The Department of Jobs, Precincts and Regions’ latest information and communication technology (ICT) survey indicates Victoria’s ICT industry continues to grow and businesses have a positive outlook.

19,941
Victorian ICT businesses

139,100
People employed by the Victorian ICT industry

$38.4 billion
Annual revenue of ICT businesses operating in Victoria

$2.4 billion
Annual international revenue of Victorian headquartered ICT businesses

Employment

Employment within the Victorian ICT industry continues to grow and at 139,100 people, represents a 46 per cent increase since 2006.

Approximately 32 per cent of staff in Victorian ICT businesses in 2018 were female (up two per cent on 2017). In the same period, over a quarter (27 per cent) of all employees were employed by businesses providing telecommunications services and almost a fifth (18 per cent) were employed by businesses in software and digital content development and installation.

---

1 ABS cat.no. 6291.0.55.003 – Labour Force, Australia (12 months to May 2019). Refers to all employees (regardless of occupation type) of select businesses categorised as “ICT” businesses under the ANZSIC system. Includes full and part time employees.
3 Ibid.
4 ABS cat.no. 6291.0.55.003 – Labour Force, Australia (12 months to May 2019).
ICT occupations

People employed within “ICT occupations” work across all industries of the economy. As of December 2018, there were approximately 202,500 Victorians employed in “ICT occupations” across the Victorian economy. Approximately 43 per cent (or 88,256) of Victorians in ICT occupations are employed within the ICT industry directly. Small businesses within the ICT industry had the highest proportion of workers in ICT occupations (76 per cent) whilst large businesses had the lowest (53 per cent).

Of the ICT sub-industries, businesses providing computer hardware maintenance and consulting services had the highest proportion of workers in ICT occupations (91 per cent) whilst computer software publishing businesses had the lowest (62 per cent).

The distribution of workers in ICT occupations across all non-ICT industries is unknown.

ICT occupations within the ICT industry and across the economy

Note: The distribution of ICT occupations across all non-ICT industries (114,244) is unknown. As such, the number of Victorians employed in ICT occupations across all non-ICT industries indicated, are for illustrative purposes only.

---

6 Victorian ICT Industry Survey 2019. “ICT occupations” are those that require specialist digital technology skills or knowledge such as software engineers, data analysts, cloud specialists and ICT security specialists. “Non-ICT occupations” are all other occupations that do not require specialist digital technology skills or knowledge such as administrative, in house legal and marketing staff. Prior to 2019, there was a lack of insight as to the proportion of ICT and non-ICT occupations within the ICT industry.

7 ABS cat.no. 6291.0.55.003 – Labour Force, Australia (12 months to May 2019).


9 Ibid.

10 Ibid.
ICT business

As at June 2018, there were approximately 19,941 ICT businesses in Victoria, representing 29 per cent of Australian ICT businesses.\footnote{ABS cat.no. 8165.0 – Counts of Australian Businesses, including Entries and Exits, June 2014 to June 2018.}

In 2018, around 95 per cent of Victorian ICT businesses were small businesses (less than 20 employees) and these businesses employed 40 per cent of the total ICT industry workforce.\footnote{ABS cat.no. 8165.0 – Counts of Australian Businesses, including Entries and Exits, June 2014 to June 2018; and Victorian ICT Industry Survey 2019.}

The remaining five per cent of ICT businesses were either medium (20–99 employees) or large (100 or more) and these accounted for 60 per cent of total industry employment.\footnote{Ibid.}

\begin{itemize}
  \item Small (<20 employees)
  \item Medium (20–99 employees)
  \item Large (100+ employees)
\end{itemize}

ICT industry revenue

In 2018, the Victorian ICT industry generated revenue of around $38.4 billion, representing annual growth of approximately four per cent from the first industry survey in October 2006, or 1.5 per cent per annum real growth adjusted for inflation.\footnote{Victorian ICT Industry Survey 2019. Refers to total revenue generated in calendar year 2018.}

The sources of revenue included:

\begin{itemize}
  \item $30.3 billion from Victorian headquartered ICT businesses
  \item $1.6 billion from Victorian operations of ICT businesses headquartered interstate, and
  \item $6.5 billion from Victorian operations of ICT businesses headquartered overseas.
\end{itemize}

Around 44 per cent of all ICT revenue was derived from the telecommunications services sub-industry.\footnote{Ibid.}

\begin{itemize}
  \item Interstate, $1.6 billion
  \item Overseas, $6.5 billion
  \item Victoria, $30.3 billion
\end{itemize}
Annual Victorian ICT industry revenue by sub-industry 2018

