

GDLB 2023

GLOBAL
DATA
LITERACY
BENCHMARK
2023



THE GLOBAL DATA LITERACY BENCHMARK: 2023

This third release of the Global Data Literacy Benchmark provides an updated view of the data literacy competencies of more than 5,000 employees from across the globe. Drawing on Databilities®, the pioneering data literacy competency framework, this release introduces a new region to the study, resulting in a benchmark across 4 domains, 18 competencies, 6 regions, 12 industries, and 5 core occupations.

Just as literacy is our ability to read, write and comprehend language, data literacy is our ability to read, write and comprehend data. More than that, it's the ability to derive meaningful and useful information from data and apply this to create better products, services, and experiences.

We need the confidence to coach.

The past year has seen continued growth in the efforts and attention towards data literacy. It has become a topic of discussion on keynote stages across the globe, with increasing numbers of industry leaders taking the initiative to establish or expand internal data literacy programs. As a result, there has been a notable decrease in Curious cohorts across all domains and competencies. However, the same progression from Confident to Coach is not as apparent.

The Confident are capable of working independently across various data literacy domains and competencies but are not as experienced in sharing their knowledge and aiding others with the same tasks. Developing their ability to guide and assist others could be a game-changer and needs to be a priority for the coming year.

We must not miss this opportunity to harness the skill and passion within this expanding group and empower them to share their knowledge with others.

Building the confidence to coach is our next step.

Jane Crofts
Founder and CEO
Data To The People

DATABILITIES®

Databilities® is the world’s first, evidence-based data literacy competency framework, with 18 core competencies across the domains of data concepts and culture, reading, writing, and comprehension. Databilities® is recognised as the most comprehensive assessment tool of individual data literacy in the world.¹

The competencies within each domain of the expanded Databilities® framework are:

Data Concepts and Culture

- Data Culture
- Data Ethics

Reading

- Data Discovery
- Evaluating and Ensuring Quality of Data

Writing

- Data Collection
- Data Management and Organisation
- Data Manipulation
- Data Curation and Reuse
- Metadata Creation and Use
- Data Conversion (Format to Format)
- Data Governance

Comprehension

- Data Analysis
- Data Interpretation (Understanding Data)
- Identifying Problems Using Data
- Data Visualisation
- Presenting Data (Verbally)
- Data Driven Decision Making
- Evaluating Decisions / Conclusions Based on Data

For each competency within the Databilities® framework, there are up to 6 levels of progression:

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
At this level of competency, an individual can complete simple tasks with instruction.	At this level of competency, an individual can complete simple tasks on their own, with guidance where needed.	At this level of competency, an individual can complete well defined tasks on their own.	At this level of competency, an individual can complete complex problems and tasks on their own.	At this level of competency, an individual can assist others to complete simple tasks and problems.	At this level of competency, an individual can teach and assist others to complete complex problems and tasks.

¹ Statistics Canada. 2019. Data Literacy: What It Is and How to Measure It in the Public Service. Statistics Canada Catalogue No. 11-633-X – no. 022. Ottawa. Version updated August 2019.

MEASURING DATA LITERACY

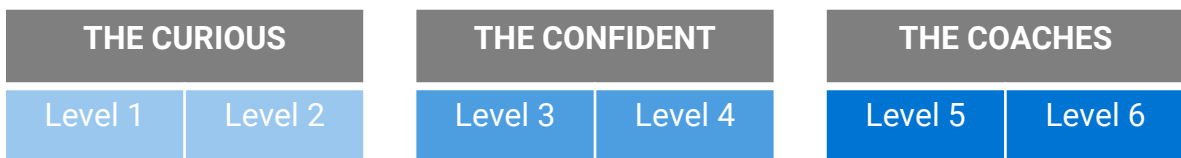
Using the Databilities® framework, Data To The People commissioned research to measure the individual data literacy of more than 5,000 employed individuals across Australia, Canada, India, the United Kingdom, the United States of America and, for the first time, Singapore. For each competency, participants were asked to select which of the progression statements best described them. Additional demographic information was also collected to enable findings by industry, occupation, and level of qualification.

This is the third study of its kind and will be revisited on an annual basis to monitor levels of data literacy across these regions.

