Sectoral Profile

Information and Culture

Ontario

2017 - 2019

Sectoral Profiles provide an overview of recent labour market developments and outlooks for some of the key industries in various regions of the country.

NEW TECHNOLOGIES CHALLENGE THE INFORMATION AND CULTURAL INDUSTRIES SECTOR

- Employment in the information and cultural industries (IC) sector has declined over the last decade
- The proliferation of new technologies is changing the sector, impacting each industry in different ways
- Employment growth is likely to be challenged in certain industries, such as print media publishing, sound recording, broadcasting, and telecommunications
- IC sector employment is expected to decline by 2.0% over the 2017 to 2019 period

The information and cultural industries (IC) sector is comprised of establishments who are primarily engaged in information publishing, motion picture and sound recording, broadcasting, telecommunications, and data processing, hosting and related services. Although the IC sector is comprised of a diverse group of industries, one commonality is that they all create and distribute copyrighted material.[1] In addition, almost all of the industries in the IC sector are supported by public funding from all levels of government, including subsidies, loans, and tax-based credits.[2]

In 2016, the IC sector employed about 147,600 people.[3] Between 2007 and 2016, employment shrank by 20,900 (-12.4%).[4] Even with this decline in employment, the unemployment rate, at 5.6% in 2016, was lower than the industrial average (6.5%).[5] As of 2016, almost half (47.2%) of the IC sector's employment was broadcasting and telecommunications.[6] Similarly, over half (51.9%) of the IC sector's GDP was contributed by the telecommunications industry in 2016.[7] In 2016, the IC sector made up 3.5% of Ontario's total GDP. Over the last decade, 2007 to 2016, IC GDP grew by 6.8%, versus 13.2% for Ontario's economy as a whole.[8] Most of this growth was in the software publishers industry (+46.8%), which is now the second-largest industry in the IC sector by GDP, after telecommunications.

The proliferation of new technologies is transforming the IC sector. Due to the range of impacts that technology is having on the various subsector within the IC sector, the discussion below is broken down by subindustry.

Publishing industries – *Digitization slows demand for print media, but boosts software publishing*

The digitization of news and the rising popularity of online media have dampened print media industry growth.[9] Employment in the print media publishing industry group has been trending downward over the past decade, declining by 37.8% between 2007 and 2016.[10] In addition, print media publishing GDP declined by 43.5% during the same time frame.[11] The prevalence and popularity of free online content has negatively affected paid circulation of print materials.[12] In addition, as a result of lower readership, businesses are allocating fewer dollars to advertising space in print media.[13,14] Historically, the industry group relied on advertising revenue.[15] To offset the loss in circulation and advertising revenue, print publishers have attempted to monetize online content by offering premium content, such as select news articles, behind a paywall. Despite these attempts, free content continues to be popular. Although couriers (NOC 1513), who deliver print media, are likely to be affected by this trend, certain occupations, such as computer programmers and interactive media develops (NOC 2174), are likely to benefit from the growth of online content.

In contrast to the print media industry, the software publishers industry is quickly growing; employment increased by 42.6% between 2007 and 2016. In 2016, although less than a third of the publishing subsector's employment came from the software industry group,[16] the software publishing industry contributed 65.6% of the publishing subsector's total GDP.[17] In addition, although over the 2007 to 2016 period, the publishing industry group's GDP shrank, the software publishers group's GDP grew by 46.8% in real terms.[18,19]

Part of this rise in software publishing is due to the expansion of personal devices and a preference for interactive media, such as 'apps' and video games.[20] For example, to meet this demand, between 2013 and 2015, gross expenditures in the video game industry in Ontario grew by nearly 98%.[21] The rise of 'big data' may also drive industry growth. Businesses in various industries are collecting data from many sources, including credit cards, mobile, and cloud platforms. Thus, they are requesting analytics software which is helping fuel industry growth.[22] The 'big data' market is expected to nearly double by 2020 as investments in data services and infrastructure increase.[23]

Global demand is also driving industry growth; a large portion of Ontario's software is exported. For example, in 2015, according to an ESAC Industry Survey, video gaming companies reported 90% of their total revenue came from export sales.[24] The United States accounted for the largest share of export revenue. Although fueling demand for software, the access to a global marketplace also adds challenges, including piracy and international competition.

Motion picture and sound recording industries – *Streaming services challenge traditional offerings*

Over the past decade, the expansion of broadband Internet and digital technology has also sparked a change in the consumption of television, film, and music. As households adopt personal entertainment devices, new platforms to download or stream online content, such as Netflix, Youtube, and Spotify, continue to gain popularity. More consumers listen to licensed music through ad-supported free streaming sites, whereas CD sales have slumped. Despite these changes, box office receipts, refreshments, and advertisement revenue streams for cinemas continue to grow.[25,26] Industry growth is supported by foreign production spending as well. Ontario is home to a number of internationally-known film festivals, including the Toronto International Film Festival (TIFF), which garners worldwide attention.[27,28,29] In 2013, the economic activity generated by TIFF was estimated to be $189 million.[30]

Ontario is also the third largest production location in North America and attracts many projects from California and New York.[31,32,33,34] The province has an intentional reputation for high-quality post-production and visual effects.[35] In addition, the depreciating CAD and the $500 million agreement with Netflix to set up a

Netflix Canada production house may also attract more projects to Ontario.[36] Countering these positive growth trends is competition with other jurisdictions. California recently increased tax credits in response to various states offering more competitive tax incentives, which may affect the relative affordability of Ontario for television and video production.[37,38,39]

