

THE REAL CHALLENGE WITH PERSONAL DATA PROCESSING

ISACA RISK EVENT – 19 APRIL 2018

INTRODUCING PROTIVITI



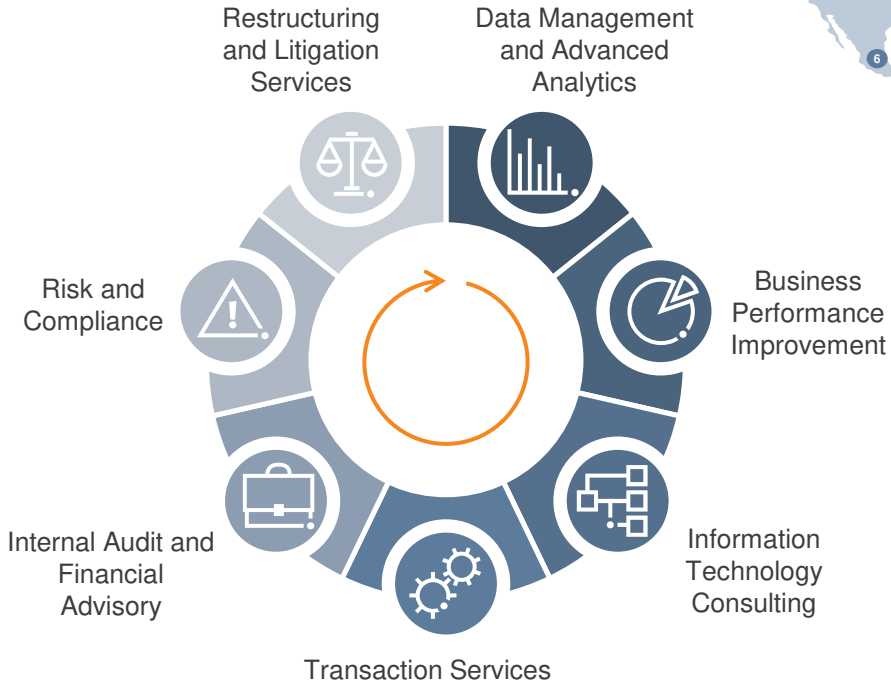
Tjakko de Boer



Marcel Koers

About the presenters

INTRODUCING PROTIVITI



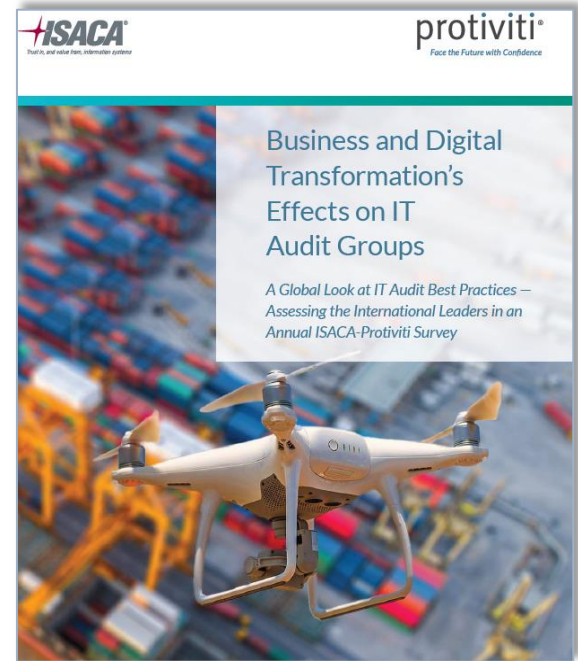
Protiviti services and global footprint

INTRODUCING PROTIVITI

Protiviti is Partner of ISACA

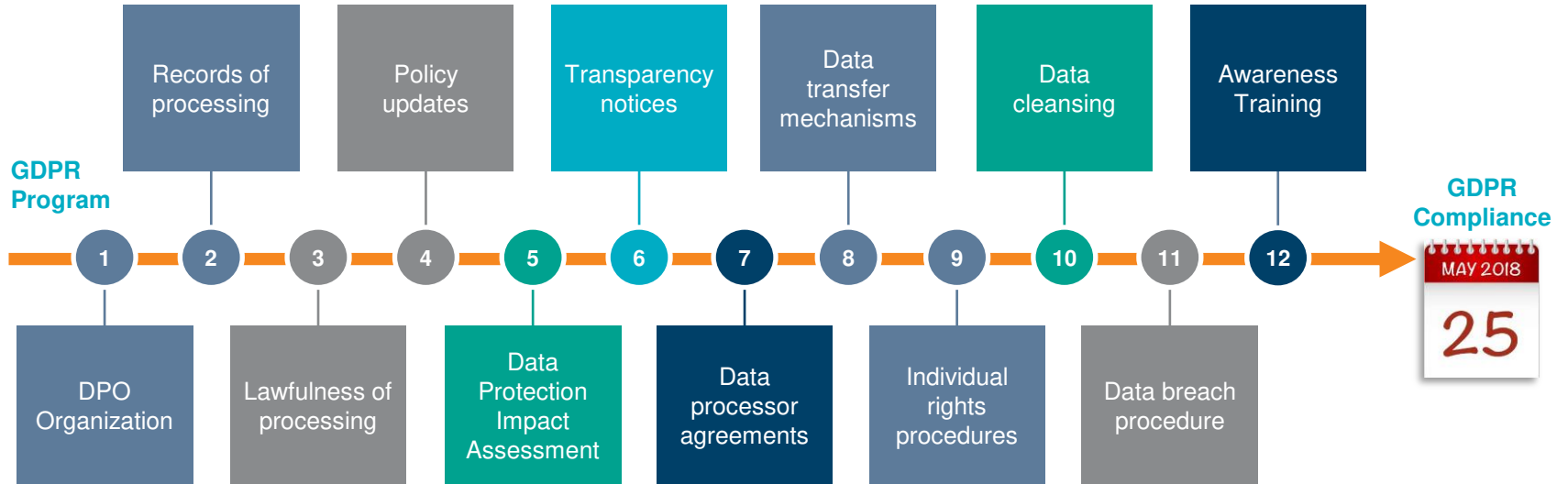
IT audit benchmarking survey

- Privacy, data and security are shaping IT audit plans
- Increase of designated IT audit directors
- IT audit professionals should strengthen collaboration with IT compliance groups
- IT audit involvement is necessary in entire IT implementation lifecycle
- Organisations are starting to co-source the IT audit function as workload increases



<https://www.protiviti.com/US-en/insights/it-audit-benchmarking-survey>

ROAD TO GDPR COMPLIANCE



CHALLENGES AFTER MAY 25TH 2018

Potential root causes of Complaints and Breaches



... no clarity on “appropriate organizational and technical measures”



