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ONTARIO CREATES

INTERACTIVE INDUSTRY PROFILE

BOOK FILM & TV INTERACTIVE MAGAZINE MUSIC

INTRODUCTION

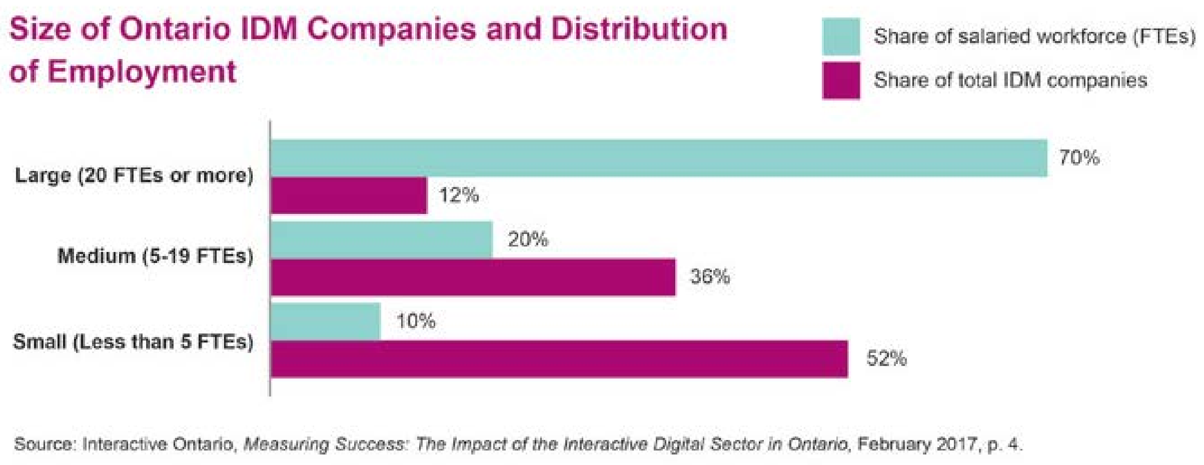
The term interactive digital media (IDM) accounts for a range of digital content and experiences available through a variety of digital platforms such as PCs, mobile devices and game consoles. IDM in Canada is a growth industry that is quickly changing, driven by shifts in consumer behaviour and technology. IDM content includes but is not limited to video games, cross-platform entertainment, virtual and augmented reality content, web series, and e-learning and training products.

INDUSTRY SIZE AND ECONOMIC IMPACT[1]

REVENUES, PRODUCTION VOLUME, AND EMPLOYMENT

- According to Statistics Canada, interactive media products generated $5.4 billion in gross domestic product (GDP) and more than 45,180 jobs across Canada in 2016. Ontario's share was nearly $2.7 billion in GDP and almost 20,000 jobs.[2]
- A 2017 study conducted by Interactive Ontario, found that there are 877 IDM companies in Ontario, and that the IDM industry in Ontario employs approximately 10,900 full-time equivalent (FTE) employees, with 70% of employment attributable to the largest 12% of IDM firms, those employing 20 FTEs or more. Ontario's IDM industry generated an estimated $1.27 billion in revenues and contributed an estimated $1.4 billion to provincial GDP in 2015.[3]
- Canada exports a significant volume of interactive media. In 2016, Canada exported an estimated $1.09 billion in interactive media products, primarily to the United States ($401 million), as well as China ($140 million in exports) and the United Kingdom ($45 million in exports).[4]
- According to the most recent available data, Ontario exports $654.8 million per year in interactive media products to other Canadian provinces.[5]
- The digital media components of traditional broadcast television productions are referred to as convergent digital media (CDM). Project types include web series, rich interactive media, video, games, and social media. The Canadian Media Producers Association (CMPA)'s *Profile 2017* estimated the Canadian CDM industry's production volume in 2016/17 at $68.9 million, up 5% from 2015/16. In 2016/17, there were 264 CDM projects produced, 19% fewer than the previous fiscal year, but average project budgets grew 30% to $261,000. (Web series budgets were on average nearly 3 times the size of any other CDM project type). In 2016/17, convergent digital media generated an estimated 1,070 FTEs.[6]

