



# Creative XR

in British Columbia

# Research Report

December 2022

# ABSTRACT

The purpose of this research was to determine the size and orientation of commercially oriented augmented reality (AR) and virtual reality (VR) companies (collectively known as extended reality companies “XR companies”) in BC, while collecting data to support DigiBC in facilitating the ongoing growth of this sector. Beginning in July 2022, the study was conducted over three months and involved extensive surveying of the 36 participating companies and one-on-one interviews with key industry players.

Video game studios that participate in XR projects/services were contacted to best understand the scope of the sub-sectors activities. These companies are categorized as a peripheral sector and are not part of the XR industry. They are not included in the core universe list.

Report by DigiBC in partnership with research by Nordicity.



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Cover images courtesy of:  
Re:Naissance Opera  
Cloudhead Games  
Kreis Immersive  
Coal Car Studio



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# British Columbia's Creative XR universe consists of 36 core companies.

*The criteria used for identifying XR companies specifically looked at commercially oriented companies that have significant XR service activity and/or are developing XR products as a primary venture. Although there are companies sitting in peripheral sectors, such as video games, who participate in XR-related projects, they are not categorized as being a part of the core universe for the purpose of this study.*

## LOCATION

The largest proportion of core XR companies (86%) are located in Vancouver. Other places include Victoria, Burnaby, Qualicum, Port Coquitlam and Langley, with one company established in each of these locations.



## SIZE



# REVENUE

The Creative XR industry in BC generates a third (35%) of its total revenue from works in the entertainment<sup>1</sup> industry.

XR companies<sup>2</sup> that work with this industry earn most of their revenue from entertainment projects (65% on average).

While companies might decide to focus on one or two key industry verticals, in general they seem open to pursuing opportunities in secondary verticals.

<sup>1</sup> Entertainment: arts and digital media, movies and television, museums, etc.

<sup>2</sup> Note: Provided the study's specific focus on BC's Creative XR sector, a vast majority of survey respondents (95%) operate with a focus on entertainment IP. However, the growth of XR solutions has led to expansion into a myriad of other primary industry verticals. As identified by survey respondents, these include education (53%), retail and e-commerce (42%), and design (37%) as being significant client industries.

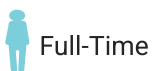
*It's estimated that the core XR sector generated **590 FTEs** in 2021/2022, an average of 17 FTEs per company.*

*Full-time equivalent is a measure of employment. FTE can mean, for example, that three part-time employees each working a third of a year make up one FTE.*

Another measure of the size and health of an industry is the number of people it employs. This average reflects the initial scan of the industry which indicated that companies with 5-25 employees account for about 70% of the universe.



On average, it was found that companies have approximately 13 full-time employees, 2 part-time employees, 3 temporary/contract employees, and 3 freelance employees.



