

Navigating Indonesia's [Personal Data Protection Law \(UU PDP No. 27/2022\)](#) with [IBM Solutions](#)

A large, three-dimensional white IBM logo is centered on the slide. The letters are thick and blocky, casting soft shadows on the light gray background.

Data breaches on the rise in Indonesia society

BreachForums users Björka uploaded billions of personal data that was claimed to be the result of breaking into corporate sites to state institutions in 2 months



91 million Tokopedia
customer data,
breached April 2020,
uploaded August 19,
2022.

**17 million State
Electricity Company
(PLN)** customer data
leakage on August 19,
2022

270 million Wattpad
social media user data
was uploaded on
August 20, 2022. This
data was compromised
in June 2020.

26 million IndiHome
subscriber data,
uploaded on 20 August
2022.

1.3 billion SIM card data
leakage from the
**Ministry of
Communication and
Information (Kominfo)**
found on September 1,
2022

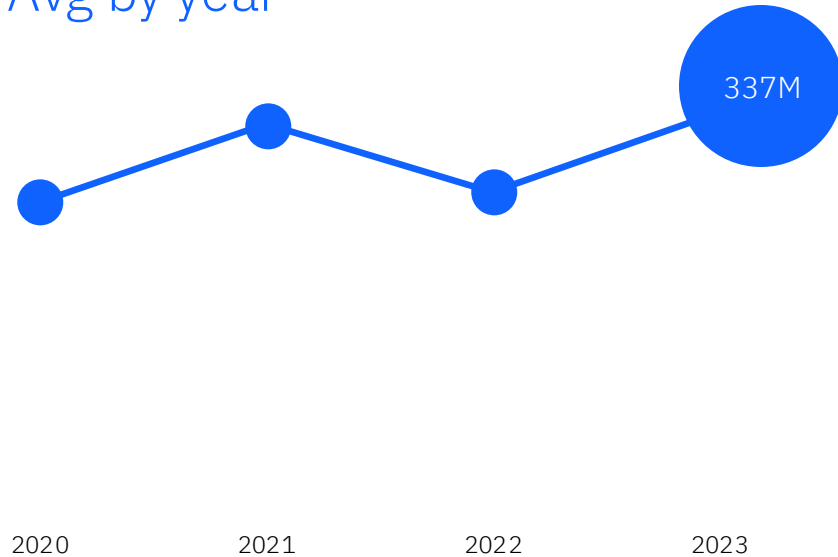
105 million population
data from the **General
Elections Commission
(KPU)**, uploaded on
September 6, 2022.

Data breaches **growing** in Indonesia society

Report states that records of data exposed from data breach incidents increases in last 4 years