- Virtual reality (VR) includes a range of immersive experiences from 360 degree "spherical" video on a laptop, desktop or mobile device, to mobile VR via a head mounted display, to a PC based headset experience. *Pulse on VR*, a recent study of the VR landscape in Canada, found that most companies engaged in VR product and service development had this as one of several lines of business. The over 200 companies that responded to the study's survey reported over 1,300 VR-focused employees (out of a total of over 14,000 employees). Ontario had the largest net number of VR employees, while Québec had the largest share of employees focused on VR at 30%.[7]



VIDEOGAME INDUSTRY

- In 2018, worldwide digital games revenue was up 11% year-over-year to US $109.8B. Mobile games made up the greatest proportion of revenues, and the free-to-play market was worth 80% of the total market at US $87.7B. Consumers in Asia contributed 62% of revenues. Free-to-play console games rose to prominence in 2018 with the explosion in popularity of *Fortnite*, which had revenues grow more than four-fold year-over-year.[8]

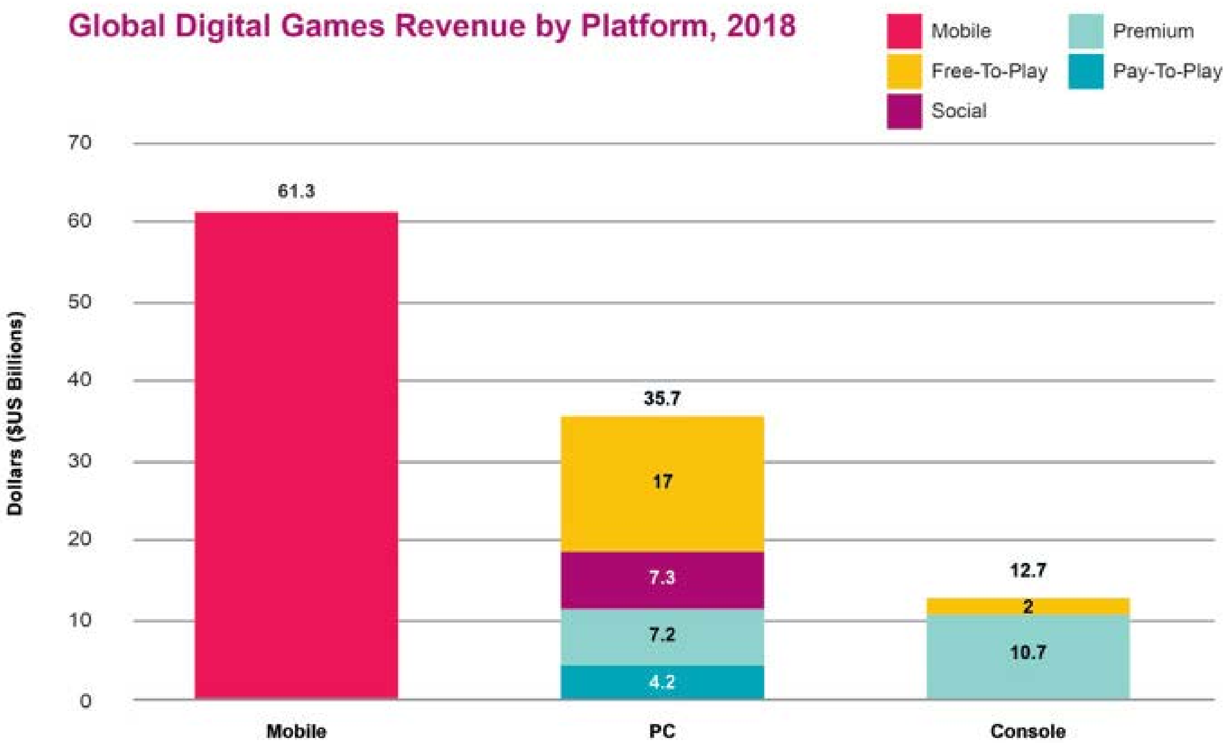
- With a videogame market valued at US $2 billion in 2017, Canada is currently in 8th position among countries worldwide for video games consumer market revenue. The United States, China and Japan have substantial leads compared to other jurisdictions, with the U.S. market alone worth in excess of US $23 billion in 2017.[9]