... inability to adapt to change and demonstrate compliance



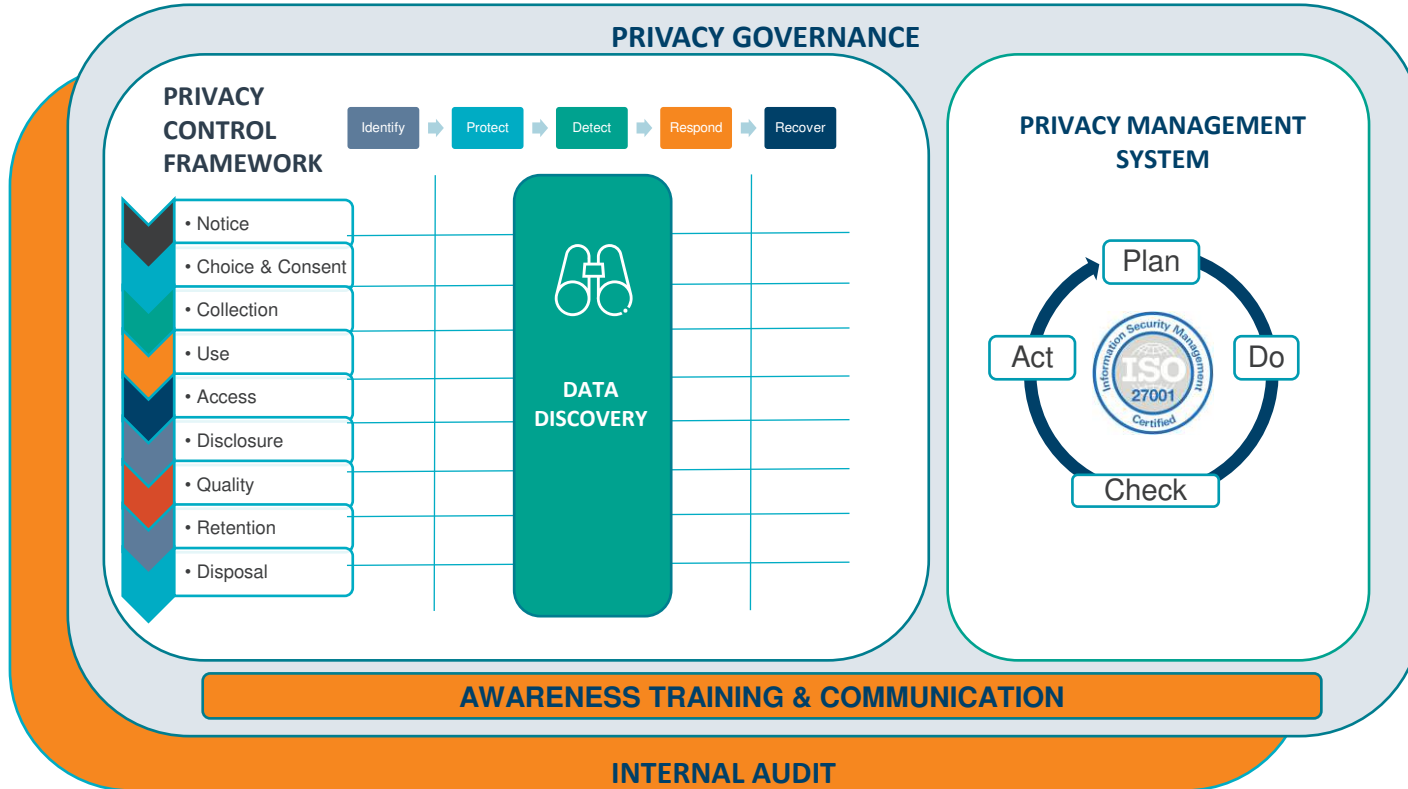
... lack of personnel awareness on data processing requirements



... no visibility on unstructured data

RESPONSE TO THE CHALLENGES

- ... no clarity on "appropriate organizational and technical measures"
- ... inability to adapt to change and demonstrate compliance
- ... lack of personnel awareness on data processing requirements
- ... no visibility on unstructured data



UNSTRUCTURED DATA

Structured

- Organized
- Formatted
- Normalized
- Annotated
- Standard processing
- Controlled
- Secured



