



Integrating Resilience into Digital Transformations: **From Risk to Recovery**

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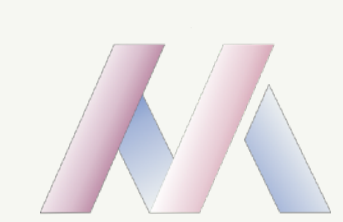
1. Does your organization have a cyber risk framework?

2. Is it an integrated part of enterprise risk management? If yes, how?

3. How are risk management and resilience connected?



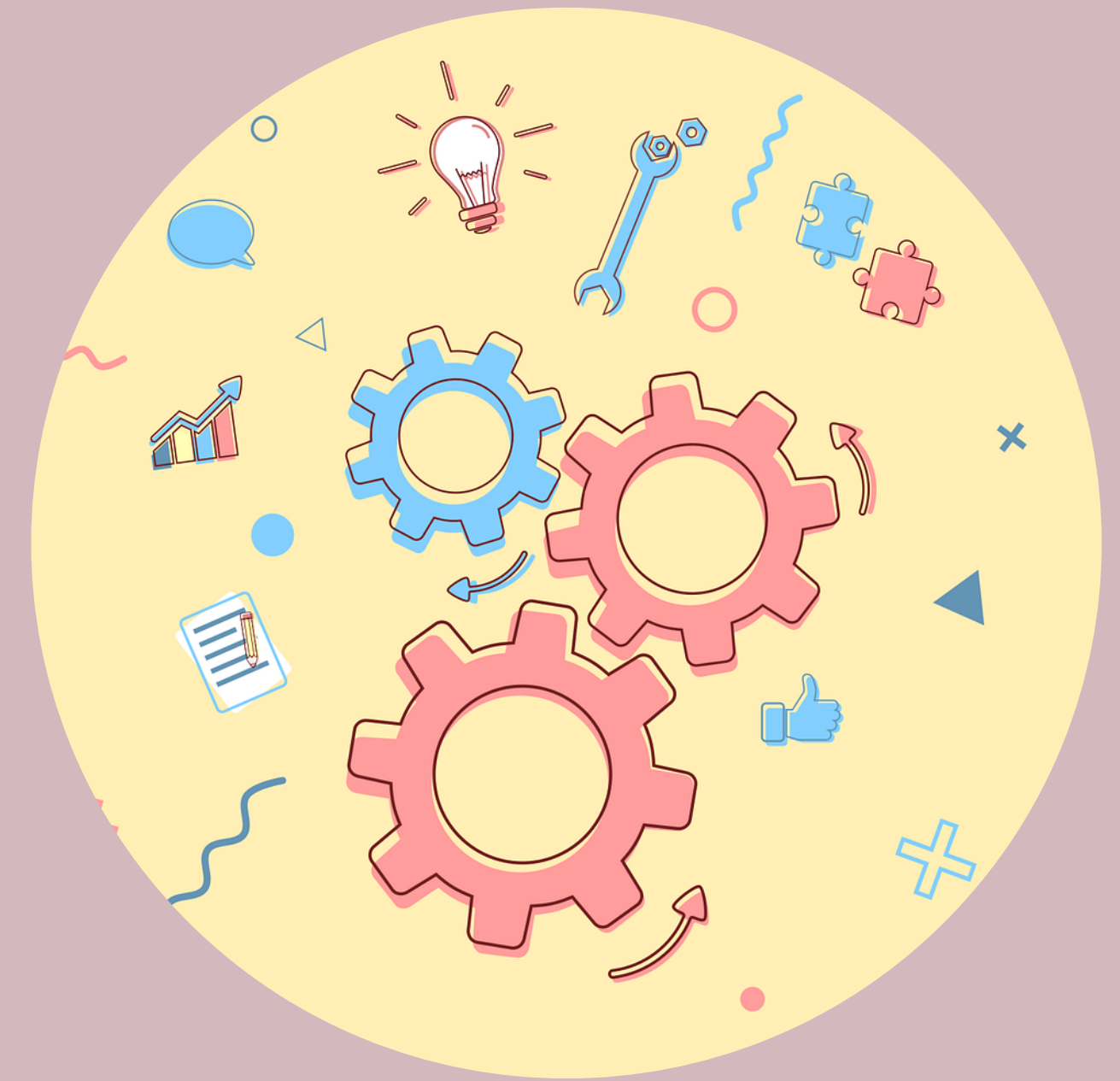
Top Cyberattack Trends



Ransomware



Cloud Attacks



Supply Chain

Source: TechTarget 10 Biggest Cyberattacks, McAfee Labs Threat Report 04.21



150% increase
