HARZEMLI, The DDI Based Statistical Production Platform

Murat TUNÇEL
Head of Information Technologies Department
murat.tuncel@tuik.gov.tr
The QUESTION

❖ Is there a way to generate a standardized approach to statistics production with an increased level of quality and decreased workload?

Why this QUESTION should be handled?

❖ The role of Statistical Institutes includes making surveys and disseminating data for statistical subjects.
❖ Statistical Institutes need to integrate the data of different subject-matter units with each other.
❖ Usage of common/standardized classification brings benefits for implementing GSBPM.
Why this QUESTION should be handled? (cont’d…)

- Standardized data entry screens and standardized data send/receive methods in data collection.
- Standardized data model for dissemination.
The SOLUTION

- DDI + Rule Files + Classification Server => for survey part
- Uniform data model + Classification Server => for dissemination part
The RESULT

HARZEMLI
The DDI-based statistical production platform

✓ Metadata-driven, dynamically created web-based surveys that have similar look-and-feels

✓ Shortened and standardized IT processes with respect to metadata

✓ Metadata is actively used in production, analysis and data dissemination phases of GSBPM

✓ Standard names of all the variables in terms of data integrity

✓ Shortened duration for data collection, more time to analyze

✓ Easy integration for compilation of private sector data in related surveys

✓ Similar database tables whose structures are generated automatically
The RESULT (cont’d…)

- **MEDAS**

- **Central Dissemination System – A subsystem of Harzemli Platform**
  - Reduced reporting and interface burden in dissemination
  - Much easier comparability of data
  - Correlation detection between any subjects for any end user
with HARZEMLI

- No need to write new Java codes
- Similar data design for each subject
- Totally metadata-driven, automatically generated web applications
- Shorter period of time for the completion of electronic data entry, since there is no paper
Harzemli Platform System Components

Data Collection
- Metadata Editor
- Rule Editor
- Harzemli Management
- Harzemli Web
- Harzemli Desktop
- Harzemli Mobile

Data Analysis
- Harzemli Analysis
- Harzemli Data Visualization

Data Dissemination
- Medas (Central Dissemination System)
# Harzemli Platform Milestones

<table>
<thead>
<tr>
<th>Milestones of the project</th>
<th>Development dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Harzemli Desktop</td>
<td>2012</td>
</tr>
<tr>
<td>2 Harzemli Rule Editor</td>
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</tr>
<tr>
<td>3 Harzemli Management Console</td>
<td>2012</td>
</tr>
<tr>
<td>4 IDM</td>
<td>2013</td>
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<tr>
<td>5 Harzemli Web</td>
<td>2013</td>
</tr>
<tr>
<td>6 MEDAS</td>
<td>2014</td>
</tr>
<tr>
<td>7 Harzemli Mobile</td>
<td>2014</td>
</tr>
<tr>
<td>8 Harzemli Analysis</td>
<td>2014</td>
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<td>Harzemli Editor</td>
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<table>
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<tr>
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<td>10</td>
<td>119</td>
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</table>
PRODUCTIVITY GAINS (Time)

❖ Decreased time for software engineers to develop data entry applications

4 WEEKS ➔ 1 WEEK

❖ Decreased time for data collection

8% decrease in data collection time

50% increase in time available for regional offices to analyze their data, thanks to instant access to data

12% decrease in the analysis time that is necessary for the staff of central office.

Time period necessary to prepare the press releases has been shortened. For example, the time period that is necessary for the preparation of the monthly Labor Statistics press releases has been shortened by 4 days.
PRODUCTIVITY GAINS (Quality)

- Software Process Standardization
- Data Integrity
- Common code development
- Common Codes Available

PRODUCTIVITY GAINS (Costs)

- 870 trees would be cut to produce 10 Million A4 papers only in 2015 if the paper editions of surveys had continued.

- 58% reduction in the cost of pollsters’ travelling expenses
MEDAS (Central Dissemination Project)

- Dissemination System of Harzemli Platform

Before MEDAS:

- Different database designs and applications for each subject (62)
- Lack of standard codes
- No data integrity, hard to detect correlations
- So many manual processes
- Security threats because of old technology

MEDAS is in use since April 2014
MEDAS

- Dissemination of different statistical subjects through generic data model - single data source and single application
- Reduced reporting burden thanks to single application
- Modern pivot tables
- Enables to compare any number of subjects in the same report
- Easy to develop web services thanks to generic data model
- Reduction in person-dependency => good for managers
- Easier database administration
Statistical units prepare data in a common format that is suitable for the system.

Data control, approval process:

Statistical Unit 1

Statistical Unit 2

Statistical Unit 3

CDMA Application

Central Institutional Database

Central Dissemination Database
MEDAS

- **MEDAS Report Screen** (Different subjects are given on the same report)

You can move different variables of the report between rows and columns.

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<thead>
<tr>
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<th>Dimension</th>
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<tbody>
<tr>
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</table>
FINAL WORDS

- So far, Harzemli Platform has had great success and has seen great support by both the presidency and staff from the units.

- Harzemli Platform is going to enlarge by the new modules that are currently being developed to be added in the near future.
Thank you

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