

The Costa Concordia Incident: A Case Study in Indirect Consequences



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September 19, 2019

OAS - CIP 3rd Hemispheric Conference on Port Security

Overview

The purpose of this presentation is to examine some examples of **indirect consequences** (a.k.a **costs**) that can result from marine safety and/or security incidents.

The information presented is intended to assist leaders and managers in understanding how indirect consequences can negatively impact their organizations.

Overview

Although this case study is from a marine accident it is plausible that a similar scenario could be adapted by nefarious actors, such as terrorists, to duplicate the **consequences**.

If this event had been the result of an intentional act, such as maritime terrorism, there is a very high probability that the **direct & indirect consequences** would have been much worse than those that resulted from this incident.

Methodology

A case study from a **real world event** will be used to illustrate key concepts.

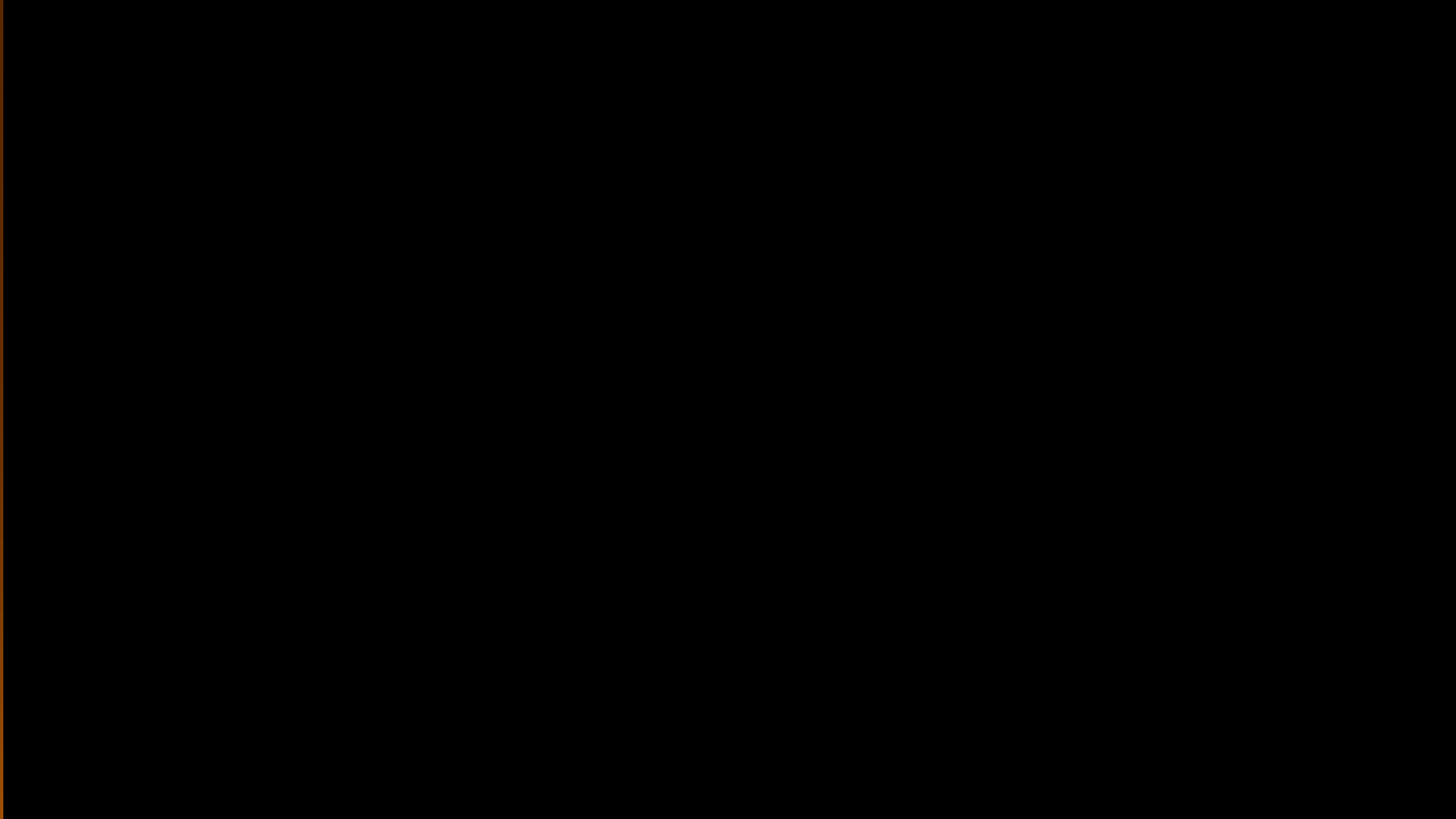
The root cause analysis of how & why the event occurred is beyond the scope of his presentation.

