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Information Security Governance Framework

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Objective

- Information security is on the board of director's agenda, the management is accountable, but their understanding of security issues is lagging.
- The universe of security controls and activities must be modeled by hierarchy to facilitates understanding by senior management.

Presentation of a simple framework to facilitate understanding of information security governance activities.

Information security is important

- Contributes to the business development by assuring reliable operations and enabling new business opportunities in the digital economy.
- Facilitates service level differentiation (secure connections, reliable data transfers, secure outsourcing, etc.).
- Protects client data and secure transactions. Should be perceived as a competitive advantage.
- Contributes to enterprise compliance with legal and regulatory frameworks.
- Protects a company’s reputation.
- Reduces operational (financial) risks.

...and must be addressed at the highest level in the company

- Security must be overseen by decision-makers having the necessary authority.

but,

- Are they knowledgeable?
- Do they understand security issues?
- Do they have the necessary tools?
- Do they know what questions to ask?

Ask yourself the following questions...

- Are the board and management involved in strategic information security decisions?
- Who defines the security strategy and policies?
- Who is legally responsible for the security posture and data protection?
- Do you know which business processes are at risk?
- Who owns sensitive data?
- Is your security adapted to meet real business needs?
- Do the business lines participate in security committees making decisions about securing their business processes?
- Do you know if your security expenditures are justified? What is the return on security investment (ROSI)?

What's there for me (senior executive) ?

- What are my main responsibilities in managing the security program?
- What questions should I ask security specialists to assess our situation?
- How can I understand the jungle of security controls? What's there for me?
- Is there any simple framework for security governance?
- Where are my key responsibilities in IS?
- Etc.

Quiz?

What are the main areas (activities), related to security, which management should pay attention to ?

or

As InfoSec governing body, what should we care about ?

(please mention one or two)

The response may be: Three-Level Control Framework (TLCF)

Strategic:
Global orientation for the Security Program (Strategy, Policies, Organization)

Tactical:
Management of the Security Program (Risk, Program, Reporting and Oversight, Compliance, Asset, Metrics)

Operational:
Operational security controls

Building blocks of a TLCF

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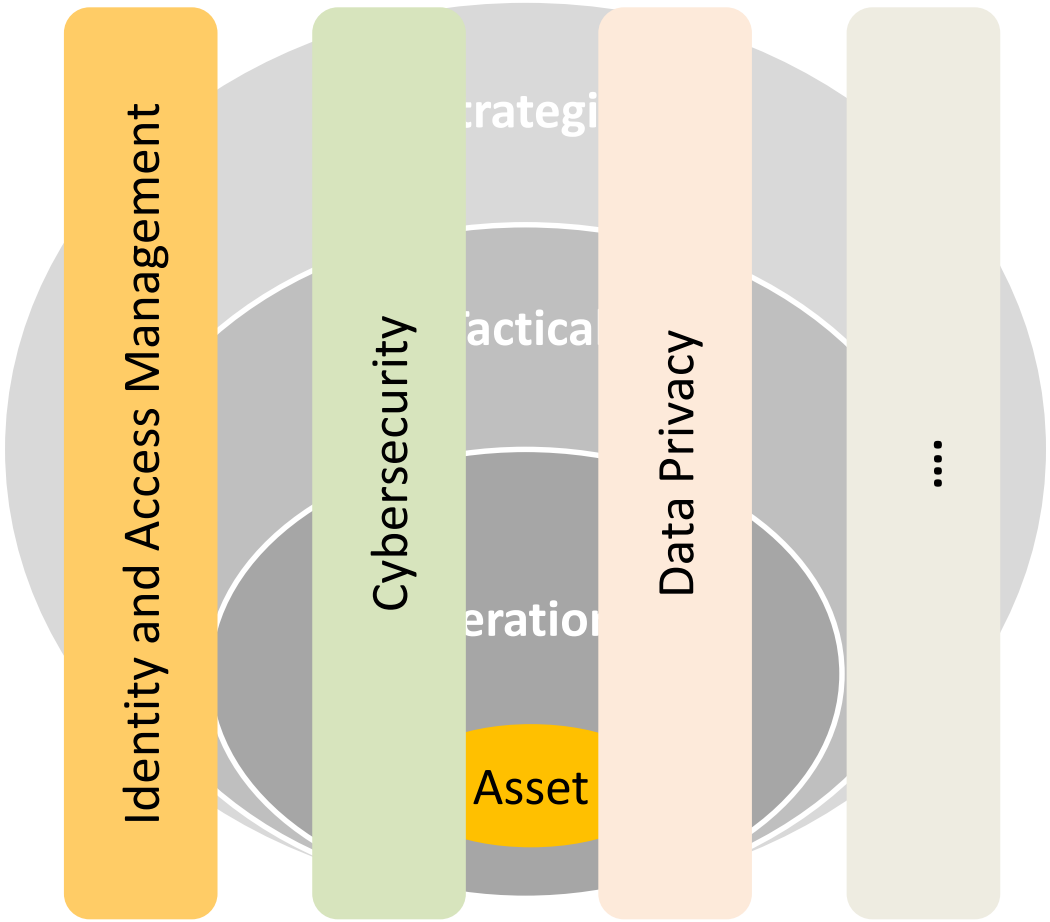
Standards can be mapped to the blocks of the framework

