Information and Communications Technology

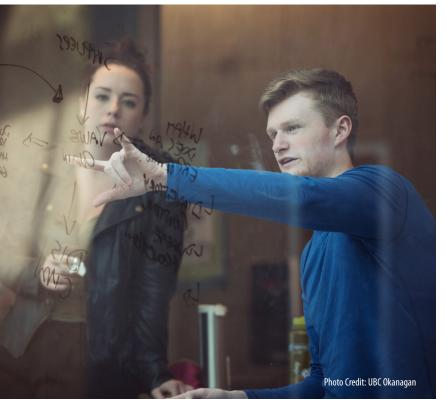
Sector Profile







Information & Communications







It's All Here Now

The Central Okanagan, with a growing population, an international airport, and a competitive housing market, is the largest trading area between Vancouver, BC and Calgary, AB, Canada. The region offers a wide variety of activities, two public post-secondary institutions and seven unique communities to explore or call home. With less traffic and a lower cost of living than major cities – in fact, the Central Okanagan was named the most Cost Competitive Region in the Pacific by KPMG in 2016 – you can spend your spare time and money on a life you enjoy. With a collective attitude and a culture that fosters entrepreneurship the possibilities are endless in the Central Okanagan. It's all here, now.

Sector Overview

The technology sector is a driving force behind the economy of Central Okanagan with an annual economic impact of \$1.67 billion for the Okanagan Valley. Advancing technologies and their swift adoption are changing businesses around the globe especially as the Information and Communications Technology Sector expands to include technology-enabled businesses. The fastest growing technology hub in BC, the Central Okanagan is home to:

- Existing essential infrastructure and connectivity
- Committed funding and support from three levels of government
- National and international connectivity (Central Okanagan is home to the 11th busiest airport in Canada, linking passengers to major hubs across the country)
- A talent pipeline fed by public post-secondary institutions and directed efforts to attract and retain top talent to the region

The region is also benefiting from two significant collaborative initiatives that are driving the sector:

- The Digital Technology Supercluster part of the Government of Canada's Innovation Supercluster Initiative investing up to \$950 million to support business-led innovation superclusters with the greatest potential to energize the economy.
- <u>Cascadia Innovation Corridor</u> the provincial partnership with the State of Washington to grow cross-border innovation in the technology sector.

¹ Source: Accelerate Okanagan, Economic Impact of the Okanagan Tech Sector: 2018

Industry Highlights

- The Okanagan Valley has 693 tech-enabled firms employing 12,474 people and a combined annual economic impact of \$1.67 billon²
- Established telecommunications infrastructure, including a dark fibre network, makes the region an attractive place to start-up, grow or relocate businesses that need to move large amounts of data
- BC ranks third in Canada in per capita venture capital investment³
- Public post-secondary R & D and support in the region has driven increased technology licenses, start-up companies formed, and patents issued
- The region benefits from funding and collaborative partnerships through initiatives like The Digital Technology Supercluster and the Cascadia Innovation Corridor

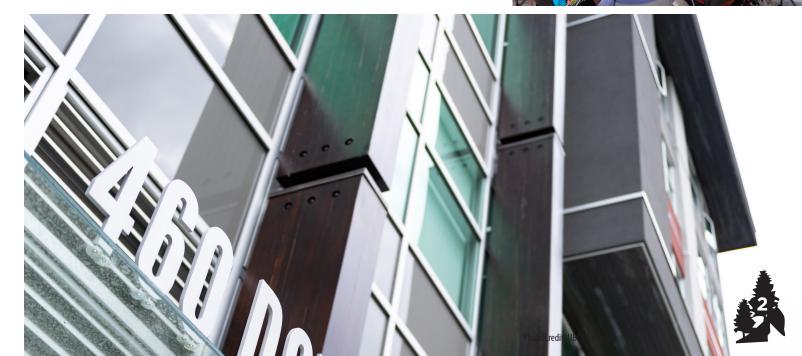
Export Values

Industry	2015 ^{r*}	2016 ^{p*}
Manufacturing	1,541	1,622
Services	12,529	12,940
Motion picture production & post-production ²	376	411
Telecommunications	4,021	4,024
Engineering services	2,523	2,546
Computer and related services	3,729	4,015
Other services	1,760	1,784
High Technology Sector Total	14,073	14,566
BC Industrial Aggregate	210,910	218,755

Source: Government of British Columbia *Chained 2007 \$ million







Accelerate Okanagan, Economic Impact of the Okanagan Tech Sector: 2018

³ Western Economic Diversification, The State of Venture Capital in Western Canada, 2018

