IBISWorld

INDUSTRY REPORT

Software Publishing in Canada

Sep 2023

About IBISWorld

IBISWorld specializes in industry research with coverage on thousands of global industries. Our comprehensive data and in-depth analysis help businesses of all types gain quick and actionable insights on industries around the world. Busy professionals can spend less time researching and preparing for meetings, and more time focused on making strategic business decisions.

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About

A quick definition of the industry, its products and services, major companies and other key identifiers help you confirm you're in the right place.

1. About

https://my.ibisworld.com//ca/en/industry/51121CA/about

NAICS 2007 - Canada	51121
NAICS 2012 - Canada	51121
NAICS 2017 - Canada	51121
NAICS 2022 - Canada	51321

Definition

Software publishers disseminate licences to customers for the right to execute software on their own computers. Publishers market and distribute software products but may also design the software, produce support materials and provide support services.

What's Included

- Operating systems and productivity software
- Business analytics and enterprise software
- Database, storage and backup software
- Design, editing and rendering software
- Video game software
- Security software

What's Not Included

- Appliances
- Nonconsulting computer systems design services
- Desktop computers
- IT technical consulting services
- Portable computers
- Peripheral equipment
- Business process management and website hosting services
- Data storage and management services
- Computers
- Computer hardware and software
- Information and document transformation services

- Other services
- TV and audiovisual equipment
- Application service provisioning
- Software

Companies

- Microsoft Corporation
- International Business Machines Corporation
- Oracle Corporation
- SAP SE
- Constellation Software Inc.

Related Industries

Industries in the Same Sector

- **Competitors:**
    - IT Consulting in Canada
- **Complementors:**
    - Computer Manufacturing in Canada
    - Computer & Packaged Software Wholesaling in Canada
    - Consumer Electronics Stores in Canada
    - Data Processing & Hosting Services in Canada

International Industries

- Software Publishing in the US
- Operating Systems & Productivity Software Publishing in the US
- Database, Storage & Backup Software Publishing in the US
- Business Analytics & Enterprise Software Publishing in the US
- Design, Editing & Rendering Software Publishing in the US
- Security Software Publishing in the US
- CRM System Providers in the US
- Website Creation Software Developers in the US
- Smartphone App Developers in the US
- Point of Sale Software Developers in the US
- Software Publishing in Australia

- Software Publishing in the UK
- App Development in the UK
- Cyber Security Software Development in the UK
- Financial Technology in the UK
- Software Publishing in Ireland
- Software Development in Ireland
- Software Development in China
- Online Games in China

Performance

Track historical, current and forward-looking trends in revenue, profit and other performance indicators that make or break an industry.

2. Performance

https://my.ibisworld.com//ca/en/industry/51121CA/performance

Highlights

Revenue	
$21.9bn	
2018-23 CAGR	↑ 8.0 %
2023-28 CAGR	↑ 1.6 %

Employees	
64,271	
2018-23 CAGR	↑ 6.7 %
2023-28 CAGR	↑ 2.4 %

Businesses	
2,897	
2018-23 CAGR	↑ 0.7 %
2023-28 CAGR	↑ 1.2 %

Profit	
$1.1bn	
2018-23 CAGR	↑ 9.8 %

Profit Margin	
5.1%	
2018-23 CAGR	↑ 0.4 pp

Key Takeaways

- **The software publishing industry in Canada, like in many other parts of the world, has seen continued growth in cloud-based solutions.** Cloud computing offers scalability, flexibility, and cost-effectiveness, making it an attractive option for software publishers and consumers.
- **With the rise of cyber threats and increasing concerns about data privacy, the software publishing industry in Canada has placed a greater emphasis on security and privacy features in its products.** Software companies will likely invest in robust security measures to protect users' data and ensure compliance with data protection regulations.

Executive Summary

The Software Publishing industry in Canada has exhibited strong growth over the five years to 2023 amid the introduction of new products, chiefly within the enterprise services and data analytics domains. Rising consumer spending has boosted demand from both businesses and consumers. Additionally, technological advancements and the increased use of laptops and smartphones in companies and consumers' everyday lives have necessitated the need for wide software varieties, boosting industry demand. However, the continued use of illegally downloaded software has hampered growth. Still, industry revenue has been growing an annualized 8.0% over the past five years and is expected to reach $21.9 billion in 2023. IBISWorld expects revenue to grow 2.9% in 2023, while high competition and short product lifecycles constrain profit growth.

Over the past five years, large software publishers eagerly bought smaller publishers and external competitors with specialties in growing software niches. For example, major player International Business Machines Corporation purchased Red Hat Inc. in 2018, a provider of open-source solutions for enterprises. Microsoft Corporation has been similarly aggressive, acquiring several companies that develop software distributed via internet-based platforms, notably acquiring GitHub Inc. in 2018. These acquisitions enable software publishers to compete in increasingly diverse markets. Despite an increase in the number of enterprises entering the mobile software space, acquisition activity is expected to continue because of the benefits of accumulating vast amounts of intellectual property.

Anticipated corporate profit and consumer spending growth will likely benefit demand and cause industry revenue to rise, which is forecast to increase an annualized 1.6% to $23.8 billion over the five years to 2028. As revenue rises, industry profit is expected to remain steady despite increased competition and greater demand for skilled employees. Software publishers will likely continue to shift their portfolios toward software distributed via cloud systems over the next five years and keep increasing revenue generated via subscriptions rather than by selling incremental updates to their software. As operators continue to focus on cloud-based distribution, companies that distribute their products via the internet will likely be key acquisition targets, along with companies that produce new types of software, like artificial intelligence software companies.

Performance Snapshot

↑ 2018-23 Revenue CAGR +8.0%

Revenue:

Revenue	2023 Revenue CAGR	Revenue Volatility
$21.9bn	↑ 2.9 %	Moderate
'18-'23 ↑ 8.0 % '23-'28 ↑ 1.6 %		

Revenue

Total value ($) and annual change from 2010 – 2028. Includes 5-year outlook.

2023 annual revenue
$21.9bn

2023 change
+2.9%

Forecasted

Legend: ── Annual Revenue ($bn)   - - - Change (%)

IBISWorld

Source: IBISWorld

Employees:

Employees	Employees per Business	Revenue per Employee
64,271	**22**	**$341k**
'18-'23 ↑ 6.7 %	'18-'23 ↑ 5.9 %	'18-'23 ↑ 1.2 %
'23-'28 ↑ 2.4 %	'23-'28 ↑ 1.1 %	'23-'28 ↓ 0.7 %

Employees

Total number of employees and annual change from 2010 – 2028. Includes 5-year outlook.

2023 annual employees
64271

2023 change
+3.4%

Forecasted

— **Annual Employees**   -- **Change (%)**

Source: IBISWorld

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Businesses:

Businesses	Employees per Business	Revenue per Business
2,897	**22**	**$7.6m**
'18-'23 ↑ 0.7 %	'18-'23 ↑ 5.9 %	'18-'23 ↑ 7.2 %
'23-'28 ↑ 1.2 %	'23-'28 ↑ 1.1 %	'23-'28 ↑ 0.4 %

Businesses

Total number of businesses and annual change from 2010 – 2028. Includes 5-year outlook.

