

Cyber Crime and Your Business

A Global Perspective

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A World of Risks

World Economic Forum – Global Risks 2017

- **Definition of Global Risks and Trends**

- A **global risk** is *an uncertain event or condition that, if it occurs, can cause significant negative impact for several countries or industries within the next 10 years.*
- A **global trend** is *a long-term pattern that is currently taking place and that could contribute to amplifying global risks and/or altering the relationship between them.*

World Economic Forum – Global Risks 2017

– <http://reports.weforum.org/global-risks-2017/>

Top 10 risks in terms of Likelihood



- 1 Extreme weather events
- 2 Large-scale involuntary migration
- 3 Natural disasters
- 4 Terrorist attacks
- 5 Data fraud or theft
- 6 Cyberattacks
- 7 Illicit trade
- 8 Man-made environmental disasters
- 9 Interstate conflict
- 10 Failure of national governance

World Economic Forum – Global Risks 2017

These are the top 5 risks
to doing business in
North America



1. Cyber attacks

2. Fiscal crises

3. Energy price shock

4. Data fraud or theft

5. Asset bubble

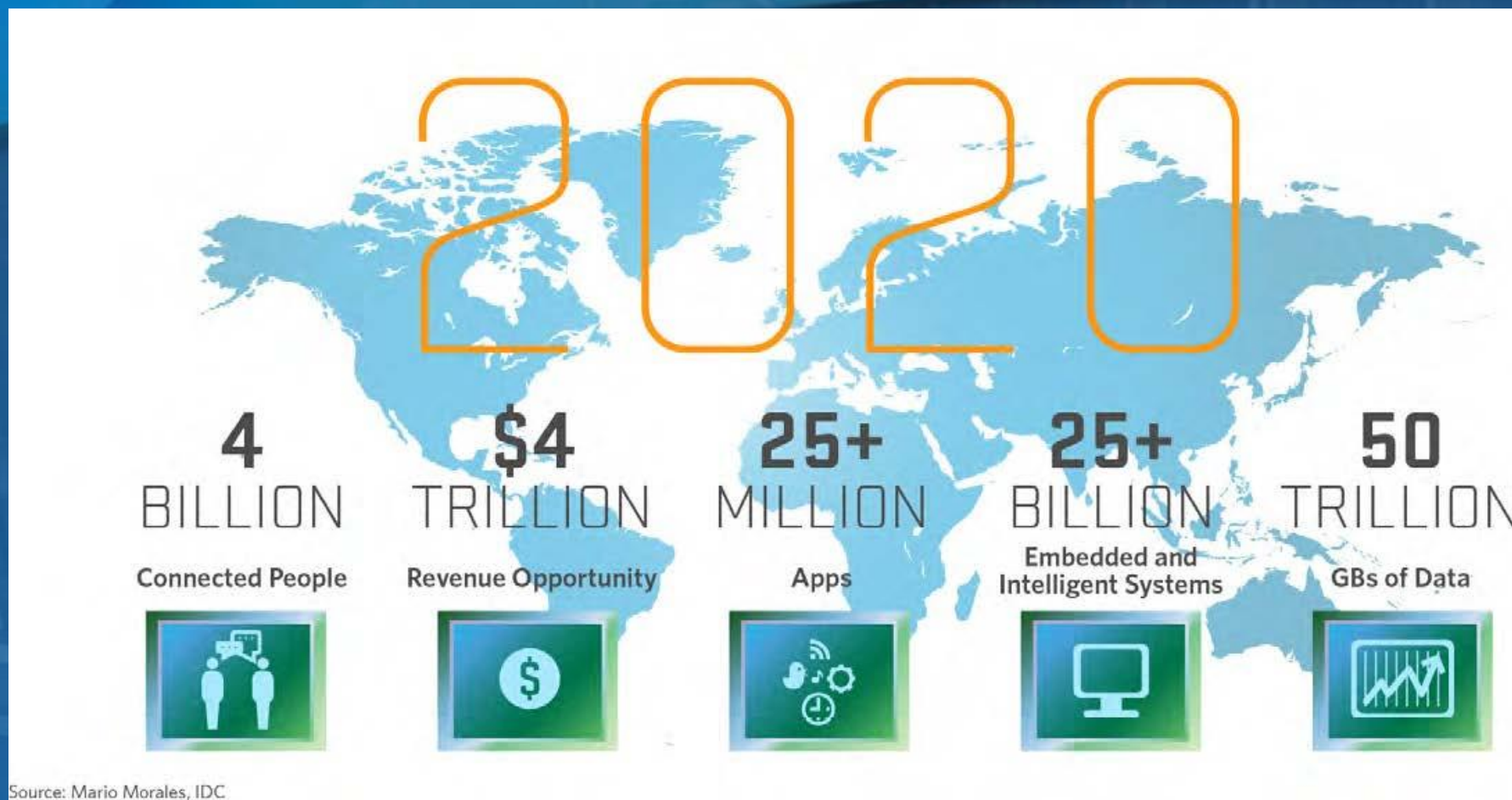
<http://reports.weforum.org/global-risks-2017/>