in ransomware attacks

2020

Cognizant
Ireland's HSE
Colonial Pipeline
Garmin*

*and more

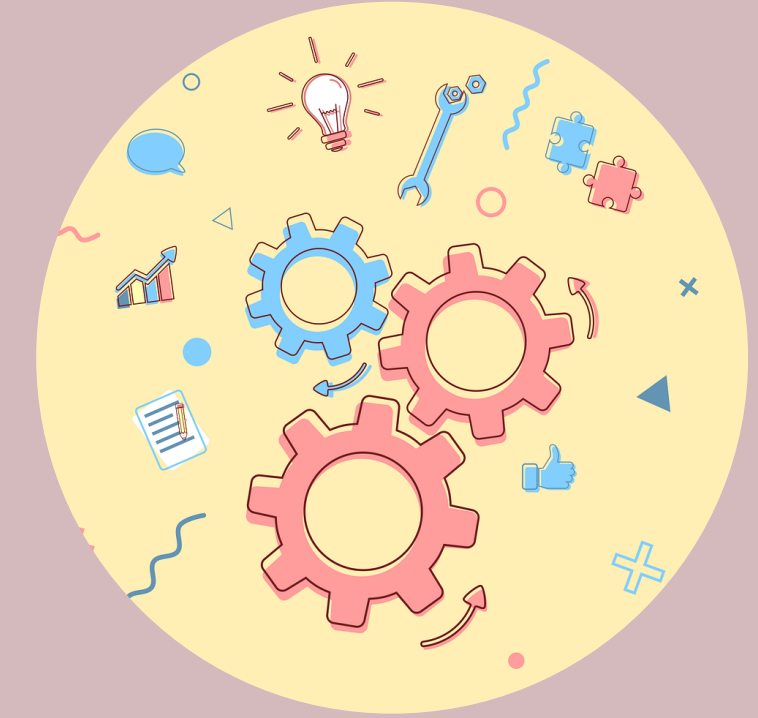


630% increase
in threats targeting
cloud services

Jan - Apr '20

7.5 million
external attacks on
cloud accounts**

**Q2 2020



4 times more
supply chain
attacks in 2021

SolarWinds
Vaccine Alliance
UNICEF
Kaseya*

*and more



Top industries by Increase in % Attacks

Pre-Covid

Finance & Insurance

1

2

3

...

...

Manufacturing

8

Energy

9

Healthcare

10

During-Covid

Finance & Insurance

1

Manufacturing

2

Energy

3

...

