Developing a Information Governance Maturity Model

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Motivation

- Working group in Portugal developed a set of guidelines for efficient and effective Information Governance
  - Guidelines will be issued as a governmental resolution
- Application of the guidelines will be measured by a Maturity Model
  - Organizations need to achieve level 2 of the IG Maturity Model in 3 years in all processes. With proper justification this deadline can be extended by one year.
  - In 4 years the IG Maturity Model will be used as a criteria for funding IG programs. Non-compliant organizations will be penalized in their performance evaluation.
Maturity Model - Definition

- A **Maturity Model** is a methodology used to develop and refine organization’s processes. For each process it identifies a five-level path of increasingly organized and systematically more mature process.
  - Identifies the strong and weak points of an organization
  - It provides information for internal auditing
  - It allows measuring of progress
  - It allows to identify gaps between the as-is and the to-be state
  - It supports planning of efforts and identification of priorities
Procedure model for developing maturity models

1. Problem Definition

- Define Information Governance as a framework to optimize the value of information to the actors involved
- Promote IG as an holistic concept
- Assure that the application of IG policies can be measured and consequently refined based on the evaluation
2. Comparison of existing maturity models

<table>
<thead>
<tr>
<th>Maturity Model</th>
<th>Scope</th>
<th>Stages</th>
<th># Dimensions</th>
<th>Details</th>
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<tbody>
<tr>
<td>IG</td>
<td>Information Governance</td>
<td>5</td>
<td>8</td>
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<tr>
<td>IAM</td>
<td>Information Asset Management</td>
<td>6</td>
<td>4</td>
<td>High</td>
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<tr>
<td>RM</td>
<td>Records Management</td>
<td>4</td>
<td>9</td>
<td>High</td>
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<tr>
<td>DAM</td>
<td>Digital Asset Management</td>
<td>5</td>
<td>15</td>
<td>Medium</td>
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<tr>
<td>ECM3</td>
<td>Enterprise Content Management</td>
<td>6</td>
<td>13</td>
<td>Medium</td>
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<tr>
<td>EIM</td>
<td>Enterprise Information Management</td>
<td>6</td>
<td>NA</td>
<td>Low</td>
</tr>
</tbody>
</table>
2. Comparison of existing maturity models

- Almost all models use the same five stages: (1) Unaware, (2) Aware, (3) Defined, (4) Effective, (5) Innovative. Six stages models normally introduce a reactive stage;
- Several models categorize their stages in People, Information and Systems
- Model with fewer dimensions provide a higher level of detail
- Good news for IG: similar concerns, dimensions and content
- Bad news for IG: different terminology and fundamentals
  - There is a need for a common vocabulary
3. Development Strategy

1. Create our maturity model architecture (i.e. define stages and dimensions)

2. Define a common vocabulary that allow the integration of the existing maturity models (i.e. Information Governance Ontology)

3. Use literature analysis to populate our levels

- ISO15489
- ISO30300/1
- MoReq2010
- ISO/IEC 38500
- ISA-ADMS
- ISO/IEC/IEEE 420130
- ISACA – COBIT
- ITIL
- TOGAF
- ISO16175
- ISO19011
3.1. Development Strategy

- i* is a comprehensive approach that was designed to closely integrate the concepts of stakeholders and goal for properly documenting and analysing goals and goal dependency. Its most relevant objects are
  - Actor
  - Goal
  - Task
  - Resource
  - Softgoal

- By modelling literature knowledge using i* we align our references and define a common referential
3.2. Development Strategy

Figure 1. Strategic Rationale Model of a RMS according to ISO15489 [4].
3.3. Development Strategy

- **Level 0 (Absence)**
  - There is an absence of vision, policies and processes regarding information governance.

- **Level 1 (Basic)**
  - There is some effort regarding information governance;
  - IG Processes are ad-hoc and unorganized;
  - Responsibilities are partially identified;

- **Level 2 (Essential)**
  - There is a concern regarding information governance;
  - IG Processes are defined;
  - Responsibilities are fully identified;
3.3. Development Strategy

• Level 3 (Valued)
  – Information Governance is part of the mission of the organization and is used to get competitive advantage;
  – IG Processes are not only defined but monitored and evaluated to assure efficiency and effectiveness;
  – The organization is a reference of IG good practices.

• Level 4 (Inovative)
  – The organization promotes IG as a tranversal strategy;
  – The Enterprise Architecture of the organization is well defined and IG plays a pro-active role in all areas;
  – The organization actively contributes to the inovation of IG;
  – The organization is recognized as a partner for IG inovation;
4. Iterative Development

• Criteria Assessment (eMM)
  – In different sectors with the help of several organizations

Agency for Administrative Modernization

National Archives of Portugal

Technical University of Lisbon

Link – Consulting firm
Future Work

• Define a Information Governance Ontology

• Develop an online questionnaire based on the developed Maturity Model
  – Evaluate and refine phase