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Cyber Incidents – Data leakage
Case Study & Lesson Learnt
23 May 2018

Private and Confidential

Forensic 

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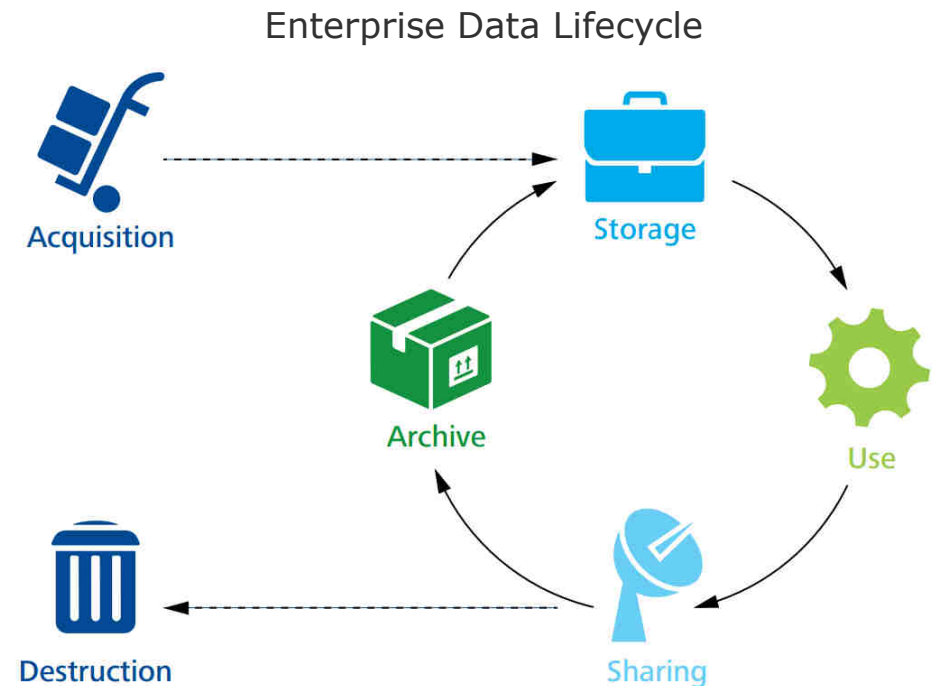
Key objectives

