

iIBA® International Institute
of Business Analysis™



Cybersecurity: Business Analysis Essentials

Tuesday February 18, 2020



Cybersecurity: The Facts

3.5 Million

Unfilled cybersecurity jobs worldwide will reach 3.5 million by 2021.



300,000

Cybersecurity jobs in the U.S. are currently unfilled.



6 Trillion

Dollars expected to be spent globally on cybersecurity by 2021.



Sources:

<https://www.cybintsolutions.com/cyber-security-facts-stats/>

<https://thehill.com/opinion/cybersecurity/365802-cyber-jobs-are-available-but-americans-dont-realize-they-are-qualified>



There is a hacker attack every 39 seconds.

21% of business analysis professionals report being involved in their organizations' cybersecurity practice.

- 2019 Salary Survey Report





67%

Cybersecurity breaches have increased by 67% over the past five years.



**The average cost of a data breach in 2020 will exceed
\$150 million.**

Q&A

Panelist Discussion



How are increasing cyber threats driving the need for a diverse cybersecurity workforce?

11 top cybersecurity statistics at-a-glance

90% of remote code execution attacks are associated with cryptomining

92% of malware is delivered by email

56% of IT decision makers say targeted phishing attacks are their top security threat

77% of compromised attacks in 2017 were fileless

The average ransomware attack costs a company \$5 million

It takes organizations an average of 191 days to identify data breaches

69% of companies see compliance mandates driving spending

88% companies spent more than \$1 million on preparing for the GDPR

25% of organizations have a standalone security department

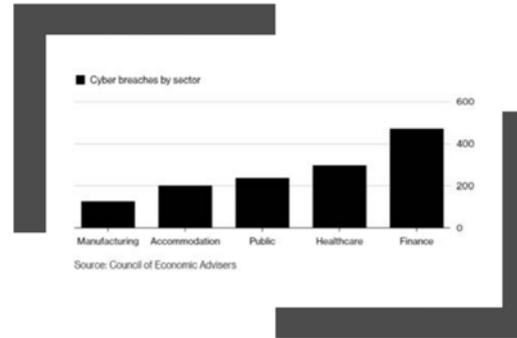
54% of companies experienced an industrial control system security incident

61% of organizations have experienced an IoT security incident

Source: <https://www.csoonline.com/article/3153707/security/top-cybersecurity-facts-figures-and-statistics.html>

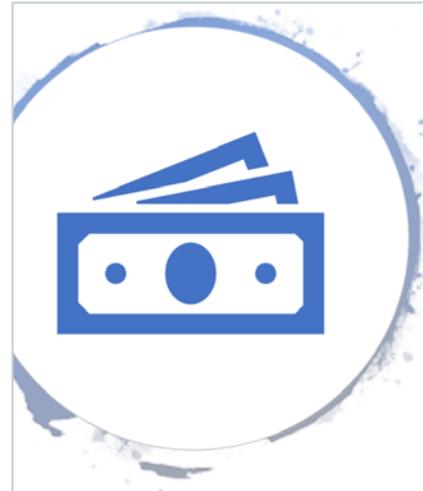
With the changing landscape of technology increasing information risks exponentially and increasing our vulnerability to cyberattacks, what is the role of the business analyst in cybersecurity?

Cost of cyberattacks to US economy



The Council of Economic Advisors reports that malicious cyber activity cost the US economy **between \$57 billion and \$109 billion** in 2016