2023 annual businesses
2897

2023 change
+1.4%

Forecasted

— Annual Businesses   - - - Change (%)

IBISWorld

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Profit:

Total Profit	Profit Margin	Profit per Business
$1.1bn	**5.1%**	**$386.0k**
'18-'23 ↑ 9.8 %	'18-'23 ↑ 0.4 pp	'18-'23 ↑ 9.0 %

Profit Margin

Total profit margin (%) and annual change from 2010 – 2023

2023 profit margin
5.1%

2023 change
+0.2pp

Legend: Profit Margin (%) — Change (pp)
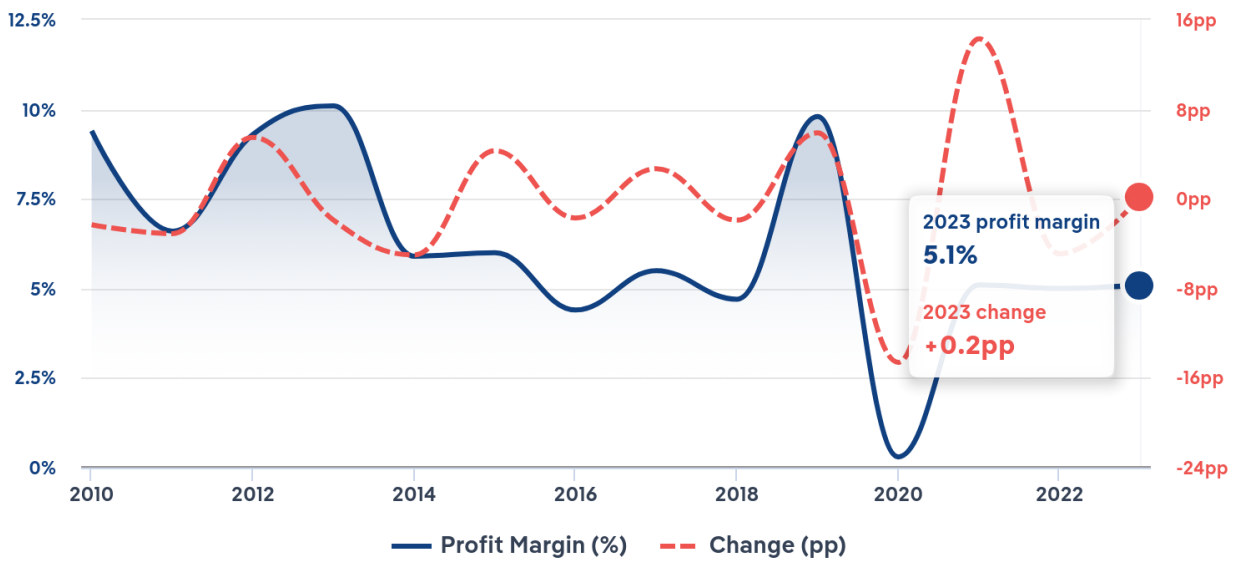
IBISWorld

Source: IBISWorld

Performance Snapshot

What's driving current industry performance?

The proliferation of smartphones and mobile devices has raised demand for mobile applications

- Consumers have increasingly relied on mobile apps for various activities, including communication, entertainment, shopping, banking and productivity.
- This growing demand has motivated software publishers to create mobile versions of their products or develop new, mobile-exclusive applications.
- The gaming industry, in particular, has witnessed a mobile gaming boom, with mobile games becoming hugely popular among users of all ages. Mobile game developers have capitalized on this trend, creating games catering to different interests and demographics.

The COVID-19 pandemic, the rise of remote work and collaboration have driven demand for software

- The global shift toward remote work and virtual collaboration has driven demand for software tools that facilitate remote communication, project management and team collaboration.
- As cyber threats have become more sophisticated, cybersecurity has been emphasized in software development.
- Security features have been integrated into software products to protect users and data.

Cloud computing and subscription-based business models have become the new norm

- Businesses and individuals have increasingly adopted cloud-based software for its scalability, cost effectiveness, and ease of access from multiple devices.
- The software industry has shifted toward subscription-based models rather than one-time purchases.
- Software companies are offering subscription services, providing regular updates and ongoing support, which can lead to more predictable revenue streams.

Volatility

What influences industry volatility?

The product portfolio and customer base play a role in revenue volatility for software publishers

- Companies with a wide range of products catering to different industries and customer segments are less susceptible to revenue fluctuations than those heavily reliant on a single product.
- A broad and loyal customer base, including long-term contracts or subscription-based revenue models, provides more predictable income streams.

Economic conditions influence publishers' performance

- Economic downturns can lead to reduced IT spending by businesses, impacting software publishers' revenue.
- On the other hand, economic growth may lead to increased investment in software solutions.

As good as it gets
Industry volatility vs. revenue growth (2018-23 CAGR)

Source: IBISWorld

☆ Key Success Factor

How do successful businesses overcome volatility?

Secure a highly skilled workforce

Software publishers employ highly skilled software developers that possess a very specific skill set and a capacity for creativity.

Secure the latest and most efficient technologies and techniques

The most successful software publishers take great care to ensure developers use industry best practices, including systematic bug tracking, efficient coding and thorough stability testing.

Develop a strong market profile

Products in this industry can require significant investments and often must be purchased before the customer has proof of their quality or effectiveness. Maintaining a high profile is a key to attracting customers in such an environment.

Outlook

What's driving the industry outlook?

The integration of artificial intelligence (AI) and machine learning (ML) technologies are expected to have a significant effect on the industry

- AI and ML technologies can automate repetitive and mundane tasks, freeing up human resources to focus on more complex and creative aspects of software development.
- Automated testing, code generation and deployment processes can streamline software development and reduce time to market.
- Software applications are likely to become more intuitive and adaptive with AI-powered user interfaces. AI can analyze user behavior and preferences to personalize interactions, creating a more engaging and user-friendly experience.

Data privacy and security will likely continue to be integral to maintaining consumer trust

- As data breaches and privacy concerns continue to make headlines, software applications will likely focus more on data security and privacy features.
- Software developers may need to adhere to stricter data protection regulations and provide robust security measures to gain user trust.

Some sectors traditionally considered less software-intensive might have the potential to experience a significant increase in software adoption

- Agriculture has historically been perceived as a traditional and manual industry. However, with the advent of AgTech (agriculture technology) and digitalization, there is a growing trend of integrating software and technology solutions into agriculture practices.
- Precision agriculture techniques leverage data from various sources like satellite imagery, drones, sensors, and weather forecasts, to optimize crop management. Software solutions can analyze this data to offer insights into soil conditions, irrigation needs, and crop health, leading to better yields and resource efficiency.
- Farm management software allows farmers to plan, schedule, and manage various farming activities, like planting, harvesting, and pest control. These tools can streamline operations, automate record-keeping, and enable data-driven decision-making.

Life Cycle

Why is the industry growing?

Contribution to GDP

Software enables businesses to operate vastly more efficiently and dramatically reduce costs. While consumer tastes may change and companies will change, the software will adapt to any new business strategies as they have in the past.

Market Saturation

Microsoft, IBM, and other significant competitors can sell infinite copies of the software to businesses, increasing market saturation without significant cost expansion.

Innovation

The subscription software model encourages continued innovation with robust and recurrent cash flow. Features for software are typically free and are downloaded to the user's copy in the background.

Consolidation

The most prominent software publishers use consolidation to keep minor developers from overextending. A significant player consumes almost all moderate-size software developers before they pose a threat.

Technology and Systems

Software is a critical technology in many industries, from manufacturing to finance and government planning. Even so, software producers need relatively little depreciable technology to get started.

Products and Markets

Find out what the industry offers, where trade is most concentrated and which markets are buying and why.

