



# Opportunities in Technology

*An introduction to AI, Blockchain, and Emerging Technologies*

By Marc Lijour

November 23, 2017

*The world-first Free/Libre Open Source and Crowdfunded R&Hub  
focusing on Blockchain and related technologies*



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## 1 Technology: Past, Present, and Future

## 2 Booming Areas

- Internet of Things
- Artificial Intelligence
- Blockchain

## 3 Career Implications



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# Economics of Technology

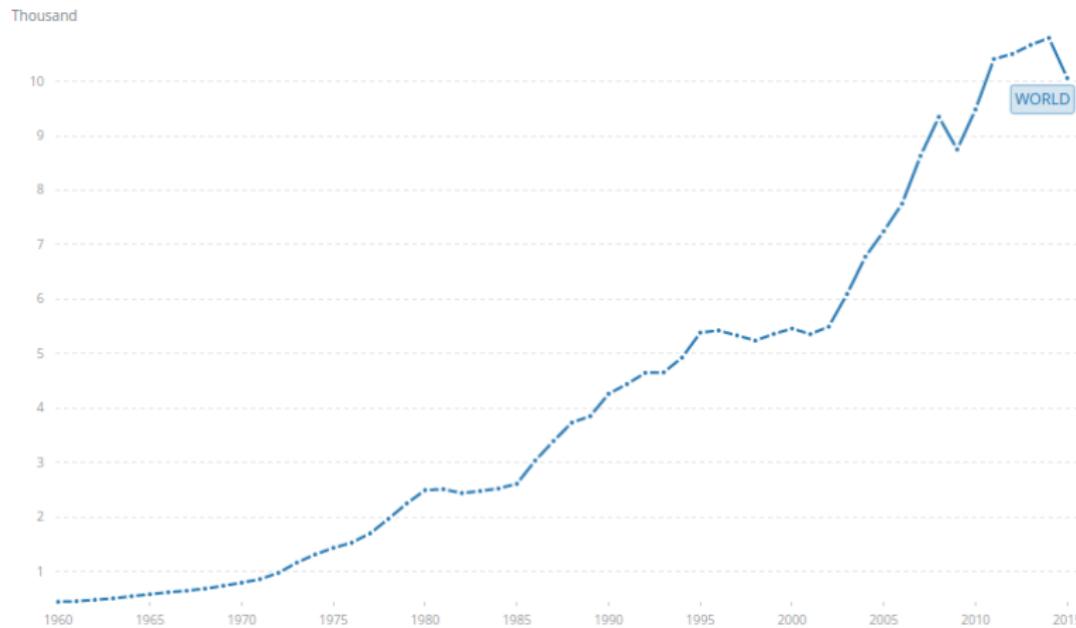


Figure: World GDP per capita, World Bank, 2017



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# The 4<sup>th</sup> Industrial Revolution