The finance sector had the highest number of cyber breaches in 2016

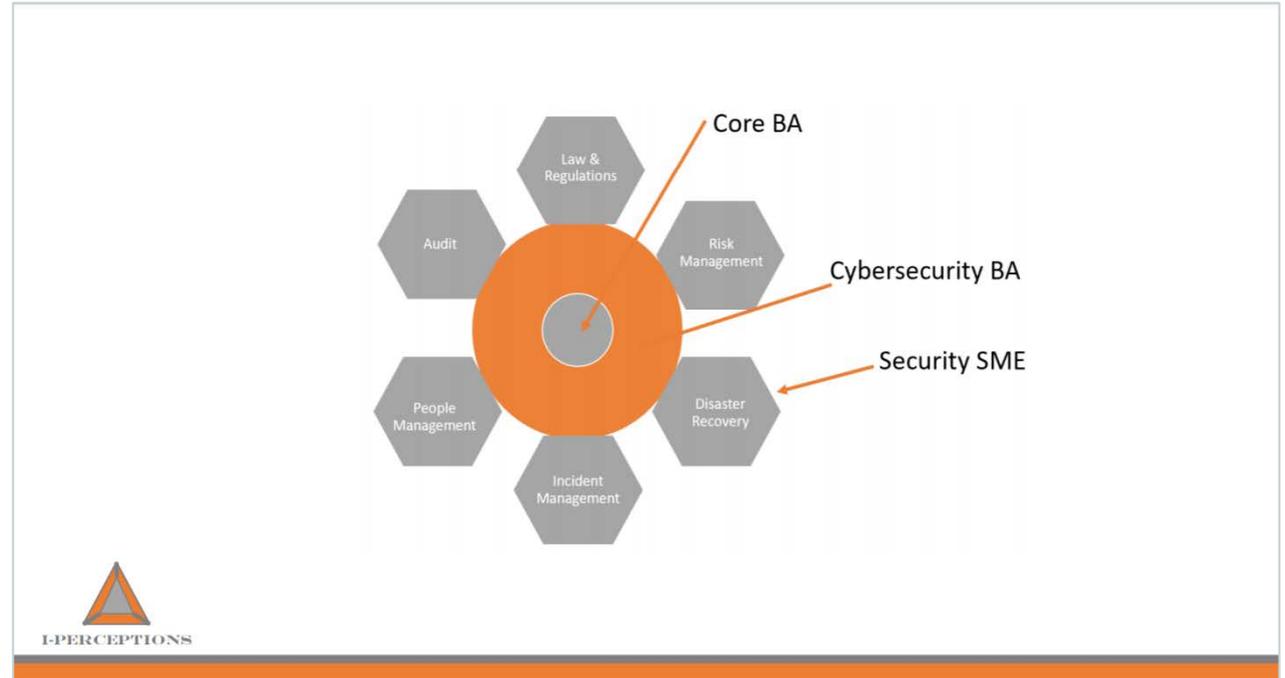


Cost of cybercrime

- Cybersecurity Ventures predicted that cybercrime will cost the world **\$6 trillion annually by 2021**, up from \$3 trillion in 2015.
 - This represents the greatest transfer of economic wealth in history,
 - risks the incentives for innovation and investment, and
 - will be more profitable than the global trade of all major illegal drugs combined.

Who is responsible for cybersecurity and what can BAs do about it?

Can you share what your experiences have been working as a BA alongside cybersecurity experts and analysts?



How can BAs apply their skills and techniques described in the Business Analysis Body of Knowledge (the BABOK® Guide) to facilitate planned change that exceeds stakeholder, compliance and regulatory requirements?

Spending on cybersecurity



“... It is estimated that spending on cybersecurity of critical infrastructure in the Asia-Pacific region will reach US\$22 billion by 2020...”.¹

“The worldwide cybersecurity market continues to grow and grow as defined by market sizing estimates that range from \$75 billion in 2015 to \$170 billion by 2020.”²

