The experience of INEGI developing a GSBPM Procedural Ruling

Eduardo Jallath
INEGI - Mexico

APRIL 2018
Table of Contents

- Background
- Motivation
- Governance
- A ModernStat Reference Framework
  - Strategic planning
  - GSBPM
    - Local version
    - Conformance of Procedural Ruling
    - Adoption considerations
    - Overarching Processes Strategy
    - Implication of the Procedural Ruling
- Perspective
GSBPM adoption background

- GSBPM has become the centre piece for strategic implementation within INEGI.
- The adoption of GSBPM and other models follow a top-down approach.
  - From Strategic Planning to IT.
- Actions started in 2015 with the establishment of a Governance body and a set of principles.
- Modernization activities take place within the context of an Enterprise Architecture project that uses TOGAF to articulate a Reference Architecture Framework.
Driver: GSBPM as a tool to explicitly comply with the UN Quality Principles
Governance

- In 2015 INEGI established a Committee to guide “Modernization” activities.
  - An Enterprise Architecture Governance Board labelled as “Quality Committee”.
  - The President of INEGI, one Vice president and all CXO sit on the board.
  - The board meets quarterly.
  - It promotes, reviews and approves all initiatives related to GSBPM.
Strategic planning

• Mexican Law requires a long-term Strategic Plan.
  • 2016-2014 Program for the National System of Statistics and Geography.
• The Program was defined with a Process Oriented approach with 5 objectives for improving:
  • Governance
  • Data Input
  • Processes
  • Information Output
  • Data Management
## ModernStat Reference Framework

<table>
<thead>
<tr>
<th>Domaine</th>
<th>Sub Domaine</th>
<th>Reference Knowledge</th>
<th>Conceptual Model</th>
<th>Logical Model</th>
<th>Regulation</th>
<th>Physical Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strategic Planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business Architecture</strong></td>
<td>Core</td>
<td>Process Orientation/BPM</td>
<td>GSBPM</td>
<td>Structured Model (IDEF1)</td>
<td>CORE GSBPM ruling</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>Overarching Data Management</td>
<td>DM bok/ DCMM</td>
<td>DM bok</td>
<td>Data Management Process Definition</td>
<td>Data Management Ruling</td>
<td>Management Implementation</td>
</tr>
<tr>
<td></td>
<td>Other Overarching</td>
<td>Asorted</td>
<td>19 Descriptive models</td>
<td>19 Structured Models</td>
<td>19 Procedural Rulings</td>
<td>Implementation</td>
</tr>
<tr>
<td><strong>Data Architecture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data Modeling</td>
<td>GSIM Description</td>
<td>GSIM</td>
<td>GSIM Ruling</td>
<td>Data Architecture Implementation</td>
</tr>
<tr>
<td><strong>Application Architecture</strong></td>
<td></td>
<td>SOA/CSPA</td>
<td>ESS</td>
<td>Orchestrated BPEL</td>
<td>Application Regulation</td>
<td>System Implementation</td>
</tr>
<tr>
<td><strong>Technology Architecture</strong></td>
<td></td>
<td>Cloud Practices</td>
<td>Cloud Development</td>
<td>Cloud Ecosystem Reference Model</td>
<td>Application development Ruling</td>
<td>Infrastructure Implementation</td>
</tr>
</tbody>
</table>
Local GSBPM version

• GSBPM 5.0 approved as a guideline in May 2016.
• Spanish translation available in October 2016.
• Local version in Spanish approved in May 2017.
  • Proposal to develop a GSBPM-based Procedural Ruling.

• Local version
  • Keeps 8 phases and 44 sub process.
  • Brings down survey flavour.
    • Makes explicit the use of administrative registries, statistics generated in previous processes, and non-traditional sources.
    • Includes the Production of both statistical and geographical Information.

• Overarching process
  • Adds 4.
Conformance of GSBPM-based ruling

- **Legal considerations**
  - 2008 Law did not consider GSBPM phases in the production of statistics.
  - Only the Board can specify needs and authorize production of new information.

- **Process orientation and compliance**
  - Process decomposition at Phase level
    - Decomposition at sub-process level will be a second stage
  - The Roles of Process and Phase Coordinator are included with specific responsibilities:
    - Develop or collect phase related evidence.
    - Store evidence and verify the completion of each phase.

- Inclusion of GSIM object terminology to specify outputs of each phase.
Process elements

Actores Responsables

Proceso Estadístico y Geográfico

Productos de información estadística y geográfica

Datos de insumo

Informantes

Evidencias

Usuarios

MPEG
GSBPM Adoption considerations

• Keep current practices, but produce standardized evidence in each GSBPM Phase.

• Evidence (paradata) at sub process level will wait for an Application Architecture that is in-line with GSBPM subprocesses.

• When the Rule for the GSBPM core started being formalized, users demanded the formalization of overarching processes.
  • Some non-GSBPM overarching processes were identified.
Priority for conceptualization, standardization and Ruling of Overarching Processes

• Statistical/geographical Component
  • Quality Management
  • Information requirement management
  • Data Management – Master Data
  • Information-Provider Management

• Support
  • Risk Mitigation and Management
  • Education and training
  • Budget and Cost Management
  • Survey related Human Resources Management
Implications of GSBPM adoption (1)

- Compliance with Quality Principles is becoming standardized and explicit.
- The Board is about to review the GSIM objects used in "Información de Interés Nacional".
- Budget and costs management is adopting GSBPM terminology.
- Software Applications are getting in line with GSBPM phases.
  - A new Software Service Architecture at sub process level is still to be developed.
Implication of GSBPM adoption (2)

- The ruling of risk mitigation and assessment is adopting GSBPM as a reference.
- Education and Training is being redesigned around GSBPM core and overarching processes.
- Gradual organizational transformation has started.
  - Some units are organizing around GSBPM phases.
  - Professional profiles are being defined in line with GSBPM.
- All divisions involved in the production of information will undergo Quality Assurance and GSBPM training in the next few months.
Perspective

• GSBPM and other ModernStat models have become tools for strategic implementation.
• The adoption of GSBPM will continue to impact many dimensions within the organization.
• In 2019 most lines of production at INEGI will comply with GSBPM at phase level.
  • The adoption implies standardized terms and production of evidence (paradata).
• The need to conceptualize and formalize overarching processes has become a high priority.
• An Application Architecture In line with GSBPM sub processes and GSIM objects is needed.
  • CSPA needs to develop an application architecture.
• Communication and training will be key for a successful implementation.
¿Questions?