What you can expect from this session



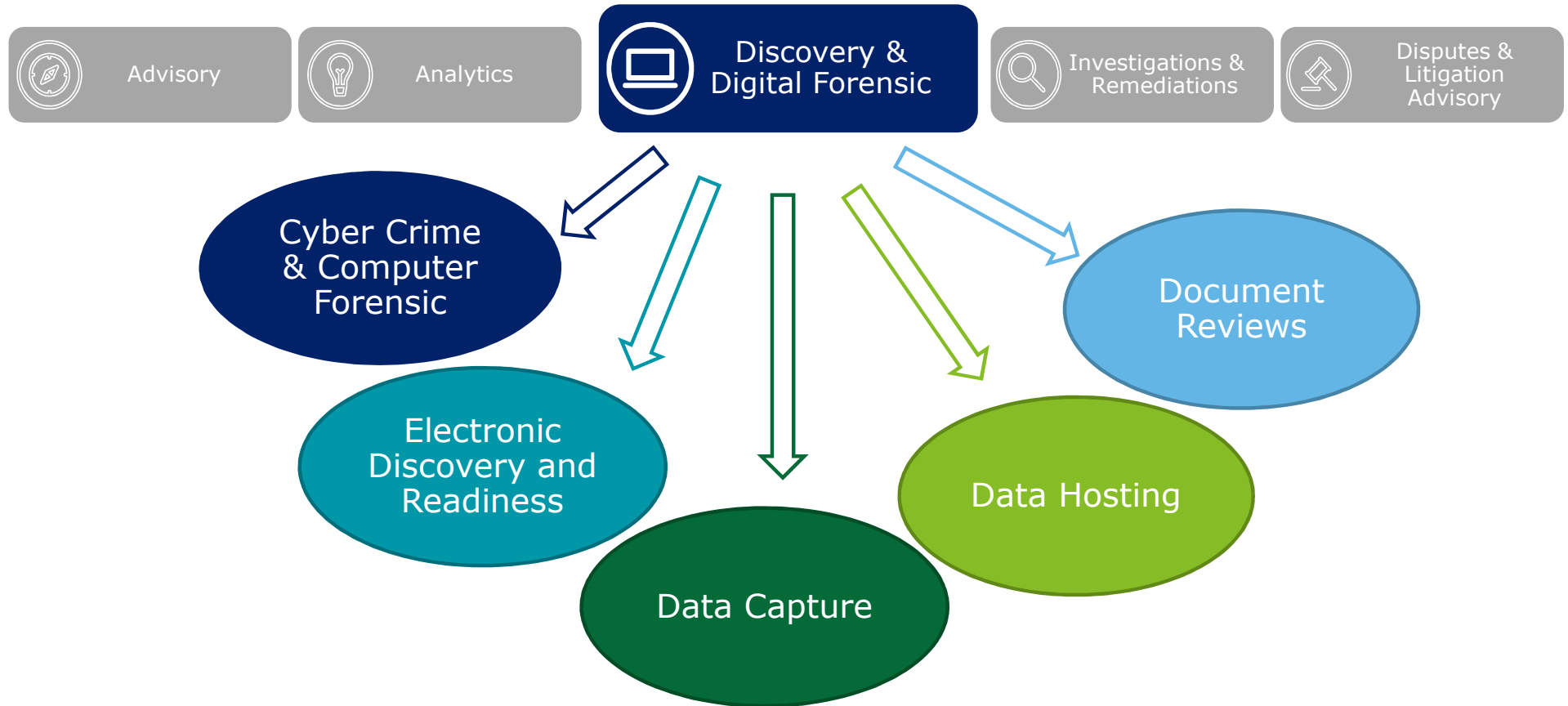
What is Data Leakage?

The **movement** of an **information asset** from an **intended state** to an **unintended, inappropriate or unauthorized state**, representing a **risk** or a potentially **negative impact** to the organization.