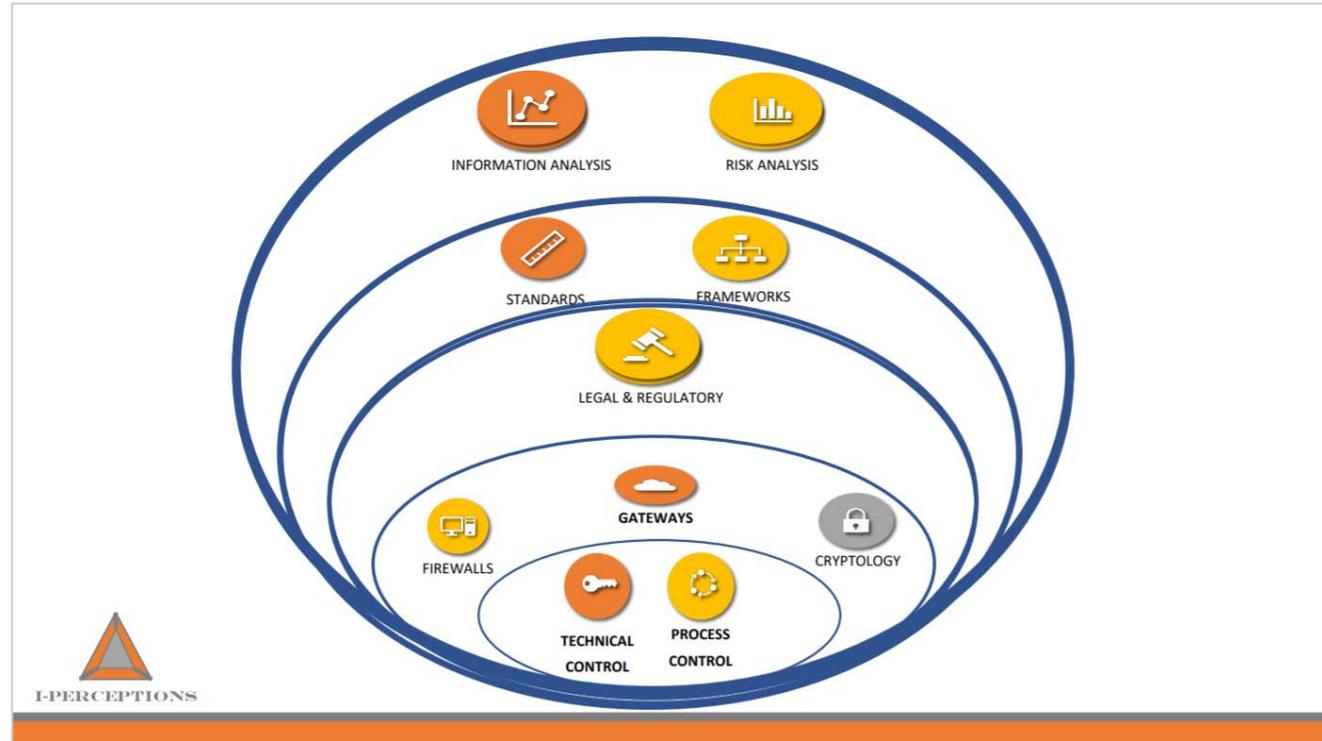
Great news for cybersecurity professionals around the globe!

1. From the authors of the *Australian Cyber Security plan*, published in 2016
2. Gartner Forecasts Worldwide Information Security Spending to Exceed \$124 Billion in 2019

Question:

What roles do governance, risk and compliance-based approaches play in cybersecurity planning?

How do you apply business analysis methods and practices to cybersecurity and enterprise information security to help keep businesses secure?



Question:

What is the role of the BA in helping cybersecurity teams prevent data loss?

Do businesses know what they are preparing for?

The National Association of Corporate Directors identified the top 10 risks to board governance and number 5 was cyber risk.

What can businesses do about this and how can BAs help?

TOP 10 RISKS FOR 2019 ¹	
RISK ISSUE	
	Existing operations meeting performance expectations, competing against “born digital” firms
	Succession challenges and ability to attract and retain top talent
	Regulatory changes and regulatory scrutiny
	Cyber threats
	Resistance to change operations
	Rapid speed of disruptive innovations and new technologies
	Privacy/identity management and information security
	Inability to utilize analytics and big data
	Organization’s culture may not sufficiently encourage timely identification and escalation of risk issues
	Sustaining customer loyalty and retention

What are the 5 things BAs can do today to prevent cyber attacks?



Patch Management

A good patch management strategy ensures that patches are applied in a timely manner and will not negatively affect operations. This breaks down into two main components: patch testing and patch application.

Role of the BA – Process modeling, stakeholder engagement, risk assessment, establishing the RASCI

How can we apply the skills and techniques described in a Guide to the Business Analysis Body of Knowledge (the BABOK® Guide) to facilitate planned change that exceeds stakeholder, compliance and regulatory requirements?

What can BA's do?

Stakeholder analysis

Requirements elicitation and tracking

Modeling

Business case development

Liaison and business partner

Change agent

Document analysis

Assessments and prioritization

A toolbox of tools and techniques

Question:

Can you share an example of the type of technologies and tools an organization may have and what are the potential gaps?

Question:

How can Business Analysis help businesses build their framework through scenarios and use cases to create user stories for cybersecurity?

Question:

IIBA and IEEE Computer Society teamed up to create the learning modules and the resource materials for Cybersecurity Analysis.

Can you tell us how the learning modules work with the IIBA IP? What do the modules cover?

How can BAs and cyber teams work hand in hand using agile?



Question:

How can you apply business analysis knowledge in cybersecurity?

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As the recognized voice of the business analysis community, IIBA supports the recognition of the profession and discipline and works to maintain the global standard for the practice and certifications.

For more information visit www.iiba.org/cybersecurity

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Cybersecurity Analysis

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