THE CURIOUS, THE CONFIDENT, AND THE COACHES

Using the 6 levels of progression outlined in the Databilities® framework, the Global Data Literacy Benchmark identifies 3 cohorts of employees:

- Those who need direction – the Curious**
 When asked to select which statement best described them, the Curious selected Level 1 or Level 2 or indicated that none of the progression statements described them.
- Those who are independent – the Confident**
 When asked to select which level of competency best described them, the Confident selected Level 3 or Level 4.
- Those who can guide others – the Coaches**
 When asked to select which level of competency best described them, the Coaches selected Level 5 or Level 6.



THE QUEST FOR COACHES STARTS NOW

The 2023 study found negligible increases in the proportion of Coaches across all four domains, with greater increases noted across all domains in the Confident cohort. Whilst the marked increase in the Confident cohort is pleasing, we need to see similar growth in the proportion of Coaches if we are to achieve a significant shift in overall data literacy rates.

As seen in previous studies, there is a significant discrepancy between the number of people who can help or guide others – the Coaches – and the number of people who need help or direction – the Curious:

- 11% of respondents can help others across all four data literacy domains.
- 75% of people can't help others in any area.
- The competencies with the greatest discrepancy between the number of Coaches and Curious are data governance, data visualisation, identifying problems using data and data analysis.

As the number of Confident continues to grow, we are also building awareness of the relevance and opportunities that improved data literacy offers all roles and functions.

Creating more frequent and varied opportunities for the Confident to share their expertise with others will lead to further development, both for themselves and their Curious colleagues.

Our focus needs to be on:

- Creating opportunities for the Coaches to play an active role in the organisation's data literacy campaign, inspiring the Confident and the Curious to continue developing their skills.
- Harnessing the scale of the growing Confident cohort and finding opportunities for them to share their expertise in a variety of forums, with the ultimate goal of converting some of this cohort to Coaches.
- Continuing to support the Curious by familiarising them with data literacy concepts and creating opportunities for them to practice these skills in their day-to-day work.



11% can help their peers with data concepts and culture, reading, writing and comprehension.

A DOMAIN PERSPECTIVE

Reading continues to be the domain where respondents feel most comfortable, with higher proportions of Coaches (20%) and Confident (52%) compared to the data concepts and culture, writing, and comprehension domains.

Data concepts and culture remains the domain with the lowest proportion of Coaches (11%), however, there has been notable growth in the proportion of Confident in this domain, increasing from 41% to 47% since the previous study.

When compared to the previous study, the proportion of Coaches rose slightly in writing and comprehension domains; each increasing by four and three percentage points respectively. The greatest increase in the proportion of Confident respondents was seen in the data concepts and culture domain; with an increase of six percentage points.

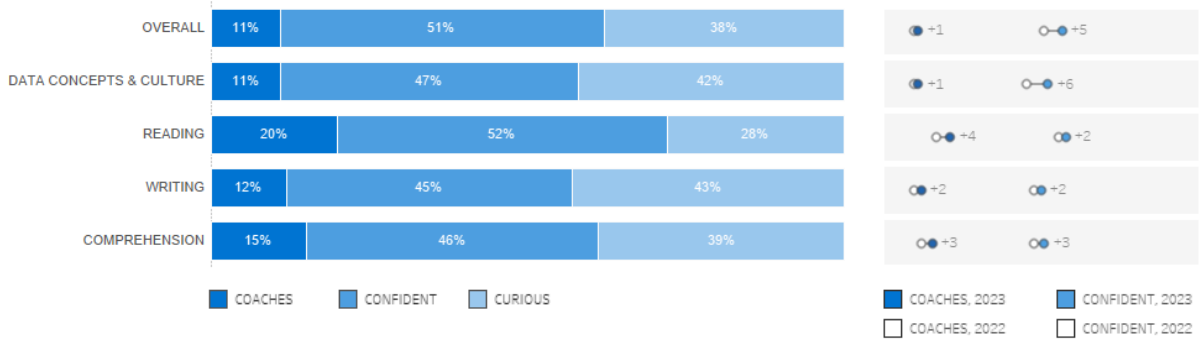


FIGURE 1: DATA LITERACY PROFILES BY DOMAIN



28% can help their peers with data driven decision making.

A COMPETENCY PERSPECTIVE

At an individual competency level, data-driven decision-making (28%) and data discovery (26%) had the greatest proportion of Coaches, with data governance (11%) and data culture (13%) having the least. Data governance (53%) and data visualisation (51%) had the greatest proportion of Curious, indicating these competencies pose the most significant challenge for respondents.