Everyone talks about it -Businesses & Government alike

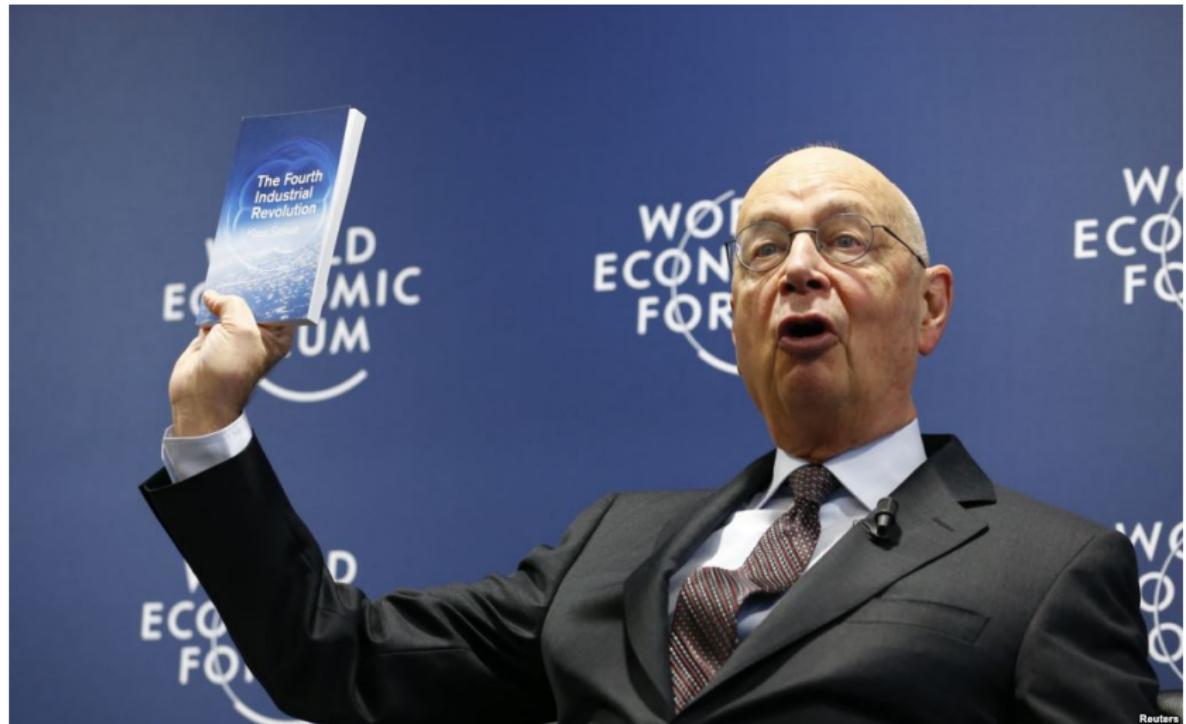


Figure: The topic of conversation since Davos 2016 (Credit: Reuters)



# The 4<sup>th</sup> 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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# Emerging Technologies (Gartner's Hype Cycle, 2015)



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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)



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# Artificial Intelligence

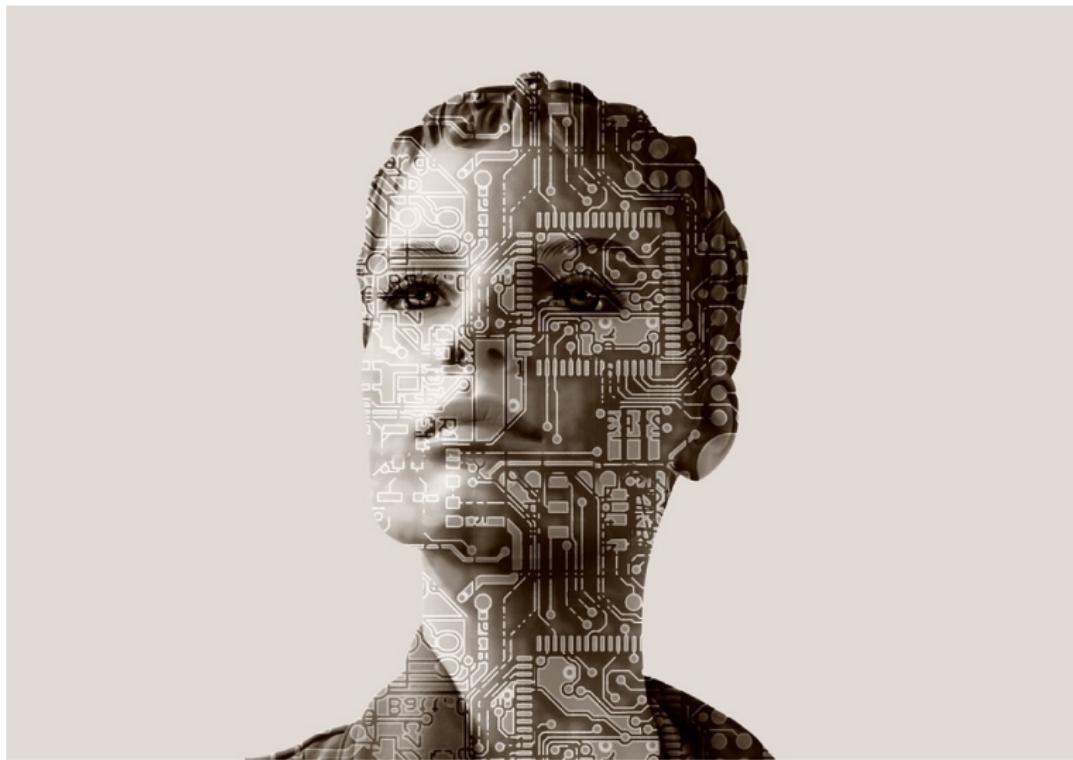


Figure: Credit: geralt





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OF THE WORLD

White Paper

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# Realizing the Potential of Blockchain