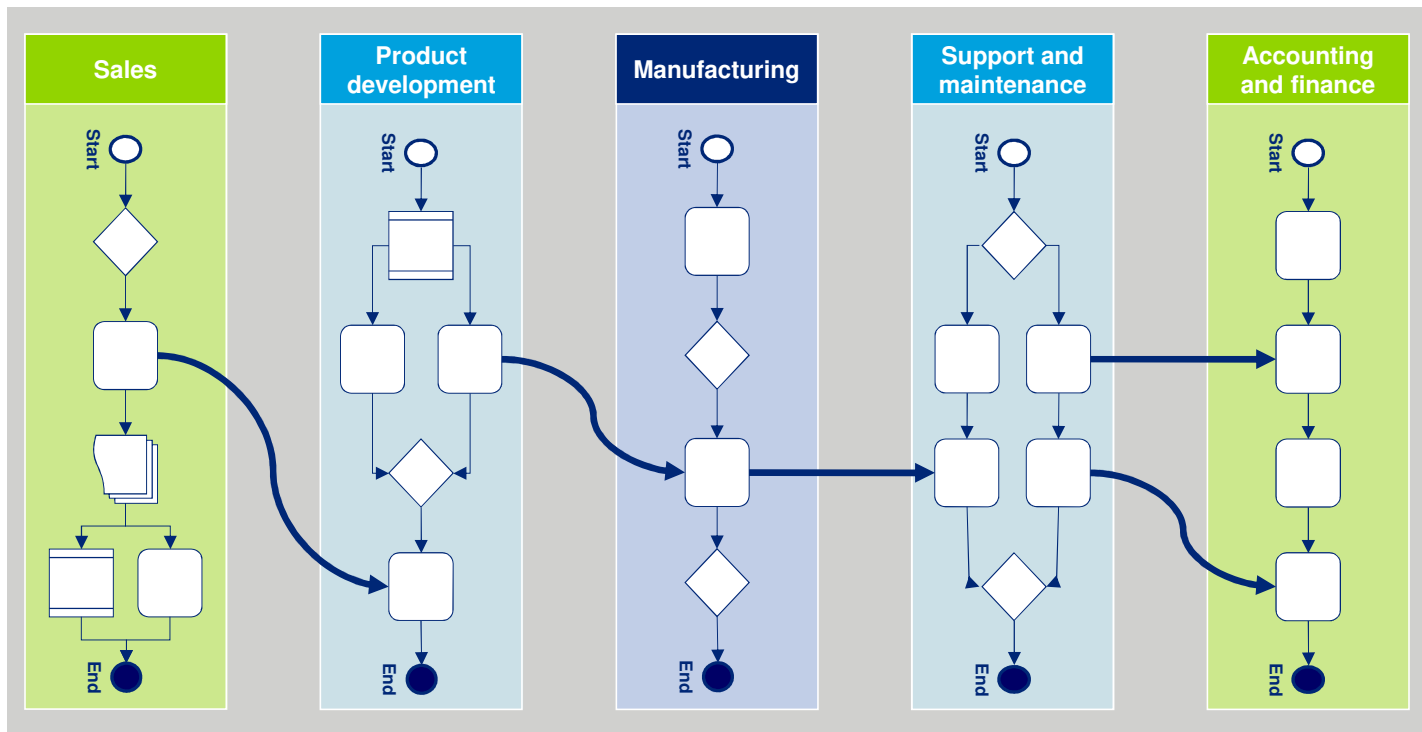


Deloitte Discovery

Why do we show up at a crisis?



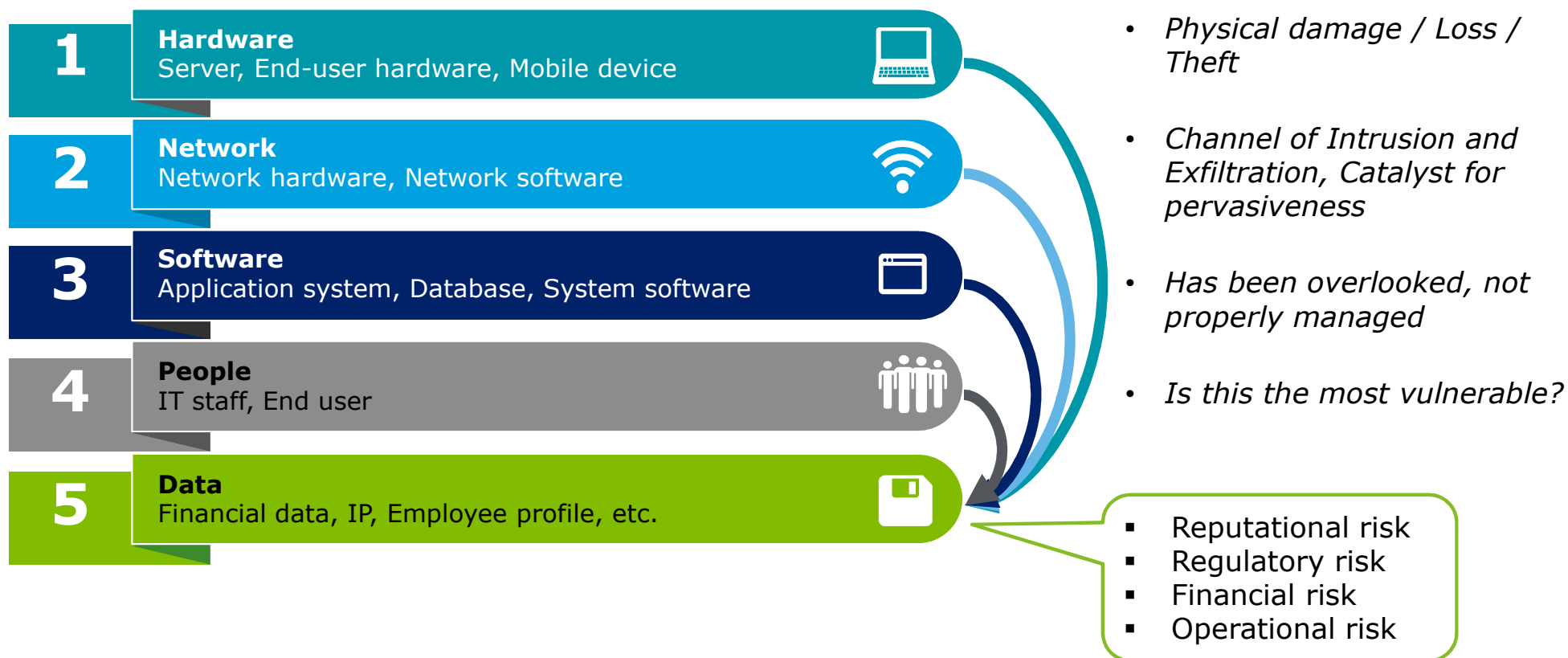
Why could data leak?
Because it flows ...