Full-Time



Temporary/Contract



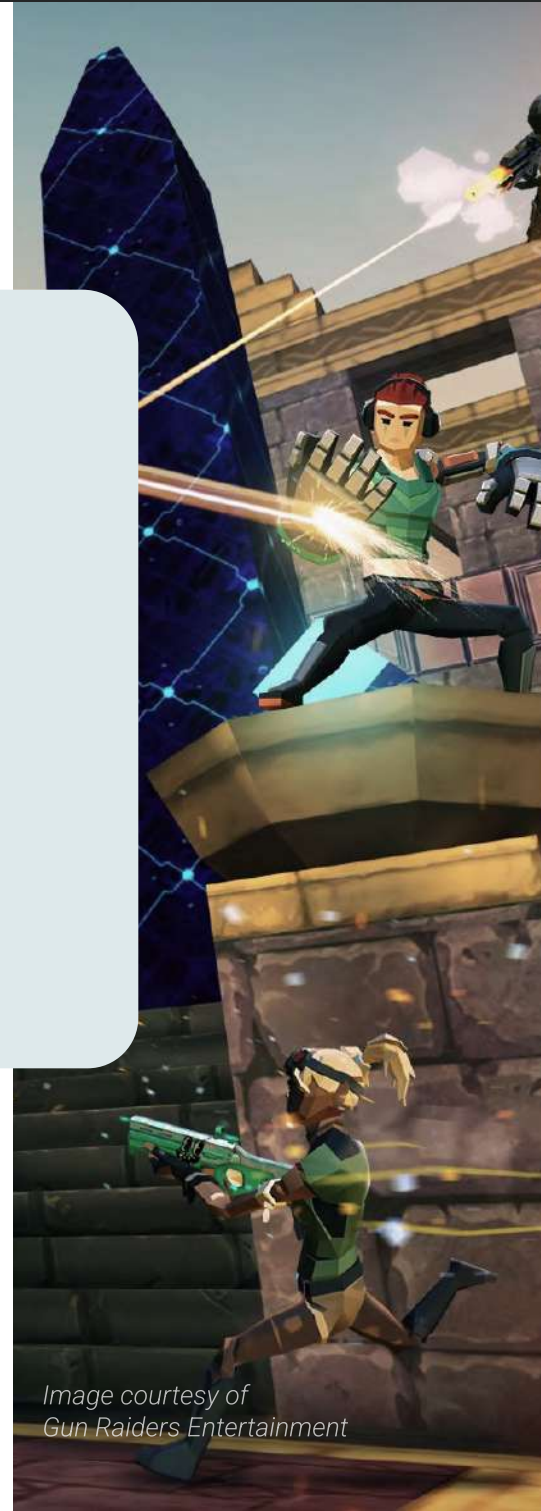
Part-Time



Freelance

**It was also found that many companies hire a notable numbers of freelance employees.**

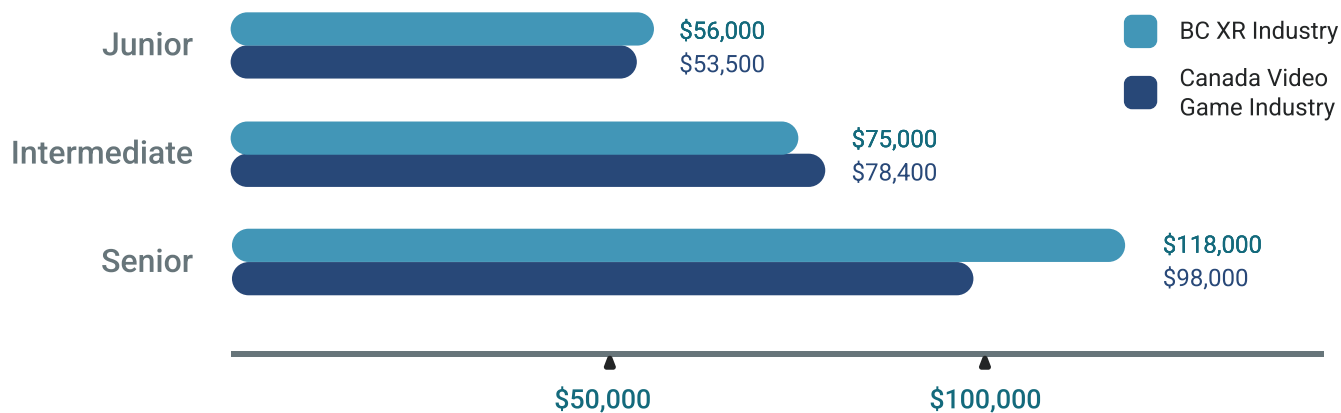
This practice seems to be more prevalent among micro and small companies (under 25 employees). For example, one survey respondent identified employing 20 freelancers while counting only 3 permanent employees.



