



Statistics
Canada

Statistique
Canada

E-commerce in Canada



Telling Canada's
story in numbers

Mary Beth Garneau
marybeth.garneau@canada.ca

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Presentation outline

- Definitions and concepts
- Impact of E-commerce on:
 - Industry and Product Classification
 - Output measures
 - SPPIs
 - National Accounts
- Conclusion



Concepts and definitions

Online e-commerce sales

Sales of goods or services where the order is received and the commitment to purchase is made via the Internet, even if payment is made by other means. This includes orders made on web pages, through an extranet or by electronic data interchange over the Internet

Pure play online retailers

A business that solely sells products online, i.e. does not have a storefront.

Brick and mortar/ storefront retailers

Retailer that sells products at a physical location/store.

Bricks and clicks/ Clicks and mortar

Retailer that sells products online and in physical stores.



Concepts and definitions (2)

Digital platforms

In the context of e-commerce, digital platforms are web-based intermediaries facilitating e-commerce and peer-to-peer transactions (e.g. e-Bay, Uber, Airbnb, AskforTask, etc.)

Digital product

Products that come in a digital format such as e-books, music or video files, etc.

Digital delivery

The delivery or distribution over an online media (e.g. download, streaming, etc.)



E-commerce and industry classification

ISIC and NAICS

Division of retail between store and non-store firms – is this distinction still appropriate given the increase in e-commerce activity by brick and mortar retailers?

NAICS 2012

Publishers who predominantly had an online presence were classified to NAICS 51913 (Internet publishing and broadcasting and web search portals).

NAICS 2017

Updated publishing to classify businesses according to main business activity, regardless of format.

Online streaming

Captured as part of broadcasting in NAICS



E-commerce and product classification

NAPCS 2017

Moved from grouping online content together as a common format to classifying products according to their purpose, then further sub-dividing them into digital and physical types.

Digital product – measurement issues

Is each download a unit of the product sold? What about the single incident of an item streamed? What about a licence renewal for a year?

Challenges in measuring output

- Coverage of domestic production
 - Canadian websites are identifiable by the extension .ca but just because an e-commerce website ends in .ca doesn't mean the firm has a retail establishment in Canada and thus may not be counted in retail output
 - Retailers operating outside Canada may set up fulfillment centres or contract a third party company to facilitate e-commerce for their Canadian customers without having to establish a retail operation in Canada
- Hard to measure and properly classify international trade
 - Trade of physical products is captured when the items cross the border but low value shipments of goods purchased online by households have no product details
 - Trade in digital products is hard to measure

Output measures at Statistics Canada

- Occasional cross-economy e-commerce survey since 2013
- E-commerce questions added to monthly retail trade survey starting January 2016
- E-commerce questions added to 22 surveys for service industries, results to be released by March 2018.



Survey of Digital Technology and Internet Use, 2013 (2)

10. What percentage of the value of your Internet sales in 2013 were to other businesses?

C1000 %

11. Did your business make purchases of goods or services via the Internet during 2013?

C1100 1 Yes 3 No

12. Does your business engage in the following online interactions with Canadian local, provincial or federal governments?
Select all that apply.

C1201 <input type="radio"/> obtain information or documents from governments	C1203 <input type="radio"/> apply for grants or benefits
C1202 <input type="radio"/> complete or return taxation forms (e.g., GST, employment (T4), year end tax (T2))	C1204 <input type="radio"/> online payments to government organizations
	C1205 <input type="radio"/> none of the above

<http://www.statcan.gc.ca/daily-quotidien/140611/dq140611a-eng.htm>



Monthly Retail Trade Survey, July 2017

Total retail sales

3. Please report the **total retail sales** for this business for the current reference period.
Report all dollar amounts in Canadian dollars (CAN\$).
When precise figures are not available, please provide your best estimates.

Include revenue from:

- Internet sales.
- Sales of any goods including value of trade-ins (net of returns and discounts).
- Repair and maintenance (including parts and labour).
- Rental or leasing of goods and equipment.
- Services (including food services).
- Goods manufactured as a secondary activity.
- Fees earned from commissions (e.g., lottery or bus tickets, phone cards). Do not report sales values.
- Orders made by mail, telephone, catalogue and facsimile.

Exclude:

- GST, HST, PST, QST and excise.
- Non-operating revenue such as interest or dividends.
- Revenue from rental of real estate, placement fees, operating subsidies, grants, royalties or franchise fees.

