Measuring the internet economy in the Netherlands

Short recap and new initiatives

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Short recap
Three-way partnership
Main research question:
“What is the importance of the internet economy to the Dutch economy?”

The aim of the research project was fourfold:
1. Determine a pragmatic definition of “the internet economy”;
2. Show the importance and size of the internet economy in the Netherlands;
3. Show the possibilities of new measurement methods with big data;
4. Explain differences from regular statistics/concepts.
Dataprovider dataset: 2,5 million Dutch websites

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business info</td>
<td>• Country, address, company name, Chamber of Commerce number, tax number, phone number, e-mail, .....</td>
</tr>
<tr>
<td>eCommerce</td>
<td>• eCommerce probability, shopping cart software, delivery services, payment methods, products, prices,....</td>
</tr>
<tr>
<td>Content</td>
<td>• Title, description, keywords, category, language, author,....</td>
</tr>
<tr>
<td>Other</td>
<td>• Marketing, social media, links, technical and hosting information, ...</td>
</tr>
</tbody>
</table>
Definition of the internet economy

- **Businesses without a website**: Hairdresser without website, Bakery without website, Freelancer without website.

- **Online presence**:
  - **Category B1**: Hairdresser with website, Shell, DSM.
  - **Category B2**: Car rental company, Hotels, High street store with supplementary webshop.

- **Core of the internet economy**:
  - **Category C**: Bol.com, Wehkamp, Coolblue.
  - **Category D**: Relatieplanet, Airbnb, Marktplaats.
  - **Category E**: Web design, Hosting, Internet marketing.

- **Online stores according to eCommerce variables**
- **Online services or internet related ICT according to keyword analysis**
Businesses without a website

Online stores according to eCommerce variables

Businesses with a website that do not belong to category C, D or E

Online services or internet related ICT according to keyword analysis
Businesses without a website:

- Hairdresser without website
- Bakery without website
- Freelancer without website

Businesses with a website that do not belong to category C, D or E:

- Hairdresser with website
  - Shell
  - DSM
- Car rental company
  - Hotels
  - High street store with supplementary webshop

Online stores according to eCommerce variables

Businesses without a website

Online services or internet related ICT according to keyword analysis

All Dutch businesses

Core of the internet economy
Merging to the GBR

Merging additional CBS data sources (e.g. jobs, turnover, employment, value added)
Merging to the GBR: results

+/- 2.5 million websites dataset Dataprocider

Around 900 thousand websites of companies (according to Dataprocider)

+/- 840 thousand websites merged to GBR

+/- 550 thousand unique business units in GBR with website
Number of business by internet category, 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>No website</td>
<td>975,000</td>
</tr>
<tr>
<td>A No website</td>
<td></td>
</tr>
<tr>
<td>Online presence</td>
<td></td>
</tr>
<tr>
<td>B1 Passive online presence</td>
<td>438,000</td>
</tr>
<tr>
<td>B2 Active online presence</td>
<td>68,000</td>
</tr>
<tr>
<td>Core of internet economy</td>
<td></td>
</tr>
<tr>
<td>C Online stores</td>
<td>28,500</td>
</tr>
<tr>
<td>D Online services</td>
<td>5,700</td>
</tr>
<tr>
<td>E Internet related ICT</td>
<td>16,000</td>
</tr>
</tbody>
</table>
Relative distribution of number of companies, jobs, turnover and value added by Internet categories, 2015
The core of the internet economy compared to other sectors

- Number of businesses (x 1,000)
- Jobs (x 1,000)
- Turnover (x billion)

Legend:
- Red: The core of the internet economy
- Purple: Accommodation and food service activities
- Yellow: Construction
- Orange: Transportation and storage
Regional distribution

Certain regions are more prominent in the internet economy than others.

Online stores

Online services

Internet related ICT
New initiatives
Ministry of Economic Affairs and Climate Policy

- Repeating the study for recent years (2016, 2017 and 2018).
- Extra options:
  - Updating the definition of the internet economy;
  - Methodological improvements;
  - Platform economy;
  - Cyber security.
Main goal is the analysis of companies websites, in order to classify companies in a certain category of the internet economy.

There will be no attempt to link websites with the companies owning them (e.g. through a statistical business register or economic census population).

For: Brazil, Chile, Colombia & Mexico.

If desirable and feasible, other analyzes based on the information available in the Dataprovider can be performed, for example on cyber security.
- A delegation of INEGI visited Statistics Netherlands last year to talk about the study.
- This year (2019) they have their five-yearly economic census which could form the framework of companies to which websites can be linked.
- After that (2020) they are interested in exploring the possibility of repeating the methodology of our study and doing further research.
In 2016 Director General Tjin-A-Tsoi of Statistics Netherlands signed a Memorandum of Understanding (MoU) with KOSTAT for collaboration in the Center for Big Data Statistics (CBDS).

As a result of this a KOSTAT employee was posted to the CBDS in 2018 to work, among other things, on the internet economy research.

In 2018 two KISDI representatives followed an intensive 3-day programme, in which CBS showed all kinds of facets of the internet economy research.

KISDI has signed a contract with Dataprovider and is starting to work with the datasets supplied by Dataprovider to map the internet economy of South Korea.
For more information:

Discussion paper

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Center for Big Data Statistics
Facts that matter