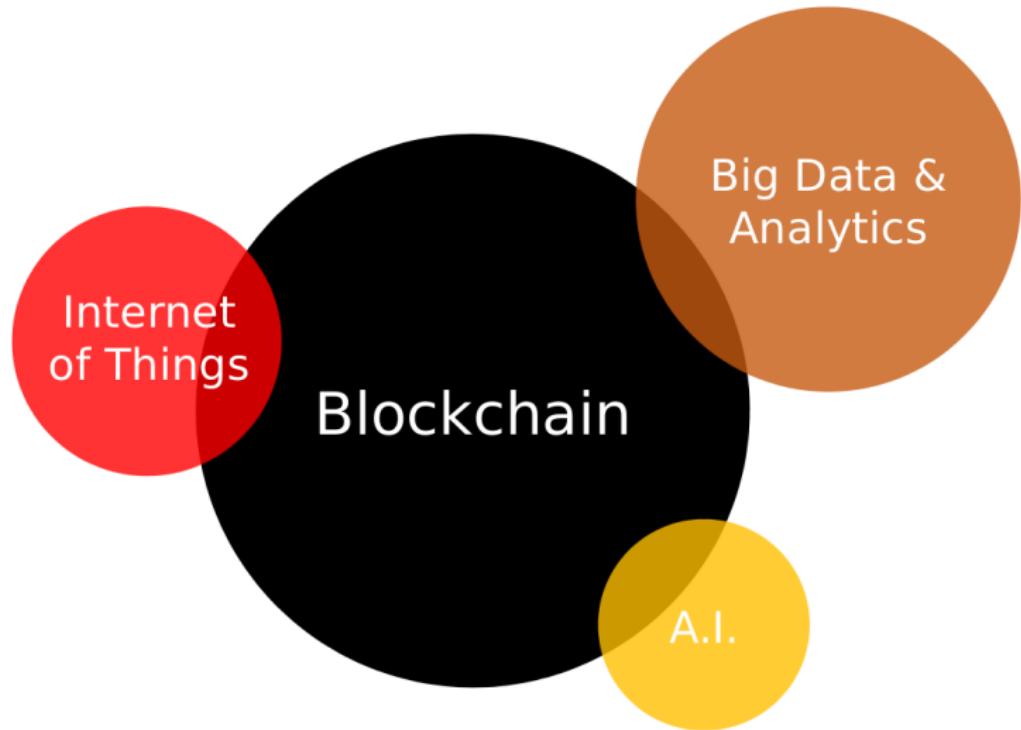
## A Multistakeholder Approach to the Stewardship of Blockchain and Cryptocurrencies

June 2017

Figure: Credit: World Economic Forum



# Related Technologies



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# Open Source runs (almost) Everything

2015 was an inflection 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:

- 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

Trend	Percentage
UNSURE	5%
SAME	28%
INCREASED	65%
DECREASED	2%



# 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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- Building **the digital infrastructure of tomorrow**
- Now building a Blockchain **Innovation Supercluster** in Canada



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- Now building a Blockchain **Innovation Supercluster** in Canada
- Open to all researchers/developers/tinkerers and backers in the world



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- Life-long Learning



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# Thank you!



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# References

- Schwab, K. (2016). *The fourth industrial revolution*. Geneva: World Economic Forum.
- Transparency Market Research. (2016, March). Artificial intelligence market to reach us\$ 3,061.35 bn by 2024. Retrieved from <https://www.prnewswire.com/news-releases/artificial-intelligence-market-to-reach-us-306135-bn-by-2024-deployment-in-disruptive-technologies-drives-growth-transparency-market-research-571268401.html>
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- World Bank. (2017). World GDP per capita. Retrieved from <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=2015&start=1960>