203 Mio

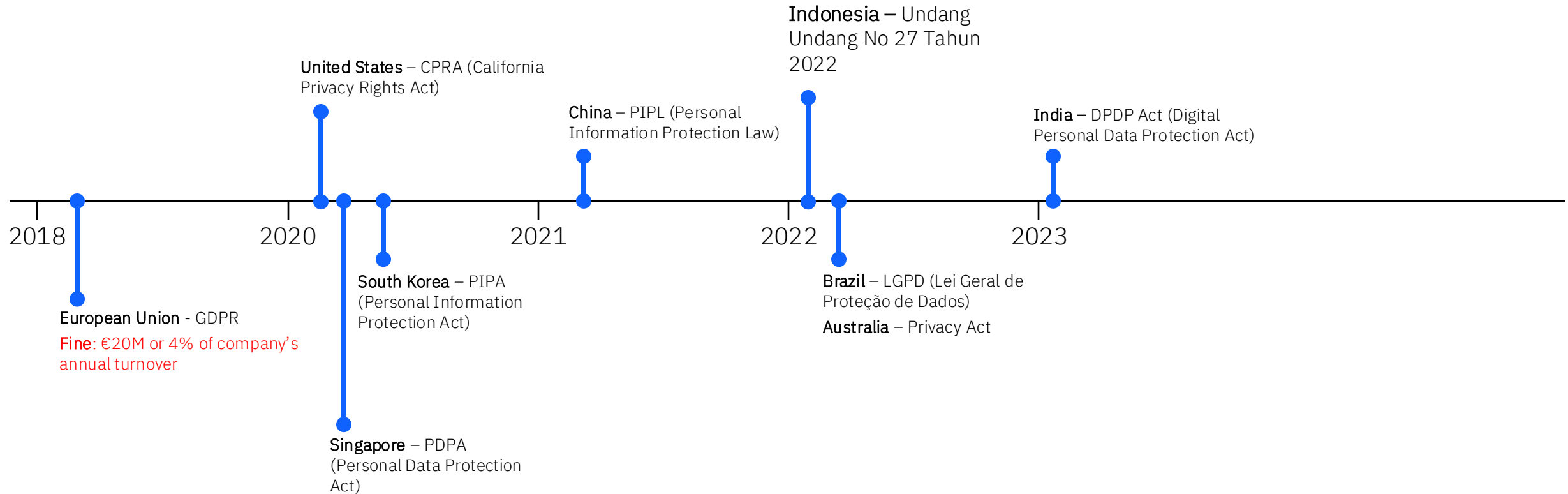
Avg by year



From 2020 to 2023, Indonesia faced **major data breaches** across critical sectors: an e-commerce platform leak exposing **user accounts**, a health insurance breach with **sensitive data** sold on the **dark web**, a **voter database** hack by “Bjorka,” and a massive **leak of population and family records** by BreachForums. These incidents revealed severe weaknesses in national data protection.

Average number of records exposed from major data breach cases in Indonesia from 2020 to 2023

Timeline of Amendments of Global Data Protection Regulations at a Glance



Elucidation of Indonesia PDPL Criminal Sanctions

Criminal sanctions under Indonesia Personal Data Protection Law (PDPL) underscore the seriousness of violations with penalties

Chapter XII: Criminal Provisions



~6 yrs

Individual can get a maximum prison sentence by intentionally and unlawfully creates false personal data

~Rp 6B

..and/or a maximum fine can be added

~Rp 100B

Sanctions will be imposed on the management, the person giving the order, or the policy maker.

Indonesia parliament passes long-awaited Data Protection Bill

Personal Data Protection Law aimed at guaranteeing the right of citizens to personal protection and raising public awareness of data privacy with 2 years transition period given

- Personal Data Types
- Data Owner Rights
- Processing of Personal Data
- Exception
- Controller / Processor Roles
- Data Protection Officer
- Personal Data Transfer
- International Cooperation
- Sanction / Penalty

Terminologies

Personal Indefinable Information:

- Health data and information
- Biometric data
- Genetic data
- Crime record
- Personal financial data
- Full name
- Gender
- Citizenship
- Religion
- Marital status
- Personal Data combined to identify a person.
- Other data in accordance with the provisions of the legislation.

Data Protection Authority is the national body established to be responsible for upholding the rights of individuals to the protection of their personal data through the enforcement and monitoring of compliance with local data privacy laws.

Data Controller is defined as any person, public body, or international organization that acts individually or jointly in determining the purpose of data processing and performing control over data processing activities.

Data Processor is defined as any person, public body, and international organization acting individually or jointly in processing personal data on behalf of the Data Controller.

Data Protection Officer (DPO) is mandatory for organizations that process personal data for public interests, main activities involve the continuous and systematic monitoring of personal data on a large scale or related to criminal data.

