Use of geospatial information for statistics on business dynamics, business demography and entrepreneurship in Mexico

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New York, June 12, 2019
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1. The Statistical Business Register of Mexico (RENUME)
In 1983

INEGI was created by presidential decree, integrating the general directorates into its structure:

- Statistics, operating since 1882, when it belonged to the Ministry of Development, Colonization, Industry and Commerce

- Geography, established in 1968 and ascribed to the Presidency Office

This decision of joining the production of statistical and geographic information in only one institution, with the tools and means necessary for this, strengthened the collection, processing and dissemination of the information on the national territory, its population and economy.
In the early 80s
- Statistical Manifestation
- National Identification System for Companies and Establishments (SINEE)

In July 2010
- A directory was created with the results of the 2009 Economic Censuses and the DENUE was published

In 2015
- The scope of the DENUE was extended in order to create the RENEM, with additional characteristics and aligned with international guidelines. From this date the DENUE is the public view of the RENEM
The Business Register of Mexico (RENEM)

It is the backbone of the economic statistics production processes, containing information on the characteristics of the economic units located in the country and it is periodically updated.

It is one of the few business registers that link statistical information with digital cartography.

DENUE is the public part of RENEM
The Business Register of Mexico (RENEM)

It is the only SBR that has a public part
Public variables of RENEM through DENUE

Identification (Name and company name)

Localization (Address and geographical coordinates)

Economic (Persons employed and economic activity code)

Contact (Telephone numbers, web page, e-mail address and social networks)

Control (Enterprise Statistical Code – CLEE)
Goals

To be the integrating element for the various sources of internal and external information, in order to enhance statistical capacity

To be the only source of updated information on economic units, providing directories and sampling frames for INEGI’s and SNIEG’s various projects on economic statistics

To monitor every economic unit, keeping a historical record of their changes, with the purpose of facilitating longitudinal and business demographics studies

To extract the database of active establishments for updating the DENUE

INEGI

RENEM’s goals
2. Geo-referencing data for statistical purposes
DENUE offers all types of users statistical information referred to a geographic area, which increases the variety of products, the interrelation of data and their analysis when visualizing them on digital cartography.

In Mexico, INEGI has developed some exercises institutionally and others in coordination with some public and private institutions, efforts that we now present in the following slides.
2.1 Business Dynamics
Growth of an enterprise of convenience stores

National growth

- 2008
- 2013
- 2018

Enterprise of convenience stores
Growth of an enterprise of convenience stores

National growth

2008 – 5,596 Economic Units

2013

2018

TOP 2008
1. Nuevo León
2. Tamaulipas
3. Baja California
4. Mexico City

Enterprise of convenience stores
Growth of an enterprise of convenience stores

National growth

- 2008
- 2013 – 9,648 Economic Units
- 2018

TOP 2013
1. Mexico City
2. Nuevo León
3. México
4. Jalisco

Enterprise of convenience stores
Growth of an enterprise of convenience stores

TOP 2018
1. Mexico City
2. Nuevo León
3. México
4. Jalisco

National growth
2008
2013
2018 – 15,241 Economic Units
2.2 Business Demography
In 2015, the first survival and mortality tables were published; a year later, data was calculated at national and state level; and within these, by economic activity sector and business size.

The main technical steps for calculating these tables:

- Generational follow-up since 1989
- Calculating survival and dead probabilities
- Estimation on function of survival, obtaining tables that include survival and death probabilities, as well as life expectancy

These guidelines explain the methodology used for the above in chapter 5.

Life expectancy of businesses at birth, by state

- **8.0 to 9.1 years**
- **7.2 to 7.9 years**
- **6.7 to 7.1 years**
- **3.8 to 6.6 years**

**States**:
- Baja California
- Baja California Sur
- Coahuila
- Chihuahua
- Durango
- Guanajuato
- Jalisco
- Hidalgo
- Michoacán de Ocampo
- Morelos
- Nayarit
- Nuevo León
- Oaxaca
- Querétaro
- Quintana Roo
- San Luis Potosí
- Sinaloa
- Sonora
- Tabasco
- Tamaulipas
- Tlaxcala
- Veracruz de Ignacio de la Llave
- Yucatán
- Zacatecas
- Colima
- Guadalajara
Life expectancy of businesses at birth, in the Manufacturing sector by state

9.8 to 12.2 years
8.9 to 9.7 years
7.4 to 8.8 years
5.0 to 7.3 years

Business Demography
Life expectancy of businesses at birth, in the Trade sector by state

- 6.7 to 8.4 years
- 6.1 to 6.6 years
- 5.2 to 6.0 years
- 3.4 to 5.1 years

INEGI
Business Demography
2.3 Entrepreneurship
Gender Atlas

Updating the RENEM through the Economic Censuses opens the possibility of having information on the characteristics of businesses and entrepreneurs.