Each security-linked domain has controls in all three levels



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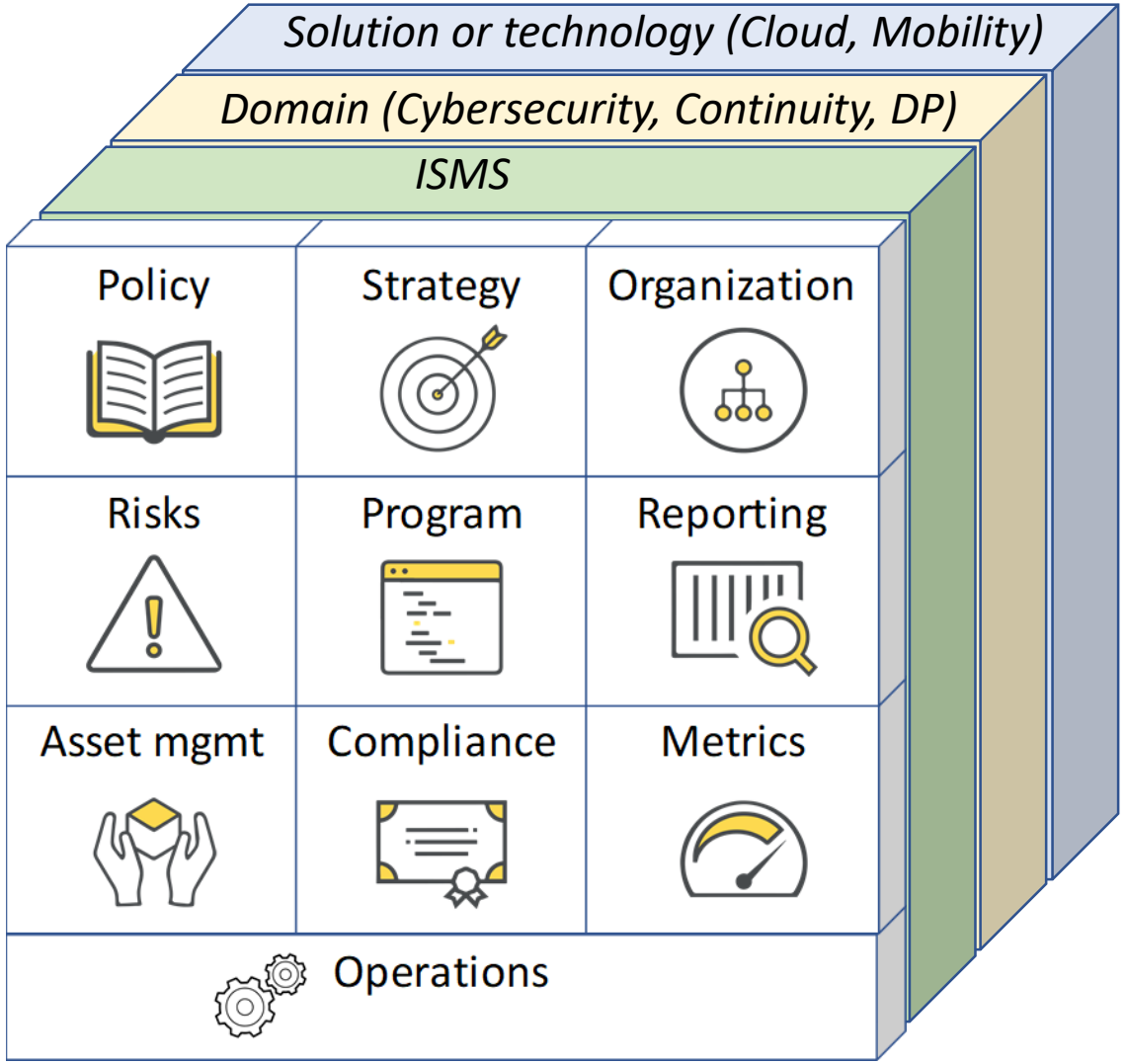


How can this framework be used?