Methodology

The assumption is made that this incident was caused by human error and was not an intentional act.

This presentation is not intended to assign blame or culpability for the incident but only to illustrate concepts for academic purposes.

Incident Summary



Direct Consequences

Loss of Life

Loss of Vessel

Salvage Cost

Legal Expenses

Direct Consequences

Lost Bookings

Fines & Penalties

Environmental Remediation Costs

Passenger Claims

Direct Consequences

Total Estimated Direct Consequences
(financial losses)

\$2 billion+

Indirect Consequences

How do we calculate the indirect costs associated with a safety/security incident???

2nd & 3rd Order Consequences

Indirect Consequences

A publically traded company's stock price is a reflection of investor confidence in that company.

Companies have limited ability to influence the value of its stock (especially post incident).

Indirect Consequences

Common Stock Valuation on January 13, 2012 (Friday)

Closing Price: \$28.75

Volume: 4.42 million

Common Stock Shares: 217,491,695

Total Value: \$6,252,886,231

Indirect Consequences

Common Stock Valuation on January 16, 2012 (Monday)

Closing Price: \$28.75

Volume: 0

Common Stock Shares: 217,491,695

Total Value: \$6,252,886,231

Indirect Consequences

Common Stock Valuation on January 17, 2012 (Tuesday)

Closing Price: \$26.97

Volume: 12.33 million

Common Stock Shares: 217,491,695

Total Value: \$5,865,751,014

Indirect Consequences

Common Stock Valuation on January 17, 2012 (Tuesday)

Loss Per Share: \$1.78

Single Day Share Holder Losses: \$387,135,217

Loss of value as a percentage: -6.1%

RCL

Indirect Consequences

CCL - Common Stock Valuation on January 13, 2012 (Friday)

Closing Price: \$34.28

Volume: 5.3 million

Common Stock Shares: 357,000,000

Total Value: \$12,237,960,000

Indirect Consequences

CCL - Common Stock Valuation on January 17, 2012 (Tuesday)