Healthcare

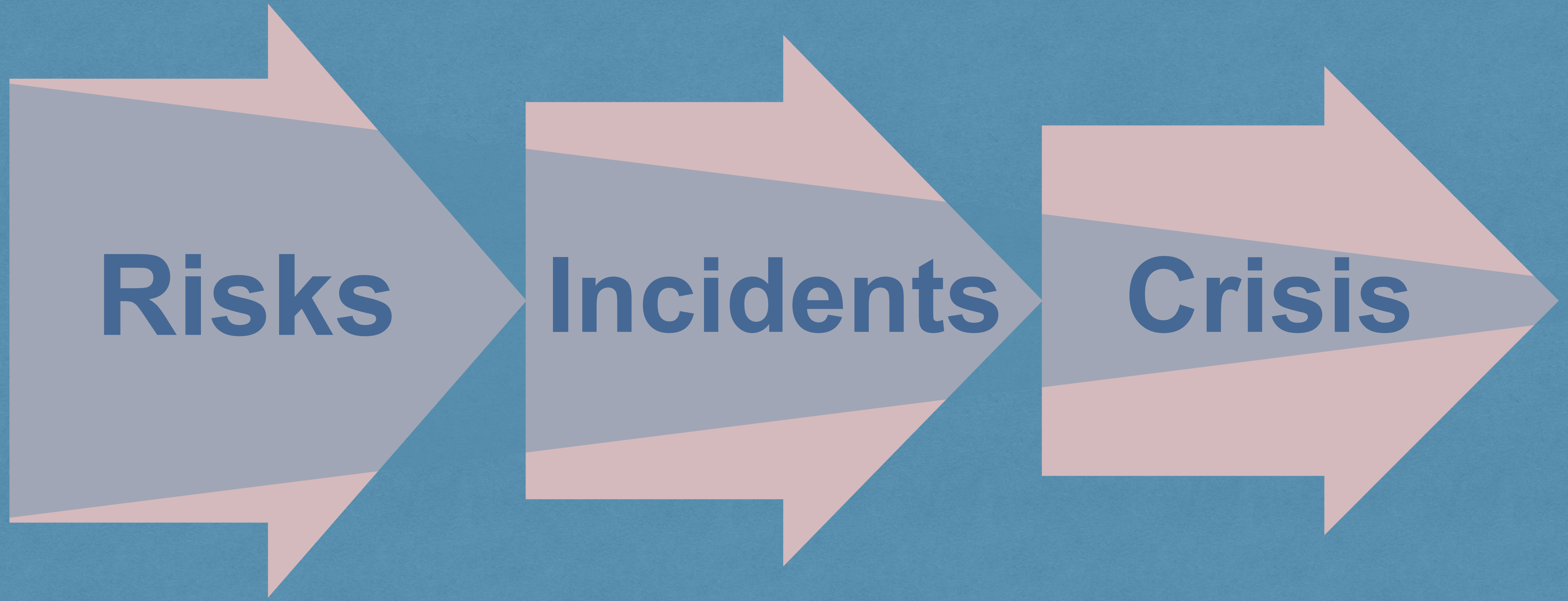
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What is a Crisis?

1. Risks (known or not; likely or less) that
2. have materialized (occurred)
3. threatening an organization's strategic objectives, reputation or viability