- A 2017 report by the Entertainment Software Association of Canada (ESAC) estimates that Canada's videogame industry employs 21,700 FTEs directly, as well as generating an additional 19,000 FTEs in the wider economy. The national videogame industry spent $2.6 billion in 2017, an increase of 8% from 2015. As of 2017, the average annual salary of a Canadian videogame worker was $77,300, up 8% from 2015. As measured by number of employees, Ontario's videogame industry is the third largest in the country after Quebec and British Columbia, with 171 firms directly employing 3,800 people.[10]

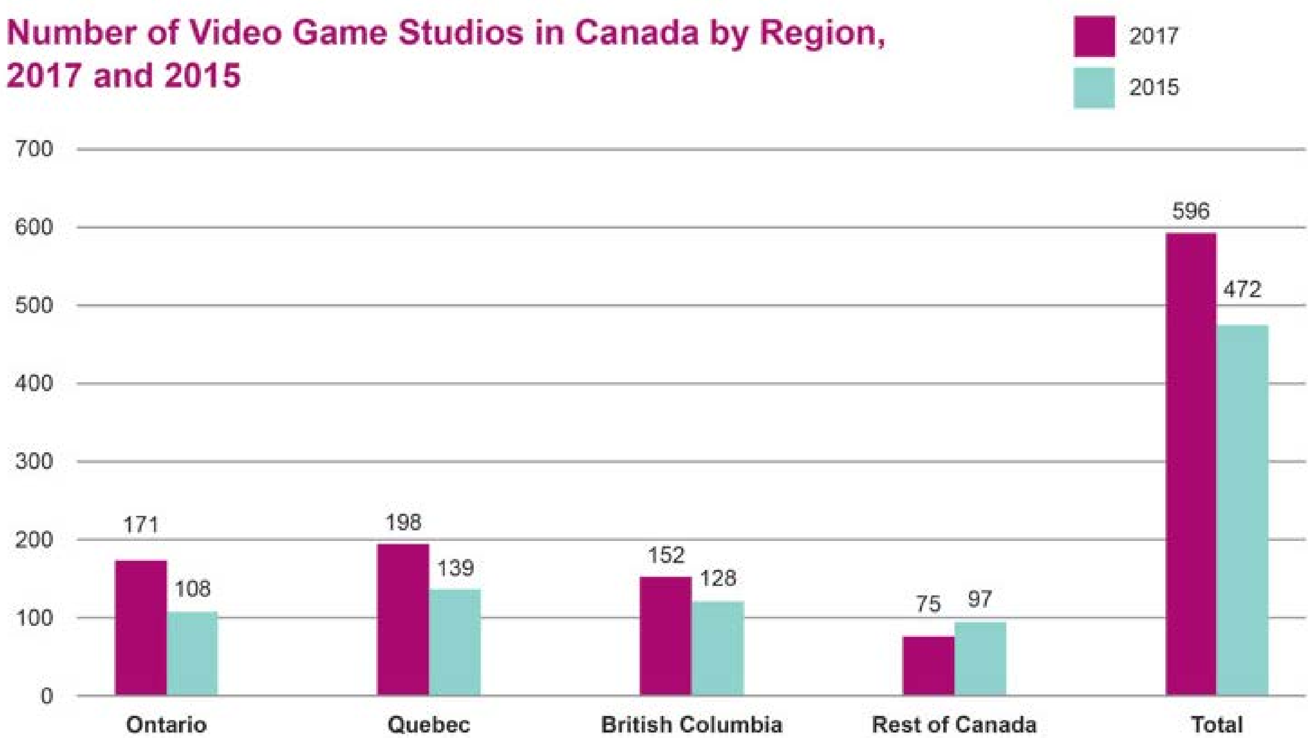
- Canada's videogame industry consists of approximately 600 studios.[11] Canada is home to several top international videogame developers, including Ubisoft with locations in Montreal, Quebec City, Halifax, and Toronto, Electronic Arts in Burnaby, Montreal, Kitchener, Charlottetown and Edmonton and Gameloft in Montreal and Toronto. Social game publisher Zynga and Rockstar Games each have studios in Toronto.

