INEGI’S METADATA MANAGEMENT STRATEGY

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STRATEGIC FRAMEWORK

STATISTICAL AND GEOGRAPHICAL INFORMATION

PRODUCTION → INTEGRATION → DISSEMINATION

GOVERNANCE + ARCHITECTURE + METADATA

SECURITY + CONFIDENTIALITY + QUALITY + INTEROPERABILITY

TECHNOLOGICAL INFRASTRUCTURE
Standardized evidence of the Statistical and Geographical Process Model

Evidence Management System

Metadata Integrator System

Metadata Consumption Systems and Services

- Metadata catalog
- Data and metadata consumption
- Production processes description
- Data Warehouse and Data Lake

Templates for standardized evidences

Integrated Metadatabase
Metadata Integrator System

Template Manager Module
- Template designing and editing

Metadata Capture Module
- Referential metadata documentation
  - DDI; ESMS; DCAT
- Structural metadata documentation (microdata)
  - DDI/Triple-S
- Documentation of supporting documents
  - Dublin Core

Metadata Consumption Module
- Metadata delivery package 1
- Metadata delivery package 2
- Metadata delivery package 3

Metadata Dissemination Website
- Metadata publication and discovery (1+2+3)

SDMX Information Model
Metadata Integrator System Architecture

**Input**
- Data Sources
  - Data Warehouse
  - DBF, XLS, CSV
  - Data Lake
- Others metadata repository
  - Geographical Clearinghouse
  - Metadata Catalog

**MIS**
- Graphical User Interfaces
  - Template manager
  - Metadata entry
  - Editing and Validation
  - Approval
- Integrated Metadata Data Base

**Output**
- Dissemination
  - Reporting + Data Analysis
  - Data + Metadata
- Data ecosystem
  - Data Science

**Data and Metadata specs:**
- DW: Oracle
- Diversity of data formats
- NADA: SQL Server 2019
- Data Lake: open source
- Variety of metadata purposes and standards

**Platform:**
- .NET and C#
- IIS 7.0
- SQL Server 2019
- Entity Framework Core
- Only web applications
- Scrum methodology

**MIS specs:**
- Workflow
- Metadata: reference, structural, supporting documents
- NSS Accessible
- Interoperability with production systems

**Output specs:**
- Windows Server 2012 R2
- IIS 7.0
- DB: SQL Server 2019
- MOLAP: SQL Analysis Services
- Data Lake: open source
- Data Catalog: Inventory of data sets