CAN\$

S1200

Total retail sales

\$

.00



Monthly Retail Trade Survey, July 2017 (2)

Internet sales

4. Did this business make any **Internet sales**?

Internet sales are those where the customer places the order and makes the commitment to purchase online. Payment may be made by other means.

Include: orders made in web page, extranet or electronic data interchange (EDI).
Exclude: orders made by mail, telephone, catalogue or facsimile.

S1300 1 Yes

2 No ► **Go to question 6**

5. How much of **total retail sales** that you reported in question 3 was from **Internet sales**?

- Enter in Canadian dollars.
- If precise figures are not available, provide your best estimate.
- Enter '0' if there were no Internet sales.

Include: orders made in web page, extranet or electronic data interchange (EDI).
Exclude: orders made by mail, telephone, catalogue or facsimile.

CANS

Internet sales S1400

\$.00

E-commerce sales by Canadian retailers

On an unadjusted basis, retail e-commerce sales were \$1.2 billion in July, accounting for 2.3% of total retail trade. On a year-over-year basis, retail e-commerce increased 46.8%, while total unadjusted retail sales rose 6.7%.



SPPI challenges with e-commerce

- E-commerce vs. in-store prices
 - Even if physical product is identical, the service provided differs from online to store
 - Price movement may differ
 - On-line pricing can instantly respond to competitor's price or terms of delivery
 - On-line pricing may use price discrimination (time of day/week/year, search cache, device used to access website, etc.)
 - Different cost structures for store and online purchases
- Ideally, we should be measuring both types of transactions and weight them by prevalence in a given industry. This can be problematic in terms of resources, response burden and access to weights.
- Canada currently excludes e-commerce prices from its Retail Services Price Index (RSPI) while relying solely on internet prices for traveler accommodation.



SPPI challenges with e-commerce (2)

- Increased customization and new products require more frequent linking between new and discontinued products and new approaches to quality adjustment
- Pricing and measurement challenges of digital products where the quantity offered for a price may be unlimited but the amount consumed in specific periods varies (e.g. Netflix, data plans, unlimited calling, etc.)



SPPI opportunities from e-commerce

- Statistics Canada is increasingly relying on alternative and administrative data sources, to acquire more robust price observations for more products and services.
 - Access to prices on-line and through web scraping and APIs
 - Access to service details for quality adjustment and product specification
 - Third party activities to track information reported online e.g. financial services, firms scraping websites
 - Higher volumes of data available without burdening respondents



E-commerce challenges for National Accountants

- Classification of digital products and bundling – some transactions are likely already accounted for in the SNA, but risk of missing them or double counting
- Borderless transactions through e-commerce and digital delivery – when Canadian households buy digital services from a non-resident business (e.g. Netflix), may not be classified correctly in SNA.
- Proliferation of digital platforms
 - Platforms facilitate exchanges between two independent units but many operate outside of Canada
- Households producing service outputs
 - No production account for household sector (even if the value is reported through tax, there is no detail on the inputs used and products produced by the household)
 - Growing measurement gap in the output and value-added of the household sector



E-commerce challenges for National Accountants (2)

Questions added to Labour Force Survey in 2016 to collect information on household sharing economy (peer-to-peer) activities

<http://www.statcan.gc.ca/daily-quotidien/170228/dq170228b-eng.htm>

The questions asked were:

1. In the past 12 months, did you use ride services such as Uber, Lyft, etc.?
2. In the past 12 months, what was the total amount that you personally spent on these ride services in Canada?
3. In the past 12 months, did you use private accommodation services such as Airbnb, Flipkey, etc.?
4. In the past 12 months, what was the total amount that you personally spent on these private accommodation services in Canada?
5. In the past 12 months, what was the total amount that you personally spent on these private accommodation services outside of Canada?
6. In the past 12 months, did you offer ride services such as Uber, Lyft, etc.?
7. In the past 12 months, did you offer private accommodation services such as Airbnb, Flipkey, etc.?

The response rate for these questions was 88%. The LFS has a sample of approximately 100,000 individuals.

Separate supplement to be added to collect household expenditures on digital products



Conclusion

- E-commerce poses a number of challenges to the measure of service activities
- Even more challenges are stemming from the changes in the products being transacted
- More work needs to be done to look at impact of digitalization on the products, industries and measurement of services