Minor increases in the proportion of Coaches were noted in data discovery, data quality evaluation, data culture and data governance competencies; each increasing by three percentage points when compared to the previous study,

Strong increases in the proportion of Confident respondents were noted in data culture, data collection, data management and organisation, and data visualisation when compared to the previous study; with increases of at least five percentage points.

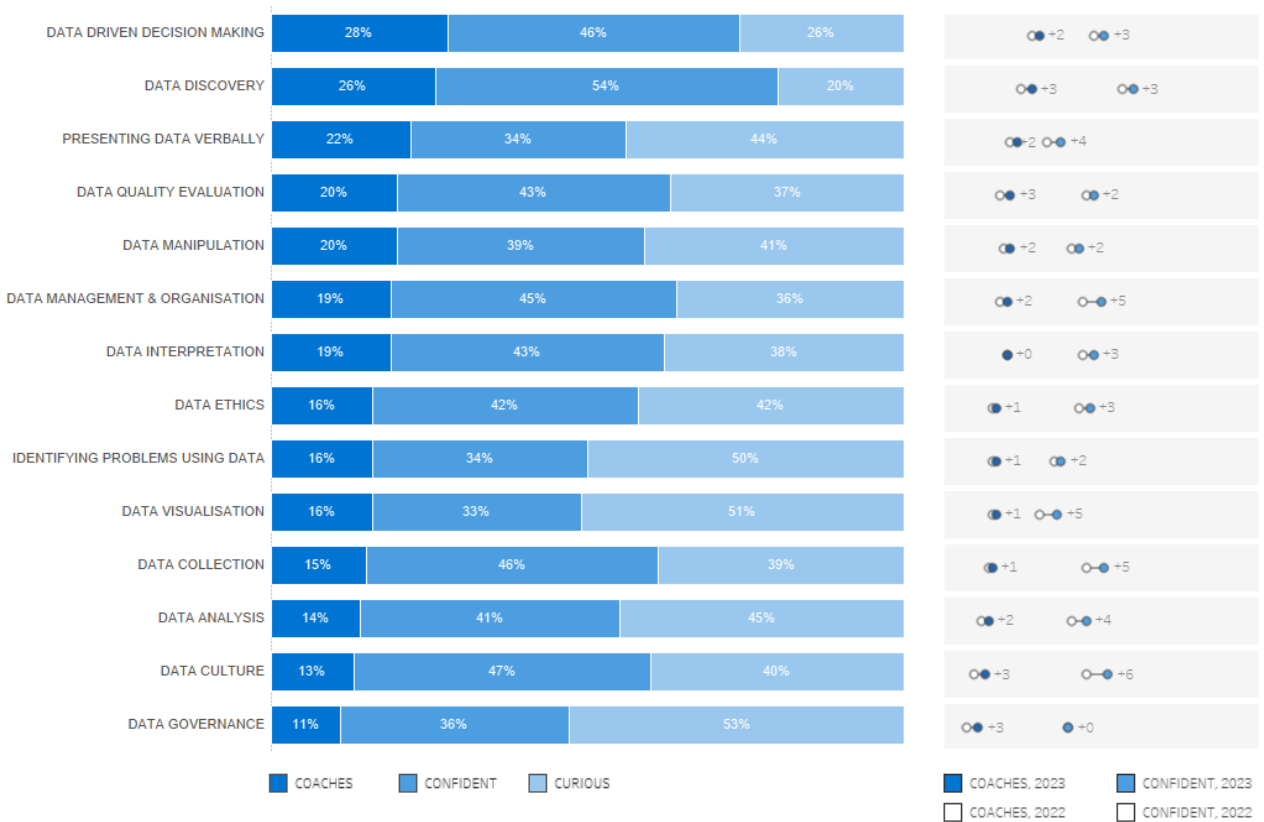


FIGURE 2: DATA LITERACY PROFILES BY COMPETENCY



45% need help with data analysis.

A REGIONAL PERSPECTIVE

This release sees the introduction of Singapore to the study, identifying 10% of participants as Coaches, 53% of participants as Confident, and 37% as Curious.

The data literacy profile continues to be very similar across countries, with all regions showing largely similar distributions across Coaches, Confident, and Curious cohorts.