Use case 1: IS Governance self-assessment

Use case 2: Impact on governance - proactive approach

Use case 1. IS Governance self-assessment

1. Chose a subject of the self-assessment:
   ISMS, cybersecurity, data privacy, specific technology, etc.

2. Establish a questionnaire based on standards, best practices, maturity models, etc. for each of the building blocks of the model.

3. Have a brainstorming session with management based on the questionnaire.

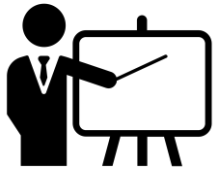
4. Consolidate the findings for each block.

Questionnaire based on standards, best practices, etc.

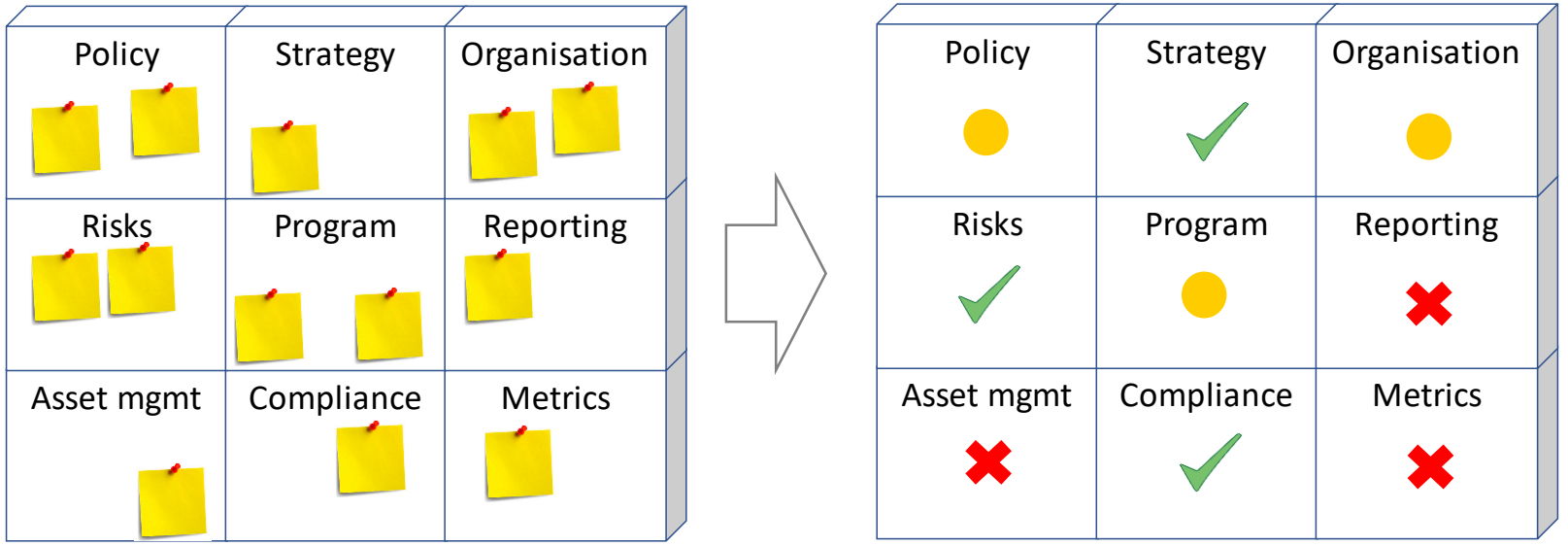
*Do we have a written security **Policy** and internal regulatory framework?*	*Is our security **Strategy** defined? How should we proceed to develop a security strategy aligned with business needs?*	*Is our **Organization** optimal? Who are our security governing (decision-making) and management bodies?*
*Have our security **risks** been identified? What measures are being taken to mitigate them?*	*How is our security **Program** managed? How should we prioritize investments?*	*Do we have a security **Reporting** system? How should we design dashboards for better decision-making?*
*How should we manage our **Assets**? Do we have an **Inventory** of sensitive data? Who is responsible?*	*Are we **Compliant** with security-related regulations? What is our compliance roadmap?*	*Do we have **Metrics** or KPIs for security and related domains? How can we establish effective metrics?*

Process

Brainstorming based on questions



Consolidate findings



It's a quick win, does not replace the audit!

