

“Information Security: you can either sink, swim or be the captain”

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> Intro

CENSUS: Talking about ourselves

Maritime Threat Landscape: an ocean of things

Sink: there are no unsinkable ships

Swim: bailing water out with a single bucket

Be the captain: knowing where you are now, where you are heading to, what you are going to encounter

VIGOROUS TIGER TEAM ASSAULTS

EPIC SECURITY TESTING

METICULOUS PRODUCT SECURITY



CENSUS
IT Security Vulnerability

> Talking about ourselves

BLEEDING EDGE VULNERABILITY
RESEARCH

> CENSUS: talking about ourselves

- Advanced Information Security Services
 - Security Assessments
 - Product Security
 - Secure S-SDLC
 - Vulnerability Research
 - Information Security Consulting
- Global presence in multiple market sectors
 - from maritime and financial
 - to software development houses
- Company certified for quality and security management systems
- Around 47 employees and we keep growing



> Maritime Threat Landscape: an ocean of things



> Maritime Threat Landscape: an ocean of things

- Physical security
- Remote Administration
- Network (HQ, Ship, Crew, Employees, Management)
- Applications for everything (messaging, loading, bay planning, navigation)
- Communications
- People (stuff, employees, seafarers, vendors)
- IoT



> Sink: there are no unsinkable ships

> Sink: Maritime threat landscape is still an uncharted territory

- Sustainability (e.g. energy efficiency, eco-friendliness)
- Automation (e.g. AI, robotic process automation)
- API based integration platforms
- Rapid change of culture (e.g. COVID 19)
- Privacy Renaissance
- IoT and ICT connected more and more



> Sink: This can happen to anyone

- You can be the target:
 - Targeted phishing email sent to the Captain of a ship telling him to share information about location, destination
 - Malware installation on a vessel
 - Gaining remote connection to a vessel via the headquarters network
- You can have “one of those days”
 - Impersonating port authority to give instructions to a vessel
 - SODANE Engine enumerating all IoT and SCADA devices
 - Take over of a remote management tool on a vessel