Closing Price: \$29.60

Volume: 39.95 million

Common Stock Shares: 357,000,000

Total Value: \$10,567,200,000

Indirect Consequences

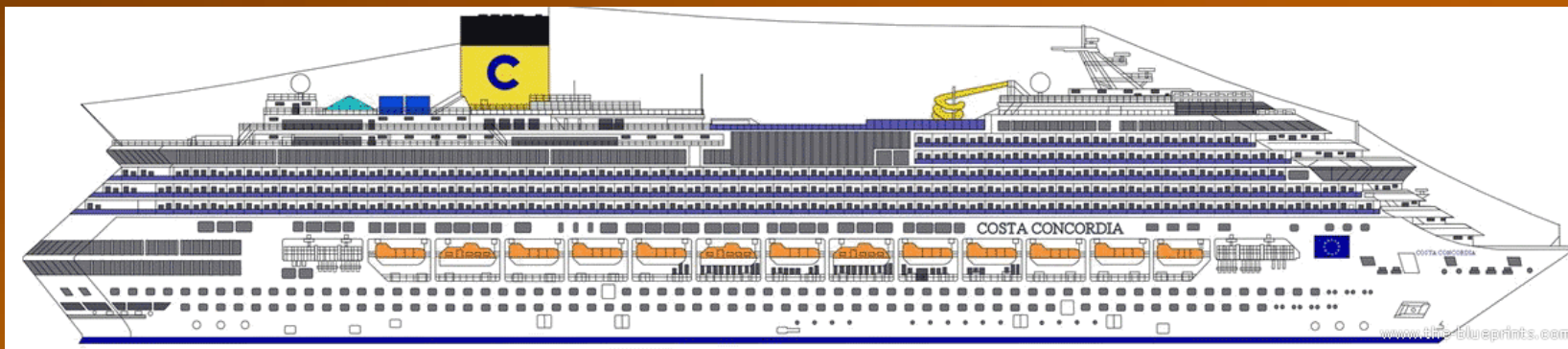
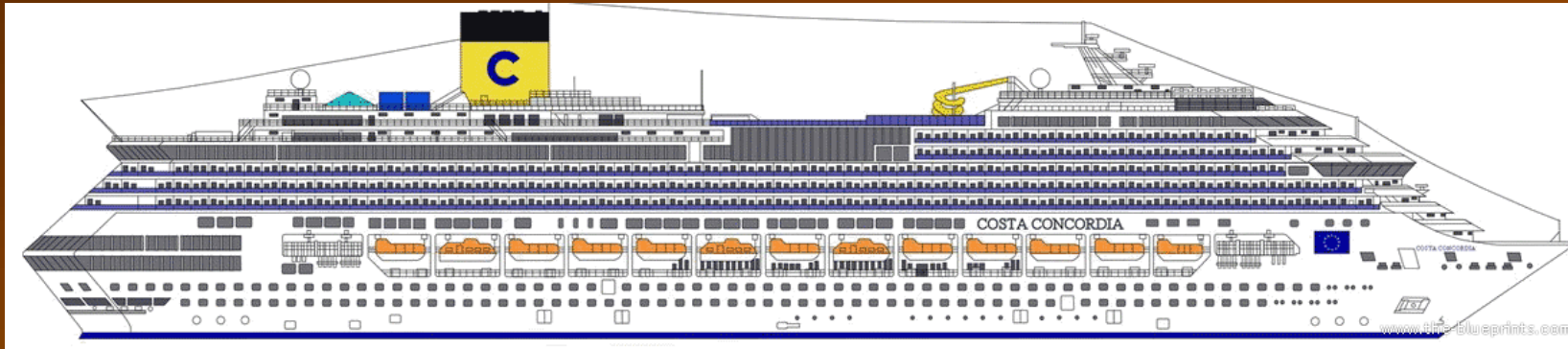
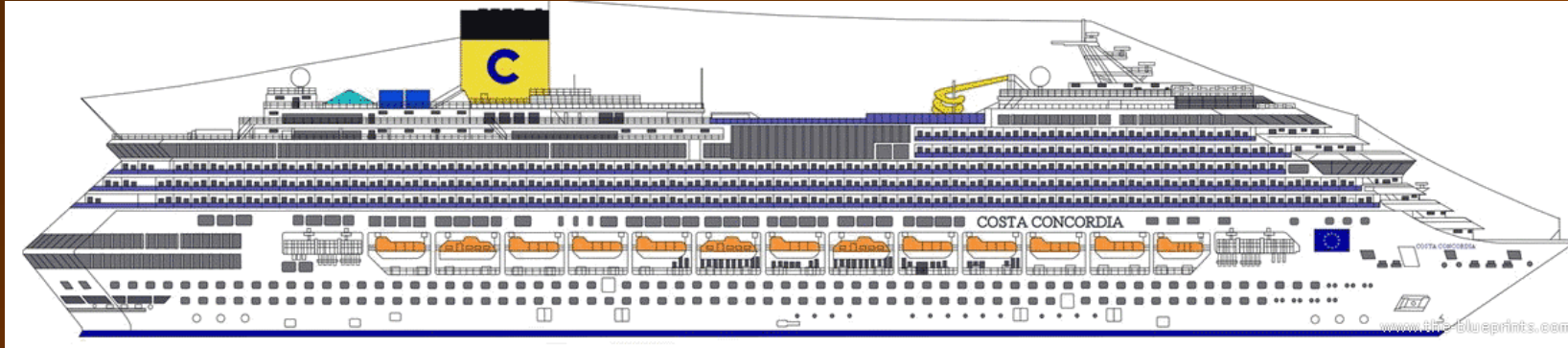
CCL - Common Stock Valuation on January 17, 2012 (Tuesday)

