The tip of the iceberg

The Digital Govt Architecture of Uruguay

Agency for e-Government and Information and Knowledge Society
Office of the President

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Population: 3.4 millions
Area: 176,215 km²
Capital: Montevideo
Language: Spanish
GDP (PPP) per capita: $21,300
### About the country

<table>
<thead>
<tr>
<th>Index</th>
<th>Rank</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lowest Poverty</strong></td>
<td>1</td>
<td>ECLAC-SEDLAC, 2016</td>
</tr>
<tr>
<td><strong>Transparency Index</strong></td>
<td>1</td>
<td>Transparency International, 2016</td>
</tr>
<tr>
<td><strong>Democracy Index</strong></td>
<td>1</td>
<td>The Economist, 2016</td>
</tr>
<tr>
<td><strong>Prosperity Index</strong></td>
<td>1</td>
<td>Legatum, 2016</td>
</tr>
<tr>
<td><strong>Transformation Index</strong></td>
<td>1</td>
<td>Bertelsmann Foundation, 2016</td>
</tr>
</tbody>
</table>

- **Lowest Poverty**
  - Uruguay in Latin America
- **Transparency Index**
  - 21 global
- **Democracy Index**
  - 19 global
- **Prosperity Index**
  - 28 global
- **Transformation Index**
  - 4 global among emerging economies
Leading in the region

**Digital Development**

<table>
<thead>
<tr>
<th>Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>0.884</td>
</tr>
<tr>
<td>Iceland</td>
<td>0.883</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.874</td>
</tr>
<tr>
<td>Uruguay</td>
<td>0.679</td>
</tr>
<tr>
<td>Argentina</td>
<td>0.652</td>
</tr>
</tbody>
</table>

**Digital Government**

<table>
<thead>
<tr>
<th>Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>0.946</td>
</tr>
<tr>
<td>Australia</td>
<td>0.910</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.908</td>
</tr>
<tr>
<td>Uruguay</td>
<td>0.742</td>
</tr>
<tr>
<td>Chile</td>
<td>0.712</td>
</tr>
</tbody>
</table>
Households below the poverty line

- 2004: 40%
- 2016: 6%

Households with internet access, by income

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1%</td>
<td>4%</td>
<td>9%</td>
<td>17%</td>
<td>37%</td>
</tr>
<tr>
<td>2016</td>
<td>77%</td>
<td>83%</td>
<td>77%</td>
<td>85%</td>
<td>91%</td>
</tr>
</tbody>
</table>

Sources: ECH (INE), EUTIC (AGESIC/INE)
It's not about technology: Transforming with equity

- SOCIAL POLICY AND INCLUSION
- SUSTAINABLE ECONOMIC DEVELOPMENT
- GOVERNMENT MANAGEMENT
- GOVERNANCE FOR THE INFORMATION SOCIETY

MULTI-STAKEHOLDER  SUSTAINABLE  MEASURABLE  COUNTRY COMMITMENT
All households with internet - universal (free), FTTH, submarine cable, …
All children with computer, internet, English, robotics, programming, …
All agro-livestock with traceability - disease control, rustling, added value, ...
All persons with digital signature - trust and security, …
All the country with e-health record equity in access to health services, ...
All govt services online
equity in access to govt services, ...
All govt services must be online by 2020

Volume defies; innovating in the model:
From artisanal to industrial

Universe of govt services:
Digitizing one by one

Modeling of services:
Patterns by category and shared assets
Digital Govt Platform
Interoperability

More than 150 Web Services
125,000 daily transactions

Value Added

SOA Design

Support and Monitor
High Availability
24x7 – 99.9%

Achieve Interoperability throughout the UY State

Legal and technical framework

Service Catalogue

Government Organization

Interoperability Platform

Government Organization

Government Organization
Digital Govt Architecture

- Integrated
- Tailored TOGAF
- Common language
- Key for biz strategy
- WHOLE-OF-GOV'T ARCHITECTURE

Public Services

Promote interoperability and an efficient use of TI resources.
Digital Govt Architecture

Components

Reference model

Guides

Repository
(public software, knowledge center, metadata DBB, ABB)

Federated model

EA in Government Organization

Reference Models

Repository

Architecture Continuum

Framework
Digital Govt Architecture

Development

Security and performance

Legal framework

Specific principles

KIS reference models + guidelines, recommendations, best practices, standards, products
Guides: Interoperability Framework Architectures

Conceptual Architecture

Implemented FW

Based on whole-of-govt architecture

Biz verticals

Actual implementations: Health, govt services, geospatial infrastructure, education
Digital Govt Architecture
Digital Govt Architecture

Evolution

Baseline - ADM

Repository

Continuity

Data Architecture
Data Architecture

Key components

National data strategy
data principles, reference model

National data platform
Integration, analysis, core vocabularies, security

Interoperability and governance

Smart & whole-of-govt
Digital Govt Architecture

Adoption

Local
• Universities
• Courses & workshops for agencies
• Technology suppliers

Regional
• Gealc Network

International
• EU, The Open Group, ...
The tip of the iceberg

The “easy” part is done. But there's a lot of work ahead.

We are convinced that sharing knowledge is the right way to do it.
Thank you!

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