India and Australia have the highest representation of Coaches, each with 14% of respondents in this cohort, whilst the United Kingdom has the lowest representation of Coaches with 9% of participants in this cohort.

Canada has shown the greatest increase in Confident respondents, growing by twelve percentage points compared to the previous study. The United States has also shown notable growth in the proportion of Confident, increasing by eight percentage points.

The United Kingdom is the only region to show minor decreases in the proportion of Coaches and Confident, with both cohorts narrowing by two percentage points.

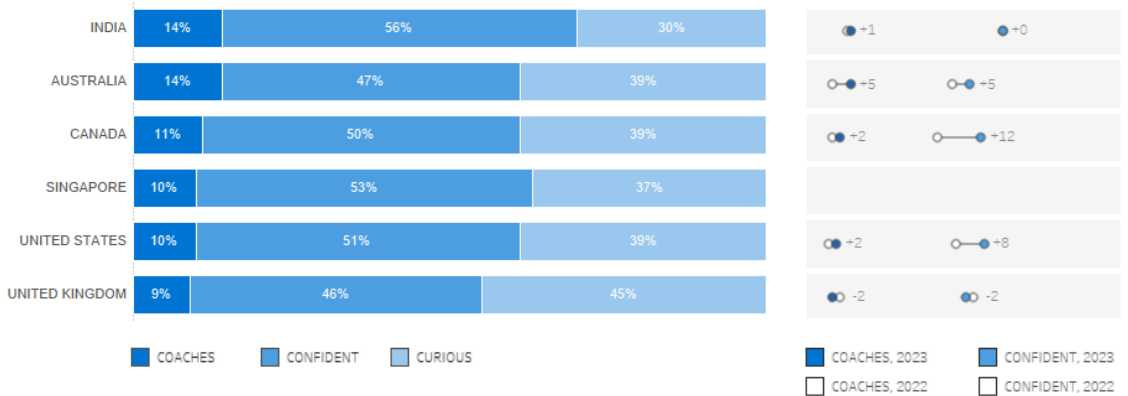


FIGURE 3: DATA LITERACY PROFILES BY COUNTRY



13% can help their peers with data culture.

AN INDUSTRY PERSPECTIVE

Significant variances continue to be seen between industries when it comes to the proportion of Coaches, with Information and Communication (19%) and Professional, Scientific and Technical (17%) having a higher proportion of Coaches than their Health and Social Work, Wholesale and Retail Trade, and Accommodation and Food Services Activities counterparts (6%).

Notable shifts from the previous study were more apparent in the Confident cohort than in the Coaches. Substantial increases were seen in the proportion of Confident respondents in the Finance and Insurance, Public Administration and Defence, and Education industries; with respective increases of eleven, nine and seven percentage points.

Decreases of less than four percentage points were seen in the proportion of Coaches in the Administration and Support, Professional, Scientific and Technical, Finance and Insurance industries.

