurement
Hosted state-of-the-art e-Government Procurement solution
integrates tenders worldwide (30+ countries full, 150+ some)
- $300 bn per year in contracts
- daily e-alerts enable suppliers to find business opportunities
- local dgMarket implemented in 8 countries – Georgia, Greece, Mauritania, Pakistan, Poland, Romania, Spain, Turkey
- new countries to come: China, Rwanda...

*High Impact:* 5% savings on annual developing country procurement of $1 trillion would nearly equal the total of official development assistance worldwide*

*The price impact of online publishing in EU countries has been 5%, according to "Impact Assessment on an Action Plan on e-Public Procurement", European Commission, 2004, Table 2.4. We would expect it to be higher in many developing countries.*
#1 non-governmental site for procurement opportunities worldwide

- Unique visitors: 180,000/ month
- Alert subscribers: 20,000
- Branded sites: 8
- All national tenders: 30+ countries
- Aid tenders: 150 countries
dgMarket-Georgia

საერთაშორისო მარკეტინგის განვითარება საქართველოში

მოსამართლების შესახებ:
- საერთაშორისო შესახებ
- შესახებ საქართველოს

მოდელის ხელმისაწვდომობა:
- საერთაშორისო შესახებ
- შესახებ საქართველოს

თანამედროვე და მდგელი საქართველო

(ჰომეგრა მოთხოვნა გამოაქვეყნა: 166)

ლაბორატორიული მიზანების დასრულებამდე, რომლითაც ქართული გამორჩენილი სახელმწიფო, ფიზიკური და სამედიცინო მომსახურება, ლაბორატორიული პროცედურები გამოდის.

<table>
<thead>
<tr>
<th>საქართველო</th>
<th>გამოქვეყნების თარიღი</th>
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<td>28 იანварი 2005</td>
<td>21 იანварი 2005</td>
</tr>
</tbody>
</table>
Making Development Aid More Effective
Increasing transparency, enabling coordination …

• We provide web-based tools for better information sharing, coordination and planning among donors and governments:

  – Aid Management Platform for partner governments and local donors
  – AIDDA --- largest online directory of development activities from major bilateral donors, multilateral development banks and UN agencies
Aid Management Platform (AMP)

- facilitates donor coordination and harmonization in-country

- Pilot developed in cooperation with Aid Effectiveness Steering Committee and Government of Ethiopia
  - Pilot deployed in May 2005
  - Support of local donors
  - Ethiopia is exploring expansion of features

- Can easily be deployed in other countries
Country Gateways
Building local capacity...

- Country Gateways are independent providers of information services
- Locally owned and managed; serving local needs
  - Web portals plus other ICT initiatives
  - Some are the country’s e-Government focus
- Development Gateway provides
  - Grants, technical and consulting assistance
  - Global brand and partnership network
Example: Rwanda

Rwanda’s competitiveness is its people - William Nkurunziza
One of the comparative advantages that Rwanda has is the hard working people who can deliver services at a lower cost, a good basis for competitiveness. [Read more]

Prof. Nshuti ‘eats’ Finance portfolio
Prof. Paul Manasseh Nshuti is the new Finance and Economic Planning Minister, replacing African Development Bank (ADB) President Dr Donald Kaberuka. Nshuti’s appointment to the finance portfolio is among the highlights of a cabinet reshuffle announced Saturday, August 20 [Read more]