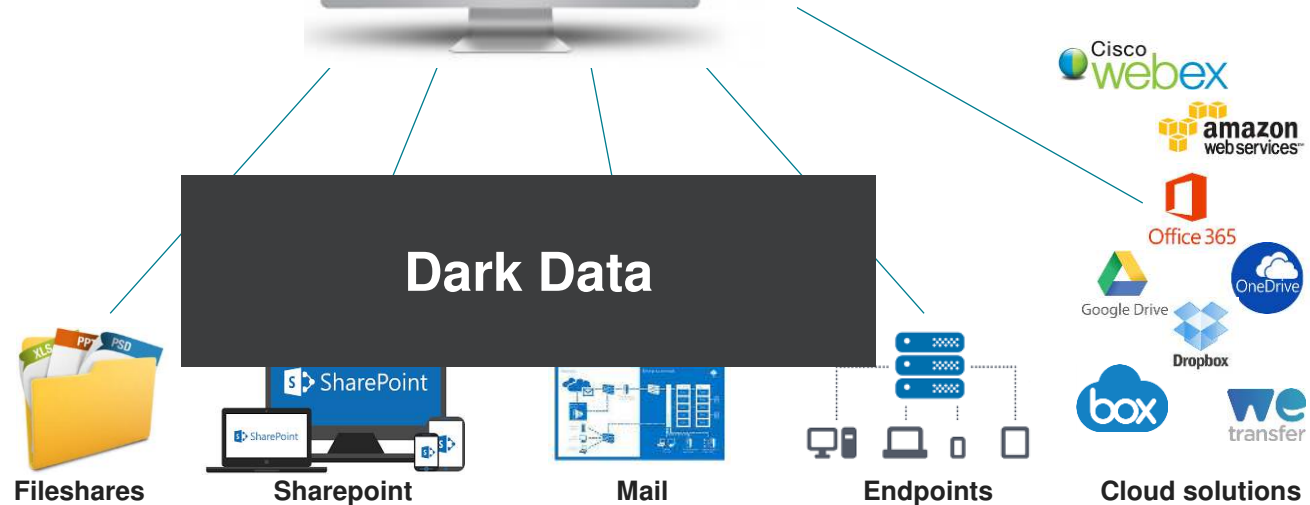
Unstructured

- Text-heavy
- File-based
- Many formats
- Not normalized
- Not annotated
- End-user computing
- Uncontrolled
- Not secured

