

An aerial photograph of a city skyline at dusk, with a blue tint. The image shows numerous skyscrapers and buildings, some with lights on. The sky is dark, and the overall scene is dimly lit. The text is overlaid on this image.

The Canadian Digital Supercluster

Overview Presentation
October 25, 2017



Data is absolutely the right opportunity at the right time for our ecosystem

1. Data is a Growing Resource

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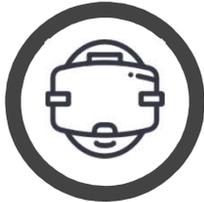
2.5 quintillion bytes of data are created every day {equal to over half a billion HD movie downloads}

0.5%

Only about 0.5% of data we collect is analysed & used {the same as buying 200 movies every day and watching 1}



By 2021, the number of devices connected to networks will be more than 3X the global population and IP traffic from smartphones will exceed PCs



By 2021, VR & AR IP traffic will increase 20X as new applications come online

2. We have relevant, world-class strengths

World's **1st**
commercial quantum
computer made in BC



New supercomputer at SFU
will serve **>11,000**
researchers

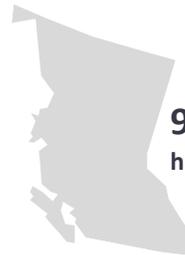
Cascadia is home to
3 of 5
cloud

service providers **top** ↑ ↑ ↑
↑ ↑

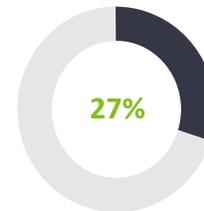
IoT CoE



Market share in connectivity
hardware and devices for IoT **#1**



95% of BC has access to
high-speed internet



27%
% of Canadian digital
game companies that are
based in BC

60

of visual effects and
animation studios
producing international
blockbusters

World's LARGEST cluster of domestic and foreign-
owned studios

3. Our ecosystem is ready for the next BIG step

Generating **\$26B** in revenue/year



Growing **2X**

faster than the provincial economy

>150,000 tech jobs (across all sectors)



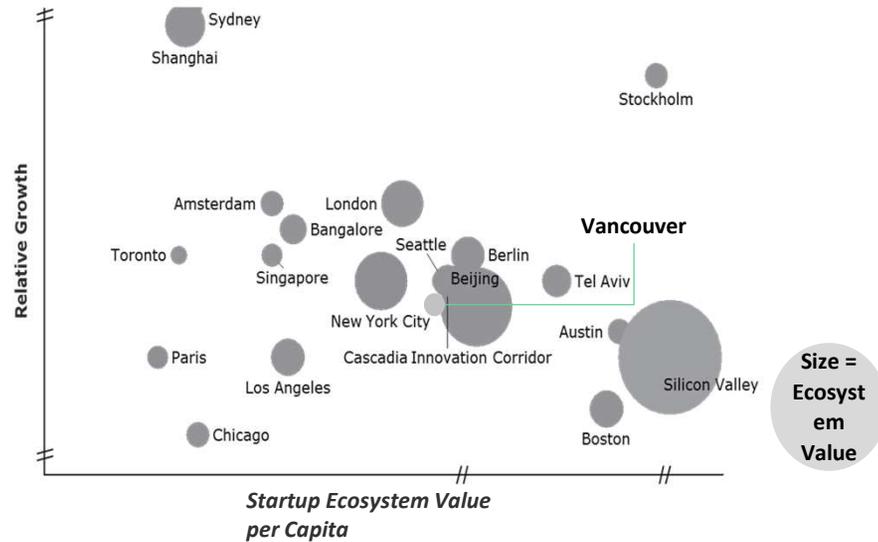
Employment growth rate **>1.5X** the Canadian average



Home to **3/5** of Canada's unicorns

(Startup with **>\$1B** valuation)

Startup Ecosystem Value per Capita and Relative Growth



BC has the fastest growing technology sector in Canada



We can be world leaders in data driven innovation

Vision

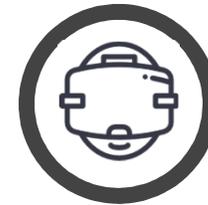
- Position Canada as a global leader through a Digital Technology Supercluster to unlock the potential of the data-driven, intelligent enterprise
- The Digital **Technology** Supercluster will:
 - Drive collaboration across technology platforms, sectors and regions
 - Accelerate the creation of IP and the scale-up of startups and SME firms
 - Increase productivity, performance and competitiveness in Canada
 - Spur the creation of new digital technology jobs; grow world-class and diverse talent