3. Products and Markets

https://my.ibisworld.com//ca/en/industry/51121CA/products-and-markets

Highlights

Largest Market

$6.3bn

Business analytics and enterprise software

Product Innovation

↑ High

Key Takeaways

- **With the increasing adoption of digital technologies across various sectors, businesses and consumers have a growing appetite for software solutions catering to their needs.** This demand has driven the industry to continually develop new and improved software products, leading to market expansion and technological advancements.
- **Software products permeate the entire modern business lifecycle.** Clients implement software for client management, shipping, analytics and almost everything else.

Products and Services

Products & Services Segmentation
Industry revenue in 2023 broken down by key product and service lines.

● **Business analytics and enterprise software ($6.3bn)** `28.7%`   ● **Operating systems and productivity software ($5.4bn)** `24.5%`

● **Database, storage and backup software ($3.0bn)** `13.6%`   ● **Other ($2.5bn)** `11.2%`   ● **Video game software ($1.9bn)** `8.8%`

● **Security software ($1.8bn)** `8.4%`   ● **Design, editing and rendering software ($1.1bn)** `4.8%`

IBISWorld   Source: IBISWorld
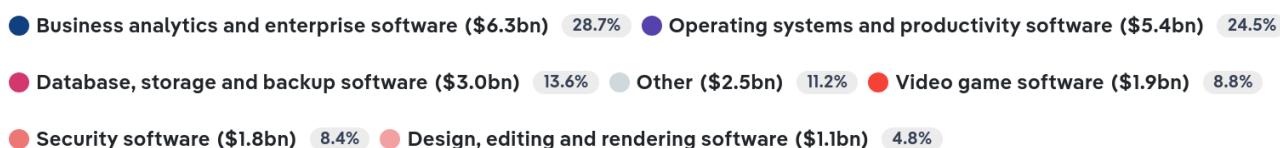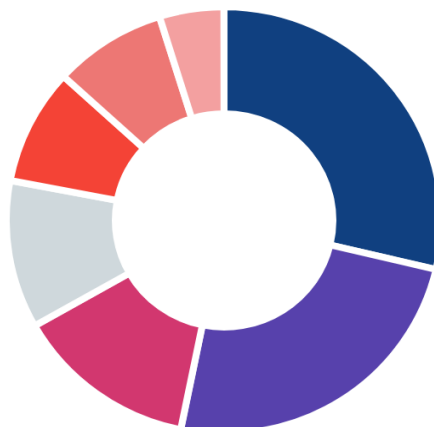
How are the industry's products and services performing?

Operating systems and productivity software is found on most computer systems

- An operating system is a fundamental software that manages computer hardware and software resources, providing services and an interface for users and applications to interact with the computer.
- Productivity software, also known as office productivity software, refers to a category of applications that help users create, edit, organize, and manage various types of digital content to enhance productivity and efficiency in personal and professional tasks.
- The products within this segment include Microsoft Corporation's (Microsoft) Windows and Office Suite, which includes Word, Excel, PowerPoint, and Outlook; and Apple Inc.'s (Apple) OSX and iWork Suite.
- Operating systems, essential for running any digital device, have grown because of the increasing number of devices and the need for updates and improvements in the software to support new

technologies and enhance security.

The ongoing digital transformation across various industries has led to increased adoption of enterprise software solutions

- The business analytics and enterprise software segment includes software for customer relationship management, enterprise resource planning, business intelligence, enterprise performance management, and supply chain management.
- Publishers increasingly use data analytics software alongside machine learning and predictive analytics algorithms, generating software to analyze large quantities of information to target customers and improve their profit more accurately.

Database, storage, and backup software primarily caters to business customers

- Database software is an application that enables the creation, management, and manipulation of structured data.
- Storage software refers to applications that manage and optimize data storage on various storage devices, like hard drives, solid-state drives (SSDs), network-attached storage (NAS), and cloud storage.
- Backup software is designed to create copies of data and applications to protect against data loss in case of hardware failures, data corruption, accidental deletions, or other disasters.
- In particular, SQL servers are essential because they are relational database servers for companies to access and interpret several datasets as they relate to each other, linking information from disparate sources to provide crucial business insights.

Video game software has risen in popularity

- Video game software includes games designed to run on PCs, mobile apps, and various proprietary console systems like Sony Corporation's (Sony) PlayStation 4, Microsoft's Xbox One and Nintendo Co. Ltd.'s Wii U.
- The popularity of online multiplayer games and the growth of esports have driven demand for video game software as gamers seek interactive and competitive experiences.

The use of peer-to-peer file-sharing limits demand for design, editing, and rendering software

- This segment includes products such as Adobe Inc.'s Creative Suite, which includes Photoshop, Flash, Illustrator and Premier; Apple's iLife Suite, including iPhoto, iMovie, Garage Band and iWeb; and computer-aided design (CAD) software that focuses on the production of art in various forms.
- This segment sells its products to businesses and consumers with creative and revenue-generating potential.

- Rising use of new technology, like 3D printers, has increased demand for software from this category.

Demand for security software rose during the COVID-19 pandemic as people worked from home

- Cybersecurity software, is a class of applications designed to protect computer systems, networks, and data from various security threats and malicious activities.
- This segment includes computer and internet security products like NortonLifelock Inc.'s Norton AntiVirus and McAfee LLC's Antivirus.
- The largest companies in this segment also compete with a variety of smaller but influential companies.

☆ Key Success Factor

What products or services do successful businesses offer?

Undertake technical research and development

Software publishers spend large sums of revenue on research and development, leading to more innovative products and a broader customer base.

What are innovations in industry products and services?

Software companies invest heavily in cloud technology

- Cloud technology provides on-demand availability of computer system resources while also reducing deployment and management costs.
- Software as a Service (SaaS) has risen hand-in-hand with subscription payment models, bringing in more stable revenue for developers.
- The COVID-19 pandemic accelerated the adoption of cloud technology because of its higher flexibility, efficiency and scalability.
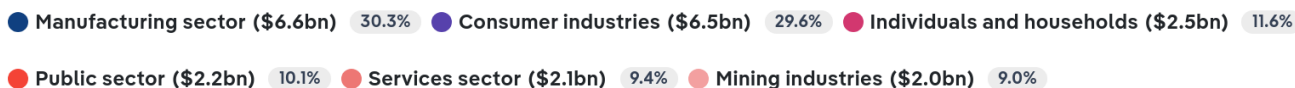
Processing speed and data security are also significant areas of innovation

- As the internet traffic volume continues to experience double-digit growth annually, web hosting companies continue to enhance data processing speed.
- The rising internet traffic volume has also led to a growing number of cybersecurity risks, increasing the importance of data protection.

Major Markets

Major Market Segmentation
Industry revenue in 2023 broken down by key markets

● **Manufacturing sector ($6.6bn)** 30.3%   ● **Consumer industries ($6.5bn)** 29.6%   ● **Individuals and households ($2.5bn)** 11.6%

● **Public sector ($2.2bn)** 10.1%   ● **Services sector ($2.1bn)** 9.4%   ● **Mining industries ($2.0bn)** 9.0%

IBISWorld   Source: IBISWorld

What's influencing demand from the industry's markets?

Sales to businesses generate the lion's share of industry revenue

- Businesses form most of the end customers for the industry.
- Businesses adopt operating systems and application software to boost productivity and cater to their respective industry's environments.
- Virus prevention and protection from hackers are also areas in which businesses require continual upgrades in software to meet ever-changing threats to internal networks and websites.
- Larger businesses have increasingly sought enterprise resource planning, customer relationship management, and data analytics software.