Business application



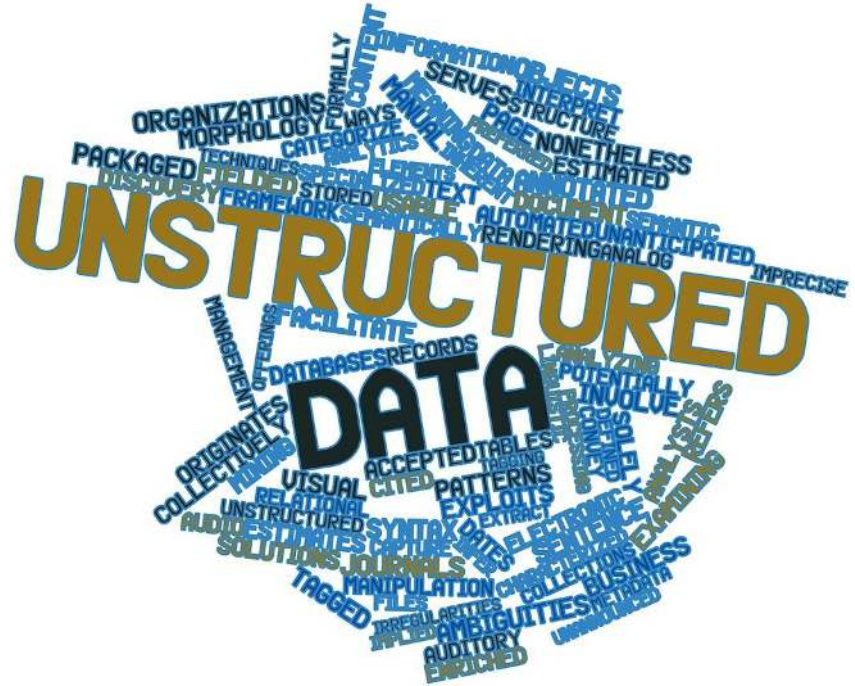
Managing the footprint of personal data



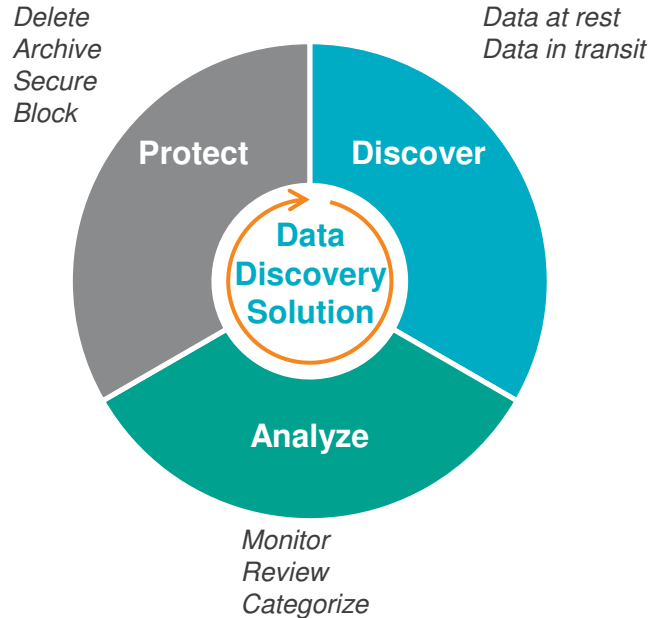
UNSTRUCTURED DATA

The real challenge with personal Data processing is unstructured data

- Where is it? Who has it? What format?
- Was it not transferred outside the company?
- Are retention periods being maintained?
- Is the personal data well secured?
- Is the data still valid? Not outdated?
- How can we execute the data subject' rights?
- Was it not breached?



DATA DISCOVERY SOLUTIONS



Specifications

- operates within company network and the cloud
- operate on all environments and file types
- easily deployable and configurable
- resource utilization can be scheduled and maximized
- volumes, velocity, impact
- can utilize different scanning techniques
- has data analytics techniques and can visualize results
