

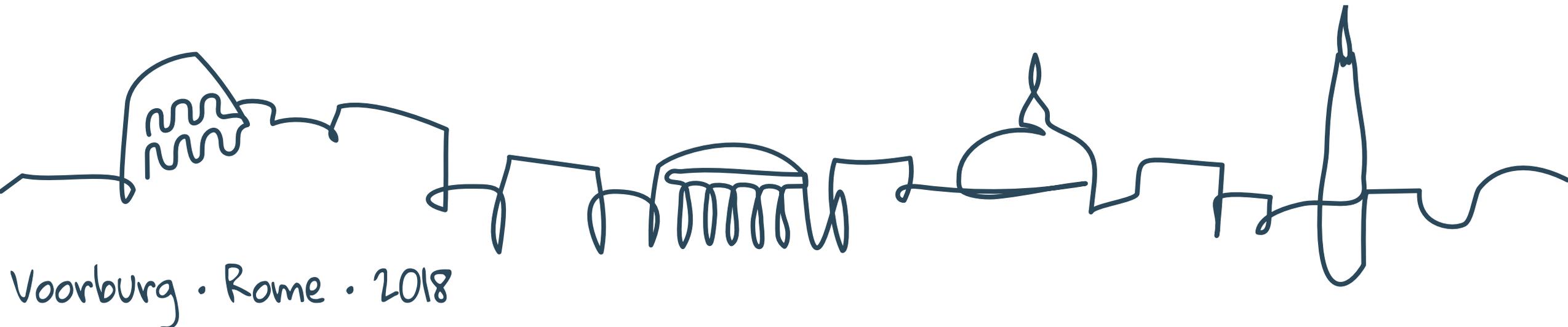
# Session: Data processing, hosting and related activities (ISIC 6311)

## Turnover/Output, basic economic statistics

Ramon Bravo

Instituto Nacional de Estadística y Geografía (INEGI)

México





VOORBURG  
GROUP

ROME

24 | 28  
SEPTEMBER

2018

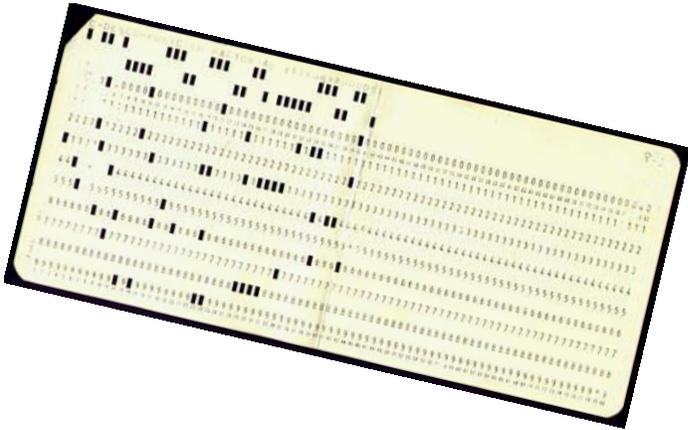
# Outline

- 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

ROME  
24 | 28  
SEPTEMBER  
2018

## Definition of the service and classification issues

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

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

NAICS México 2013 code	Establishments			Employment			Incomes (millions Mx. pesos)		
	2014	2009	2004	2014	2009	2004	2014	2009	2004
<b>51 Mass media information</b>	9,338	11,354	7,586	287,617	293,550	244,679	568,883	453,229	284,793
<b>518 Electronic data processing, hosting, and other related services</b>	299	84	229	14,498	17,379	18,910	7,468	3,805	3,602

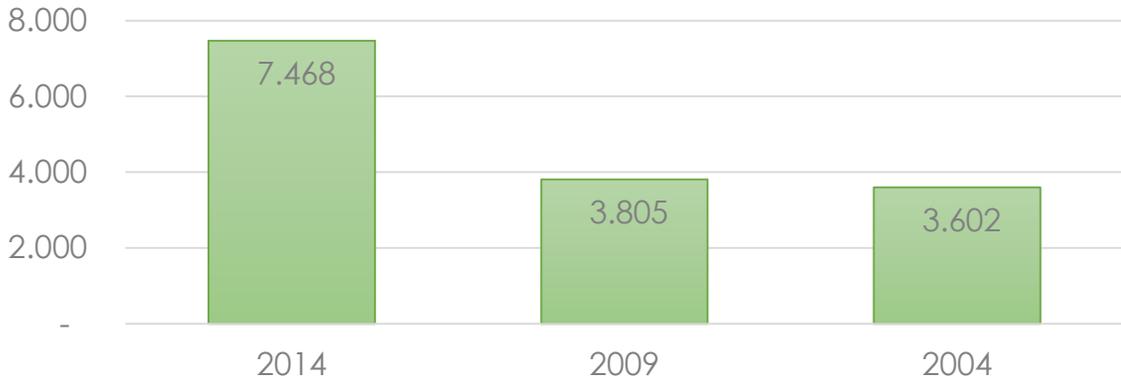
Source. INEGI. Censos Económicos 2014. Resultados definitivos/SAIC.  
<http://www.beta.inegi.org.mx/app/saic/default.aspx>