Sanction / Penalty

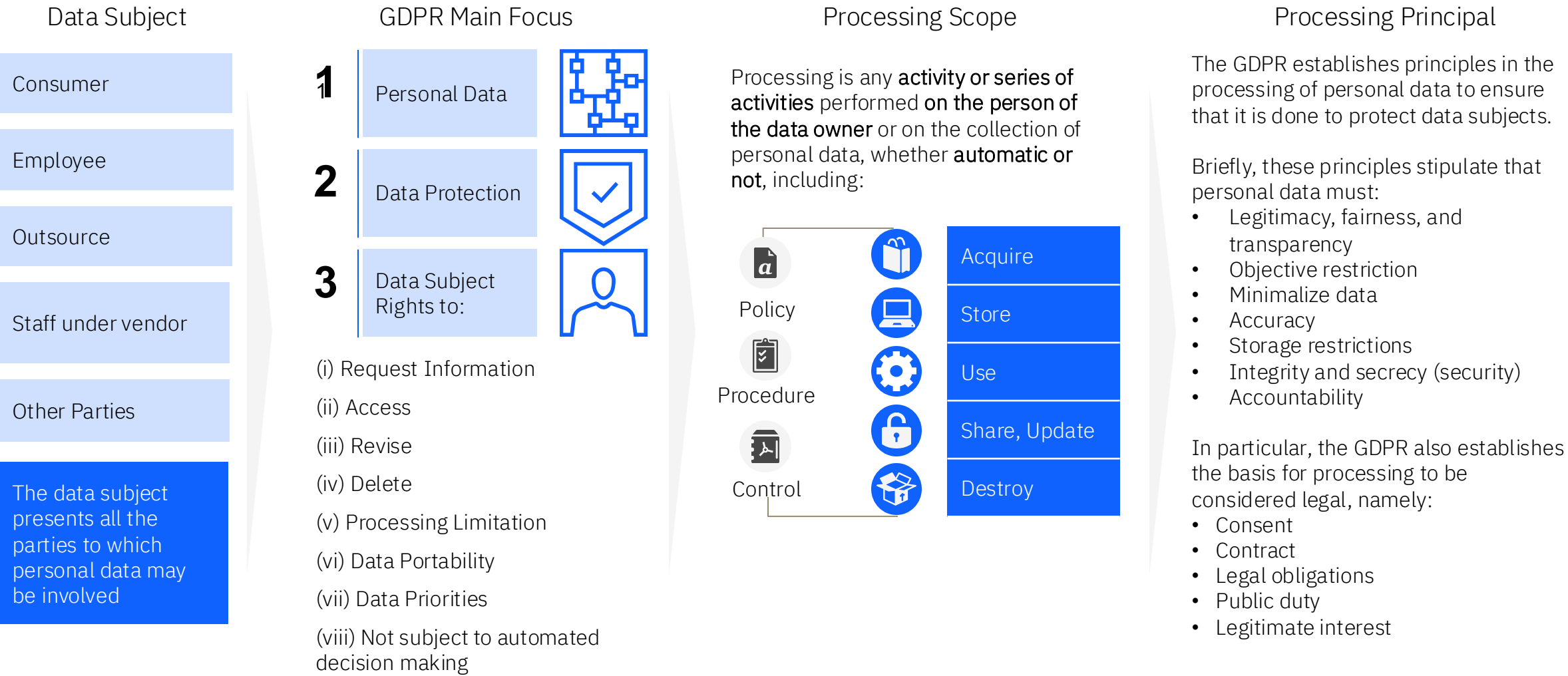
- **6 years** imprisonment and/or a fine of **IDR 6 billion** maximum for falsifying personal data (Article 68).
- **5 years** imprisonment and/or a fine of **IDR 5 billion** for collecting or using personal data that do not belong to them (Article 67).
- **4 years** imprisonment and/or a fine of **IDR 4 billion** for disclosing data that do not belong to them (Article 67).
- **10 times** fine for Corporate (Article 70).