Loss Per Share: \$4.68

Single Day Share Holder Losses: \$1,670,760,000

Loss of value as a percentage: -13.3%

Indirect Consequences



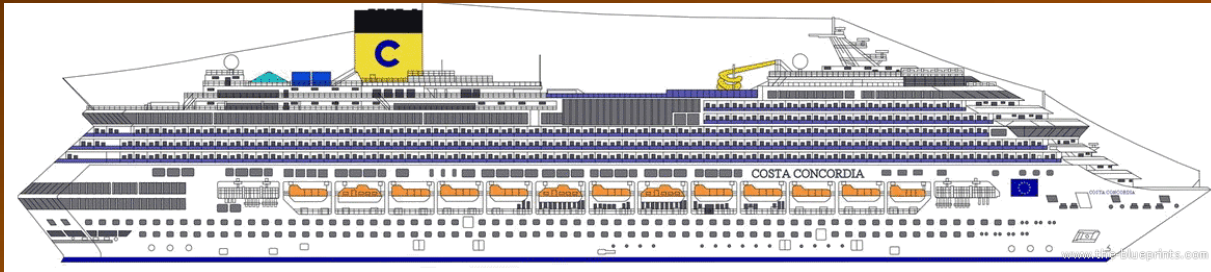
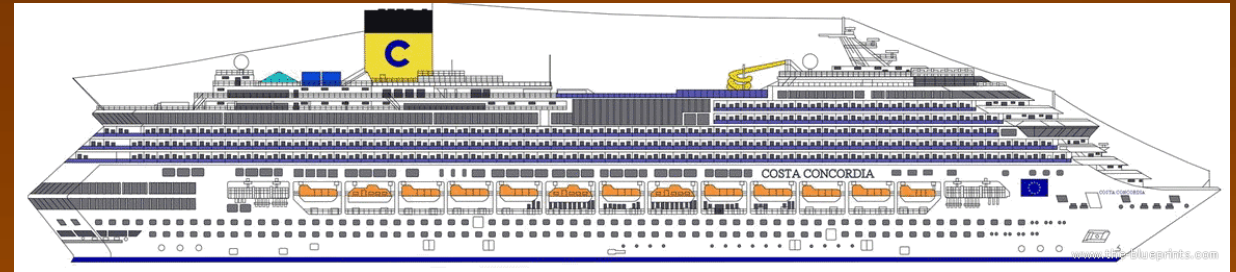
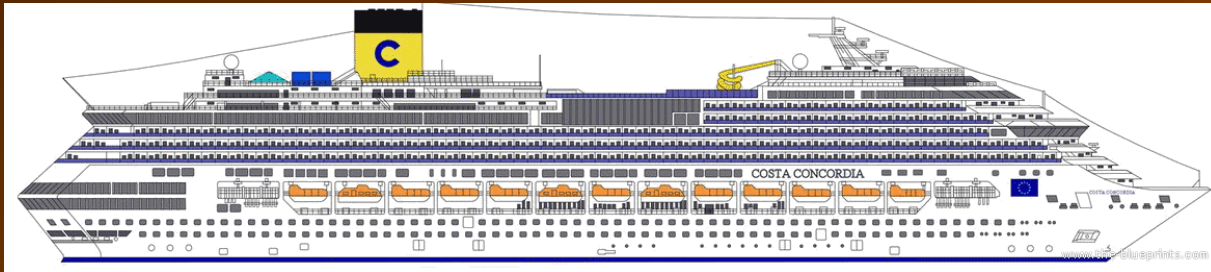
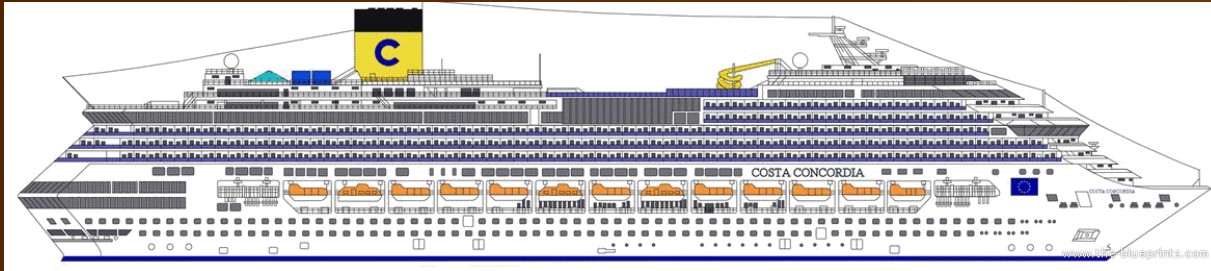
Indirect Consequences

Combined Single Day Shareholder Losses

\$2,057,895,217

Indirect Losses = Direct Losses

Indirect Consequences



Business Recovery

CCL - Common Stock Valuation on July 2, 2012 (Monday)

Closing Price: \$34.42

Volume: 3.86 million

Common Stock Shares: 357,000,000

Total Value: \$12,287,940,000 (173 days)

Increasing Risks – Vessel Size

Seatrade Maritime News – seminar hosted by the Emirates Maritime Arbitration Centre (EMAC)

Worst case scenario of \$4bn casualty between cruise and container ships highlighted

https://www.seatrade-maritime.com/news/middle-east-africa/worst-case-scenario-of-4bn-casualty-between-cruise-and-container-ships-highlighted/?utm_content=Worst%20case%20scenario%20of%20%244bn%20casualty%20between%20cruise%20and%20container%20ships%20highlighted&utm_source=Email&utm_medium=Seatrade%20Maritime%20News&utm_contact=23945749&utm_term=Newsletter_SMN_Daily_News&utm_campaign=149557

Increasing Risks – Vessel Size

The number of total losses in 2018 was 46 compared to 207 in 2000.