World Economic Forum – Global Risks 2017

– Concerns of Doing Business Risks – Global vs Canada

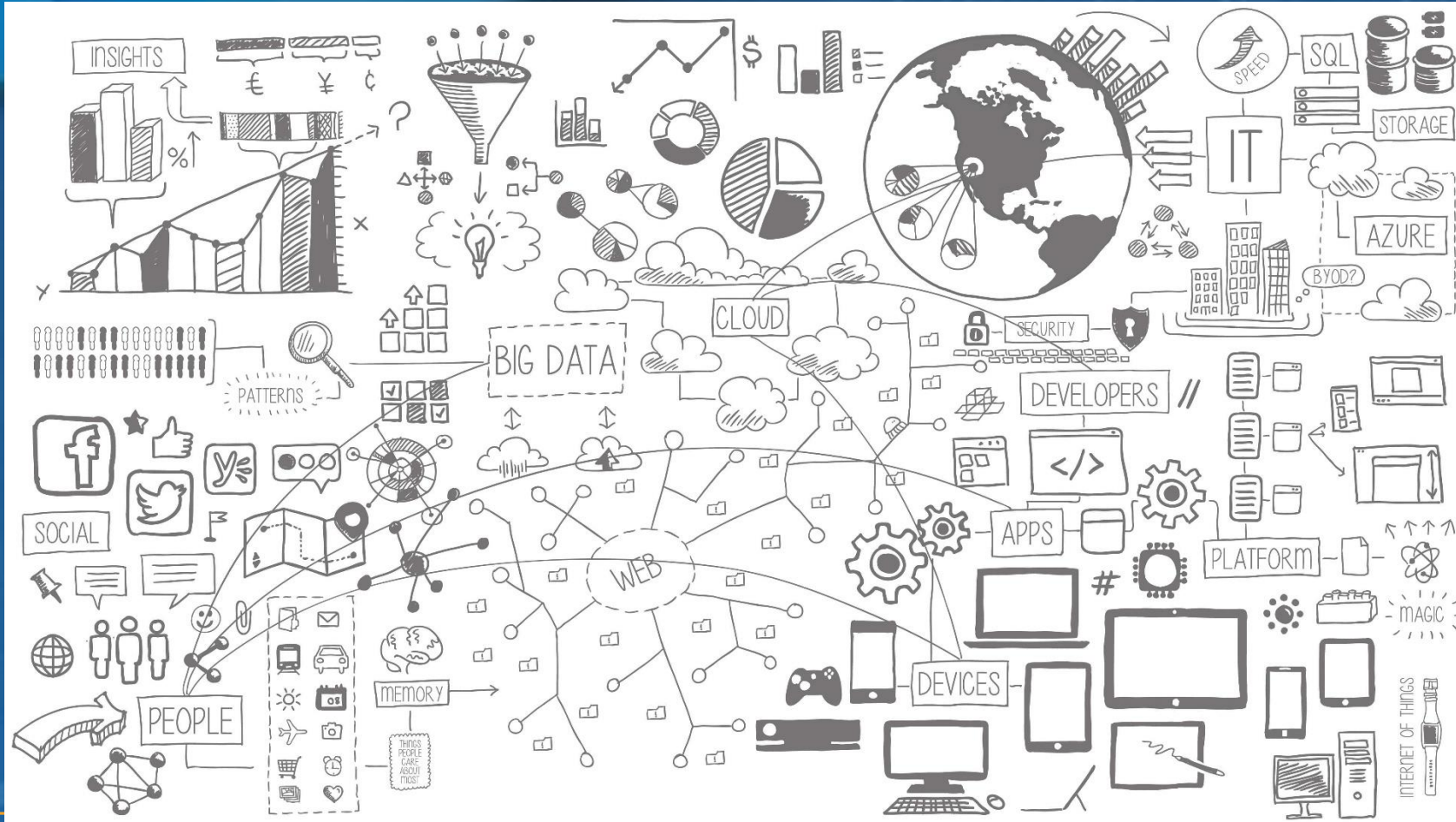
Top Global Tech Risks	Top Canadian Tech Risks
12 th – Cyberattacks	2 nd – Cyberattacks
14 th – Data Fraud or Theft	9 th – Data Fraud or Theft
22 nd – Misuse of Technology	14 th – Misuse of Technology
25 th – Critical Information Infrastructure Breakdown	15 th – Critical Information Infrastructure Breakdown

