Linking the SBR with registers of companies in the web to measure the Internet Economy of Mexico

Session 9: The digital economy and the SBR
Meeting of the Group of Experts on Business Registers
UNECE
Introduction

The use of the internet has changed the lives of people and companies around the world. More and more applications are used for the development of daily activities.

The use of Internet has been increasing in recent years and this trend is expected to continue on the rise in the coming years. From the point of view of producing economic statistics, it is very important trying to understand the behavior and characteristics of the users of Internet for the development of economic activities, particularly in the case of companies.

The presentation includes INEGI´s activities for measuring the impact of the Internet economy, studies that use traditional sources as well as the project in which the methodology of the Dutch CBS was used and whose results will be published soon as experimental statistics.
Results of studies using traditional sources
A question was included in the 2019 Economic Census questionnaires to find out the percentage of income that companies obtained in 2018 through a website, their own or that of a third party.

At a general level, the percentage of income obtained through a web page was 5.01% with respect to the total income, with mature companies (25 years and older) being the segment with the highest percentage of income obtained through this medium.

<table>
<thead>
<tr>
<th>Age group</th>
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</tr>
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<tbody>
<tr>
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The National Accounts area has made calculations to approximate the share of Electronic Commerce in GDP.

Understanding Electronic Commerce as the process of buying, selling or exchanging goods, services and information through computer networks.

In sales of goods and services, the buyer places an order, and the price and terms of the sale are negotiated over the Internet, email, or website. Payment may or may not be made online.

Share of businesses that implemented internet sales during the COVID-19 pandemic

During 2020, INEGI carried out three information collections for probabilistic sampling surveys with the aim of measuring the economic impact during the COVID-19 pandemic, as well as knowing the measures implemented by companies to mitigate its effects.

The surveys incorporated World Bank recommendations.

One of the questions refers to the implementation of Internet Sales as a measure to face the contingency.

The graph shows that, nationwide, out of every 100 companies, 29.6 implemented internet sales during the pandemic. The graph also shows the percentages according to the size of the enterprise.

Source: Survey on the Economic Impact Generated by COVID-19 on Companies (ECOVID-IE)
https://www.inegi.org.mx/programas/ecovidie/
Procedure
Mexico, together with Brazil, Colombia and Chile, participated with ECLAC in a project with the aim of producing indicators to measure the impact of the Internet economy within the national context.

The methodology developed by the Dutch Statistical Office (Centraal Bureau voor de Statistiek, CBS) was used, through which companies are classified according to the use they make of the Internet for the development of their activities.

To achieve the objective, ECLAC negotiated with the Dutch company Dataprovider to obtain information on economic units that carry out activities through Internet in these four countries.
The companies provided by Dataprovider were linked to the Statistical Business Register of Mexico (RENEM), with the purpose of knowing the main characteristics of the companies that carry out activities through Internet, with which indicators that characterize the companies are constructed, according to their use of the Internet.

* The URL listing provided by DATAPROVIDER contained company name and/or address information for around 50,000 companies, which required manual research. Work is being done with the company NIC México to obtain more data to link a greater number of companies.
### Categories according to Internet use

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CONCEPTUAL DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category A. Companies without a website.</strong></td>
<td>Companies that do not have a website, according to the available web register</td>
</tr>
<tr>
<td><strong>Category B1. Indirectly generated income (passive presence)</strong></td>
<td>Companies that have a website, however, do not generate revenue directly from the Internet. The website is for informational purposes only and is not transactional.</td>
</tr>
<tr>
<td><strong>Category B2. Directly generated income (active presence)</strong></td>
<td>Companies that generate indirect income through the web. The website is transactional but the main activity of the company is carried out in person.</td>
</tr>
<tr>
<td><strong>Category C. Directly generated revenue (online stores)</strong></td>
<td>Companies that generate revenue directly from the Internet by selling goods. The website is transactional and the company's activity could not exist without the Internet.</td>
</tr>
<tr>
<td><strong>Category D. Directly generated income (online services)</strong></td>
<td>Companies that generate income directly from the Internet by selling services. The website is transactional and the company's activity could not exist without the Internet.</td>
</tr>
<tr>
<td><strong>Category E. Income generated directly (ICT sector)</strong></td>
<td>Companies that generate income directly from the Internet by selling services. The website is transactional and the company's activity could not exist without the Internet. The company's activity belongs to the information and communication technology (ICT) sector.</td>
</tr>
</tbody>
</table>
Main results
Confidentiality

It indicates that the Website stores personal information, such as contact or details of the payment made.