*Image courtesy of  
Gun Raiders Entertainment*

# AVERAGE WAGE DISTRIBUTION

## *BC XR Industry vs Canadian Video Game Industry*



**Junior** | 0-2 years

**Intermediate** | 2-6 years

**Senior** | 6+ years

**Interviews confirmed a fierce competition for senior talent observed consistently across the BC tech sector.**

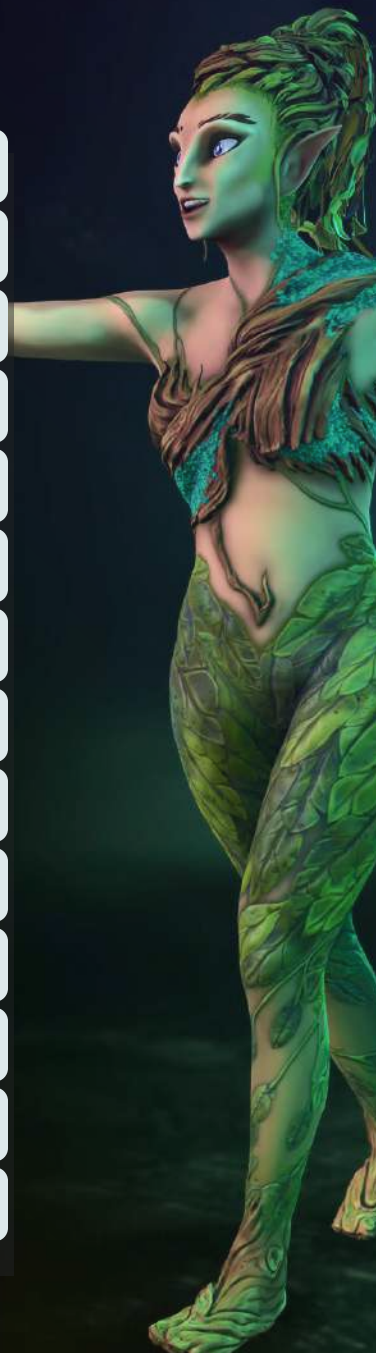

Findings suggest that the XR industry could be better positioned to secure senior talent than markets such as the broader video games industry. In order to attract and retain senior talent with the specific XR skillset, companies have to offer comprehensive packages that vie with other industries.

*Photo by Stella Jacob*





# TOP SKILL DEMANDS



1	Game Development & Design
2	3D Modeling, Animation, Art
3	Software Development (Web/Mobile)
4	AI, Data Science, Machine Learning, Engineering
5	UI/UX Design
6	Visual Effects Art & Design
7	Architecture Design and Technology
8	Computer Vision
9	Business Development
10	Other
11	Marketing
12	Sound Design for Visual Media
13	Graphic Design
14	Business Operations

Image courtesy of Re:Naissance Opera

As the industry continues to grow, XR companies increasingly require a deeper understanding of emerging technologies such as artificial intelligence and machine learning.