# Main characteristics of the industry...

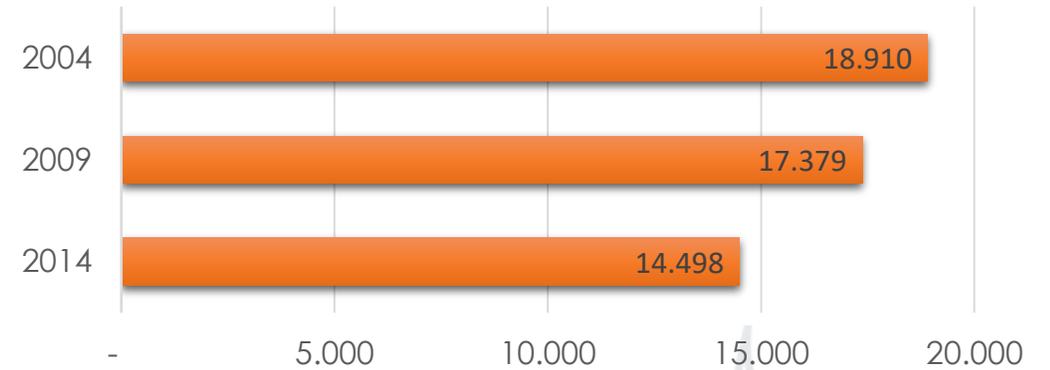
## Electronic data processing, hosting, and other related services

Incomes  
(millions Mx. pesos)



## Electronic data processing, hosting, and other related services

Employment  
(number of persons)



Source. INEGI. Censos Económicos 2014. Resultados definitivos/SAIC.  
<http://www.beta.inegi.org.mx/app/saic/default.aspx>



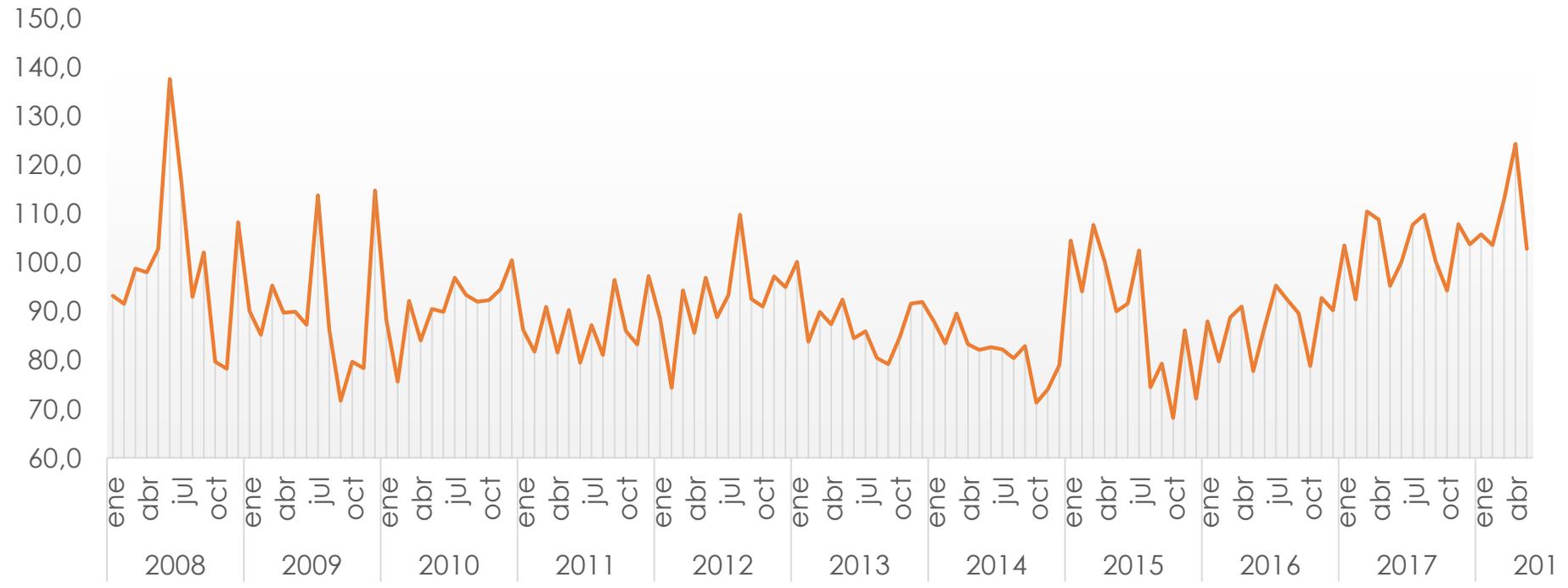
# Main characteristics of the industry...