Total URLs: 975,050

Yes, 60.21%

No, 39.79%
Percentage distribution of Web Pages according to the level of “Heartbeat”

“Heartbeat”:
It indicates the updating frequency of the web page during a year.
Characterization of the companies that carry out activities on the Internet and were linked to RENEM
Percentage coverage of related companies for the main economic variables

<table>
<thead>
<tr>
<th>Category</th>
<th>Establishments</th>
<th>Personnel Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1: Indirect online presence</td>
<td>5.03%</td>
<td>30.97%</td>
</tr>
<tr>
<td>B2: Direct online presence</td>
<td>0.71%</td>
<td>4.52%</td>
</tr>
<tr>
<td>C: e-commerce</td>
<td>1.36%</td>
<td>3.14%</td>
</tr>
<tr>
<td>D: Online services</td>
<td>0.08%</td>
<td>0.67%</td>
</tr>
<tr>
<td>E: ICT services</td>
<td>0.05%</td>
<td>0.37%</td>
</tr>
<tr>
<td>Total</td>
<td>7.23%</td>
<td>39.68%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Incomes</th>
<th>Added Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1: Indirect online presence</td>
<td>46.86%</td>
<td>45.28%</td>
</tr>
<tr>
<td>B2: Direct online presence</td>
<td>4.20%</td>
<td>5.34%</td>
</tr>
<tr>
<td>C: e-commerce</td>
<td>4.66%</td>
<td>5.38%</td>
</tr>
<tr>
<td>D: Online services</td>
<td>0.53%</td>
<td>0.78%</td>
</tr>
<tr>
<td>E: ICT services</td>
<td>0.18%</td>
<td>0.19%</td>
</tr>
<tr>
<td>Total</td>
<td>56.43%</td>
<td>56.96%</td>
</tr>
</tbody>
</table>
Distribution of websites according to category of internet use

Total of linked enterprises: 73,597

- B1: Indirect on line presence, 77.22%
- B2: Direct on line presence, 14.25%
- C: e-commerce, 5.64%
- D: On line services, 1.54%
- E: ICT services, 1.35%
Number of linked enterprises and their corresponding number of establishments

Quantity of linked enterprises: 73,597
Average income per employee by category

- B1: Indirect on line presence: 1,641
- B2: Direct on line presence: 1,006
- C: e-commerce: 1,607
- D: On line services: 852
- E: ICT services: 526
- 2019 Economic Census: 1,084

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Percentage distribution of related companies by economic activity

- Retail Trade: 18.42%
- Manufacturing: 13.52%
- Wholesale Trade: 11.78%
- Professional, Scientific, and Technical Services: 8.91%
- Accommodation and Food Services: 8.22%
- Other Services (except Public Administration): 7.27%
- Educational Services: 6.50%
- Health Care and Social Assistance: 5.22%
- Administrative and Support and Waste Management and Remediation Services: 4.13%
- Real Estate and Rental and Leasing: 3.67%
- Transportation and Warehousing: 2.88%
- Construction: 2.49%
- Finance and Insurance: 1.73%
- Public Administration: 1.58%
- Arts, Entertainment, and Recreation: 1.47%
- Information: 1.43%
- Others: 0.78%
Share by Age Group for main economic variables

Category C: Ecommerce

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<th>Age group</th>
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- **Enterprises**
  - Young: 23.8%
  - Median: 58.1%
  - Mature: 18.2%

- **Establishments**
  - Young: 1.7%
  - Median: 10.2%
  - Mature: 88.1%

- **Employed personnel**
  - Young: 1.0%
  - Median: 17.3%
  - Mature: 81.6%

- **Incomes**
  - Young: 0.5%
  - Median: 14.1%
  - Mature: 85.4%

- **Value Added**
  - Young: 0.3%
  - Median: 7.8%
  - Mature: 91.9%
Share by Age Group for main economic variables

Category D: Online Services

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- **Enterprises**
  - Young: 15.0%
  - Median: 59.1%
  - Mature: 25.9%

- **Establishments**
  - Young: 4.8%
  - Median: 28.6%
  - Mature: 66.6%

- **Employed personnel**
  - Young: 2.1%
  - Median: 27.8%
  - Mature: 70.1%

- **Incomes**
  - Young: 4.0%
  - Median: 30.9%
  - Mature: 65.1%

- **Value Added**
  - Young: 1.3%
  - Median: 18.9%
  - Mature: 79.9%
Share by Age Group for main economic variables

Category E: ICT-Related Services

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[Bar chart showing distribution by age group for enterprises, establishments, employed personnel, incomes, and value added.]
Conclusions and next steps
Conclusions

Undoubtedly, digital economy follows a growing trend worldwide and Mexico is no exception. In this sense, it is important to continue measuring the impact it has on the national economy, for which INEGI will continue to carry out studies that use traditional sources, but will also carry out the necessary actions for the measurement through alternative sources, for which the following lines of action are in place:

1. Measure the impact of the Internet economy on an annual basis.
2. Establish alliances with private companies that can supply network information related to pages through which economic transactions are carried out in Mexico.
3. Strengthen collaboration ties with CBS of the Netherlands to participate in monitoring the methodology for classifying companies according to the use of the Internet.
4. Publish the results as official statistics in a future stage.