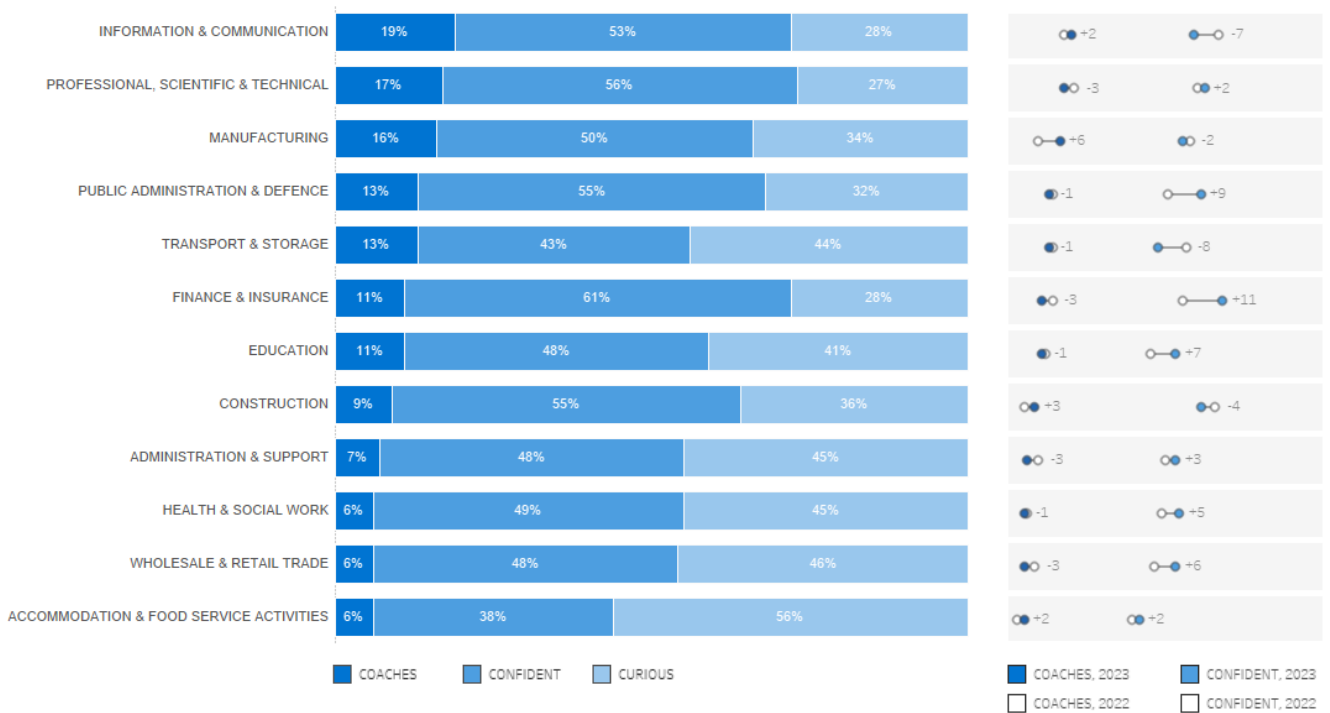


FIGURE 4: DATA LITERACY PROFILES BY INDUSTRY



50% need help identifying problems using data.

AN OCCUPATION PERSPECTIVE

Managers and Professionals continue to report the greatest proportion of Coaches at 17% and 13% respectively, compared to Clerical Support Workers (4%) and Services and Sales Workers (4%).

There was very little change in the proportion of Coaches across all occupations, with Managers, Technicians and Associate Professionals and Clerical Support Workers each recording a decline of one percentage point when compared to the previous study.

Managers, Sales and Service Workers and Professionals each recorded some growth in the Confident cohort; with increases of eight, three and two percentage points respectively.

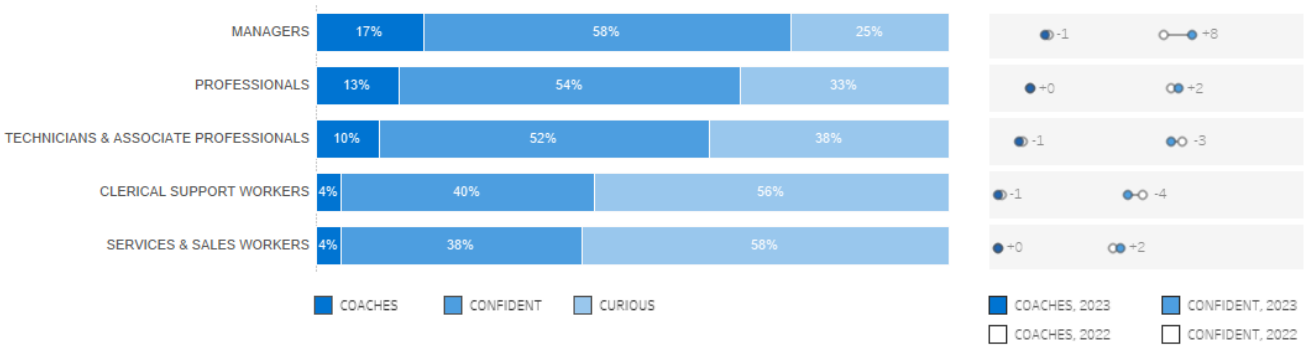


FIGURE 5: DATA LITERACY PROFILES BY OCCUPATION



19% can help their peers with data interpretation.

WHAT DOES THIS ALL MEAN?

This study reflects the continued improvement in data literacy competencies across all domains, however, there is still a significant gap between the number of Coaches and the Curious.

Whilst the 2023 study found only a small increase in the proportion of Coaches, the marked increase in the Confident cohort is a positive sign. By creating more opportunities for the Confident to share their expertise with others, we can nurture them into the Coach cohort, building additional capability to instruct and lead the Curious.

The good news is we're heading in the right direction, now it's time to pick up the pace!