Sales to nonprofit organizations and government agencies are dependent on government spending

- Government and nonprofit organizations include public organizations like educational institutions and police departments.

- Generally, customer needs within this market are similar to those of businesses, focusing on operating systems, productivity software, business analytics, enterprise software, and database and storage management to improve operating efficiencies or monitor activities.

Free software obtained via peer-to-peer file-sharing networks limits sales to individuals and households

- The household market is the most diverse segment, as purchases range from games and photo-editing software to educational, word processing, and spreadsheet software.
- Rather than purchasing software from software publishers, some consumers choose to obtain software for free via peer-to-peer file-sharing networks.

Geographic Breakdown

Discover where business activity is most concentrated in this industry and what's driving these trends.

4. Geographic Breakdown

https://my.ibisworld.com//ca/en/industry/51121CA/geographic-breakdown

Key Takeaways

- **Business software development companies locate near business centers.** However, the rise of remote work is enabling developers to move anywhere and lower their work costs.

- **Regions near high-education centers can lower their software hiring costs dramatically.** College-work programs and alternative education verification are becoming more common as the price of college has increased.

Business Locations

Business Concentration
Percentage of total industry establishments in each region

Establishments	Revenue	Employment	Wages
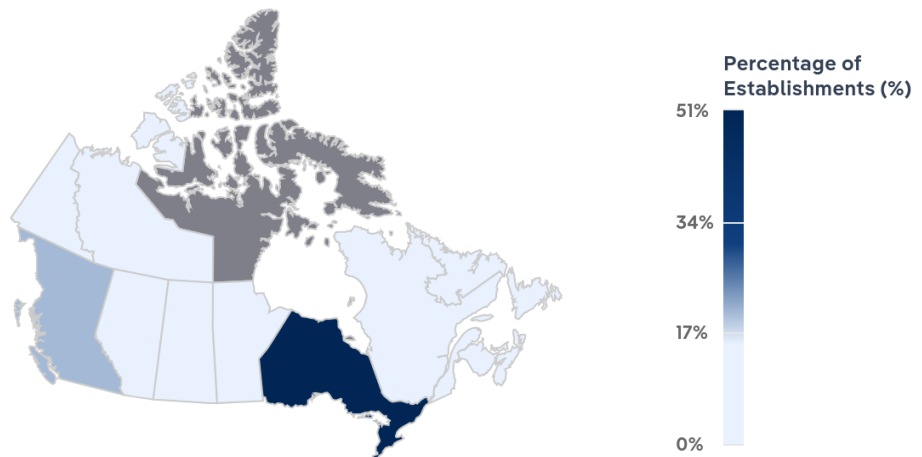
Source: IBISWorld

Province	Establishments Units	Establishments %	Revenue $	Revenue %	Wages $	Wages %	Employment Units	Employment %
Ontario	1,686	51.1	11,295,542,272.0	51.5	5,381,436,928.0	77.1	32,525	50.6
British Columbia	666	20.2	4,323,746,816.0	19.7	948,128,640.0	13.6	12,837	20.0
Quebec	379	11.5	2,592,182,272.0	11.8	391,643,456.0	5.6	7,838	12.2
Alberta	360	10.9	2,350,372,608.0	10.7	240,507,488.0	3.4	6,953	10.8
Manitoba	55	1.7	347,555,168.0	1.6	6,503,395.0	0.1	1,058	1.6
Northwest Territories	50	1.5	327,102,720.0	1.5	2,835,063.3	0.0	989	1.5
Nova Scotia	40	1.2	259,936,624.0	1.2	4,105,960.5	0.1	775	1.2
Saskatchewa	27	0.8	173,777,584.0	0.8	1,974,272.3	0.0	525	0.8

n							
New Brunswick	20	0.6	130,333,184.0	0.6	1,294,635.8	0.0	394	0.6
Newfoundland and Labrador	10	0.3	63,469,184.0	0.3	226,479.1	0.0	189	0.3
Prince Edward Island	8	0.2	48,552,352.0	0.2	234,100.0	0.0	151	0.2
Yukon	2	0.1	12,228,925.0	0.1	9,571.3	0.0	37	0.1

Where are industry businesses located?

Ontario's large population provides a significant market for publishers

- Ontario is Canada's largest province, housing nearly 40.0% of the Canadian population.
- Major cities in the area include Toronto, Ottawa, and Hamilton, prime markets for software publishers.
- Ontario has a strong pool of highly skilled professionals, including software engineers, data analysts, and information technology experts.

Quebec has several technology-focused clusters

- Quebec has several industry clusters, including the Montreal Artificial Intelligence Cluster, the Quebec City High-Tech Park, and the Quebec Videogame Cluster.
- These clusters bring together companies in related industries, which can help to foster innovation and collaboration.

British Columbia has a thriving technology ecosystem

- British Columbia has a vibrant and robust technology ecosystem, especially in Vancouver, Victoria, and Kelowna.
- The presence of numerous tech companies, startups, research institutions, and accelerators fosters innovation and collaboration.

Software Publishing in Canada

Ontario has the largest spread of businesses compared to its population

Share of establishments (%) vs. share of population (%):

■ **Establishments**   ■ **Population**
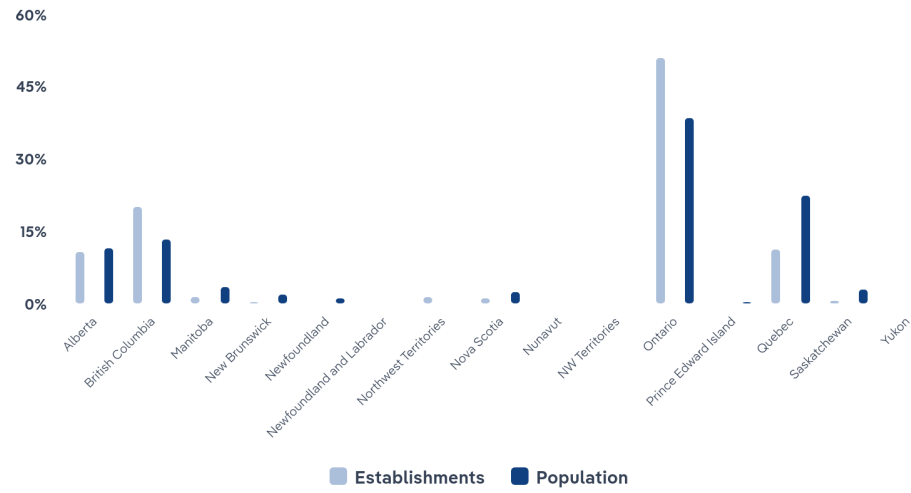
IBISWorld   **Source: IBISWorld**

Competitive Forces

Uncover challenges and benefits in the operating environment, digging into market share, buyer and supplier power and key success factors for operators.

5. Competitive Forces

https://my.ibisworld.com//ca/en/industry/51121CA/competitive-forces

Highlights

Concentration	Competition	Barriers to Entry
Moderate	↓ High ↓ Increasing	Moderate Steady

Substitutes	Buyer Power	Supplier Power
↑ Low Steady	Moderate ↓ Increasing	↑ Low Steady

Key Takeaways

- **Large software companies benefit from transforming global business.** Colleges and education systems will focus on the most established software, encouraging companies to leverage this talent and buy more subscriptions.
- **Software companies experience minimal external competition.** Instead, development companies must handle low entry barriers and limit patent infringement.