Risks

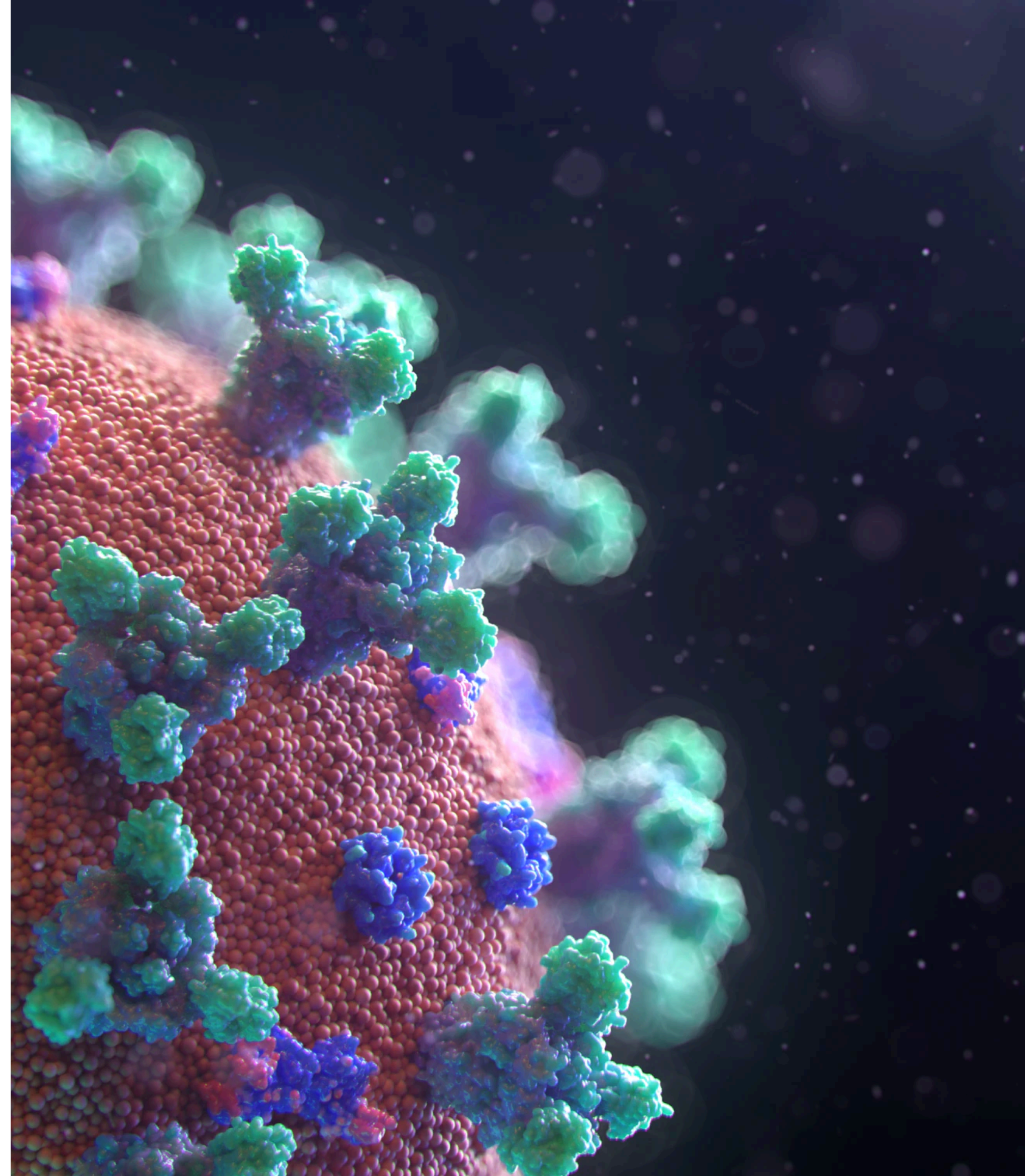
Incidents

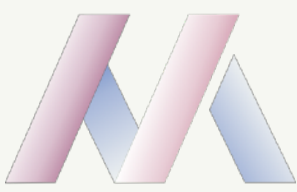
Crisis



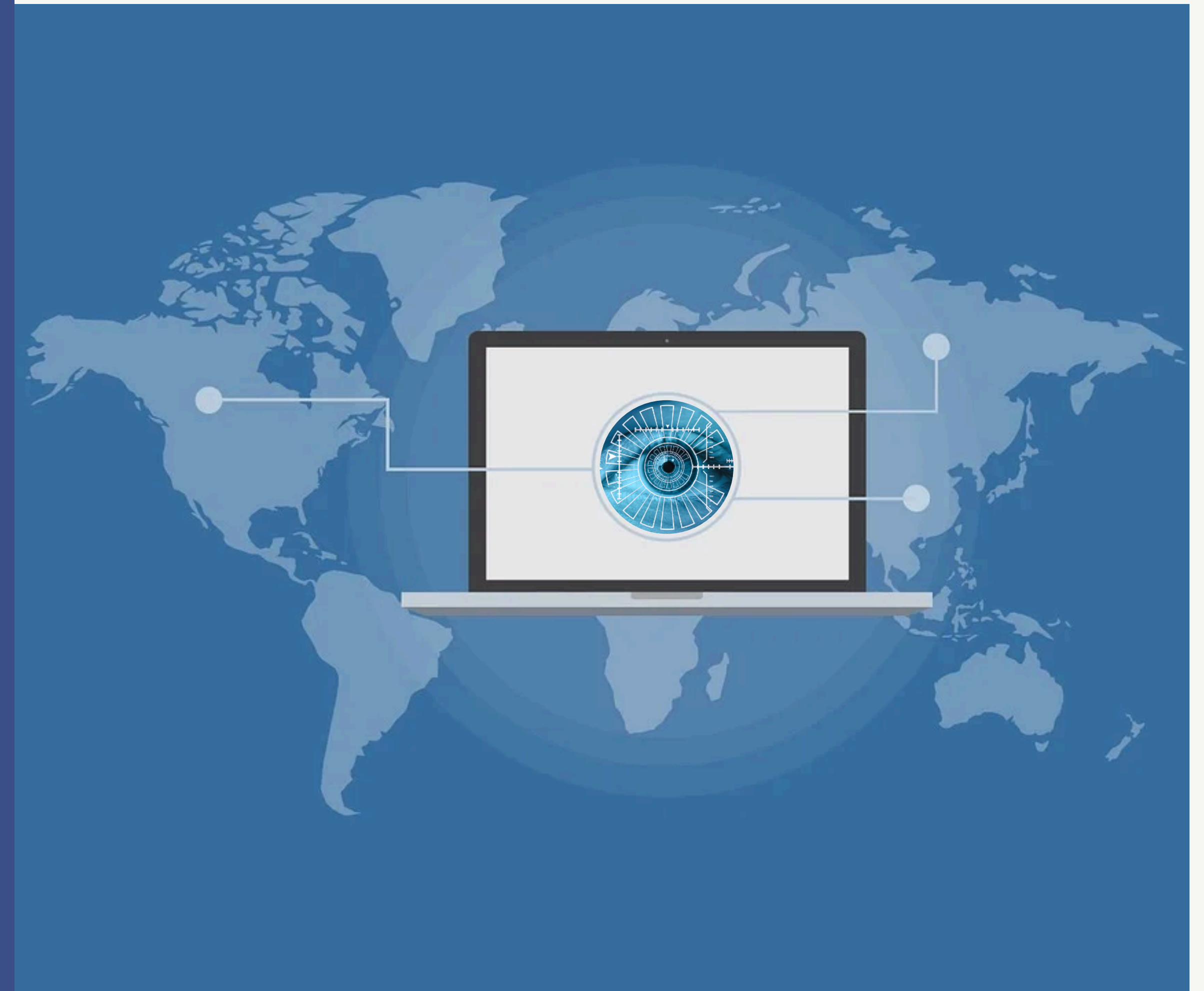
Pandemic

A few challenges and true impact





- 1. Increased cyberattacks and monetization (e.g., double extortion)**
- 2. Exponential rise in attack surface and connectedness**
- 3. Attackers leveraging emerging technology**
- 4. Increased need for effective BCP and crisis management**
- 5. Global risks and supply chain**



Source: Impact of Covid19, Covid19 is Changing Cybersecurity, Trend Micro



By 2026, almost 26% of the world's GDP could be based on internet-based and digitally-connected industries.

- World Economic Forum



Globalization Interconnection Lack of Immunity Unknowns



Cybersecurity


Similarities to a Pandemic



Globalization Interconnection Lack of Immunity Unknowns



Key learnings from the pandemic

- 
1. Speed is of essence
 2. From risk to recovery
 3. Fail but adapt
 4. Cyber crisis affects global crisis
 5. Understanding the unknowns