- can present discovery results in metadata only
- can demonstrate compliance

Two types of data discovery solutions:

Cloud Access Security Brokers (CASB).
Endpoint Detection & Response (EDR).

DATA DISCOVERY

Cloud Access Security Brokers (CASB)

- Monitor network traffic on personal data to cloud applications
- Consolidated view on cloud usage and data transfers
- Fingerprint based
- In-line, SPAN or Replay

- Identify shadow and sanctioned IT
- Enforce data-centric security policies
- Prevent unwanted devices to access cloud services^[SEP]
- Demonstrate compliance with regulations

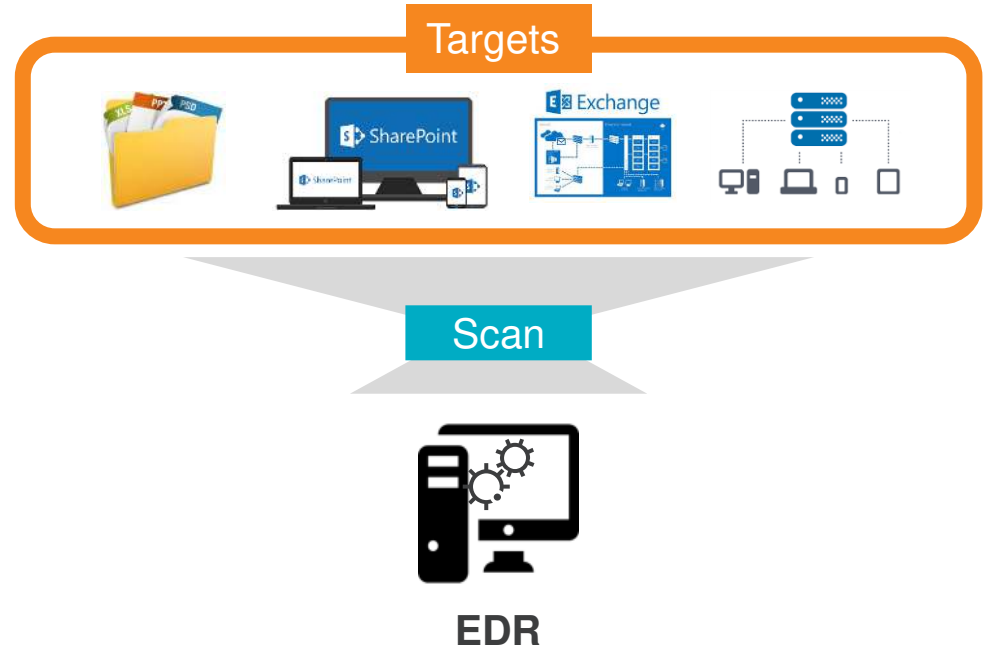


DATA DISCOVERY

Endpoint Detection & Response (EDR)

- Scans servers, workstations for personal data
- Consolidated Insight where personal data is located
- Requires agents installed on host systems
- Fingerprint based
- Files information on scans centrally for analysis