Global data inventory to quadruple by 2025



50 billion devices will be online by 2020

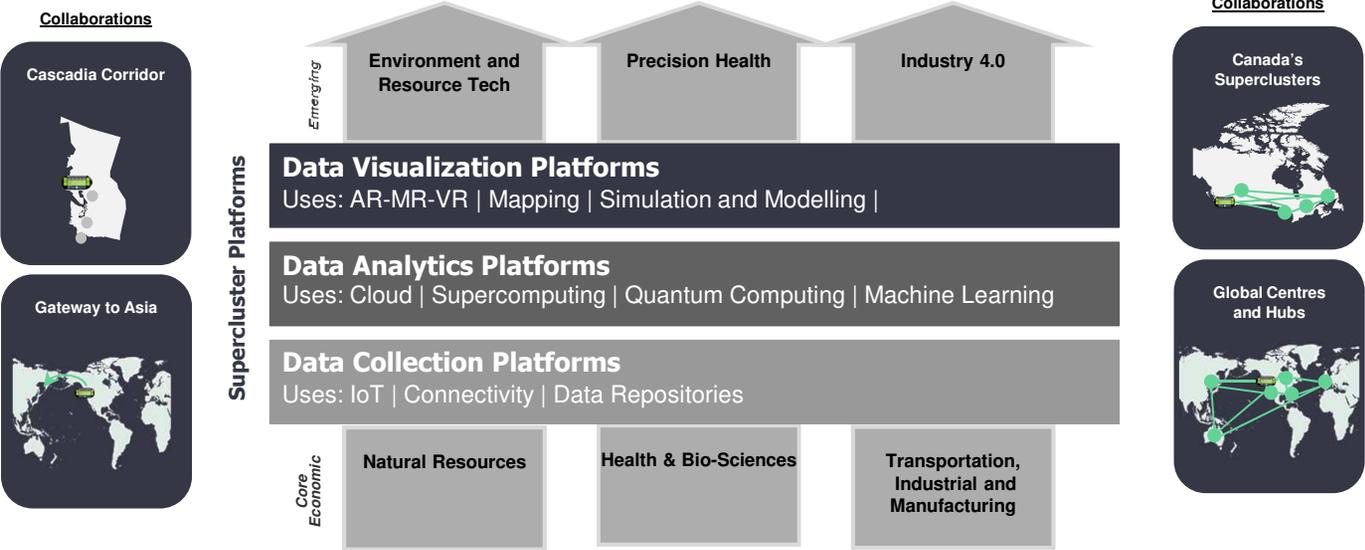


AR/VR market to be > \$150 Billion by 2020

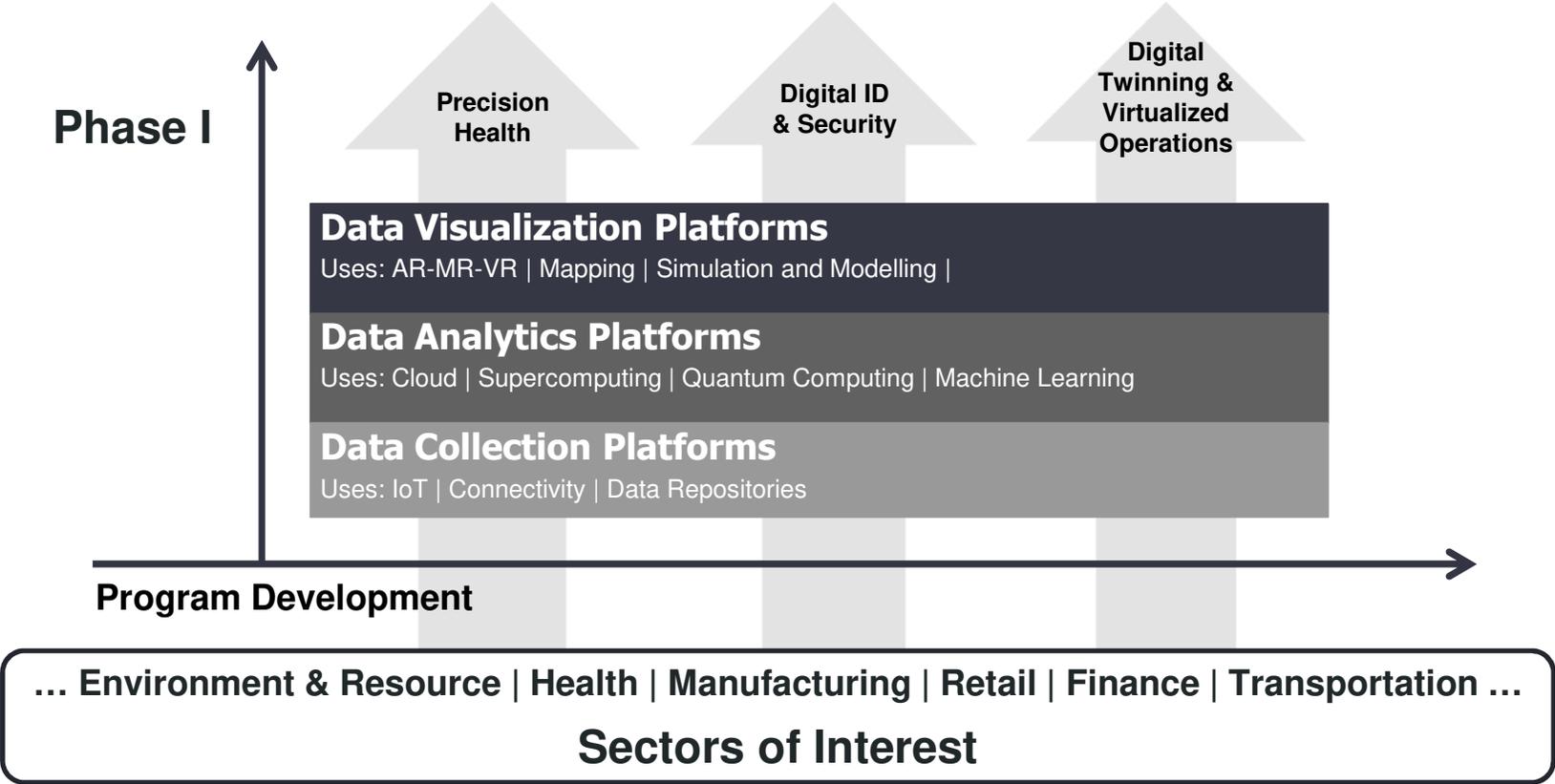
Supercluster Framework

We will leverage the capabilities of core technologies in Canada and apply directly to transformational opportunities in key sectors of the economy

