ICT Access and Use by Businesses OECD database – Metadata

Country: **Canada**

OECD latest update: February 2025

Source(s):

Organisation(s): Statistics Canada

Survey(s): Survey of Digital Technology and Internet Use (SDTIU) – 2023, 2021, 2019 –

2017 Canadian Survey of Cyber Security and Cybercrime (CSoCC) -2017-

Survey of Digital Technology and Internet Use (SDTIU) – 2012 and 2013 –

Survey of Electronic Commerce and Technology (SECT) – 2005 to 2007-

Link(s):

SDTIU => https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getInstanceList&Id=144010

CSoCC => http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5244

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Specific notes for the OECD ICT access and use by businesses database:

Before 2017

1. The North American Industry Classification System (NAICS) was used instead of ISIC Rev.4. The following equivalent have been retained: Manufacturing (ISIC Rev.4 C) includes NAICS 31-33; Wholesale trade includes all of NAICS 41 (inclusive of motor vehicles) and Retail trade includes all NAICS 44 and 45 (inclusive of motor vehicles); Transportation and storage (ISIC Rev.4 H) includes NAICS 48-49; Accommodation and food service activities (ISIC Rev.4 I) includes NAICS 72; Information and communication (ISIC Rev.4 J) includes NAICS 51; Financial and insurance activities (ISIC Rev.4 K) includes NAICS 52; Real estate activities (ISIC Rev.4 L) includes NAICS 53; Professional, scientific and technical activities (ISIC Rev.4 M) includes NAICS 54; and Administrative and support service activities (ISIC Rev.4 N) includes NAICS 56.

2. Medium-size enterprises refer to 50-299 employees instead of 50-249, and large enterprises refer to 300+ employees instead of 250 and more.

For 2017, 2019, 2021 and 2023

3. The North American Industry Classification System (NAICS) Canada 2012 (resp. NAICS Canada 2017) was used instead of ISIC Rev.4 for 2017 (resp. for 2019 and 2021). The following equivalent have been retained: Construction (ISIC Rev.4 F) includes NAICS 23 (construction of buildings; and heavy and civil engineering construction); Manufacturing (ISIC Rev.4 C) includes NAICS 31-33; Wholesale trade includes all of NAICS 41 (inclusive of motor vehicles) and Retail trade includes all NAICS 44 and 45 (inclusive of motor vehicles); Transportation and storage (ISIC Rev.4 H) includes NAICS 48-49; Accommodation and food service activities (ISIC Rev.4 I) includes NAICS 72; Information and communication (ISIC Rev.4 J) includes NAICS 51; Financial and insurance activities (ISIC Rev.4 K) includes NAICS 52; Real estate activities (ISIC Rev.4 L) includes NAICS 53; Professional, scientific and technical activities (ISIC Rev.4 M) includes NAICS 54; and Administrative and support service activities (ISIC Rev.4 N) includes NAICS 56.

4. The target population corresponds to the Canadian businesses with 10 or more employees. Enterprise employment size group are as follows: Small: 10 to 49 employees; Medium: 50 to 249 employees; Large: 250 or more employees.

5. The reference period is a 12 months calendar year.

Indicator	Breakdown(s)	Year(s)	Explanatory notes
A2	All	2019, 2021	Enterprises using particular fixed and mobile connection types to access the Internet (includes fibre optic line, cable Internet, Digital Subscriber Line (DSL) over a telephone line, mobile wireless, fixed wireless or portable wi-fi hotspot, satellite Internet access, municipal wireless, or other). Enterprises that selected "Don't know" are included in the in-scope population.
A2a	All	2019, 2021	Enterprises using particular fixed connection types to access the Internet (includes fibre optic line, cable Internet, Digital Subscriber Line (DSL) over a telephone line, fixed wireless or portable wi-fi hotspot, satellite Internet access, municipal wireless, or other). Enterprises that selected "Don't know" are included in the in-scope population.

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A2b	All	2019, 2021	Enterprises using a mobile wireless connection to access the Internet. Enterprises that selected "Don't know" are included in the in-scope population.
A2	All	2012, 2013	Includes all connection groups except dial-up connection; responses of 'don't know' were removed from the numerator and the denominator.
A2, B1, C3a to C3d, D1, D7, E3, F1, G3, H4, K1	Medium, Large	2013 and before	50-299 employees and 300+ employees as opposed to 50-249 and 250 and more.
A2, B1, C3a, C3b, C3d, D1, D7, H4, K1	Inf	2012, 2013	In the NAICS this grouping represents Information and Cultural Industries (NAICS 51).
A2, B1, C3a to C3d, D1, D7, F1	Who + Ret	2013	Wholesale trade includes all of NAICS 41 (inclusive of motor vehicles) and Retail trade includes all NAICS 44 and 45 (inclusive of motor vehicles).
B1	All	2017	Enterprises use website for their business.
B2	All	2019, 2021	Enterprises having websites for online booking or purchasing of goods or services Indicators for 2019 and 2021 are the proportion of businesses that specifically indicated that they have websites that allow for purchasing or booking, while previous reference periods assumed that having an e-commerce platform meant that an enterprise had a website that allowed for online ordering, booking or reservation.
B2	All	2017	Businesses use E-commerce platforms and solutions. Software technology solution that allows a business to build and host a digital storefront soliciting a specific set of products or services (e.g., online payment and ordering).
C3a	All	2019, 2021, 2023	Enterprises using Enterprise Resource Planning (ERP) software Indicators for 2019, 2021 and 2023 are the proportion of businesses that specifically indicated that they use ERP software, while previous reference periods assumed that using web-based applications meant that an enterprise used ERP software.
C3a	All	2017	Web-based application such as a program that is accessed over an Internet network, rather than existing within a device's memory (e.g., payroll processing, e-signature, order and delivery service).
D1	All	2019, 2021, 2023	Enterprises receiving orders or making sales of goods or services over the Internet
D1	All	2012, 2013	Sales online over the Internet; may include EDI sales over the Internet as well as web site sales but does not include sales via manually typed e-mail or leads.
D7	All	2012, 2013	Sales online over the Internet; may include EDI sales over the Internet as well as web site sales but does not include sales via manually typed e-mail or leads.