As a result of high cinema attendance and Ontario's burgeoning production scene, the motion picture and video industries posted employment growth of 37.0% over the last decade[40] and industry GDP grew by 35.4% during the same time frame.[41]

Broadcasting industries – *Innovative Internet-service providers elbow out conventional broadcasters*

Online streaming has also affected broadcasters.[42] Between 2007 and 2016, employment in broadcasting (excluding Internet) decreased by 27.2% and industry GDP was stagnant.[43] In Canada, the broadcasting subsector is fairly mature, with high penetration and limited opportunities for growth via new customers.[44] Private conventional broadcasters have seen their share of total TV revenue shrink from $16.2 billion in 2014 to $16 billion in 2016.[45] Part of this decline in conventional television revenue is due to the increased popularity of Internet-based service providers, such as Netflix.[46] In 2015, nearly half of English-speaking Canadians watched Netflix.[47] Although broadcasters have attempted to create their own streaming services, this has so far been unsuccessful.[48] In addition, Canadian networks face competition from American broadcasters. As of 2018, Canadians will be able to stream CBS TV shows on the internet.[49] Historically, Canadian broadcasters in English-speaking Canada broadcasted American content while collecting revenue on Canadian commercials. Should the decision to stream American content become the norm, it could mean the end of the Canadian broadcast licensing model.[50] Like the publishing industry, advertising is a large source of revenues for broadcasters. In Canada, revenue has continued to fall since 2011 while programming expenses increase.[51] In 2014, profits declined by 22%.[52]

Telecommunications industries – *Businesses shift focuses from legacy services to newer technologies*

Technology is also shaping the growth of the telecommunications subsector. Over the last decade, employment in telecommunications has declined by 19.0%.[53] In Canada, revenues from newer services, such as wireless telephones and Internet have been increasing whereas revenue for older services, such wireline voice, have declined.[54] Mobile phones are prevalent and are expected to dominate usage. As of 2016, more homes have mobile phones than landlines.[55] Furthermore, as businesses across Canada adopt mobile payment technology and other mobile capabilities, this may drive demand for telecommunications services. The development of e-health technologies and cloud computing are also likely to support the growth of the telecommunications industry.

Data processing, hosting, and related services and other information services industries – *The popularity of digital technology offers new opportunities for libraries*

Advances in technology have offered challenges and opportunities to the information services and data processing services industries subsector. On the one hand, the progression of technology may have resulted in improvements in productivity, reducing the demand for labour. On the other hand, these advances may also drive demand for services, such as libraries. Although the usage of academic libraries has declined, public library usage is up.[56] Many libraries and archives are adopting new technologies, such as 3D printing and new information and media formats, to draw in the public. Nevertheless, over the last decade industry employment and GDP declined.[57,58]

Over the forecast period, employment prospects in this industry may be improved as the federal government focuses their efforts on supporting the transition to digital content. For example, digital periodicals will now be eligible to receive funding from the Canadian Periodical Fund and a partnership between Ryerson University and Facebook will endeavour to create a digital news incubator.[59]

Sector Outlook

The IC sector is expected to decline by 2.0% over the 2017 to 2019 period. The introduction of new technologies may continue to challenge some industries, such as print media publishing, sound recording, broadcasting, and telecommunications. Thus, we expect declines in employment over the forecast period.

Regional trends in the IC Sector

Over the last five years broadcasting and news media publishing companies across the province have been impacted by the adoption of technologies, including the big three telecom companies[60,61,62,63] and large news media companies.[64,65,66] Despite this challenge, the expansion of broadband internet in 300 southwestern Ontario communities may offset some employment declines over the forecast period.[67] In addition, telecommunications companies who provide newer services, such as mobile phones, may offer employment growth as well.

Although the **Toronto** ER hosts a large number of telecommunications and broadcasting headquarters, ongoing structural changes do not bode well for these industries. The ER accounts for an above-average share of the larger newspaper, periodical, book, and directory publishers in Ontario, but the reorganisation of the industry may reduce opportunities in the forecast period.

On the other hand, Toronto has a strong presence of financial institutions and information technology firms, which may offer opportunities for employment growth in software publishing and data processing, hosting, and related services. The financial services industry manages large amounts of sensitive data, so with the increasing use of financial technology (FinTech) and the demand for security, employment growth may be necessary to meet these business needs.

Toronto is one of the largest screen-based production centres in North America and is the location of Canadian operations for a number of record labels. The region also benefits from hosting the Toronto International Film Festival. Thus, the motion picture and sound recording industries are likely to remain a bright spot for the IC Sector in the economic region.[68]

The **Ottawa** ER is has a large number of high technology firms and a large proportion of software publishing businesses.[69] Business expansions and investments, alongside the recent opening of Ottawa's Innovation Centre at Bayview Yards, bodes well industry growth over the forecast period.[70,71,72,73,74,75]

In the **Northern** ERs, a number of picture deals and ongoing public funding are likely to support employment prospects over the forecast period in the film industry.[76,77,78,79] In addition, the Ontario Government and the Governments of Canada are investing in broadband infrastructure across the **Northeastern** and **Muskoka—Kawarthas** ERs, which may eventually result in employment opportunities in the two ERs.[80,81]

The **Kitchener—Waterloo—Barrie** and the **Hamilton—Niagara** ERs both have growing technology bases which could lend employment growth to the IC sector over the forecast period.[82,83,84,85]

Note: *In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.*

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