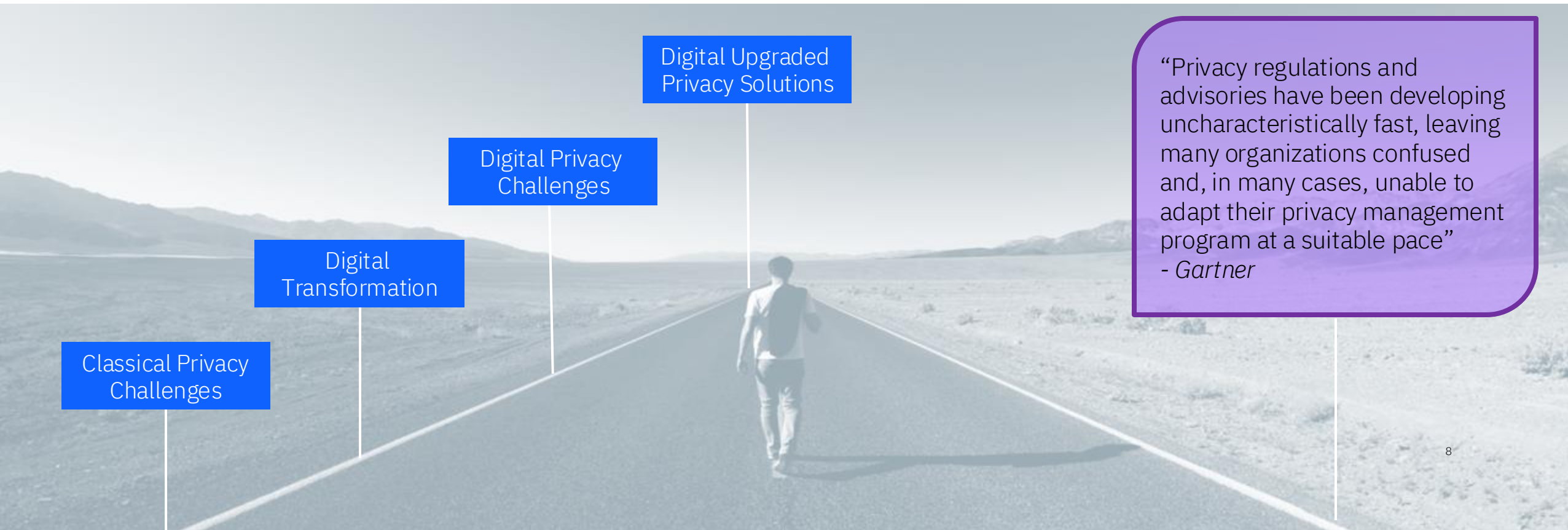
¹ “INFOGRAPHIC: Personal Data Protection Bill to Anticipate Data Misuse”. MOCI. September 9th, 2019. ² “Contents of the Personal Data Protection Law: Prohibitions, Sanctions and Types of Data”. Detik News. September 20th, 2022.

Personal Data is any data about a person either identified and/or can be identified separately or in combination with other information either directly or indirectly through electronic and/or non-electronic systems.

GDPR introduces key concepts related to Personal Data Privacy



Privacy Compliance is a continuous Journey, not a Destination!



Our story understands and follows the client's privacy journey!

Why privacy should be a key priority?



#1 Intensive Globalization

Due to continued interaction between nations, organizations, people and businesses our society and economy have become global a data centric, in which the personal data of individuals travels beyond borders thus privacy should be a priority for all.



#2 Technology Digitalization

The new digital solutions, cutting-edge technologies drive organizations to become more effective, by supporting their decision-making process to gain insights into the datasets, collected on clients and/or generated by their overall business activities.



#3 Pervasiveness & Sensitivity

The growth of the global data sphere, the growing pervasiveness of digital technologies, the increase of data incidents, breaches has made clients customers, data subjects (employees, consumers) even more sensitive to the ever-changing, cumulative, and exponential privacy risk landscape.



#4 Increased Regulation

Privacy is a human right and has become a focus for many regulators to create the applicable privacy laws throughout the world to ensure such fundamentum to individuals when controllers, processors, third parties collect, store, transfer, etc. their personal data. As of 2020 there are 148 different privacy laws.



#5 Global Privacy Governance

Organizations need to design and manage their privacy governance frameworks, data management systems in a global environment where the privacy challenges are multifold due to the different privacy cultures legislations.