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Employment Data

Employed Labour Force by Central Okanagan Census Sub-Division		
NAICS	Industry Description	Central Okanagan Census Division (Total)
3341	Computer and Peripheral Equipment Manufacturing	0
3342	Communications Equipment Manufacturing	10
3343	Audio and Video Equipment Manufacturing	15
3344	Semiconductor and Other Electronic Component Manufacturing	40
3346	Manufacturing and Reproducing Magnetic and Optical Media	0
4173	Computer and Communications Equipment and Supplies Merchant Wholesalers	80
5112	Software Publishers	190
517	Telecommunications	625
5182	Data Processing, Hosting, and Related Services	65
5415	Computer Systems Design and Related Services	1,240
8112	Electronic and Precision Equipment Repair and Maintenance	65
	Total	2.330

Central Okanagan	ICT
Total Businesses	497
W/O Employees	304
W/Employees	193
1-4	107
5-9	40
10-19	22
20-49	18
50-99	5
100-199	1
200-499	0
500+	0
500+	0

Source: Statistics Canada, Census 2016





Wage and Salary Information

NOC	Median Wage Thompson Okanagan	Median Wage British Columbia
2171 - Computer Engineers (Except Software)	\$38.46/HR	\$38.46/HR
2173 - Software Engineers and Designers	\$38.46/HR	\$38.46/HR
2174 - Computer Programmers and Interactive Media Developers	\$38.46/HR	\$38.46/HR
2175 - Web Designers and Developers	\$25.00/HR	\$25.00/HR
2281 - Computer Network Technicians	\$33.65/HR	\$33.65/HR
2282 - User Support Technicians	\$28.97/HR	\$28.97/HR

Source: Economic and Social Development Canada, Wage Report, 2018



Competitive Advantages

- The region was named the most Cost Competitive Region for business in the Pacific by KPMG in 2016
- Talent pipeline supported by responsive public post-secondary institutions and directed regional attraction and retention initiatives
- Proximity to and ease of travel to Vancouver (1-hour flight from YLW or 4-hour drive)
- Dark Fibre network in Kelowna
- Kelowna named the best city to open a small business by the Canadian Federation of Independent Business in 2018



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Post-Secondary Support

The <u>University of British Columbia Okanagan Campus</u> offers degrees at both the undergraduate and graduate level in Computer and Data Sciences to support the ICT field. Undergraduate degrees in Computer and Data Sciences include: Computer Science degree where students explore topics such as databases and operating systems, software engineering, security, web development, and numerical methodology and Data Science Degree providing students training in Data Science, which focuses on making decisions supported by data enabling students to pursue opportunities in the emerging Big Data sector. Graduate degrees are offered in the same disciplines at the master's level.

Okanagan College offers a Network and Telecommunications Engineering Technology Diploma. Students are trained to design, configure and support telecommunications infrastructure. They are employed as network support specialists, network operations and telecommunications analysts, communications integrators, network administrators and consultants.

Supporting Agencies and Groups

The Digital Technology Supercluster, located in BC, is part of the Government of Canada's Innovation Supercluster Initiative investing up to \$950 million to support business-led innovation superclusters with the greatest potential to energize the economy and will support technology industry acceleration. Supported by over 200 partners, including 25 post-secondary institutions, the Digital Technology Supercluster secured over \$500 million in committed private-sector funding. The supercluster is expected to have an economic impact over the next 10 years of more than \$5 billion in GDP and an expected 13,500 jobs.

Accelerate Okanagan is the region's tech accelerator. Accelerate Okanagan is a not for profit organization founded in 2010 and funded in partnership with the British Columbia Innovation Council and Western Economic Diversification. Accelerate Okanagan's mission is to increase the number of technology companies that start and grow in the Okanagan, through a wide range of educational, coaching and mentoring programs in partnership with local businesses, government and educational/research institutions. These programs include:

- <u>The Startup Basics Program</u>: supplies participants with the tools and resources needed to start their venture.
- The Venture Acceleration Program: entrepreneurs are guided through the Venture Growth Model by an Executive-in-Residence and work to set the right objectives and priorities.
- The RevUp Program: connects established companies and their leadership team with experienced Executives-in-Residence to help them grow their businesses.

Metabridge: connects emerging Canadian technology companies to California's Silicon Valley through a series of targeted events since 2008. Metabridge has engaged hundreds of technology stakeholders across Western North America, and in the process is helping local technology companies establish the connections they need to grow their business beyond Canada.

The Okanagan Centre for Innovation: is a 100,000 sq. ft. facility offering publicly-supported space and services for early-stage companies, non-profits, community groups, and social enterprises. The goal of the Innovation Centre is to help build Canada's most innovative, creative, and entrepreneurial technology community. The Innovation Centre also houses the University of British Columbia Innovation Hub and entrepreneurship@ubc programs.