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E3	All	2019, 2021	Enterprises that were impacted by cyber security incidents.
E3	All	2017	Business was impacted by cyber security incident(s). Cyber security incident refers to any unauthorized attempt, whether successful or not, to gain access to, modify, destroy, delete or render unavailable any computer network or system resource.
E7	All	2017, 2019, 2021	A written policy in place to manage cyber security risks (e.g., Cyber Incident Response Plan).
F1	All	2019, 2021	Enterprises performing activities over the Internet to interact with the Canadian federal government. Enterprises that selected "Don't know" are included in the in scope population.
G3	All	2019, 2021, 2023	Enterprises purchasing cloud computing services. Indicators for 2019, 2021 and 2023 specifically asked enterprises to indicate if they purchased cloud computing services, while previous reference periods did not ask enterprises to specify whether cloud computing services were purchased or free.
G3b	All	2019, 2021	Enterprises purchasing cloud computing services: software. Indicators for 2019 and 2021 are the proportion of businesses that indicated that they purchased any cloud computing services and separately indicated that they used (purchased or free) cloud computing services for software. Previous reference periods did not ask enterprises to specify whether cloud computing services were purchased or free.
G3f	All	2019, 2021	Enterprises purchasing cloud computing services: storage capacity. Indicators for 2019 and 2021 are the proportion of businesses that indicated that they purchased any cloud computing services and separately indicated that they used (purchased or free) cloud computing services for storage capacity. Previous reference periods did not ask enterprises to specify whether cloud computing services were purchased or free.
G3g	All	2019, 2021	Enterprises purchasing cloud computing services: processing power to run own software. Indicators for 2019 and 2021 are the proportion of businesses that indicated that they purchased any cloud computing services and separately indicated that they used (purchased or free) cloud computing services for processing power to run their own software. Previous reference periods did not ask enterprises to specify whether cloud computing services were purchased or free.
G3	All	2017	Businesses that use cloud computing or storage.

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G3	All	2012	This is a measure of enterprises that have made expenditures on 'Software as a Service (e.g. Cloud computing).
G3	Inf	2012	In the NAICS this grouping represents Information and Cultural Industries (NAICS 51).
G3	Who + Ret	2012	Wholesale trade includes all of NAICS 41 (inclusive of motor vehicles) and Retail trade includes all NAICS 44 and 45 (inclusive of motor vehicles).
G13	All	2019, 2021	Enterprises using Internet-connected smart devices, or Internet of Things (IoT)
G14	All	2019, 2021	Enterprises using software and hardware using Artificial Intelligence (AI)
H1	All	2019, 2021	Enterprises employing one or more Information and Communication Technologies (ICT) specialists. Enterprises that selected "Don't know" are included in the in-scope population. Indicators for 2019 and 2021 are the proportion of businesses that specifically indicated having ICT specialists, while previous reference periods assumed that the proportion of businesses that had employees with cyber security responsibilities would be the same as the proportion of businesses with ICT specialists.
H1	All	2017	Businesses had employees primarily responsible for the cyber security of their business. Cyber security refers to the protection of digital information, as well as the integrity of the infrastructure housing and transmitting digital information. More specifically, cyber security includes the body of technologies, processes, practices and response and mitigation measures designed to protect networks, computers, programs and data from attack, damage or unauthorized access so as to ensure confidentiality, integrity and availability.
H3	All	2019, 2021, 2023	Enterprises that provided training to develop or upgrade Information and Communication Technologies (ICT)-related skills of its ICT specialists or employees that are not ICT specialists, but that use ICTs during their day-to-day tasks in 2019. Enterprises that selected "Don't know" are included in the in-scope population. Indicators for 2019, 2021 and 2023 are the proportion of businesses that specifically indicated providing ICT-related training to employees, while previous reference periods used the proportion of businesses that provided cyber security training to IT employees for this indicator. Indicators for 2019 and 2021 combined categories from two separate questions, separating ICT specialists and non-ICT related employees. 2023 only asked about ICT training for all employees.

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H3	All	2017	Business provided formal training to internal IT personnel to develop or upgrade cyber security related skills.
H4	All	2021	Enterprises that attempted to recruit ICT specialists in 2021.
H4	All	2019	Enterprises that attempted to recruit ICT specialists in 2019.
H4	All	2013	Enterprises' employ ICT specialists (includes only those employees whose primary function was to operate, maintain, develop, support or manage ICTs).
H4	Inf	2013	In the NAICS this grouping represents Information and Cultural Industries (NAICS 51).
K1	All	2019, 2021	Enterprises with social media accounts
K1	All	2017	Businesses use social media accounts for their business. Social networking sites like Facebook, Twitter and LinkedIn for their business to reach potential customers and build stronger relationships with clients. Businesses could also use social networking sites for marketing or professional purposes.
K1	All	2012, 2013	Enterprises' Internet website offer integration with social media (e.g., Facebook, Twitter, Google+).
K1	Who + Ret	2012, 2013	Wholesale trade includes all of NAICS 41 (inclusive of motor vehicles) and Retail trade includes all NAICS 44 and 45 (inclusive of motor vehicles)

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