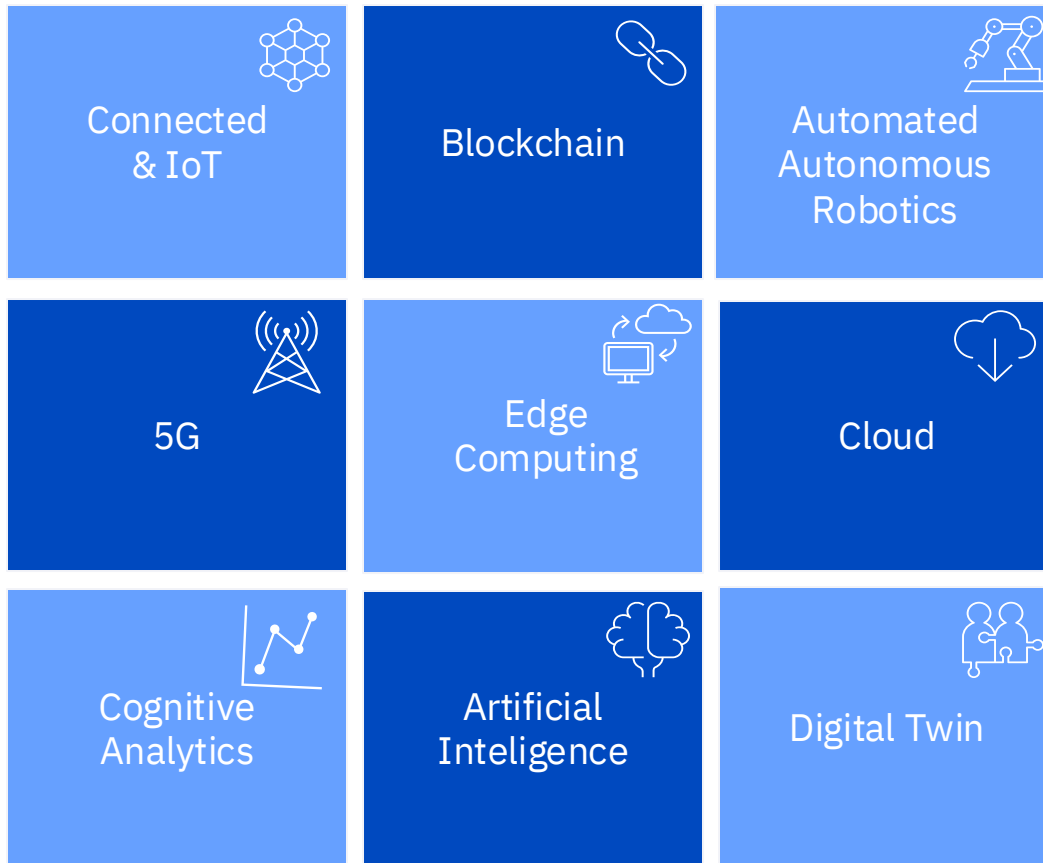


#6 Processor Third Party Management

Organizations upon managing their privacy activities need to supervise, coordinate, manage a growing network of processors and third parties (contractors and consultants) that work together to provide products and services to the individuals.

Privacy Challenges in Digital Transformation

IBM is one of the key stakeholder in driving the digital revolution.



< 58%
Strategic
Importance

“58 percent of 1,100 executives surveyed in the Digital Reinvention Study expect new technologies to reduce barriers to entry and 69 percent expect more cross-industry competition.”

Source: [IBM IBV – Digital Reinvention](#)

- Evolve
- Adapt
- Adopt

Companies are transforming their business operations due to the new and disruptive technologies, so shall they adapt their data protection frameworks to the new challenges!

Data management is governed by laws and regulations globally, and specifically in Indonesia where organizations must comply with every aspect seen from various views of Policies, Procedures, and Controls.



1. Who are the executive personas



Understand the different perspectives!

CISO

Chief Information Security Officer: a policeman for protecting the integrity, confidentiality and availability of all of the enterprise data, IBM's sweet spot.