- Canadian game companies' revenues are highly dependent on export. In 2017, 75% of all revenue generated by video game companies in Canada was attributable to other markets, primarily the U.S. (46% of export revenue) and Europe (42% of export revenue).[12]

- In 2017, the Hand Eye Society launched the Toronto Videogame Database, a resource which lists over 1,000 games made in Toronto and the surrounding area over the last 20 years. A total of 236 creators (including developers, publishers and others) were identified, each of which had created an average of 3.43 games. Almost two-thirds of games were for PC, 29% for mobile devices and 11% for consoles.[13]



Source: Superdata, *Year in Review 2018*, p.7.



Source: Entertainment Software Association of Canada (ESAC), *Canada's Video Game Industry in 2017*, September 2017, p.7.

CONSUMER MARKET

- According to the Entertainment Software Association of Canada (ESAC)'s *Essential Facts 2018*, 61% of Canadians consider themselves gamers, and 64% of Canadians have actually played games in the past month—50% of them male and 50% female, with an average age of 39.[14]
- In the 12 months prior to June 2018, Canadians spent $1.35 billion on online gaming subscriptions, game downloads and in game purchases, 17% of all spending on digital products. Over three-quarters of men aged 18-24 (78%) spent on these products, with an average annual spend per buyer of $380.[15]
- Gaming is a highly engaging activity, with active users playing console games an average of 51 daily minutes, and mobile games an average of 35 daily minutes. The length of mobile daily gaming sessions also increased 33% between July 2015 and March 2017.[16]
- Broadly there has been an evolution occurring from individual play to global collaborative play. There is a growing trend toward observing others playing games, both via online streaming (using platforms such as Twitch) and in person, in terms of esports spectatorship.[17] Average daily streaming hours for Twitch rose considerably between 2012 and 2017.[18] While China is the global esports leader, 16% of Canadians online 12 years and older engage in esports activities, making Canadians enthusiastic players.[19]

TRENDS AND ISSUES

GROWTH RATE AND INDUSTRY TRENDS

- The global video game and e-sports market (comprised of traditional gaming, social/casual gaming, video game advertising and e-sports revenue) was worth US $105.5 billion in 2017, and is expected to grow over the next five years at a compound annual growth rate (CAGR) of 7.3%. The Canadian video game and e-sports market is expected to grow at a 3.5% CAGR and reach US $2.4 billion by 2022.[20]
- In 2017, global traditional gaming revenue (which is made up of console and PC gaming) reached US $49.9 billion; social/casual gaming revenue (comprised of games on smartphones or tablets) was reported at US $51.7 billion; video game advertising revenue was reported at US $3.5 billion; and e-sports, the smallest category, was estimated to be worth US $620 million. Social/casual gaming revenue exceeded traditional gaming revenues globally in 2017, and is expected to exceed the former top category during the forecasted period with a 9.2% CAGR increase.[21]
- The majority of videogame advertising revenue is concentrated in five markets: US, China, UK, Japan and Germany. The reason for this is due to a combination of different attributes each market possesses: massive potential audiences (US, China, Japan), a sophisticated advertising market (US, UK Japan) and high consumer spending (US, UK, Germany).[22]
- The e-sports market has been steadily growing within Canada. In 2017, total e-sports revenue (US $11 million) had exceeded markets in Italy and Spain. Canada is also becoming a popular spot for e-sport tournaments. Both the Scotiabank Arena in Toronto (formerly known as the Air Canada Centre) and the Pacific Coliseum in Vancouver have been hosting major events the last two years. It is expected that the e-sports market will grow at a 22.7% CAGR over the next five years.[23]
- Educational and institutional markets represent a significant opportunity for interactive digital media companies. Forecasters predict the educational technology market will grow from US $17.7 billion to US $40.9 billion by 2022, growing at a compound rate of over 18% annually over the next five years. Gamification is seen as a significant component in educational technology created for classroom use, and virtual reality and augmented reality are being used in pilot education programs globally. Educational apps for children of all ages, as well as online content delivered via platforms such as YouTube have seen significant uptake. Some Canadian examples include the creators of ASAPScience and MarcoPolo Learning (Boat Rocker Media).[24]
- The advent of 5G is expected to have significant impacts on the content sector. While the first 5G networks will not be operational in Canada until after the 2021 spectrum auctions and widespread adoption is therefore several years away, the promise of the technology is to see increased speeds and data transfer rates. High-bandwidth video, VR, AR and video games are among the types of content and technology expected to benefit from 5G network deployment in the years ahead.[25]
- Augmented reality (AR) and virtual reality (VR) generated an estimated $3.9 billion globally in 2016, and Digi-Capital predicts that by 2021, AR will be worth $83 billion and VR $25 billion. Canadians are expected to spend $723 million on AR and VR products and