The Internet of Things – Adoption by 2020



A World of Data

Satya Nadella @satyanadella “great doodle of the world of data. catalyzing data exhaust into fuel for ambient intelligence”

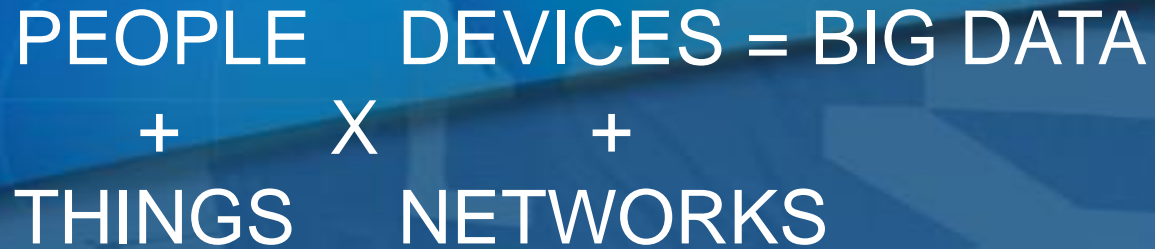


(Meisner, 2014)

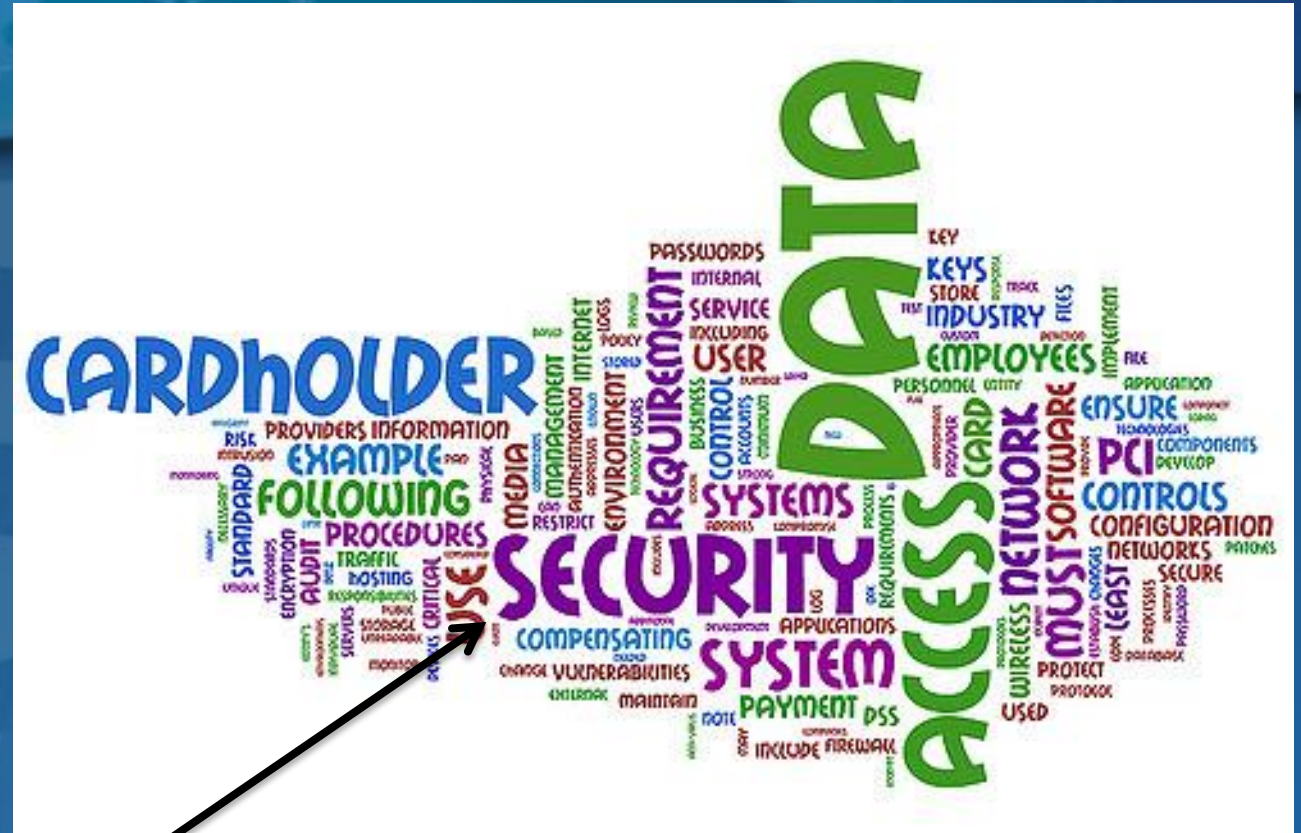
Data Exhaust – What is it?

- Refers to the data generated as **trails or information byproducts** resulting from all digital or online activities.
- These consist of **storable choices, actions and preferences** such as log files, cookies, temporary files and even information that is generated for every process or transaction done digitally.
- This data can be **very revealing about an individual**, so it is very valuable to researchers and especially to marketers and business entities.

Internet of Things + Big Data



PEOPLE + THINGS = BIG DATA
DEVICES + NETWORKS



ARE WE DOING ENOUGH? CAN WE KEEP UP?

Cybersecurity – Holistic Approach



Practical Approaches

- Business Impact Assessments
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Definition of Business Impact Analysis

- Gartner Definition:
 - A business impact analysis (BIA) is a process that identifies and evaluates the potential effects (financial, life/safety, regulatory, legal/contractual, reputation and so forth) of natural and man-made events on business operations.
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Objectives of BIA

- Identify critical business functions (CBFs)
 - Identify critical resources
 - Identify maximum acceptable outage (MAO)
 - Identify indirect costs
 - Identify recovery requirements
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Definition of Critical Business Functions

- Critical functions are those activities that are vital to your organization's survival and to the resumption of business operations. Typically, your critical functions are the business functions that are:
 1. most sensitive to downtime
 2. fulfill legal or financial obligations to maintain cash flow
 3. play a key role in maintaining your business' market share and reputation
 4. Safeguard an irreplaceable asset

Definition from Arthur J. Gallagher and Co

Dimensions of a BIA

- Identify the business impact of IT disruptions
 - Mission critical IT systems and components
 - Does not analyze all IT functions
 - Stakeholders identify mission critical systems
 - Compliance issues often drive BIA
 - Inputs into the business continuity plan (BCP) and risk assessment (RA)
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Steps Involved in Implementing a BIA

Identify the environment

Identify stakeholders

Identify Critical Business Functions

Identify maximum downtime

Identify critical resources

Identify recovery priorities

Develop a BIA report

References

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