- Narrowly focused on Data Protection activities
- Looks for a way to "check the box" for specific regulatory obligations and be done with them

CIO

Chief Information Officer: responsible for enterprise IT, IBM's sweet spot.

- Usually annoyed by added regulatory burden
- Looks for a way to "check the box" for specific regulatory obligations and be done with them
- Oversee the implementation of data privacy in the company's IT ecosystem

CPO

Chief Privacy Officer: responsible for overall Privacy governance activities and other compliance obligations.

- Usually has a legal, enterprise-wide perspective
- Typically, he/she is overwhelmed in the role
- *How IBM can help:* provide governance assistance, assessments, corporate roadmaps

DPO

Data Protection Officer: responsible for Privacy governance activities usually with regard to a single regulation like GDPR. Sometimes is the same or reports to the CPO.

- Usually has a legal, enterprise-wide perspective but focused on one regulation
- Typically is overwhelmed in the role
- *How IBM can help:* provide governance assistance, assessments, corporate roadmaps

2. Who are the field personas



Understand the different perspectives!

IT Security

IT Security: design and implement security of IT systems

- Design and implementation of the security policy, AAA, consent management, encryption
- Create a privacy policy
- Handling privacy incidents
- Status report

Data Management

Data Management: responsible for data management and protection.

- Make documentation of personal data used
- Protect data by creating access control and authority over data
- Encryption of data at rest
- RBAC for data

Application Team

Application team: responsible for design and development of secure applications

- Implement consent and terms at application
- Ensure proper security of personal data at application layer
- Document application architecture

Process and Audit

Process and audit: Design business process and rules to comply with PDP law. Conduct internal audit for compliance.

- Update business process and rules to align with PDP law
- Audit the internal stakeholders for compliance to the process and rules
- Provide report to data processor

What capabilities should enterprises prepare?

Govern the lifecycle of personal data management

Discover personal data in the data ecosystem

Mapping data processing activities to personal data use

Consent management system and implementation on applications

Access control and authorization of data – SSO, TWA

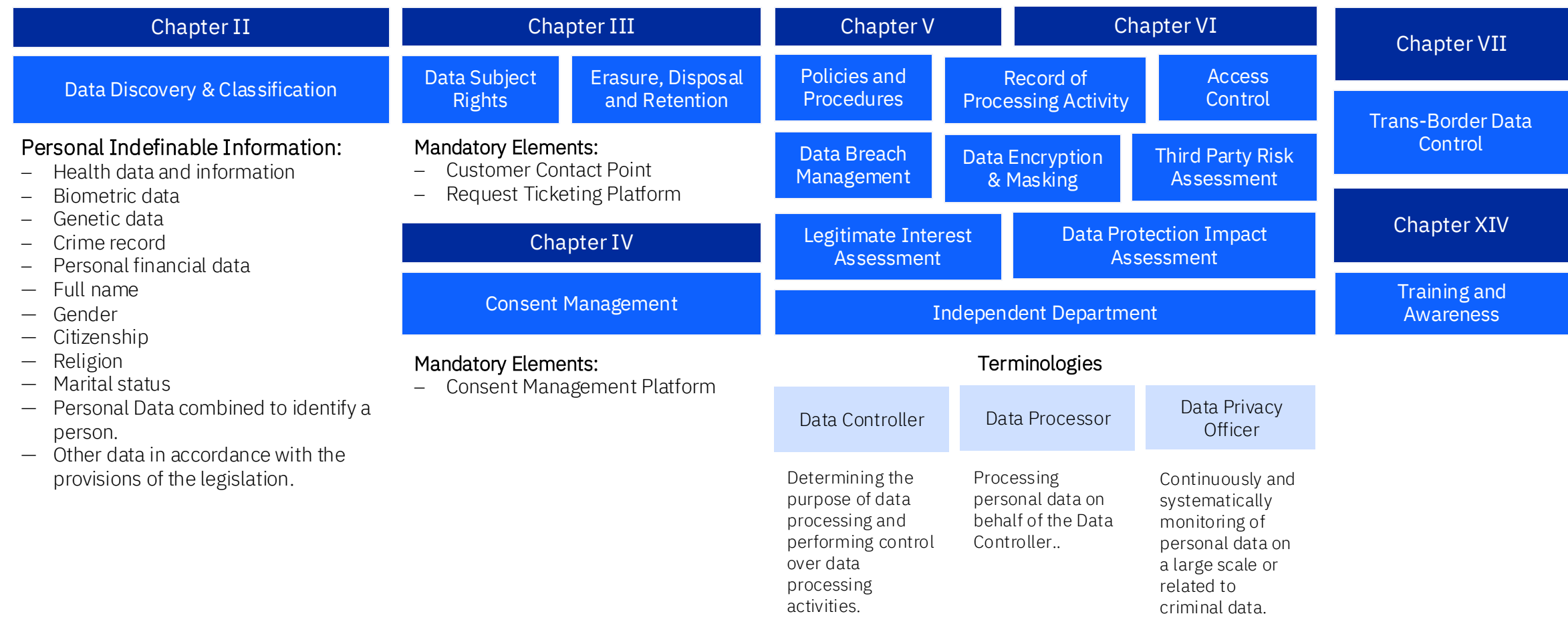
Data at rest / in transit protection and confidentiality