services in 2017, increasing to $7.1 billion by 2020.[26] China's virtual reality market holds significant potential, as does the AR/VR market in South Korea.[27]

- The global VR market is expected to grow at a CAGR of 40.4% over the next five years as VR hardware is improving, becoming more accessible, and cheaper. While at the early stages of being fully accepted by the mainstream, investments from major media and technologies will propel the industry further. It is predicted that by 2022, there will be 175.2 million headsets in circulation, and will drive total VR revenue up to US $21.2 billion. Video gaming will represent the largest segment of the market at 54.6%, and revenue from this market is expected to reach US $11.6 billion. The largest VR market is the United States, with a revenue of US $1.5 billion in 2017, which is equivalent to about 37.3% of the global VR revenue. China is the second largest market, and generated a revenue of approximately US $728 million in 2017. The US market is expected to grow at 33.7% CAGR over the forecasted period while China is expected to expand at 44.5% CAGR.[28]
- VR video represents a small portion of the market, with a 2017 totalled revenue at approximately US $1.5 billion. Despite major distributors and broadcasters remaining cautious of VR, many other companies such as Time Warner, Viacom and Fox Sports have begun or have already invested in VR technology.[29]
- A key predicted growth area for virtual reality is the location-based entertainment (LBE) market. LBE centres in places such as movie theatres, offer consumers the opportunity to experience virtual reality in a social context and at lower up front cost. For producers this model allows for reaching a potential broader audience at a lower cost due to the ability to centralize marketing efforts. In September 2018, Cineplex announced its partnership with (and acquisition of shares of) VRstudios, and 30-40 VR attractions are scheduled to open through to end of 2021 in movie theatres and shopping centres.[30]
- Twenty-nine per cent (29%) of respondents to a recent survey of interactive digital media companies were developing for VR platforms. Some of the Ontario companies working in this space include Secret Location, CFC Media Lab, and Occupied VR. A small number of companies are exclusively focused on creating VR products and services, however the majority of firms are adding this capacity to their range of digital media offerings. Many companies' most advanced VR products were still in a prototype stage as of 2017.[31]
- Several companies, such as Ontario magazine media firms, are using off-the-shelf augmented reality (AR) products such as Layar and Blippar in both editorial and advertising capacities (e.g. *Brainspace Magazine*, *Cottage Life*, *House & Home*). Game and audiovisual production companies have created AR products with a site specific component in a museum/gallery setting (e.g. Xenophile Media, Sinking Ship) or standalone applications (Alex Mayhew, Big Blue Bubble).
- Web series are defined as episodic entertainment delivered via online distribution platforms. In 2013, Ontario-based independent web series creators collectively generated $3.14 million in web series revenue, and the total volume of production budgets the same year was $7.45 million. About 24% of creators report working exclusively in web series, while the majority have a background in traditional film and television production and continue to work in these other platforms in addition to web series. Comedy was the most popular genre for web series, followed by drama.[32]
- Most digital game company revenue comes from sales of game units, intercompany/transfer pricing, and in-app or in-game sales.[33] The proportion of revenue attributable to physical retail has declined significantly in recent years, from 62% in 2013 to just 13% in 2015, while direct-to-consumer digital sales rose in relative importance to 38% of revenue from 5% over the same period.[34]
- New monetization models have been emerging for interactive digital media in tandem with growth of new technologies and platforms, from consumer-paid subscription models to content funded by brands. The videogame industry in particular has early adopters experimenting with models. In 2018, *Fortnite* had a strong influence on monetization approaches with its use of the battle pass as a core monetization strategy. The pass is a time-limited in-game purchase that rewards players with digital items when challenges are completed. Game subscription packages are also gaining significant ground.[35]
- A Canada Media Fund (CMF) International Market Series report on India discusses opportunities for content producers including video game producers. Some key indicators of noteworthy growth in that market: an expectation of the video game market doubling by 2020, and a ninefold increase, since 2014, in time spent watching online videos.[36] Other CMF studies looking at opportunities for video game producers abroad include those focusing on Mexico, South America and South Africa.[37]