<table>
<thead>
<tr>
<th>Industry</th>
<th>Revenue (million)</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications services</td>
<td>$16,990</td>
<td>44%</td>
</tr>
<tr>
<td>Computer software consulting</td>
<td>$7,370</td>
<td>19%</td>
</tr>
<tr>
<td>Software/digital content development/installation</td>
<td>$4,130</td>
<td>11%</td>
</tr>
<tr>
<td>ICT infrastructure services</td>
<td>$2,850</td>
<td>7%</td>
</tr>
<tr>
<td>Wholesaling – ICT goods</td>
<td>$1,770</td>
<td>5%</td>
</tr>
<tr>
<td>Internet and web design and consulting</td>
<td>$1,670</td>
<td>4%</td>
</tr>
<tr>
<td>Computer software publishing</td>
<td>$870</td>
<td>2%</td>
</tr>
<tr>
<td>Systems analysis, computer programming</td>
<td>$810</td>
<td>2%</td>
</tr>
<tr>
<td>Manufacturing – ICT equipment</td>
<td>$620</td>
<td>2%</td>
</tr>
<tr>
<td>Internet publishing</td>
<td>$560</td>
<td>1%</td>
</tr>
<tr>
<td>Internet and data services</td>
<td>$490</td>
<td>1%</td>
</tr>
<tr>
<td>Computer hardware maintenance and consulting</td>
<td>$290</td>
<td>1%</td>
</tr>
</tbody>
</table>

Large ICT businesses accounted for $276 billion of total revenue or 72 per cent (consistent with 2017).[^19]

Medium-sized ICT businesses accounted for $2.9 billion of annual revenue or eight per cent (up two per cent on 2017) and small ICT businesses accounted for $7.9 billion, or 20 per cent (down two per cent on 2017).[^20]

---

Overseas revenue and exports

In 2018, Victorian headquartered ICT businesses had annual international revenues of $2.4 billion from:
- exports of ICT equipment and services ($1.6 billion); and
- offshore operations ($0.8 billion), which represents six per cent of total industry revenue.[^21]

Around 26 per cent of ICT businesses in Victoria reported that they regularly export ICT products and services. Four major geographic and economic regions stood out as export destinations: North America, South East Asia, Western Europe, and Oceania and the Pacific Islands.[^22]

New Zealand was identified as the premier export destination (by value of exports) followed by the United States of America, United Kingdom, Singapore and Malaysia.[^23]

---

Profitability

In 2019, approximately 53 per cent of ICT businesses reported that they achieved their profit expectations in the previous year, the lowest result since 2014.[^24]

---

ICT businesses whose profit met expectations 2007-2019

![Graph showing the percentage of ICT businesses whose profit met expectations from 2007 to 2019.](image)

[^18]: Ibid.
[^19]: Ibid.
[^20]: Ibid.
[^21]: Ibid.
[^22]: Ibid.
[^23]: Ibid.
[^24]: Ibid.
Research and development

In 2019, Victorian ICT businesses reported they spend around 14 per cent of gross revenues on R&D, consistent with that recorded over the 2017 and 2018 surveys.26

University ICT enrolments and graduates

In 2018, there were 39,568 enrolments in university ICT courses in Victoria, representing 40 per cent of national enrolments (a 40 per cent increase over 2017), the highest of any state in Australia.27 Victoria also produced more university ICT graduates than any other Australian state (35 per cent).28

ICT industry research

Industry research conducted in March 2019 captured information from 256 Victorian ICT businesses about their employment profile, revenues, products and services, operations, export activity and innovation.

Findings are informed estimates only, formulated either directly through survey responses, or weighted with data from the Australian Bureau of Statistics and other industry sources.

26 Ibid.

Disclaimer
The information contained in this report is provided for general guidance and assistance only and is not intended as advice. You should make your own enquiries as to the appropriateness and suitability of the information provided.

While every effort has been made to ensure the currency, accuracy or completeness of the content, we endeavour to keep the content relevant and up to date and reserve the right to make changes as required. The Victorian Government, authors and presenters do not accept any liability to any person for the information (or the use of the information) which is provided or referred to in the report.

Authorised by the Victorian Government Department of Jobs, Precincts and Regions

121 Exhibition Street, Melbourne, Victoria 3000
Telephone (03) 9651 9999
November 2019
© Copyright State of Victoria 2019

Except for any logos, emblems, trademarks, artwork and photography this document is made available under the terms of the Creative Commons Attribution 3.0 Australia license.

This document is also available in an accessible format at djpr.vic.gov.au/priority-industries-sectors/digital-technologies