Risks

Incidents

Crisis



Risks

Incidents

Crisis



Manage Risks Fast and Effectively

Key Elements

**Cyber Risk
Management:
A part of
Enterprise Risk
Management**

**Clear and Well-
Defined Risk
Appetite and
Tolerances**

**The True Cost
of a Cyber
Incident**

**Right
Expertise.

Right
Competency.**

Key Elements

Categorization
Key Scenarios
and Key Cyber
Risks

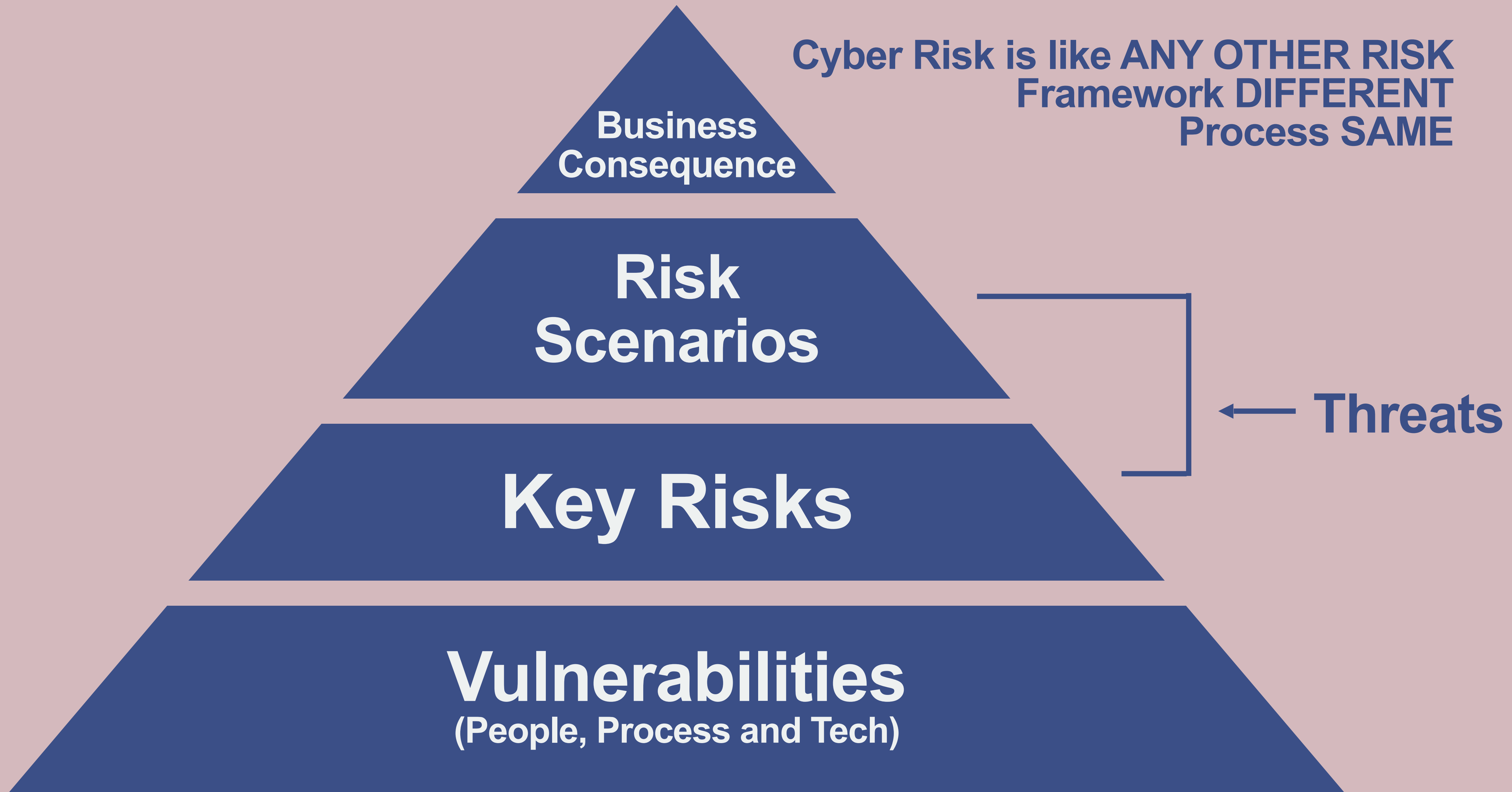
Threat Factor
Capability and
Motivation

Monetary Loss
(Range of)
Amount of loss
with ca. 90%
certainty

Subjective BUT
numeric
(amount or
range)



Cyber Risk is like ANY OTHER RISK
Framework DIFFERENT
Process SAME







Fail Faster



Testing and Verification

Testing BCP, cyber resilience plans, security incident and crisis management plans

Verify - Treat all accesses as unauthorized unless and until identified, authorized and verified.

Verifications policies independent of working from office or from home.





Incidents
Lessons Learned



Risk Register
Controls Effectiveness
Identify the Unknown



Risks

Incidents

Crisis



Adapt fastest



Not just a matter of if and when,
but

how long?
how much impact?
how to contain?
how to invest?
how to continue?
how to adapt?
how to predict?