Use case 2: Impacts on governance - proactive approach

- Analyze a specific domain from the viewpoint of all the building blocks.
- Aim to establish good governance practices in anticipation of the major change.

Examples:

1. How do data privacy regulations impact IS governance?
2. How does the outsourcing impact IS governance?

Impacts of Data Privacy regulations on GRC (excerpt)

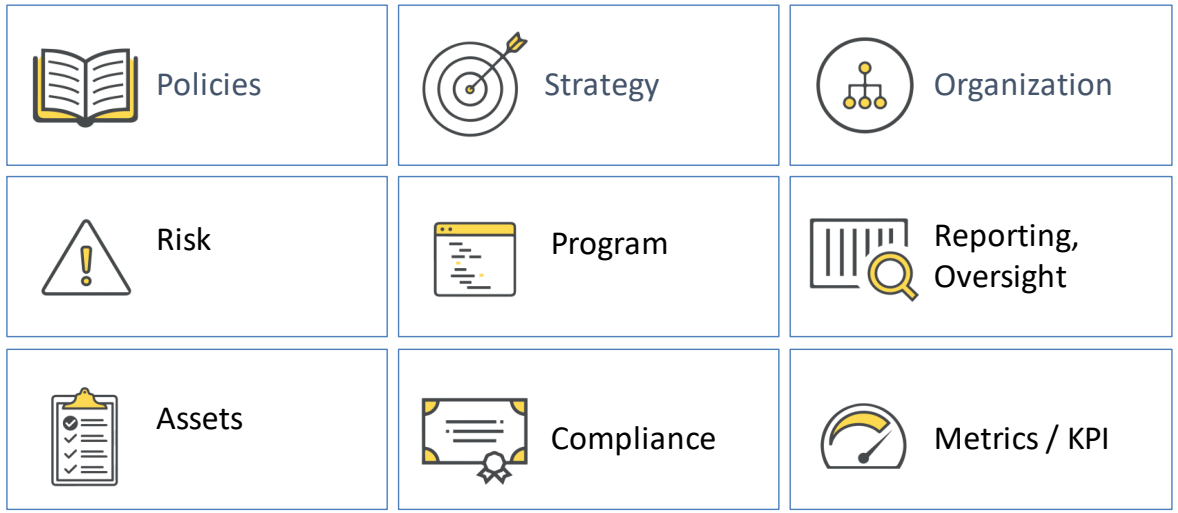
 ***Policies.*** *Develop a Data Privacy policy or adapt existing Data Protection or security policy.*	 ***Strategy****. Review security strategy to encompass Data Privacy principles.*	 ***Organization****. Responsibilities in Data Privacy protection (Data Processors, Data Controllers, Data Owners)*
 ***Risks****. Adapt your security risk catalog to include Data Privacy risk scenarios.*	 ***Program****. Do a Privacy Impact Assessment (PIA) on your current security program and adapt priorities.*	 ***Reporting****. Adapt reports to include DP risks and the effectiveness of associated controls.*
 ***Asset mgmt****. Classification of personal data. Data flows of personal data.*	 ***Compliance****. Make a gap analysis with DP regulations. Review the liability of third parties.*	 ***Metrics****. Put in place special metrics for Data Privacy (e.g. access rights to sensitive data).*

Discussion…

Does operational changes impact IS governance?

Examples

1. Encryption techniques.
2. Audit findings and recommendations.



Some tools and tips

Policies

- *Build a framework for internal regulation.*
- *Establish policies and guidelines structure.*

Strategy

- *Security initiatives should support business issues.*
- *Visualize on 1 page.*

Organization

- *Involve business units (data owners, etc.).*
- *CISO must move towards GRC.*

Risks

- *Design security risk management concept.*
- *Evaluate risks based on external events.*

Program

- *Build a control catalog.*
- *Establish a program review process.*

Reporting

- *Risks reports,*
- *Posture & Maturity*
- *Strategic initiatives.*
- *Balanced scorecard.*

Asset management

- *Classification of data.*
- *Data, application and flow inventory.*

Compliance

- *Readiness map.*
- *Gap analysis based on questionnaires.*

Metrics

- *Maturity.*
- *Modeling for ROSI.*
- *Cost analysis.*

Thank you for your attention !

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