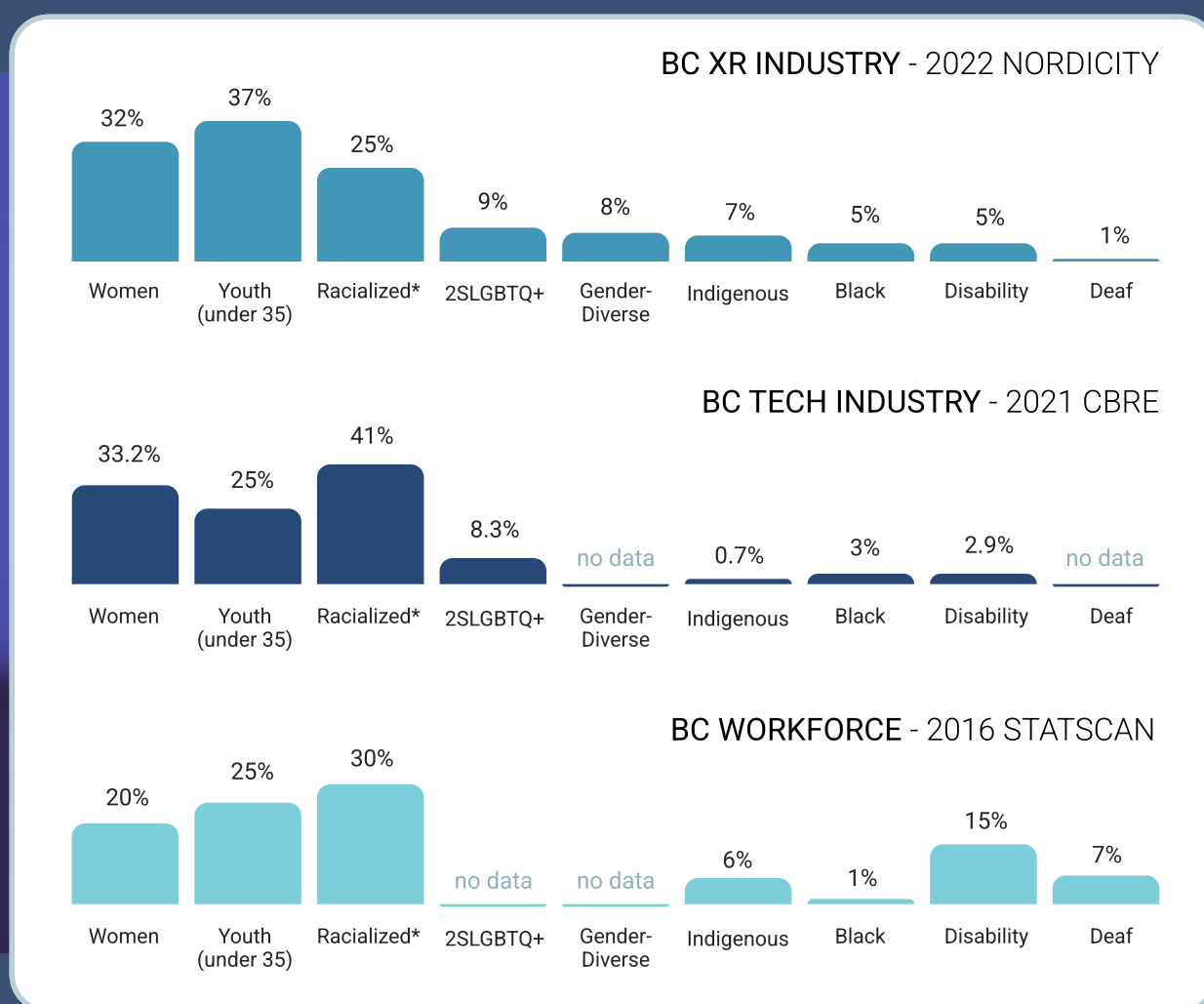


# EMPLOYEE DEMOGRAPHICS

The XR industry in BC is found to employ a relatively high number of persons under the age of 35 at 37%.

While the industry also employs a notable share of racialized individuals, there is room for improvement when compared with the broader BC tech industry.

Additionally, 32% of the XR workforce identified as female, while comparatively, 33.2% of tech workers identify as women (CBRE Group Inc. 2021), with 20% of the overall BC workforce being female.



NOTE: The concept of racialized population is measured with the 'visible minority' variable in this release. 'Visible minority' refers to whether or not a person belongs to one of the visible minority groups defined by the Employment Equity Act. The Employment Equity Act defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour".

When asked about the perceived growth trajectory of the XR industry,

## REVENUE (12-MONTH HORIZON)

35% of respondents expect **revenue to increase** by more than 10%, showing a general **confidence in the market for fiscal year 2022/2023**.

## WORKFORCE (12-MONTH HORIZON)

All survey respondents anticipate their companies will **grow their headcount** over the next 12 months. This optimism should be embraced as a massive **opportunity and advantage to further grow the industry**.

## TALENT (5-YEAR HORIZON)

There were **mixed feelings about their ability to secure experienced talent in BC**. While 45% of respondents are not confident that they will be able to fill future positions with **locally sourced talent**, 14% are very confident.

Contrastingly, 45% of survey respondents felt confident and 18% felt very confident in their ability to secure **experienced international talent**.



# GLOSSARY

**XR Company:** Commercially oriented companies that are key players in the creative technology industry (organizations that indicate having a lot of XR activity and/or developing XR products).

**Secondary Company:** Companies that operate alongside XR companies or use XR products (operating where XR may be a peripheral activity).

**Creative Technology Industry:** Sector which includes video games, visual effects (VFX), animation, and mixed reality (XR).

**Industry Verticals:** Refers to different fields and/or industries that a sector may work across.

**N-values:** The number of respondents to a survey question, which is often used in the data analysis related to that question.

**FTE:** Full-time equivalent is a measure of employment. FTE can mean, for example, that three part-time employees each working a third of a year make up one FTE.

## **B.C. Creative XR Studios Participated:**

3D Evolution (3DE)

Active Replica

Ahead.IO Labs

Bending Time Technologies

BRANDLIVE

Cloudhead Games

Coal Car Studio

Cognitive3D

Denman Digital

Departure Lounge

DNEG

DRYFT VR

Electronic Arts

Finger Food Studios

Go2 Productions

Gun Raiders Entertainment

Hammer & Tong

Hololabs Studio Inc.

House of Kibaa

Impact VR Media Ltd

Inscape Studios

Intergalactic Agency Inc.

Kreis Immersive

LNG Studios

Make Believe

Many Hats

Metanaut Ltd.

Microsoft

Mozilla

NGX Interactive

Strawberry Fields Interactive

The Sawmill

Unity

Vaudeville

VR Cinematic

Wondr VR