WHERE TO FROM HERE?

The Global Data Literacy Benchmark allows organisations from any industry to compare themselves to a global benchmark of data literacy competency levels and understand the landscape in which they operate.

Data To The People is committed to completing this study on an annual basis to monitor levels of data literacy across the globe, providing organisations with an accurate understanding of their competitive environment.

The Databilities® framework provides an opportunity for Organisations to measure, map and develop data literacy competencies within their workforce, providing further direction for those looking to meet and exceed their regional, industry and occupational benchmarks.



ABOUT US

Data To The People are recognised global experts and industry leaders in building and nurturing data literacy. We deliver a research-backed, scalable approach to data literacy, assisting organisations to measure, map and develop data literacy across their entire workforce.

Our proprietary Databilities® framework means we're uniquely placed to help organisations understand how they measure up against competitors, other businesses in the region and different occupations.

Data To The People is proud to provide organisations with specific benchmarks and assessment tools that are relevant and useful to them.

For more information and to discuss how we can support you, contact us at info@datatothepeople.org or visit www.datatothepeople.org.

INDUSTRY BENCHMARKS

Manufacturing

Includes manufacture of food products, beverages, tobacco products, textiles, wearing apparel, leather products, wood products, paper products, printing and reproduction of recorded media, chemical products, pharmaceuticals, medicinal products, rubber and plastic products, non-metallic mineral products, basic metals, fabricated metal products, computer, electronic and optical products, electrical equipment, machinery and equipment, motor vehicles, trailers and semi-trailers, other transport equipment, repair and installation of machinery and equipment. 19,000+ data points.

Construction

Includes construction of buildings, civil engineering, specialised construction activities. 9,500+ data points.

Wholesale and Retail Trade

Includes wholesale and retail trade, and repair of motor vehicles and motorcycles. 9,000+ data points.

Transport and Storage

Includes land transport and transport via pipelines, water transport, air transport, warehousing and support activities for transportation, postal and courier activities. 5,000+ data points.

Accommodation and Food Service Activities

Includes accommodation and food and beverage service activities. 5,500+ data points.

Information and Communication

Includes publishing activities, motion picture, video and television programme production, sound recording and music publishing activities, programming and broadcasting activities, telecommunications, computer programming, consultancy and related activities, information service activities. 16,500+ data points.

Finance and Insurance

Includes financial service activities, insurance, reinsurance and pension funding, and activities auxiliary to financial service and insurance activities. 12,500+ data points.

Professional, Scientific and Technical Activities

Includes science and engineering professionals, health professionals, teaching professionals, business and administration professionals, information and communication technology professionals, legal, social and cultural professionals. 12,500+ data points.

Administrative and Support Service Activities

Includes rental and leasing activities, employment activities, travel agency, tour operator, reservation service and related activities, security and investigation activities, services to buildings and landscape activities, office administration, office support and other business support activities. 8,500+ data points.

Public Administration and Defence

Includes public administration and defence. 5,500+ data points.

Education

Includes primary, secondary and tertiary education. 14,500+ data points.

Health and Social Work

Includes provision of health and social work activities. Activities include health care provided by trained medical professionals in hospitals and other facilities, other residential care activities that still involve a degree of health care activities, and social work activities without any involvement of health care professionals. 14,500+ data points.

OCCUPATION BENCHMARKS

Managers

Includes chief executives, senior officials and legislators, administrative and commercial managers, production and specialised services managers, hospitality, retail and other services managers. 45,000+ data points.

Professionals

Includes science and engineering professionals, health professionals, teaching professionals, business and administration professionals, information and communication technology professionals, legal, social and cultural professionals. 45,000+ data points.

Clerical Support Workers

Includes general and keyboard clerks, customer services clerks, numerical and material recording clerks, other clerical support workers. 21,000+ data points.

Services and Sales Workers

Includes personal services workers, sales workers, personal care workers, protective services workers. 19,500+ data points.

Technicians and Associate Professionals

Includes science and engineering associate professionals, health associates, business and administration, legal, social, cultural and related associate professionals, and information and communications technicians. 15,500+ data points.

REGIONAL BENCHMARKS

Australia

35,000+ data points.

United Kingdom

35,000+ data points.

Canada

35,000+ data points.

United States of America

35,000+ data points.

India

35,000+ data points.

Singapore

10,000+ data points.