



Opportunities in Technology

An introduction to AI, Blockchain, and Emerging Technologies

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July 17, 2017



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Table of Contents

1 Technology: Past, Present, and Future

2 Booming Areas

- Internet of Things
- Artificial Intelligence
- Blockchain

3 Career Implications

4 Savoir-faire Linux



Economics of Technology

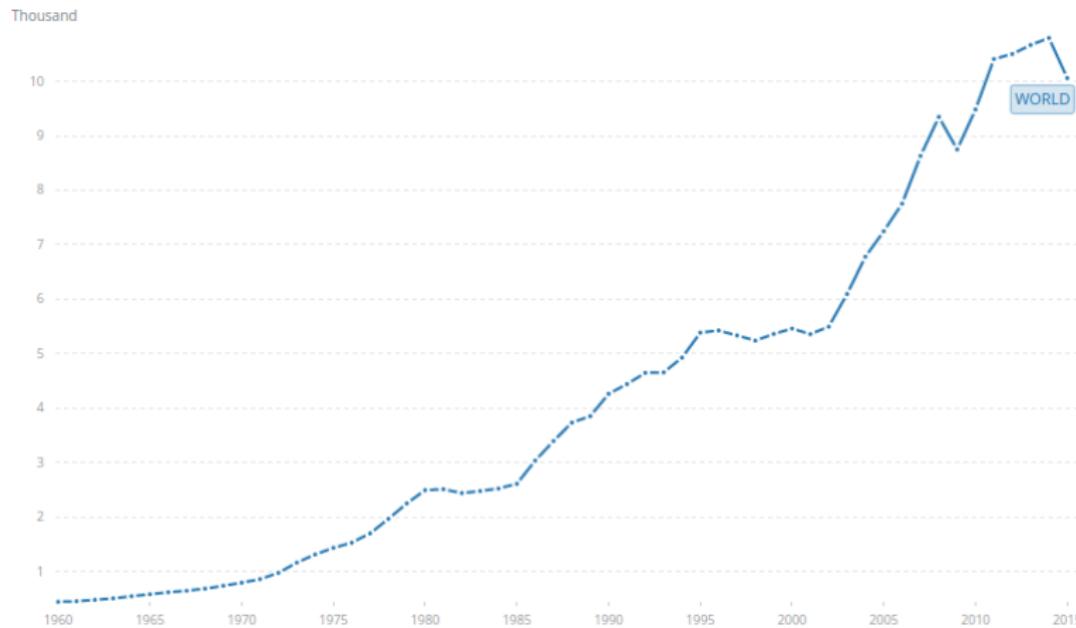


Figure: World GDP per capita, Credit: [World Bank](#), 2017



Emerging Technologies (Gartner's Hype Cycle, 2015)



The 4th Industrial Revolution

Everyone talks about it -Businesses & Government alike



Figure: The topic of conversation since Davos 2016 (Credit: Reuters)



The 4th Industrial Revolution

“The new technology revolution, which entails nothing less than a transformation of mankind.” —Klaus Schwab, founder and executive chairman of the World Economic Forum

Schwab, K. (2016). *The fourth industrial revolution.* Geneva: World Economic Forum



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The IoT market value at stake

\$19T over 10 years according to Cisco



Figure: Verticals with highest \$ potential Credit: John Chambers Keynote (Cisco, 2014)