GLOBAL AND DOMESTIC ISSUES

- Canada reached an agreement with the United States and Mexico on a new free trade agreement, known as the Canada-United States-

Mexico Agreement (CUSMA). The agreement is expected to be ratified and implemented shortly. The agreement includes provisions around digital trade, intellectual property, small-and medium-sized businesses, and competition policy. The cultural exemption was preserved in negotiations.[38]

- In September 2018, the federal government announced results of Economic Strategy Tables set up by Innovation Science and Economic Development Canada, including one focused on digital industries. Made up of industry representatives, the Tables had been charged with setting growth targets and road maps for their sectors. The Digital Industries Table was chaired by Tobi Lütke, CEO of Shopify. The resulting report urges leadership around AI, scaling up businesses, with an emphasis on anchor firms (those with at least $1 billion in revenue) and calls for the federal government to modernize the SR&ED tax credit to increase support for commercialization. It also highlights the need for skilled digital talent and the urgency of increasing Canada's supply and stemming "brain drain" of tech graduates. It is stated that virtual and augmented reality could become a significant competitive advantage for Canada due to early leadership and development in VR/AR content and technology.[39]
- In June 2017, the federal government announced a new Global Talent Stream of the Temporary Foreign Worker Program as part of the Global Skills Strategy, aimed at attracting highly-skilled high-tech workers from abroad. The news was welcomed by industry groups such as the Entertainment Software Association of Canada, as the changes should allow member video game studios to attract global talent in a more efficient and timely fashion than was previously possible. In 2015, 13% of the video game work force in Canada was hired through the Temporary Foreign Worker Program.[40]
- Approximately 25% of the workforce within IDM in Ontario is female. Interactive Ontario has launched several initiatives aimed at addressing the diversity gap in the IDM industry, including the *apprenticeship* program which provided placements at leading digital media companies to diverse candidates and a *Diversity & Inclusion Toolkit*.[41]
- Canadian VR companies surveyed in the 2017 *Pulse on VR* study identified maturity of the market as the most significant challenge, followed by access to private finance and public funding.[42]
- There is currently a regulatory freeze on new game launches in China. Nonetheless, the mobile games market in Asia grew 18% year-over-year, which SuperData attributes to existing successful titles.[43]
- Teenagers are increasingly spending significant amounts of time online, a phenomenon dubbed "hyperconnectivity". Among American 13-17-year-olds, 95% own or have access to a smartphone and nearly half admit to being online "almost constantly". There is some self-awareness and concern about the situation, however, with 52% of U.S. teens saying they have taken steps to reduce the amount of time they spend on their phones, including time spent on social media (57%) and video games (58%).[44]

GOVERNMENT SUPPORT

- In 2018-19, Ontario interactive digital media producers have access to public funding through the Ontario Interactive Digital Media Tax Credit (OIDMTC) and the Ontario Creates Interactive Digital Media (IDM) Fund. Support from Ontario Creates provides opportunities for producers of interactive content to create new products, access existing and new markets and grow their business through the IDM Fund. IDM Fund programs include: Production, Concept Definition, Global Market Development, Marketing Support and Industry Development, which provides support to trade organizations for events and activities that stimulate the growth of the industry. In 2018, as part of the Industry Development program, the IDM Fund supported emerging digital companies with training activities through the IDM Fund Futures initiative.
- In launching the Creative Canada federal policy framework, the Government of Canada announced additional support for the Canada Media Fund including investing a minimum of $40 million per year in the Experimental Stream. A new Creative Export Strategy will have $125 million over 5 years allocated to expanded export opportunities for creative entrepreneurs.[45] This includes a new $7-million-per-year program, Creative Export Canada, open to all creative industry sectors including interactive digital media.