The Cascadia Innovation Corridor is a partnership between the Government of British Columbia and the State of Washington to grow cross-border innovation in the technology sector. The objective of the Cascadia Innovation Corridor is bringing business, government and academic leaders together to identify and pursue initiatives that will drive regional growth and foster international collaboration, in the spirit of unity that the Peace Arch symbolized – with demonstrable progress made by the centennial in 2021.

Tax Incentives

Residents and businesses enjoy a financial advantage with the Central Okanagan's competitive tax climate. BC has the lowest provincial income taxes for individuals earning up to \$121,000. Canadian federal government corporate taxes are some of the lowest among the G7 countries.

BC provides a suite of provincial tax credits and exemptions to encourage business investment and innovation. A summary of these credits and exemptions is listed below, and may be found here:

Research and Development

• Up to 35% Scientific Research and Experimental Development (SR&ED) tax credits plus 10% Provincial top up

Investment Capital

- 30% refundable tax credit up to 60K per year on Venture Capital Corporation individual investment
- Corporations receive non-refundable credits without limit
- Employee Share Ownership Plan, employees can invest and claim 20% of their investment up to \$2,000 per year

Film and TV production,

- Up to 35% tax credit on labour for movie and TV projects filmed in British Columbia
- Up to 25% federal tax credit available to production companies active in British Columbia
- Up to 12.5% additional regional tax credits apply to labour expenses for movie and TV projects filmed outside the Vancouver area



Interactive Digital Media

- Up to 17.5% tax credit on labour expenses for movie or TV digital animation and visual effects
- Up to 17.5% tax credit for video game developer labour

International Business

Up to 100% refund of provincial corporate income tax for businesses in international lending, foreign exchange, management of international investments, treasury functions, factoring, administrative services, film distribution, and leasing property and insuring property outside Canada

Registered Specialist Labour

- 100% refund of personal income tax paid by registered specialists recruited from abroad who perform qualifying work for the first two years, followed by partial refunds for the following three years
- Up to a 75% refund of provincial corporate income tax on foreign earnings from eligible patents related to life sciences; power from wind, solar, and tidal sources; wastewater treatment and fuel cell technology

General Manufacturing

- No provincial sales tax on eligible machinery and equipment
- Manufacturers recover the five percent federal value-added tax (GST) through input tax credits
- 50% per year straight-line depreciation method for manufacturing or processing equipment
- Imports of advanced machinery and equipment are duty-free

Figure 1: Provincial and Federal Corporate Tax Rates, 2018

Communities	Small Corporate Tax Rate	General Corporate Tax Rate
British Columbia	2.0%	12.0%
Canada	10.0%	15.0%

Sources: TaxTips.ca, 2018

Figure 2: Municipal Mill Rates, 2018

Communities	Mill Rate, Residential	Mill Rate, Business	Mill Rate, Light Industry	Mill Rate, Major Industry
Kelowna	5.9038	14.8087	15.3971	28.5029
West Kelowna	5.8593	14.8301	14.7396	18.1937
Lake Country	5.4848	14.4566	23.1759	23.5347
Peachland	5.7165	13.0383	19.1122	5.2981

Sources: BC Stats, 2017

Examples of ICT Firms in the Central Okanagan

Acro Media Inc. specializes in Drupal solutions for limitless ecommerce and unrestricted development. Full Time Employees 70+

<u>Provision Data Systems Inc.</u> while specializing in disaster recovery systems also provides services from hosting and colocation to email and data storage to clients throughout North America from their secure, hi-tech data center in Kelowna. Full Time Employees: 5

wtfast delivers reliable gaming connections and experiences for online gamers across the world. Founded in 2009 in Kelowna, wtfast serves an 800 million global user, MMO gaming community. The company provides built-in support for over 1000 online games, with users on every continent and in virtually every country. Full Time Employees 20



LOCAL SUCCESS STORIES



Our Leads Are Sweet

Beelineweb has specialized, since 2001, in the online generation of high-quality leads, with expertise in search marketing and SEO since 1998. With a wide range of clients throughout the U.S. and Canada Beelineweb has a long track record in the education sector, addiction rehab and senior living industries. As a trusted and transparent source of high-converting leads clients have confidence that their organization is being represented accurately while getting results with less effort and less cost-per-conversion than other marketing methods. It's that simple. Full Time Employees: 13



Your Compliance Testing and Certification Partner

<u>Celltech Labs Inc.</u> is an EMC, RF and SAR compliance and engineering facility specializing in compliance testing of electronic intentional and unintentional radiators to meet international consumer and occupational standards for North America, Europe, Australia and through ISO 17025 accreditation with A2LA (ILAC member) virtually all areas of the world. In the face of new technologies, materials, modules, configurations or changes of transmitting capabilities, Celltech Labs Inc. has answered the regulatory challenge of the rapidly changing ICT sector since 1999.