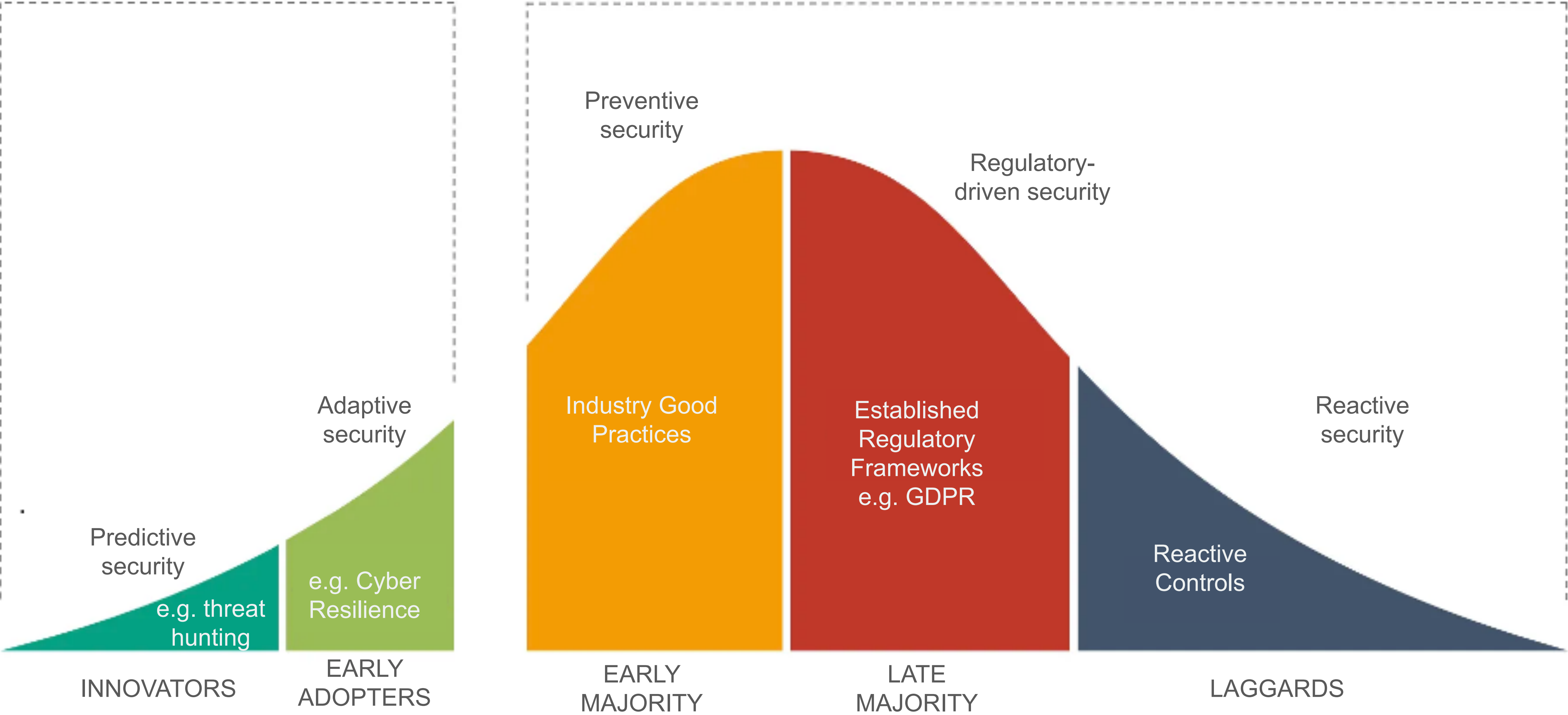
Cybersecurity Adoption Lifecycle



EARLY MARKET

THE CHASM

MAINSTREAM MARKET



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One of the best defenses against cybersecurity threats is cyber resilience.

Anticipate Chaos. Be Prepared.