Concentration

Moderate

Market Share Concentration
Combined market share of the four largest companies in this industry

2023 market share of the four largest companies
50.2%

2023 sector average
+34.1%

— Market share of the four largest companies (%)   – – Sector average (%)

IBISWorld   Source: IBISWorld

What impacts the industry's market share concentration?

Massive software companies dominate smaller publishers

- Companies with more extensive product portfolios, both software and non-software products, can cross-sell items.
- Besides the product production power of the major players, each holds a library of patents, ensuring that no minor player dares copy their income-generating features.
- Larger businesses tend to have more well-known software, which increases the chance that employees will know how to use the software; this decreases the training cost for client companies.

Low barriers enable microbusiness developers

- With quality innovation in software design, one person can design the framework for a new core piece of software.
- A decently powerful computer, coding knowledge, and time are theoretically enough to power the creation of a new program.

- Many developers try this route, creating a glut of nonemployer and small business developers in the software space.

☆ Key Success Factor

How do successful businesses handle concentration?

Undertake technical research and development

Software publishers spend large sums of revenue on research and development, leading to more innovative products and a broader customer base.

Secure the latest and most efficient technologies and techniques

The most successful software publishers take great care to ensure developers use industry best practices, including systematic bug tracking, efficient coding and thorough stability testing.

Develop a strong market profile

Products in this industry can require significant investments and often must be purchased before the customer has proof of their quality or effectiveness. Maintaining a high profile is a key to attracting customers in such an environment.

Barriers to Entry

Moderate   Steady

What challenges do potential industry entrants face?

Legal

- Any entrants must avoid copyrights and nondisclosure agreements held by incumbents, but no formal restrictions fundamentally hold back new software developers.

Start-Up Costs

- Entrants must find an office space, hire labor, develop a differentiated product, and bring the product to market. One person can meet these challenges, but the most successful products frequently require teams of programmers to be paid for months before any income is made. Venture capital firms may be able to mitigate these start-up costs, but these trades can introduce more risk.

Differentiation

- Differentiation defines new entrants in software development. Business customers will not switch from existing software without profit-generating reasons to sway management, though individuals are more likely to listen to marketing. Differentiations can be in the core features, connections to existing software, or ease of use.

Labor Intensity

- The limited pool of skilled software developers is a significant barrier to entry into this industry. Software vendors compete with all other software industries for the same pool of software engineering talent.

Substitutes

Low	Steady

What are substitutes for industry services?

Insourced software development

- The dramatic rise in programming talent more than the past years has allowed many companies to hire developers of their own for projects.
- The resulting custom software can be more fully integrated with existing business systems and leverage trade secrets.
- AI-leveraged software development tools and easy-to-use programming interfaces are also giving existing client employees easy access to the tools for creating their own software.

Open-source software

- Free, Open-Source Software (FOSS) is a minor competitor to paid versions of some enterprise suites.
- Businesses have little incentive to develop FOSS, as a result is fundamentally a public good that competitors can use, so this competition is relatively stagnant.

Buyer & Supplier Power

Supply Chain
Direct and indirect supplier and buyer industries related to this industry

Suppliers				Buyers	
2nd tier	**1st tier**			**1st tier**	**2nd tier**
Computer Peripheral Manufacturing in Canada Computer Manufacturing in Canada	Data Processing & Hosting Services in Canada Computer & Packaged Software Wholesaling in Canada	→	**Software Publishing in Canada** →	Consumer Electronics Stores in Canada Computer & Packaged Software Wholesaling in Canada	→ Consumers in Canada

IBISWorld

Source: IBISWorld

What power do buyers and suppliers have over the industry?

Buyers: business software is critical, but more options exist for entrants

Moderate   Increasing

- Especially for fully digital retailers and service providers, a suite of well-connected software is the framework holding a business together.
- Large business software providers, including Microsoft, Salesforce, Adobe and IBM, wield significant market share, particularly against the most prominent clients with killer features and excellent scalability.
- For small businesses, software is far more fragmented; industry nonemployers frequently create programs tailored for businesses like theirs, and clients use a small fraction of the available features.

Suppliers: computer manufacturers couldn't care less about software developers

Low   Steady

- Computer and programming package manufacturers receive a tiny fraction of sales from business software developers.

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- Software developers also commonly use the tools of other developers, namely operating systems and business productivity suites.

Companies

Find out which companies hold the most market share and how revenue, profit and market share have shifted over time for these leaders.
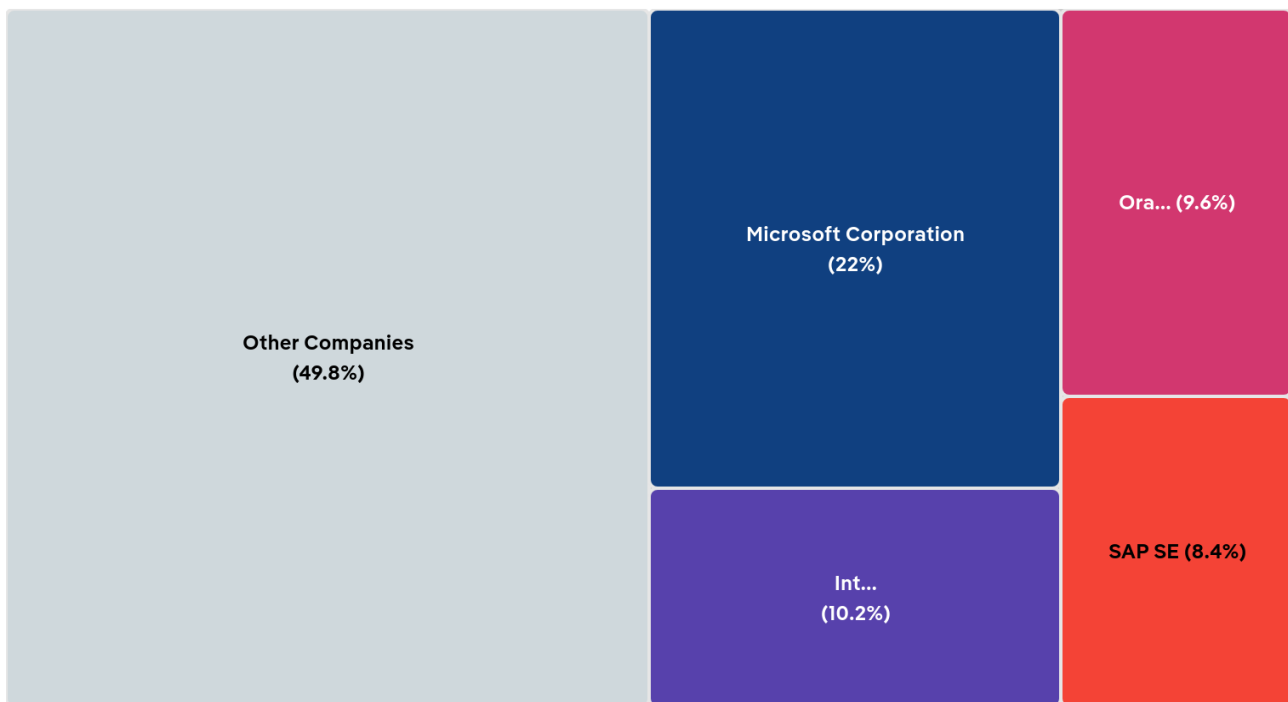
6. Companies

https://my.ibisworld.com//ca/en/industry/51121CA/companies

Key Takeaways

- **Software creation has barriers to entry so low that individuals can enter the market.** These individuals often seek a buyout from a major player as opposed to total market control.
- **Software companies tend to involve themselves in other technology markets.** Developers then cross sell business software to users of other technology.