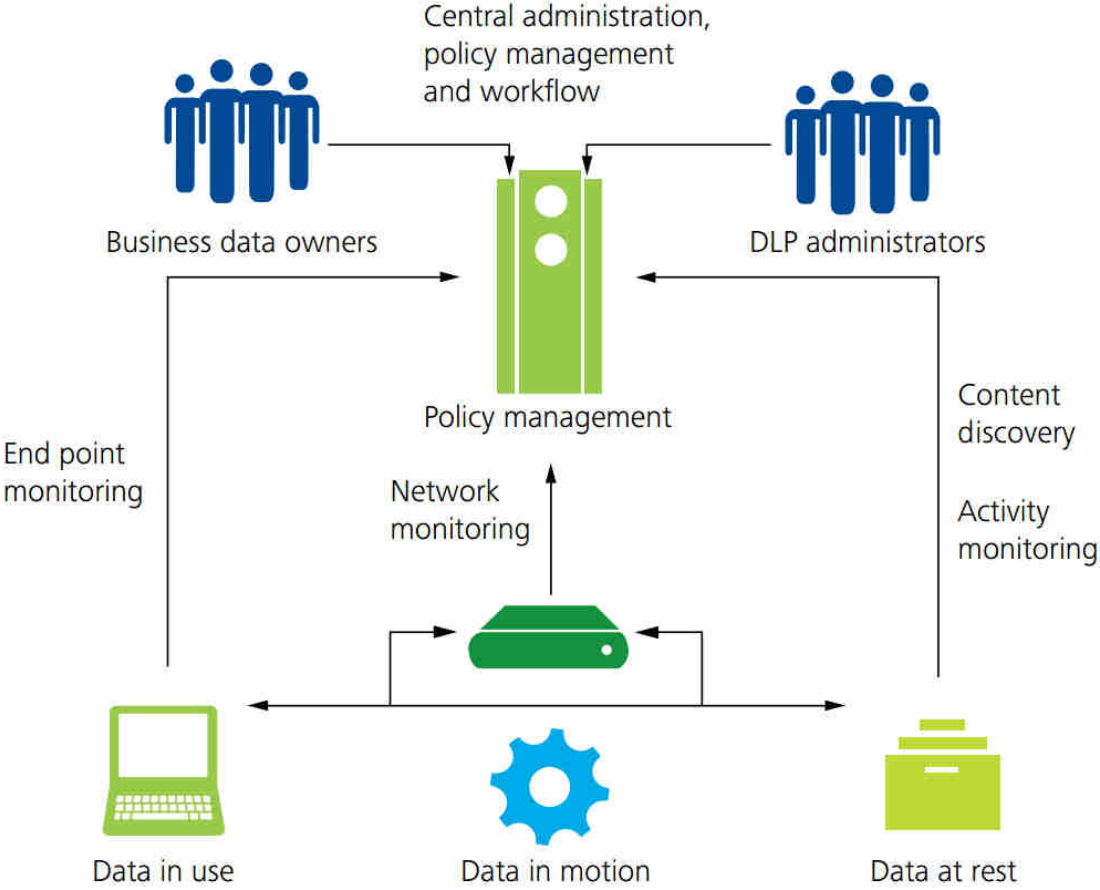
Sensitive data such as **personal information**, **financial data**, and **intellectual property** moves horizontally **across organizational boundaries**, including vertical business processes (e.g., order fulfilment process).