Further Work

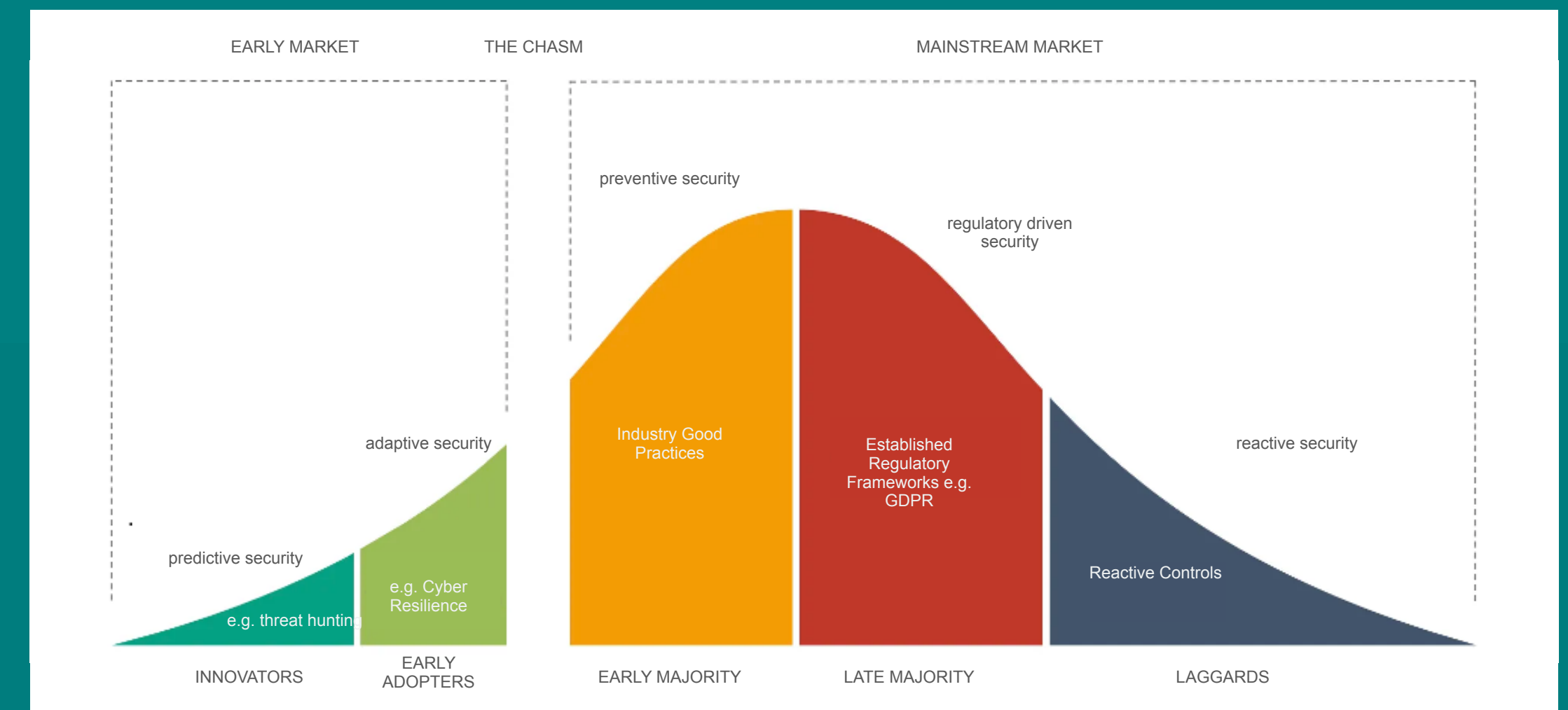
Linking to Risk Assessment (RoS analyse) to select a position in curve?

What type of organizations should be in which part of the curve?

What kind of typical vulnerabilities will hit organizations in the different phases?

What organizational benefits are associated with being a specific position in the curve?

What type of investment is required for the different phases?





Key Takeaways

- **Risks vs. Incidents vs. Crisis - Integrate with Feedback Loops**



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- **Cyber Crisis as a Part of Overall Crisis Management**



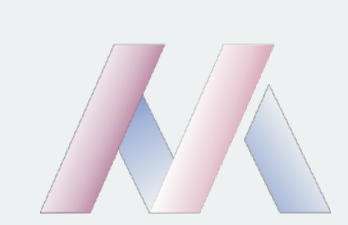
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- **Humility, Self-Critique and Openness To Accept Mistakes**



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- **Take Risks Into The Crisis Management Board**
- **Cyber Crisis as a Part of Overall Crisis Management**
- **Humility, Self-Critique and Openness To Accept Mistakes**
- **Transparency to Share Failures and Learnings**



Risks: Manage
FAST

Incidents: Fail
FASTER

Crisis: Adapt
FASTEST



FOR MORE CONTENT ON CYBER, CAREER & LEADERSHIP

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