Market Share

Industry Market Share by Company
Industry-specific company revenue as a share of total industry revenue

Other Companies (49.8%) | Microsoft Corporation (22%) | Ora... (9.6%) | Int... (10.2%) | SAP SE (8.4%)

IBISWorld   Source: IBISWorld

Chart displays current year only in the PDF version of this report. You can view and download chart for all other years associated with this industry on my.ibisworld.com.

Companies

Company	Market Share (%) 2023	Revenue ($m) 2023	Profit ($m) 2023	Profit Margin (%) 2023
Microsoft Corporation	22.0	4,812.5	2,033.9	42.3
International Business Machines Corporation	10.2	2,227.0	85.6	3.8
Oracle Corporation	9.6	2,113.6	906.4	42.9
SAP SE	8.5	1,852.7	223.1	12.0
Constellation Software Inc.	4.4	964.7	0.0	0.0

You can view and download company details on my.ibisworld.com.

External Environment

Understand the demographic, economic and regulatory factors positively and negatively affecting the industry.

7. External Environment

https://my.ibisworld.com//ca/en/industry/51121CA/external-environment

Highlights

Regulation & Policy	Assistance
Moderate ↓ Increasing	↓ Low ↑ Increasing

Key Takeaways

- **As a relatively new industry, the Software Publishing industry experiences little regulation.** Even the COVID-19 pandemic failed to hit the industry hard, as many developers simply worked from home.
- **Volatility affects the numerous software developer nonemployers far more than established enterprises.** Venture capital drying up or a key client going under can sink a fledgling software hopeful.

External Drivers

What demographic and macroeconomic factors impact the industry?

**Private investment in computers and software**
Growth

Source: IBISWorld
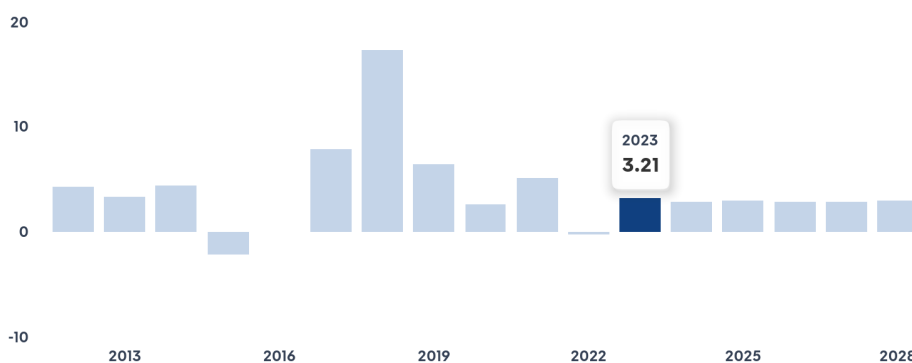
Software is often purchased with hardware, with licensing fees often tied to the number of computers on which the software is installed. Therefore, a direct correlation exists between computer investment and software publishing revenue. Private investment in computers and software is expected to grow in 2023,

representing a potential opportunity for the industry.

Corporate profit
$ billion
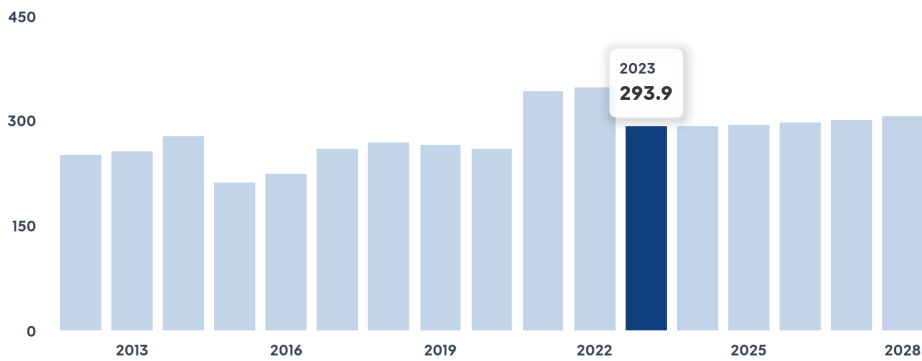
Source: IBISWorld

When corporate profit is high, businesses are likelier to increase their capital expenditures and invest in goods like software. When profit shrinks, however, information technology spending is one of the first expenditures companies cut, as it can easily be postponed. Corporate profit is expected to fall in 2023.

Consumer spending
Growth
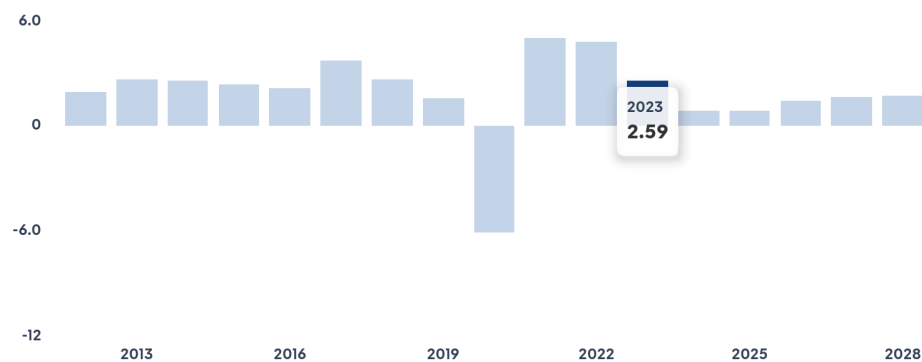
Source: IBISWorld

Consumer spending is a crucial indicator of demand for software publishers. As consumers spend more, businesses benefit. Since businesses are the primary market for industry software, any boon to business activity should thus be a harbinger of industry demand. Consumer spending is expected to grow in 2023.

**Demand from professional, scientific and technical services**
Growth
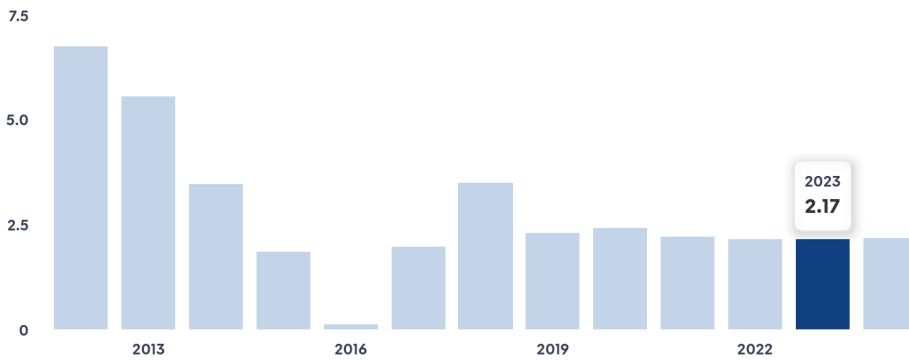
Source: IBISWorld

Most professional, scientific, and technical services require extensive software to function. When this sector is growing strongly, businesses invest heavily in software. Conversely, businesses are less likely to invest when the sector experiences a rough stretch. Demand from professional, scientific and technical services is expected to increase in 2023.