Canada's Digital Technology Supercluster

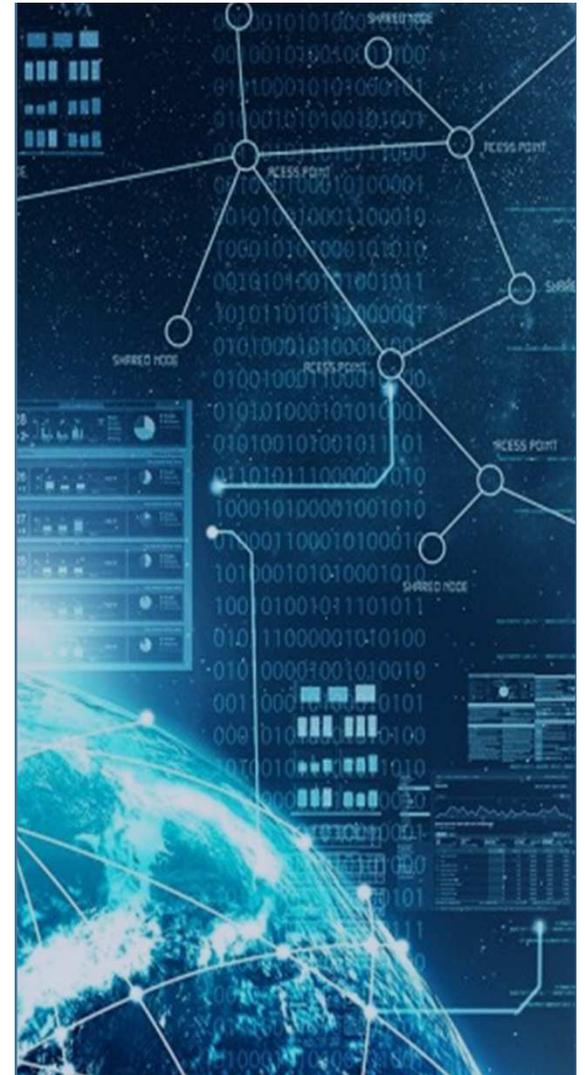


Phase 1 Supercluster Projects



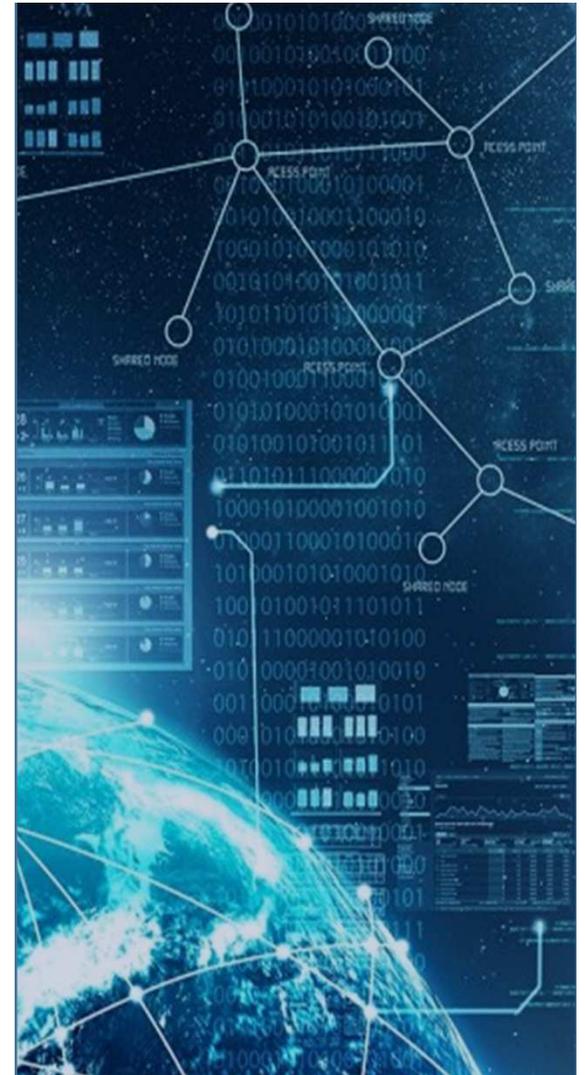
Precision Health

- Explore the use of genome related “omics” data in health & wellness
- Advance platforms that use this data with a line of sight to clinical service delivery
- Potential to leverage the Academic Health Science Network in chronic disease applications
- New opportunities in the emerging field of “scientific wellness”



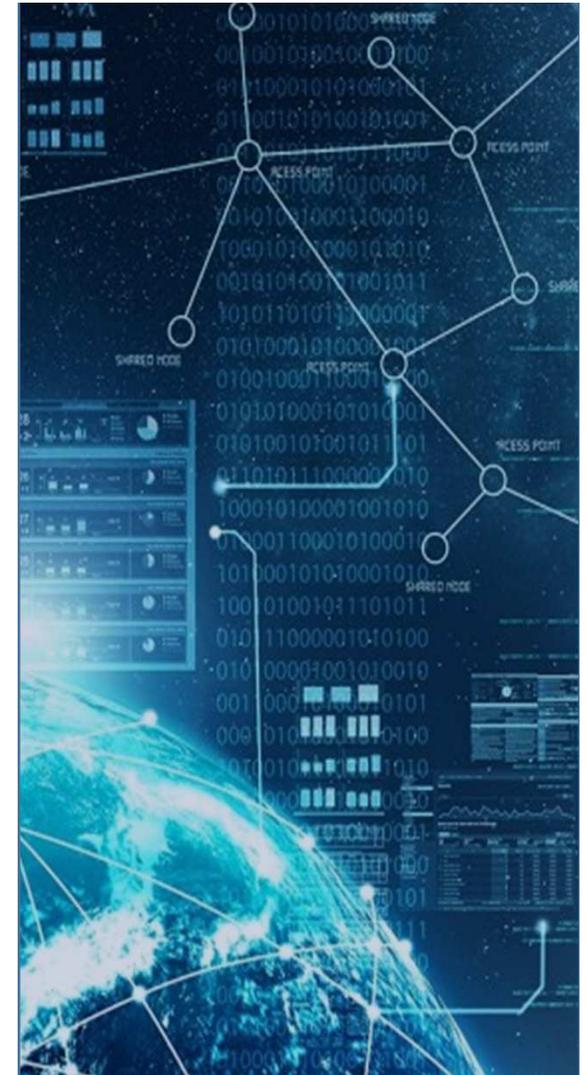
Digital ID & Security

- Explore the use of digital ID, data and transaction security
- Advance platforms for manufacturing traceability in consumer product (food, fashion, retail) and industrial supply chains (aerospace, automotive)
- Leverage or integrate digital ID and blockchain projects
- New opportunities in data aggregation, using the BC Services Card and personal health records



Digital Twinning & Virtualized Operations

- Exploit the use of VR/AR in non-gaming, enterprise applications
- Advance platforms in production management (ie. Mine of the future, digital twins, learning factory)
- Build the connected workforce with interactive, 3D performance support tools, health & safety apps
- New opportunities in immersive training platforms