An example is the Gender Atlas that has the purpose of gathering some of the most important indicators to make the differences of gender visible, as well as the additional differences derived from the geographic location of people in the states of the national territory.
Entrepreneurship

<table>
<thead>
<tr>
<th>Entidad</th>
<th>Mujeres</th>
<th>Hombres</th>
<th>Brecha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nacional</td>
<td>37.59</td>
<td>35.92</td>
<td>1.68</td>
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<tr>
<td>Aguascalientes</td>
<td>34.35</td>
<td>39.15</td>
<td>4.80</td>
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<tr>
<td>Baja California</td>
<td>31.28</td>
<td>37.90</td>
<td>6.63</td>
</tr>
<tr>
<td>Baja California Sur</td>
<td>31.12</td>
<td>34.77</td>
<td>3.65</td>
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<td>Campeche</td>
<td>41.57</td>
<td>32.00</td>
<td>9.56</td>
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<tr>
<td>Coahuila de Zaragoza</td>
<td>33.14</td>
<td>36.54</td>
<td>3.41</td>
</tr>
<tr>
<td>Colima</td>
<td>39.43</td>
<td>32.65</td>
<td>6.78</td>
</tr>
<tr>
<td>Chiapas</td>
<td>43.96</td>
<td>31.93</td>
<td>12.02</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>31.49</td>
<td>39.92</td>
<td>8.43</td>
</tr>
<tr>
<td>Ciudad de México</td>
<td>29.73</td>
<td>37.23</td>
<td>7.50</td>
</tr>
<tr>
<td>Durango</td>
<td>38.01</td>
<td>36.02</td>
<td>2.79</td>
</tr>
<tr>
<td>Guanajuato</td>
<td>36.74</td>
<td>38.18</td>
<td>1.44</td>
</tr>
<tr>
<td>Guerrero</td>
<td>48.23</td>
<td>29.97</td>
<td>18.26</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>38.05</td>
<td>35.03</td>
<td>3.02</td>
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<tr>
<td>Jalisco</td>
<td>34.51</td>
<td>37.18</td>
<td>2.67</td>
</tr>
<tr>
<td>México</td>
<td>37.09</td>
<td>37.39</td>
<td>0.30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entidad</th>
<th>Mujeres</th>
<th>Hombres</th>
<th>Brecha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michoacán de Ocampo</td>
<td>40.20</td>
<td>36.83</td>
<td>3.37</td>
</tr>
<tr>
<td>Morelos</td>
<td>42.28</td>
<td>32.96</td>
<td>9.30</td>
</tr>
<tr>
<td>Nayant</td>
<td>41.90</td>
<td>33.80</td>
<td>8.10</td>
</tr>
<tr>
<td>Nuevo León</td>
<td>29.67</td>
<td>37.12</td>
<td>7.45</td>
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<tr>
<td>Oaxaca</td>
<td>50.85</td>
<td>28.40</td>
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<tr>
<td>Puebla</td>
<td>41.86</td>
<td>35.99</td>
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<tr>
<td>Querétaro</td>
<td>36.83</td>
<td>33.42</td>
<td>3.41</td>
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<tr>
<td>Quintana Roo</td>
<td>29.96</td>
<td>31.22</td>
<td>1.26</td>
</tr>
<tr>
<td>San Luis Potosí</td>
<td>37.63</td>
<td>36.64</td>
<td>0.99</td>
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<tr>
<td>Sinaloa</td>
<td>35.37</td>
<td>35.98</td>
<td>0.61</td>
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<tr>
<td>Sonora</td>
<td>32.38</td>
<td>37.69</td>
<td>5.31</td>
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<tr>
<td>Tabasco</td>
<td>32.83</td>
<td>38.25</td>
<td>5.42</td>
</tr>
<tr>
<td>Tamaulipas</td>
<td>34.21</td>
<td>37.65</td>
<td>3.45</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>43.17</td>
<td>35.98</td>
<td>7.19</td>
</tr>
<tr>
<td>Veracruz de Ignacio de la Llave</td>
<td>39.44</td>
<td>35.82</td>
<td>3.62</td>
</tr>
<tr>
<td>Yucatán</td>
<td>43.93</td>
<td>32.57</td>
<td>11.36</td>
</tr>
<tr>
<td>Zacatecas</td>
<td>36.83</td>
<td>40.82</td>
<td>4.18</td>
</tr>
</tbody>
</table>

SOURCE: 2014 Economic Censuses

Note: The sum of percentages of women and men is not 100%. The difference corresponds to legal entities or to the cases where the sex was not specified.
The Virtual Office of Economic Information (OVIE) is a free geographic information platform aimed at entrepreneurs, business-owners and investors, which presents the main socio-demographic, economic and urban data of CDMX territory on digital cartography, which shows the combination of efforts between the government of CDMX and INEGI.

OVIE Platform for entrepreneurs, business-owners and investors

- Total economic units: 4,924
- Total persons employed: 24,149
- Average pay per employee (monthly): $7,771
- Average labour productivity (annual): $389,141

- Consulted activity
  - Hospitals (13)
- Predominant activity
  - Private specialization medical office (382)
  - Grocery store (362)
  - Beauty parlor (200)

- 84% of economic units have:
  - 0 to 5 persons employed

- Defined specialization
  - Economic units: 61%
  - Persons employed: 68%
  - Total gross production: 75%

- Economic development index: 0.45
3. Conclusions and next steps
Conclusions and next steps

The combination of statistical and geographic information enriches the response to information needs at a mayor disaggregation level (subnational level).

Institutional agreements allow responding to information needs in a more accurate way.

Linking information with various statistical and geographic sources is strategic, since it opens the analytical perspectives, therefore it is necessary to enrich the SBRs with geographic information.
Thank You!

Contact:
Gerardo A. Durand Alcantara
Deputy Director General of Economic Administrative Records

gerardo.durand@inegi.org.mx
Conociendo México

01 800 111 46 34
www.inegi.org.mx
atencion.usuarios@inegi.org.mx

Facebook  Instagram  Twitter  YouTube  INEGI Informa