Number of fixed broadband connections
Million
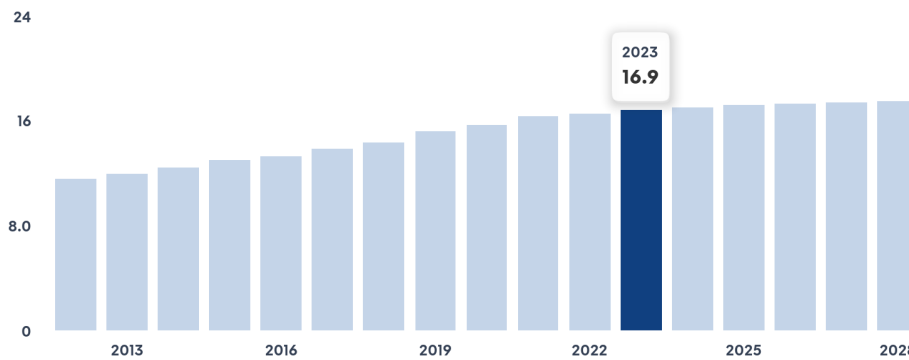
Source: IBISWorld

The number of fixed broadband connections is a proxy for how many Canadians are connected to the internet. Consequently, as the number of internet connections increases, software sales, which rely on computers and internet connectivity, are expected to follow. The number of fixed broadband connections is expected to increase in 2023, but at a slower rate than in prior years, posing a potential threat to the industry.

Regulation & Policy

Moderate	Increasing

What regulations impact the industry?

Copyright Act

The Copyright Act protects the rights of software developers and publishers by granting them exclusive rights to reproduce, distribute, and sell their software. It also provides legal remedies against copyright infringement.

Consumer protection laws

Consumer protection laws in Canada ensure that software publishers provide accurate information about their products, disclose any limitations or restrictions, and honor warranties and refund policies.

Privacy laws

Privacy laws, like the Personal Information Protection and Electronic Documents Act (PIPEDA), regulate software publishers' collection, use, and disclosure of personal information. They require publishers to obtain consent from users before collecting their data and implement appropriate security measures to protect it.

Accessibility standards for software

In some provinces, accessibility standards have been developed to ensure that software is accessible to individuals with disabilities. These standards may include requirements for accessible user interfaces and assistive technology compatibility.

Competition law

Canada's Competition Act aims to prevent anti-competitive practices in the software publishing industry, like price-fixing or abusing a dominant market position.

Assistance

Low	Increasing
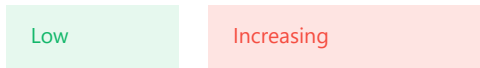
What assistance is available to this industry?

COVID-19 pandemic

In response to the spread of COVID-19, the Canadian government instituted various assistance programs that businesses qualified for. For example, the Canada Emergency Wage Subsidy covered a portion of an employee's wages for eligible employers negatively affected by the pandemic. Additionally, companies could take advantage of tax deferrals and improved access to credit and loans to remain liquid. The Canada Emergency Business Account provided interest-free loans to small businesses of up to $40,000. Large companies could apply for bridge financing through the Large Employer Emergency Financing Facility.

Venture capital funding

Software developers are significant recipients of technology-focused seed funding from venture capital companies. After gaining the attention of a venture capital company, software developers will present their business proposal and a stake in company ownership in exchange for large lumps of cash to build out development resources. Venture capital is popular with business software industries as income is limited until projects are finished.

Financial

Benchmarks

Understand average costs for industry operators and compare financial data against key ratios and financial benchmarks broken down by business size.

8. Financial Benchmarks

https://my.ibisworld.com//ca/en/industry/51121CA/financial-benchmarks

Highlights

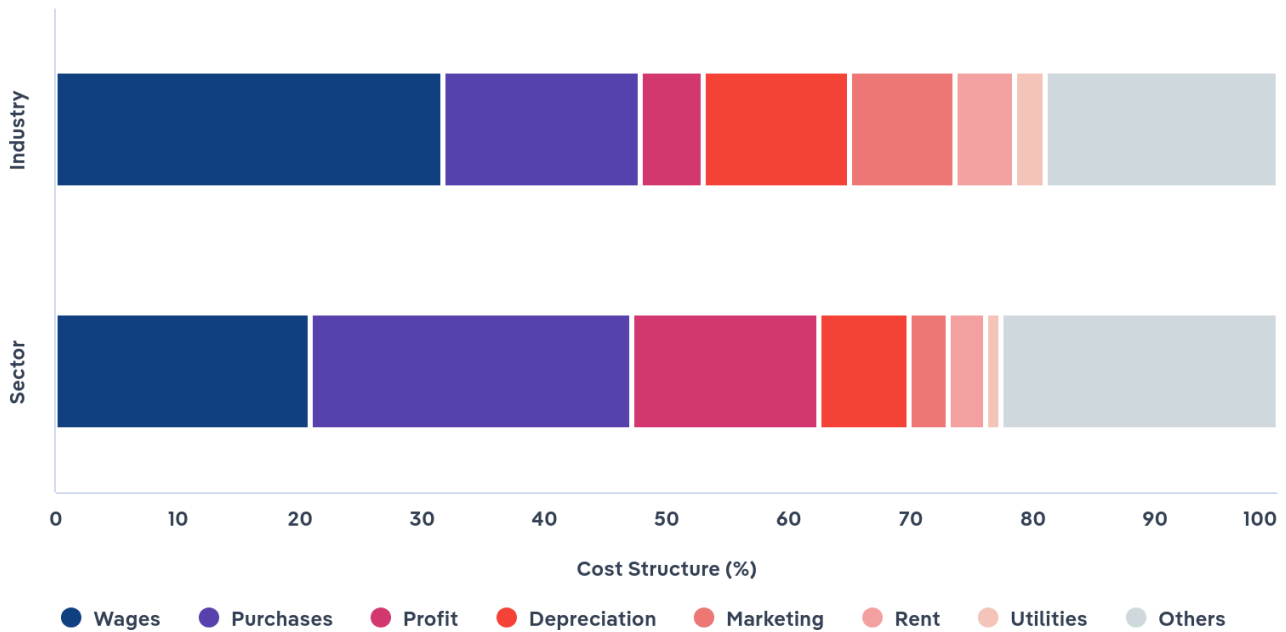| Profit Margin	Average Wage	Largest Cost
5.1 %	**$109k**	**Wages**
↑ Higher than sector	↑ Higher than sector	31.8% of Revenue

Key Takeaways

- **Software's replicability reduces purchase and depreciation costs for producers.** Business software producers have become some of the most profitable companies in the economy.
- **Wages are the primary expense of software development companies.** Hiring and retaining expert talent costs more than $100,000 a year.

Cost Structure

Cost Structure Benchmarks
Average operating costs by industry and sector as a share (%) of revenue 2023

Legend: ● Wages ● Purchases ● Profit ● Depreciation ● Marketing ● Rent ● Utilities ● Others

IBISWorld   Source: IBISWorld

Chart displays current year only in the PDF version of this report. You can view and download chart for all other years associated with this industry on my.ibisworld.com.

What trends impact industry costs?