Technology elements in the business

And why they can lead to data leakage



Deloitte's DLP in Action



Key Considerations

To assess your data leakage risks

General

- What **information or data elements** present the **most risk**?
- What **locations or business units** present the **most risk**?
- What are our **mitigating controls**?
- How **robust** of a **governance structure** and **incident response workflow** do we need to support our goals and mitigate our risks?
- What type of **resourcing** do we need to **support management** of the tool and the **incidents it generates** on an on-going basis?

Data-at-rest

- What **types of data repositories** does the solution need to be able to scan?
- What do we plan to **do with the data** once it is found?

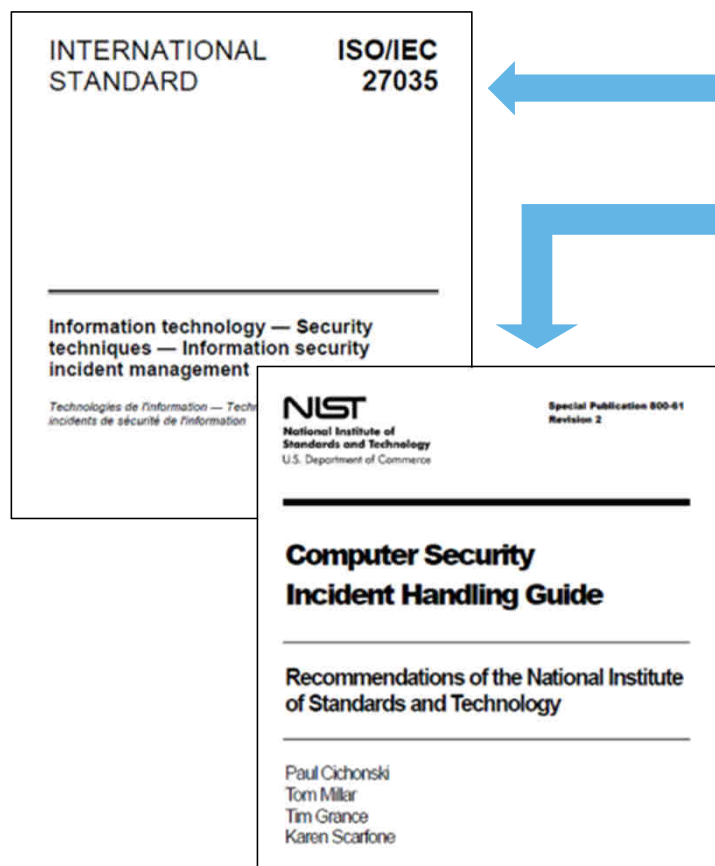
Data-in-motion

- Do we care about **outgoing** transmissions only, or **incoming and internal** as well?
- What **protocols** do we need to monitor and protect?
- Do we need to **block or encrypt** traffic?

Data-in-use

- What **platforms** does the solution need to support?
- What do we want the tool to accomplish when users are **not on the network**?

Examples of guidelines from recognized institutes



ISO/IEC 27035:2016 – Information technology incident management

NIST Special Publication 800-61 Revision 2 – Computer Security Incident Handling Guide

SANS institute – Various contents ...

And many more from other organizations...

- <https://www.alienvault.com/resource-center/ebook/insider-guide-to-incident-response>
- <https://www.crest-approved.org/wp-content/uploads/2014/11/CSIR-Procurement-Guide.pdf>

IT Asset Management (ITAM)

Efficient ITAM could mitigate risks on data leakage and help you comply with regulations

- **Detailed inventory of IT assets** could help data controllers analyze their current IT resources used to process personal data and assess the risk of data breach.
- **Appropriate internal controls** or counter measure could be implemented to mitigate data breach risk.
- In case of data breach, ITAM will **help the data controllers/processors notify the regulators** by answering their questions such as:
 - What assets/data were affected?
 - Who was affected? Who had the access to the assets?
 - Where was the affected assets located? Where was the data processed?
 - How will data controller response to the breach? How many stakeholders were affected?
- Overall, ITAM could help data controllers **understand their IT landscape, optimize IT costs and provide a foundation for complying to regulations.**



Contact

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