Electronic data processing, hosting, and other related services

**Total incomes (for the provision of services)**

**Weighted Index**

**(2008 = 100)**



Source: INEGI, Encuesta Mensual de Servicios, serie 2008=100.  
<http://www.beta.inegi.org.mx/temas/servicios/>



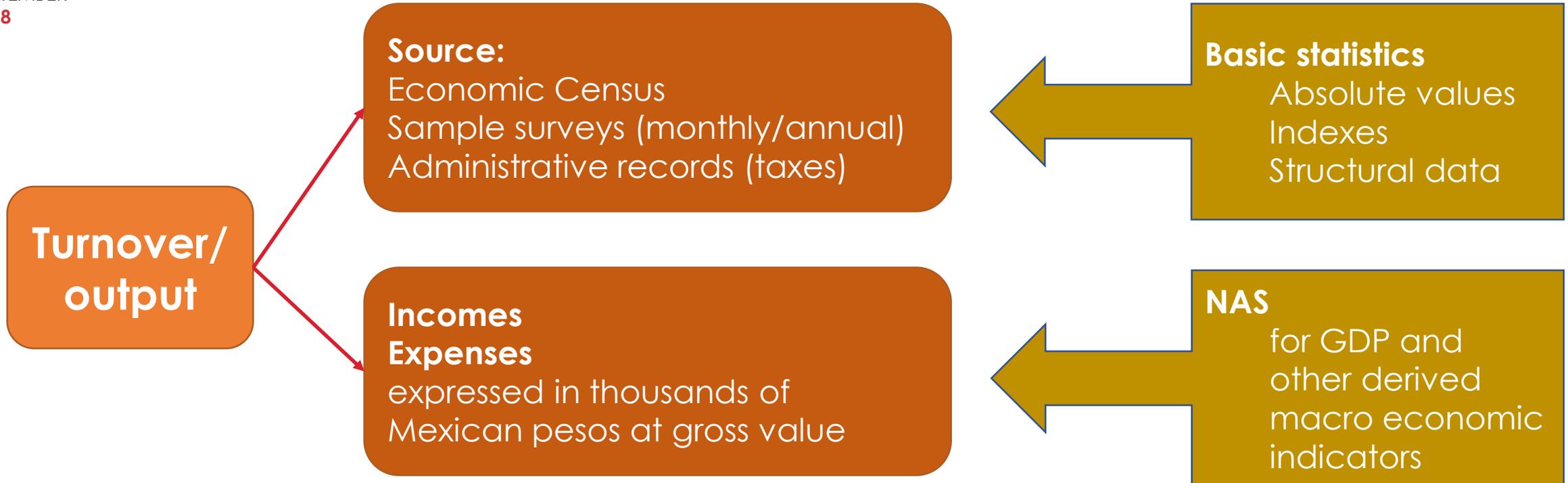
# Main characteristics of the industry...

## 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





# Turnover/output measurement

- ✓ 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



## Challenges and future work...

- ✓ 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.



VOORBURG  
GROUP

ROME

24 | 28  
SEPTEMBER  
2018

# Thank you very much!

## Comments?

**Ramón Bravo**  
**INEGI**

**Deputy director of Service Surveys**  
[ramon.bravo@inegi.org.mx](mailto:ramon.bravo@inegi.org.mx)