Heightened competition and short product lifecycles limit profit

- Industry profit, measured as earnings before interest and taxes, is expected to account for 5.1% of revenue in 2023.
- The software publishing industry is highly competitive, with numerous players offering similar products and services. Intense competition can lead to price wars and pressure on profit.
- The technology landscape evolves quickly, leading to short product lifecycles. Software publishers may need to invest heavily in research and development to keep their products up-to-date, which can impact profitability.
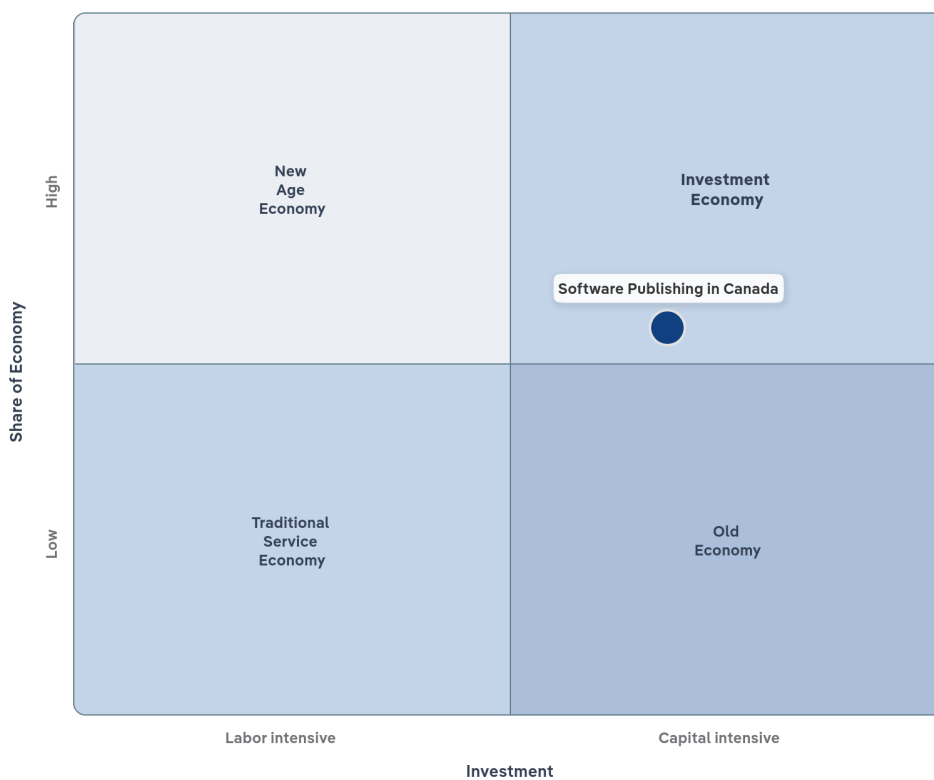
Purchases fall as physical media use wanes

- In 2023, purchase costs are anticipated to account for 16.1% of industry revenue.
- Purchase costs remain low, as practically no companies distribute software through physical channels.
- Other purchase costs are mostly one-time expenses, like office furniture.

Publishers place a premium on talent, boosting wage costs

- Wages are expected to account for 31.8% of industry revenue in 2023.
- Producing a computer program requires programmers, marketers, management, and intellectual property lawyers, which all command high salaries.
- Since a programmer's quality ultimately dictates a program's quality, publishers place a premium on attracting and maintaining highly skilled workers, driving up wage costs.

Capital investment drives growth
Share of economy vs. Investment

	Labor intensive	Capital intensive
High	New Age Economy	Investment Economy — Software Publishing in Canada
Low	Traditional Service Economy	Old Economy

Share of Economy

Investment

Source: IBISWorld

Key Ratios

Year	Revenue per Employee ($)	Revenue per Enterprise ($ million)	Employees per Estab. (Units)	Employees per Ent. (Units)	Average Wage ($)	Wages/ Revenue (%)	Estab. per Enterprise (Units)	IVA/ Revenue (%)
2005	378,745	7.1	15.1	18.6	93,433	24.7	1.2	35.8
2006	332,209	6.3	15.1	19.1	98,837	29.8	1.3	42.8
2007	292,027	5.7	15.5	19.5	103,375	35.4	1.3	47.2
2008	278,836	5.2	15.3	18.8	99,225	35.6	1.2	53.4
2009	284,133	5.0	15.6	17.5	111,467	39.2	1.1	56.1
2010	284,261	5.0	14.9	17.5	103,904	36.6	1.2	52.1
2011	303,264	5.1	13.2	16.7	101,314	33.4	1.3	46.1
2012	292,638	5.1	12.9	17.5	97,381	33.3	1.4	48.5
2013	251,591	4.3	12.4	17.1	105,135	41.8	1.4	65.8
2014	246,484	3.8	12.2	15.5	105,561	42.8	1.3	64.3
2015	275,977	4.0	12.4	14.6	111,201	40.3	1.2	61.0
2016	299,008	4.4	13.2	14.6	109,862	36.7	1.1	55.0
2017	305,702	4.7	13.5	15.5	107,831	35.3	1.1	54.0
2018	321,579	5.3	14.4	16.6	125,270	39.0	1.2	56.1
2019	334,510	6.0	15.9	17.8	120,605	36.1	1.1	57.0
2020	355,681	6.4	16.0	18.1	122,680	34.5	1.1	46.9
2021	365,289	7.4	17.5	20.1	128,133	35.1	1.1	53.1
2022	342,973	7.5	19.1	21.8	108,707	31.7	1.1	48.8
2023	341,131	7.6	19.5	22.2	108,586	31.8	1.1	48.9
2024	337,451	7.6	19.7	22.5	108,352	32.1	1.1	49.4
2025	334,839	7.6	20.0	22.8	108,185	32.3	1.1	49.4
2026	332,712	7.7	20.2	23.1	108,047	32.5	1.1	49.5
2027	330,711	7.7	20.4	23.3	107,916	32.6	1.1	49.8
2028	328,901	7.7	20.5	23.5	107,800	32.8	1.1	49.9
2029	327,987	7.7	20.7	23.6	107,738	32.8	1.1	49.9

Key Statistics

Discover 14 years of historical, current and forward-looking industry performance data in table format.

9. Key Statistics

https://my.ibisworld.com//ca/en/industry/51121CA/key-statistics

Industry Data

Year	Revenue ($ million)	IVA ($ million)	Establishments (Units)	Enterprises (Units)	Employment (Units)	Wages ($ million)
2005	9,877	3,535	1,732	1,400	26,078	2,437
2006	9,486	4,060	1,896	1,496	28,555	2,822
2007	9,027	4,259	1,988	1,589	30,910	3,195
2008	8,776	4,686	2,056	1,676	31,473	3,123
2009	8,567	4,805	1,936	1,726	30,151	3,361
2010	8,768	4,568	2,073	1,767	30,845	3,205
2011	9,342	4,306	2,331	1,842	30,806	3,121
2012	10,133	4,911	2,691	1,976	34,628	3,372
2013	9,582	6,300	3,080	2,221	38,087	4,004
2014	9,439	6,074	3,129	2,464	38,296	4,043
2015	10,704	6,528	3,140	2,661	38,787	4,313
2016	12,012	6,612	3,034	2,747	40,172	4,413
2017	13,160	7,109	3,182	2,771	43,050	4,642
2018	14,932	8,371	3,220	2,792	46,434	5,817
2019	16,619	9,465	3,124	2,790	49,683	5,992
2020	18,232	8,547	3,201	2,829	51,259	6,288
2021	20,939	11,115	3,267	2,848	57,321	7,345
2022	21,316	10,401	3,254	2,856	62,151	6,756
2023	21,925	10,728	3,302	2,897	64,271	6,979
2024	22,226	10,975	3,345	2,933	65,864	7,137
2025	22,612	11,172	3,383	2,965	67,530	7,306
2026	22,998	11,386	3,420	2,998	69,122	7,468
2027	23,371	11,635	3,469	3,039	70,669	7,626
2028	23,758	11,861	3,516	3,080	72,233	7,787
2029	24,144	12,047	3,562	3,119	73,612	7,931

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