> Swim: bailing water out with a single bucket

> Swim: taking out the water with a single bucket

No management involvement



Ad hoc decisions



One stop shops without specialization



Excluding people from specific policies

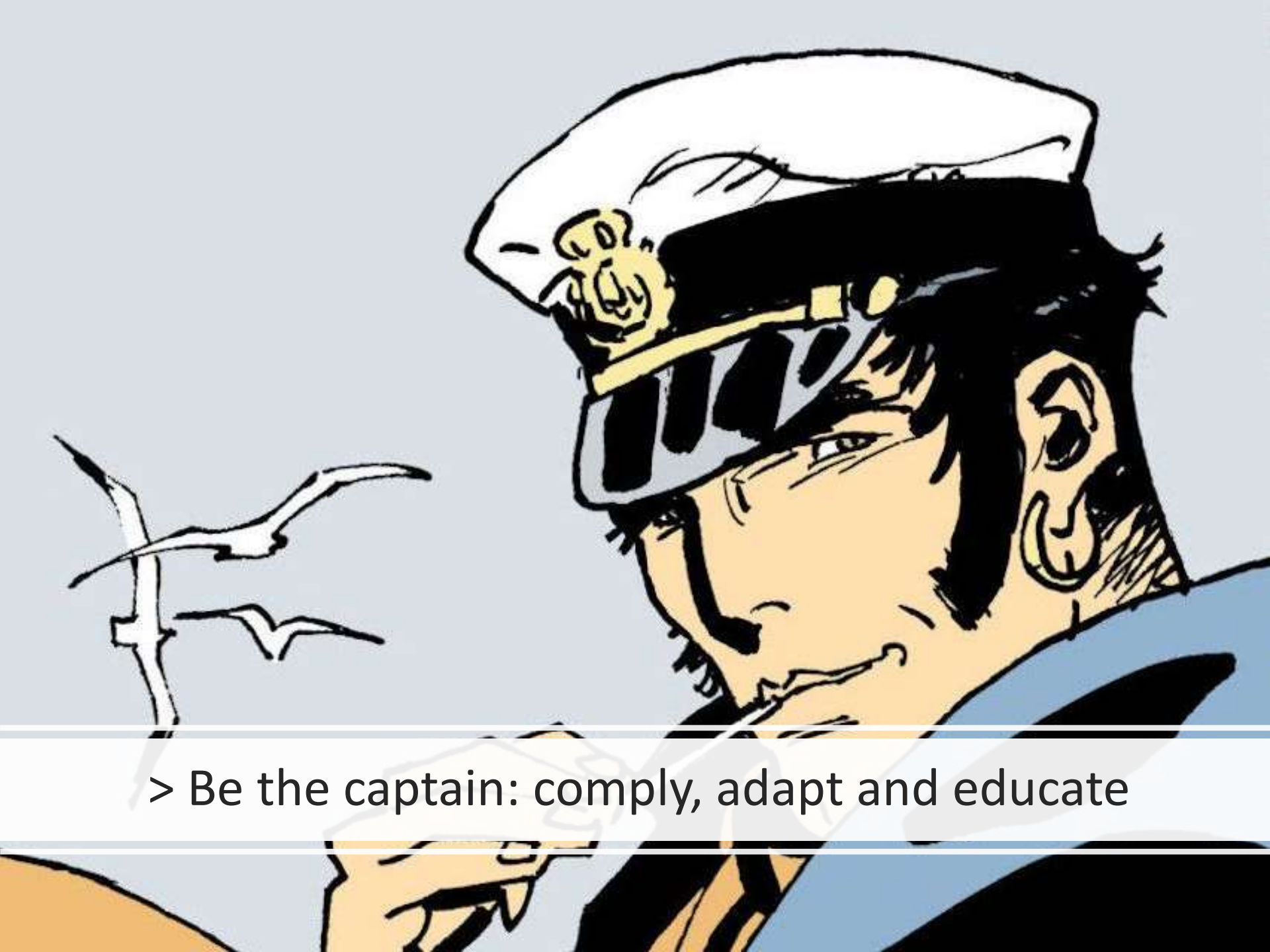


Lack of information security expertise



Reactive measures





> Be the captain: comply, adapt and educate

> Be the captain: **comply, adapt and educate**

Information security demands: a Strategy

Information security requires proactive and not reactive approaches to eliminate the element of surprise



> Be the captain: **PEOPLE**

Involve management



Education and awareness program



Periodic testing



Constant measurement of the awareness level



By the end, people need to know that security is everyone's responsibility.

> Be the captain: **Technology**

What is the current IT and IoT network architecture, equipment and applications list

What are the next steps of the company's digital transformation

Which are your most valuable assets

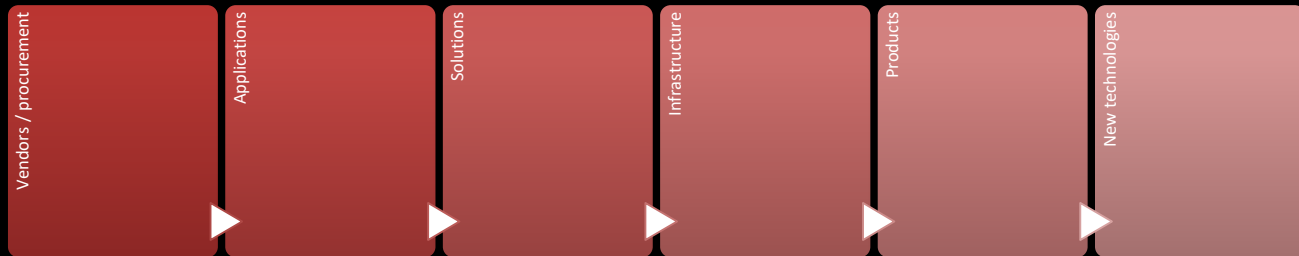
What are your weakest points

What is your budget

Do you have the experts to support all of your technology (current and future)

What are your legal and regulatory framework compliance requirements

> Be the captain: Procedures





Thank you!



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IT Security Works