INDUSTRY RECOGNITION

Ontario is home to a thriving IDM industry that includes many independent firms creating award-winning products:

- Three games supported by the Ontario Creates Interactive Digital Media Fund were among the eight 2018 Game Developers Conference (GDC) Best in Play winners: *Light Fingers* by Numizmatic Games, Lightning Rod Games' *A Fold Apart*, and Future Immersive's VR title *Furious Seas*.

- Ontario's Sinking Ship Entertainment won a 2018 Canadian Screen Award in the category of Best Cross-Platform Project (Children and Youth), for *Odd Squad 1.5*. For the second year in a row, Digital Howard won an award for *Wynonna Earp Digital* for Best Cross-Platform Project (Fiction).
- Toronto developer Snowman's mobile game *Alto's Odyssey* won a 2018 Apple Design Award. Apple Design Awards recognize best in class apps design, innovation and technology on Apple platforms.
- Ontario virtual reality production *Enchanted Forest* (Shaftesbury VR) was featured at the Marché International des Programmes de Télévision (MIPTV) in Cannes in April 2018.

Profile current as of January 30, 2019

ENDNOTES

1 The following information on industry size, activity, revenue, and employment should be considered a snapshot of activity in the industry based on the best available information.

2 Statistics Canada, *Table 36-10-0452-01 Culture and sport indicators by domain and sub-domain, by province and territory, product perspective (x 1,000)*. (Accessed: January 30, 2019).

3 Interactive Ontario, *Measuring Success*, February 2017, pp. 3-4, 33.

4 Statistics Canada, *Table 12-10-0117-01 International trade of culture and sport products, by domain and sub-domain, and trading partner (x 1,000,000)*. (Accessed: January 30, 2019).

5 Statistics Canada, *Table 12-10-0116-01 International and inter-provincial trade of culture and sport products, by domain and sub-domain, provinces and territories (x 1,000,000)*. (Accessed: January 30, 2019). Data is for the year 2014.

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12 ibid, p. 28.

13 Hand Eye Society, *Toronto Videogame Database Report*, July 4, 2017. A prototype is available at http://tovgdb.smallcity.ca/.

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18 ibid, p. 24.

19 Solutions Research Group Consultants Inc., “Millennials Driving eSports Popularity,” June 13, 2017.

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30 CMF, *Trends Report 2019*, pp.43-44.

31 CFC Media Lab, *Pulse on VR*, pp. 5, 18; IAB, *Is Virtual the New Reality? A Market Snapshot of VR Publishing and Monetization*, September 2016; Interactive Ontario, *Measuring Success*, p. 14.

32 Independent Web Creators of Canada, *Industry Profile of the Independent Web Series Creators of Ontario*, June 23, 2014.

33 ibid, p. 25.

34 Ontario Media Development Corporation (OMDC), *State of Content Distribution*, p. 15.

35 SuperData, pp. 9, 11.

36 CMF, *Your Market Is Everywhere International Market Series: India*, 2017.

37 CMF, *Your Market Is Everywhere International Market Series Reports: Mexico*, 2017; CMF, *Your Market Is Everywhere International Market Series: South America*, 2017; CMF, *Your Market Is Everywhere International Market Series: South Africa*, 2017.

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39 Innovation, Science and Economic Development Canada (ISED), “Economic Strategy Tables,” Canada.ca; *The Innovation and Competitiveness Imperative: Seizing Opportunities for Growth* (Report of Canada’s Economic Strategy Tables: Digital Industries), September 2018.

40 Jayson Hilchie, “Attracting Foreign-born Talent Can Take Canada’s Tech Sector Global,” *Huffington Post*, October 25, 2016; Press Release, “Video game industry welcomes new Global Talent Immigration Stream,” ESAC, June 12, 2017.

41 Interactive Ontario, *Measuring Success*, pp.18, 21; Press Release, “Interactive Ontario announces diversity and inclusion initiatives,” Interactive Ontario, March 8, 2017; Interactive Ontario, *A Diversity & Inclusion Toolkit for the Interactive Digital Media Industry*, October 17, 2017.

42 CFC Media Lab, *Pulse on VR*, p.38.

43 SuperData, p. 9.

44 Pew Research Center cited in CMF, *Trends Report 2019*, p. 23.

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