- Endpoint visibility on malicious activities

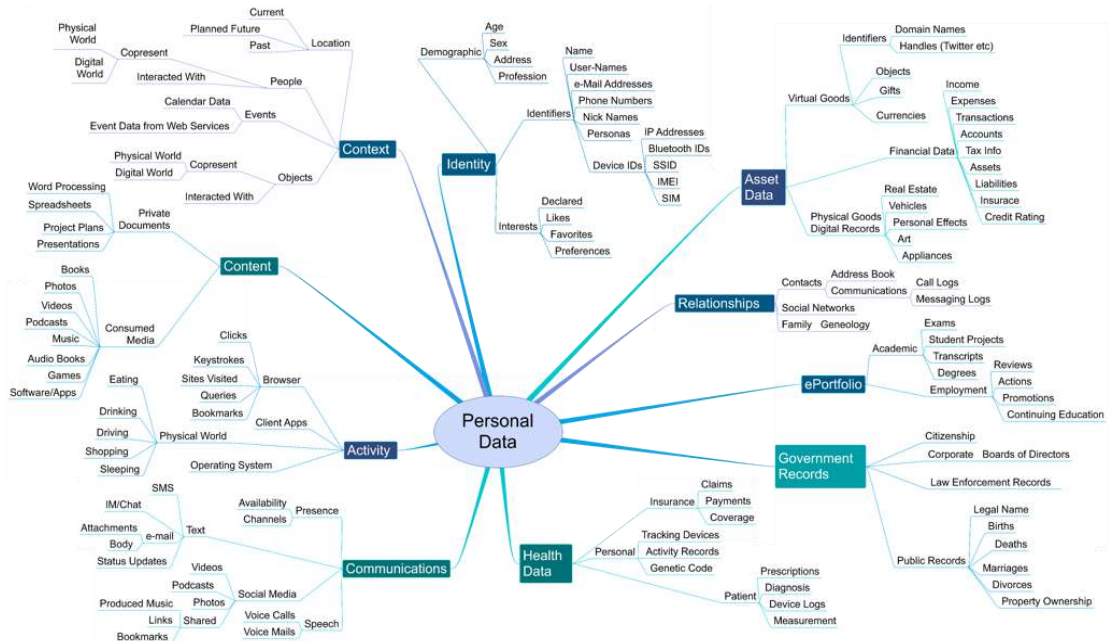


PERSONAL DATA FINGERPRINTS

Information related to an identified or Identifiable natural person ('data subject').

- Full name
- Home address
- Email address
- Social security number
- Passport number
- Driver's license number
- Credit card numbers
- Bank account numbers
- Date of birth
- Telephone number
- Log-in details
- IP Addresses
- MAC addresses
- Curriculum Vitae
- Medical files
- Client identification number
-
-
- Specific words as well

Personal Identifiable Information (PII)



DATA DISCOVERY ASSESSMENT



Discover personal data

DATA DISCOVERY ASSESSMENT



Plan

- Select data discovery solutions
- Investigate targets and endpoints
- Investigate on exclusions
- Set fingerprint library
- Agree with Work council
- Draft data clean-up protocol

Step 1

DATA DISCOVERY ASSESSMENT

2 Prepare



1 Plan



Prepare

- Deploy CASB and EDR
- Prepare targets and endpoints
- Configure fingerprint library
- Configure exclusions
- Trial-run to assess impact
- Investigate on false positives
- Refine data clean-up protocol
- Reduce unstructured data
- Determine final planning

Step 2

DATA DISCOVERY ASSESSMENT

2 Prepare



3 Scan

1 Plan

Scan

- Perform CASB analysis
- Perform agent-based scan
- Analyze data discovery results
- Investigate on last false positives
- Agree on data discovery outcomes
- Draft data discovery report

Step 3

DATA DISCOVERY ASSESSMENT



Curate

- Identify custodian
- Perform data curation
- Execute data clean-up protocol:
 - Classify personal data
 - Dispose data where required
 - Condone where permitted
 - Enhance security where needed
 - Execute retention policy

Step 4

Face the Future with Confidence