Globally competitive enterprise needs
globally competitive institutional support

Cross-sectoral Leaders and Partners

Environment & Resource Tech
(clean resources agri-tech, climate solutions)



Precision Health & Healthtech
(biotech, omics, digital health)



Industry 4.0
(digital manufacturing, smart transportation)



Data Visualization Platforms



Data Analytics Platforms



Data Connection Platforms



The LOI: Emboldening Collaboration

- A strong supercluster proposal with cross-sectoral impact that includes some of the most significant Canadian brands and companies
- Leverages the foundational strength in terms of technology platforms, market access and research capabilities
- Commitments from over 60 companies, six post-secondary institutions and a dozen support organizations totaling more than \$300MM

\$300 MM

Over \$300 million in commitments from companies and institutions

60 +

of startups, SMEs, major corporations who supported the Digital Technology Supercluster LOI

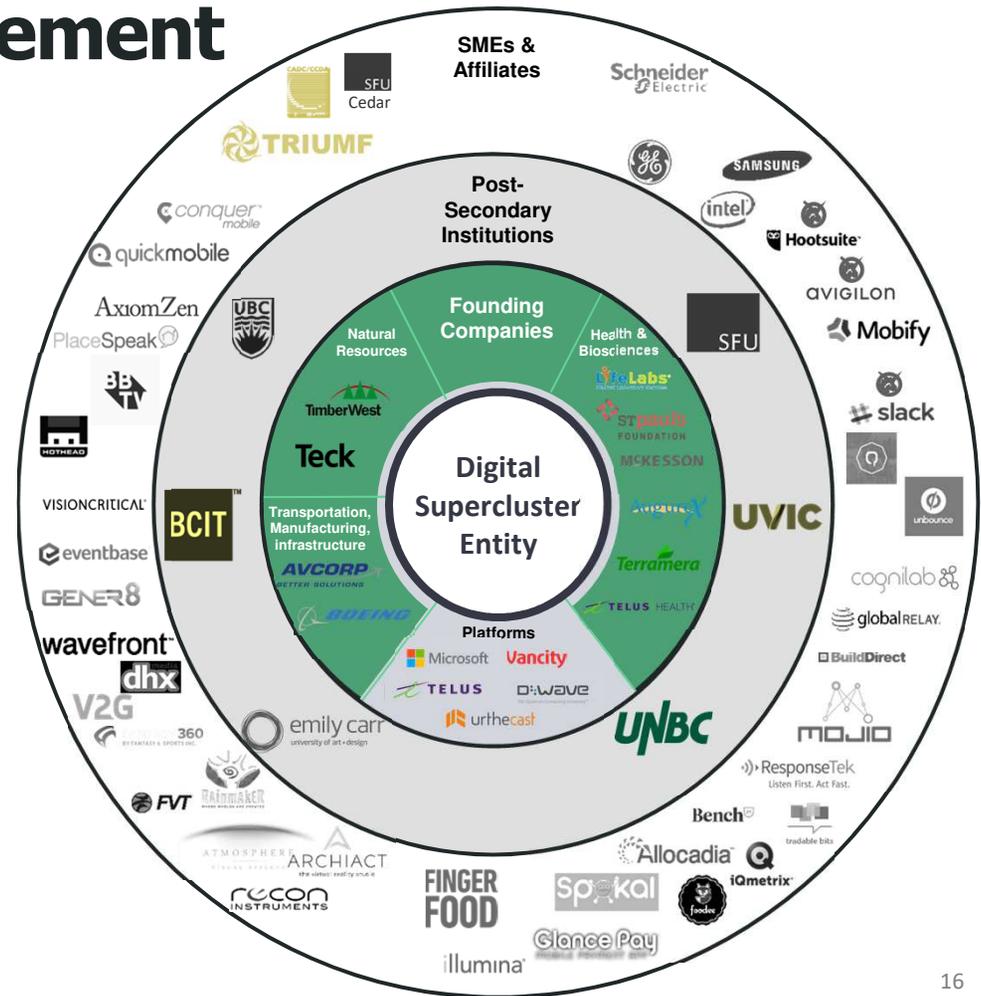
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Of BC's top post-secondary institutions committed cash and in-kind support

Full Value-Chain Engagement

Supercluster entity will engage with:

- **MNEs & Large BC-based companies** with access to global markets, deep market expertise
- **Post-secondary.** Collaboration of six post-secondary institutions with deep research capabilities and talent development
- **SMEs.** Strong base of start-ups, early stage and SMEs building industry solutions that leverage core platforms



Conclusion

Data is a growing resource

We have relevant, world-class strengths

Our ecosystem is ready for the next step

We believe Canada can and will be
a global leader in data driven innovation.