Savoir-faire
LINUX

Artificial Intelligence

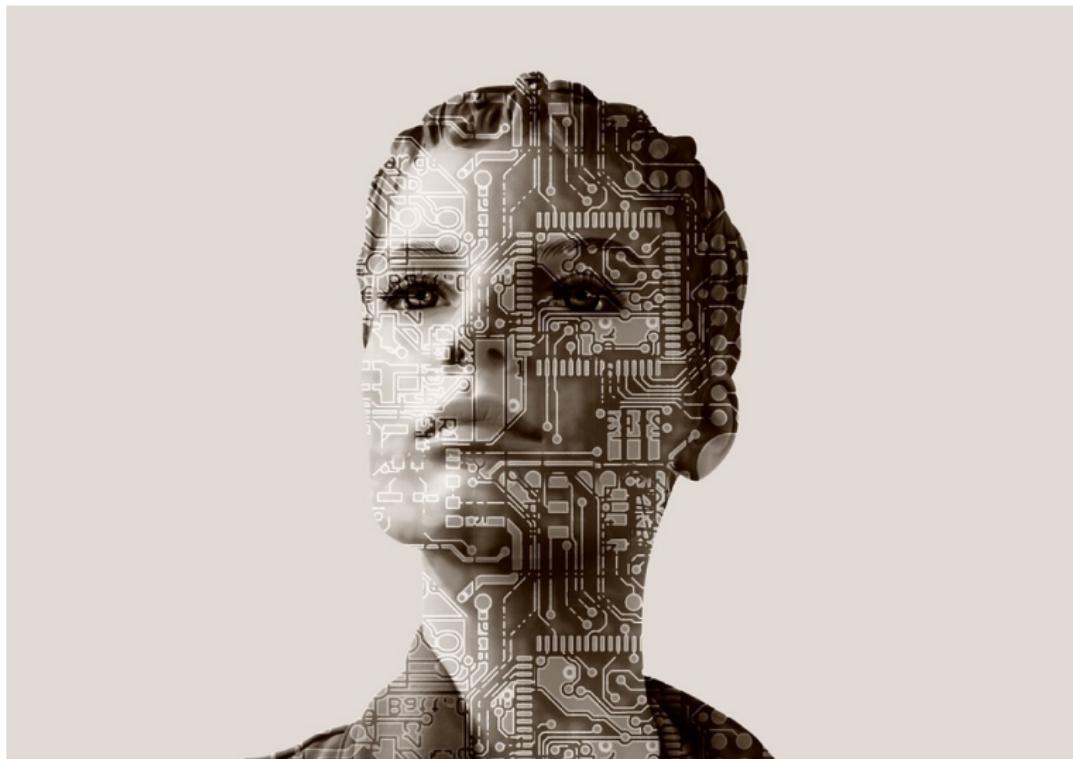


Figure: Credit: geralt



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

White Paper

Realizing the Potential of Blockchain

A Multistakeholder Approach to the Stewardship of Blockchain and Cryptocurrencies

June 2017

Figure: Credit: World Economic Forum



Case Study: ColliderX

<https://www.collider-x.org>

- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)



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- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)
- Building **the digital infrastructure of tomorrow**



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- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)
- Building **the digital infrastructure of tomorrow**
- Now building a Blockchain **Innovation Supercluster** in Canada



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- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)
- Building **the digital infrastructure of tomorrow**
- Now building a Blockchain **Innovation Supercluster** in Canada
- Open to all researchers/tinkerers and backers in the world



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Career Implications

- Newer & better jobs (old jobs go away, new jobs appear)



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Career Implications

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- 216,000 new ICT jobs in Canada in the next 3 years



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- Life-long Learning



Career Implications

- Newer & better jobs (old jobs go away, new jobs appear)
- 216,000 new ICT jobs in Canada in the next 3 years
- Life-long Learning
- Entrepreneuring (start-ups, contract work / self-branding, intrapreneurship...)



A new role for Digitization Leaders



By Billu (Own work) [CC BY-SA 4.0 (<http://creativecommons.org/licenses/by-sa/4.0/>)], via Wikimedia Commons

Dundee Precious Metals
Connects People, Miners, Vehicles and Building Controls

Quadrupled Production Saved US\$2.5M

"We've actually taken the Internet to a place that realistically it never should have gone."

Mark Gelman
Corporate Director of IT,
Dundee Precious Metals

Tory announces details of plan to modernize city services

Mayor says plan is designed to improve service while saving the city money

By Muriel Draisma, CBC News Posted: Nov 22, 2016 10:28 AM ET | Last Updated: Nov 22, 2016 2:13 PM ET



<http://torontolife.com/style/toronto-coolest-office-spaces-shopify/>

Open Source runs (almost) Everything

2015 was an inflexion point

<https://www.blackducksoftware.com/future-of-open-source>

WIRED Open Source Software Went Nuclear This Year
CADE METZ BUSINESS 12.27.15 7:00 AM

OPEN SOURCE SOFTWARE WENT NUCLEAR THIS YEAR

OVER THE NEXT 2 – 3 YEARS...

88% TO INCREASE OPEN SOURCE CONTRIBUTIONS **61%** EXPECT SECURITY OF OPEN SOURCE TO RISE

EXPECTED TO BE IMPACTED MOST:

Category	Percentage
CLOUD COMPUTING	39%
BIG DATA	35%
OPERATING SYSTEMS	33%
INTERNET OF THINGS	31%

HOW & WHY COMPANIES ARE USING OPEN SOURCE

The 2015 Future of Open Source Survey finds

78% OF COMPANIES RUN ON OPEN SOURCE
(nearly double since 2010) &

64% PARTICIPATE IN OPEN SOURCE PROJECTS.
yet many still lack formal policies and processes to manage potential open source-related security, operational, and legal risks.