It was noted that the average container vessel carrying capacity had nearly doubled over the last decade with ships of over 23,000 teu now in service, and vessel size had increased by nearly 1,500% since 1968.

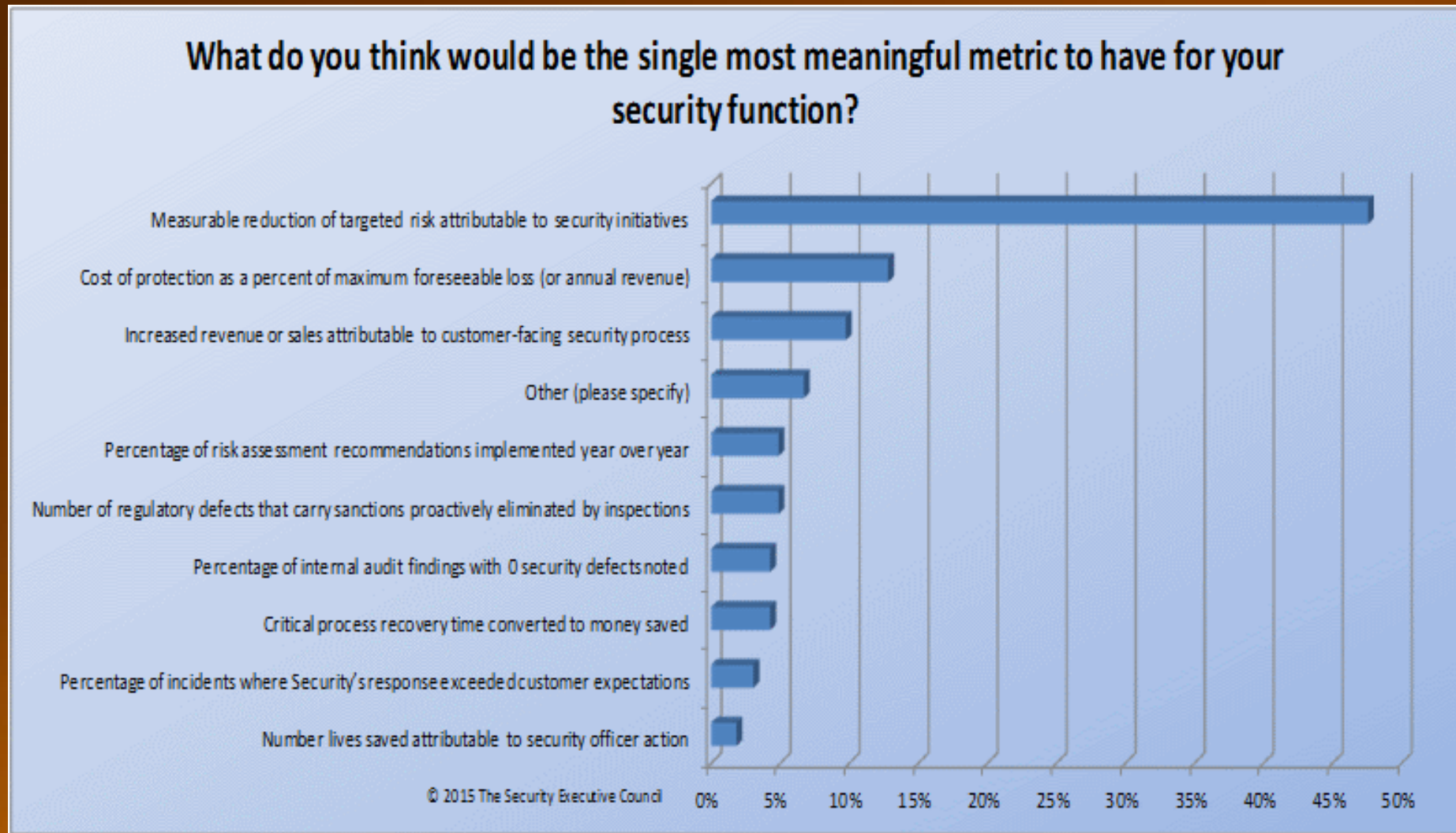
Risk Appetite

How much risk will senior management tolerate?

Are they aware of the direct and indirect consequences?

Use risk calculations to justify security expenditures.

Making a Business Case for Security



Key Points...

- What happens to my competitor(s) impacts me.
- Indirect consequences can equal or exceed direct consequences.
- Remember to use indirect consequences for calculating your total risk exposure.

Conclusion

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