Session: Data processing, hosting and related activities (ISIC 6311)

Turnover/Output, basic economic statistics

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Outline

1. Overview
2. Main characteristics of the industry
3. Turnover/output measurement
4. Challenges and future work
5. Conclusions
Overview

Data Processing Services.

...the use of **automated methods to process commercial and social data**

...to **process large volumes of similar information and data**

- Stock updates applied to an inventory,
- Banking transactions applied to account and customer master files,
- Booking and ticketing transactions to an airline's reservation system,
- Billing for utility services, etc.

In recent years, data-processing activities have not only been growing, but have become more complex in their operation and scope; today, processing are involved in practically any economic activity.
Main characteristics of the industry

<table>
<thead>
<tr>
<th>ISIC Rev. 4</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section J</td>
<td>Information and communication</td>
</tr>
<tr>
<td>Division 63</td>
<td>Information service activities</td>
</tr>
<tr>
<td>Group 631</td>
<td>Data processing, hosting and related activities; web portals</td>
</tr>
<tr>
<td>Class 6311</td>
<td>Data processing, hosting and related activities</td>
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<tr>
<td>Class 6312</td>
<td>Web portals</td>
</tr>
<tr>
<td>NAICS Mx 2013</td>
<td>Title</td>
</tr>
<tr>
<td>Sector 51</td>
<td>Mass media information</td>
</tr>
<tr>
<td>Subsector 518</td>
<td>Electronic data processing, hosting, and other related services</td>
</tr>
<tr>
<td>4-digits 5182</td>
<td>Electronic data processing, hosting, and other related services</td>
</tr>
<tr>
<td>6-digits 518210</td>
<td>Electronic data processing, hosting, and other related services</td>
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</tbody>
</table>

According to the NAICS Mexico 2013, *Electronic data processing, hosting, and other related services*, comprises establishments primarily engaged in providing electronic processing information, hosting and other related services...
Main characteristics of the industry...

- The complexity of data processing services include many activities, making difficult to get a clear classification of the companies.
- In Mexico classification issues are obtained from Economic Census program and the Business Register.
- The classification principle is for the enterprise main economic activity, or the activity that generates more incomes.
- Due to these, during the data analysis is very important to revise the economic classification in order to avoid an incorrect interpretation.
Main characteristics of the industry...

Market conditions
Main indicators for Sector 51 and Subsector 518. Economic Censuses 2004-2014

<table>
<thead>
<tr>
<th>NAICS México 2013 code</th>
<th>Establishments</th>
<th>Employment</th>
<th>Incomes (millions Mx. pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 Mass media information</td>
<td>9,338</td>
<td>11,354</td>
<td>7,586</td>
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<tr>
<td>518 Electronic data processing, hosting, and other related services</td>
<td>299</td>
<td>84</td>
<td>229</td>
</tr>
</tbody>
</table>

Main characteristics of the industry...

Electronic data processing, hosting, and other related services

Incomes
(millions Mx. pesos)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2009</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>7,468</td>
<td>3,805</td>
<td>3,602</td>
</tr>
</tbody>
</table>

Employment
(number of persons)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2009</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>14,498</td>
<td>17,379</td>
<td>18,910</td>
</tr>
</tbody>
</table>

Main characteristics of the industry...

Electronic data processing, hosting, and other related services
Total incomes (for the provision of services)
Weighted Index
(2008 = 100)

Main characteristics of the industry...

Specific characteristics of the industry

– Activity **non-intensive in persons employed**

– Hi-tech skills and programming persons

– Data processing is a **constantly changing activity**

– The impact on the **development and evolution of IT**, affect the services and products of the companies

– The activity could not be understood without, for example, **services in the cloud**, data transfer, automation of productive processes
Turnover/output measurement

**Source:**
- Economic Census
- Sample surveys (monthly/annual)
- Administrative records (taxes)

**Incomes**
Expenses expressed in thousands of Mexican pesos at gross value

**Basic statistics**
- Absolute values
- Indexes
- Structural data

**NAS**
for GDP and other derived macro economic indicators
Economic censuses and sample surveys, have proved to be efficient methods for collection and data processing for the industry, particularly in the measurement of turnover/output.

However, it is necessary to study alternatives data sources, for example, administrative tax records or social security, as well as data from regulatory institutions.
Challenges and future work

- In general terms, basic statistics is well aligned with SNA requirements
- However, information needs and the detail of the data are increasing
- A better and understandable industry classification and products definitions
- Include Cloud Computing services and Software as a service (SaaS)
- Explore new alternative data sources
- Clearly identify enterprises engaged in the data processing
The next 2019 Economic Census, will include a series of improvements to the questionnaires, which will allow a **better characterization of the data processing industry and the companies**.

The information and data generated by the Economic Censuses will be not only the **basis for updating framework and the sample surveys**, but will also allow a **better understanding of the sector, through detailed qualitative information**.
Conclusions

✓ In Mexico, data processing services is not large industry

✓ But have been growing significantly in the last years

✓ Is important to continue improving turnover/output measurements, including cloud services and SaaS services

✓ Most of the improvements will begin with the upcoming 2019 Economic Censuses, and will be reflected in the sampling surveys program

✓ By the other hand, alternate sources of data, such as administrative tax records, will be analyzed.
Thank you very much!

Comments?

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