66% OF COMPANIES BUILD CUSTOMER SOFTWARE ON OPEN SOURCE

OPEN SOURCE USE & PARTICIPATION HAS REACHED AN ALL-TIME HIGH

93% OPEN SOURCE USE INCREASED OR STAYED THE SAME

5% UNSURE

28% SAME

65% INCREASED

2% DECREASED

BLACKDUCK NORTH BRIDGE

Formation of Tech Clusters

e.g. Opportunities in Ontario

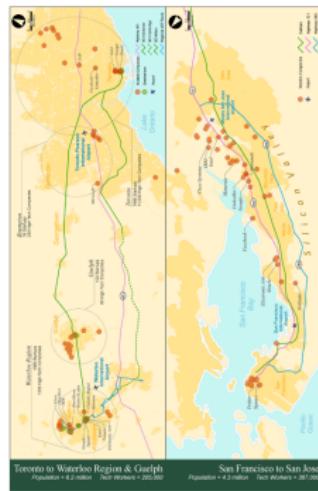


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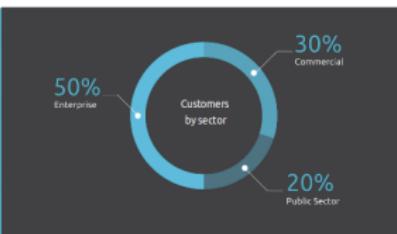


CONNECTED PEOPLE
& OBJECTS

DIGITAL ECONOMY
& INNOVATION

COOPERATION &
SUSTAINABLE DEVELOPMENT

Company Profile



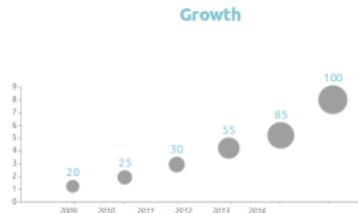
4 main offices

Toronto
Québec
Montréal
(head quarters)
Paris

4 training centers

Toronto
Ottawa
Québec
Montréal

Growth



Certifications ISO 9001 and ISO 14001

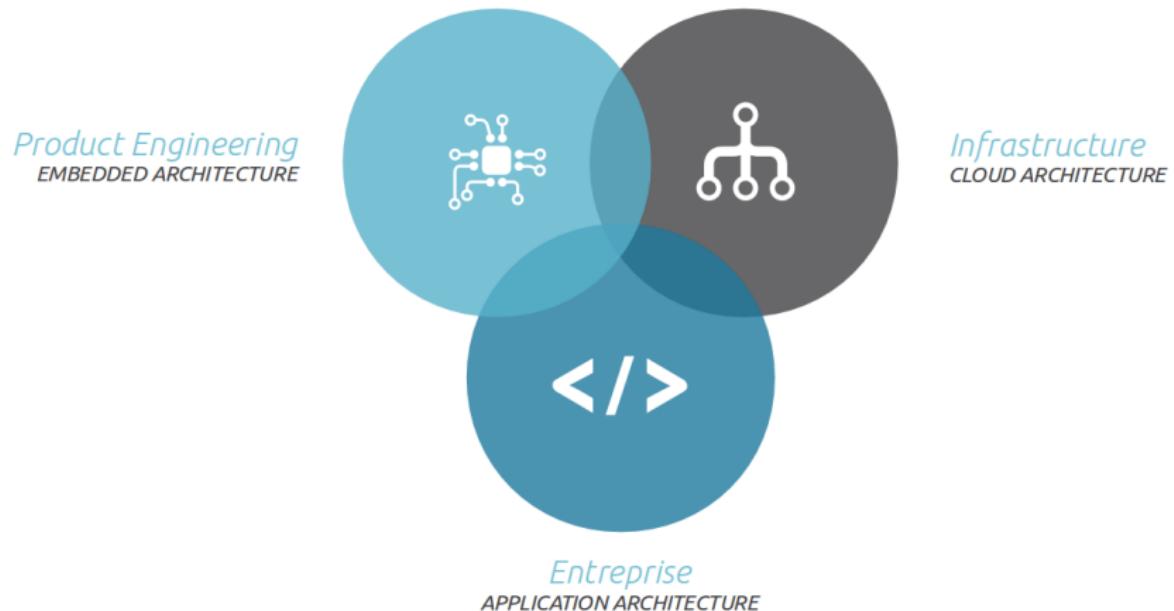


Solid references



Breadth of Services

on Free/Libre Open Source Technologies



Thank you!



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