Accountable personal data storage and processing

Secure infrastructure for personal data

Key Processes Required by Indonesia PDPL

Personal Data Protection Law aimed at guaranteeing the right of citizens to personal protection and raising public awareness of data privacy



Who are the personas



Understand the different perspectives!

DPO

Data Privacy Officer

- Oversee internal compliance
- Liaison with PDPL authorities
- Advise on data processing
- Manage data breach reporting

Data Management

Data Engineer and Data Governance (Steward)

- Conduct data inventory and mapping
- Determine personal data classification
- Manage data lifecycle
- Support data data subject rights

App Dev and IT Sec

Application Developer and IT Security

- Technical implementation of data protection
- Developing and testing incident response plans
- Monitoring data breaches and incident notification
- Implement consent and terms at application
- Develop customer contact point to enable data subject rights

Risk and Compliance

Legal, Compliance, Audit and Risk Management

- Create data processing contracts
- Manage consent management mechanisms and privacy policies
- Conduct compliance audits
- Enable risk management related to personal data

Metadata Enrichment in IKC to identify business terms laid on data

Key Features

- Automatically **generate meaningful column names** and descriptions with context
- **Assign terms** based on semantic meaning and context
- **Improved precision of term assignments** with best-in-class automation & accuracy that doubles the number of correct column mappings (reduction in false positives)
- **Accelerate data curation** through increased accuracy and precision of auto-term assignments using AI and trusted LLMs from IBM Research
- Provide Gen AI capabilities to other Data & AI products

The screenshot displays the 'DB2 Bank Database Asset Enrichment' interface. The main table lists 150 assets with columns for Name, Display name, Description, Source, and Business terms. The 'ACCOUNT_HOLDERS' table is highlighted, showing AI-generated terms like 'Account holders' with a confidence score of 83%.

Name	Display name	Description	Source	Business terms
ACCOUNT_HOLDERS Table	AI Account holders	Table containing data of debit acco...	DB2 Bank... / BANK3	AI 2 Suggest
BANK_CLIENTS Table	Banking clients	AI This table contains client data.	DB2 Bank... / BANK3	Customer +1 more
BANK_CUSTOMERS Table	Banking customers	AI This database table contains custome...	DB2 Bank... / BANK3	Customers
CLIENTS Table	Clients	This table contains data on clients wi...	DB2 Bank... / BANK3	
CREDIT_CHECK Table	Credit score checks	Credit score check process data.	DB2 Bank... / BANK3	Credit score +2 more
MORTGAGE_APP Table	Mortgage applications	Mortgage application data and data from mo...	DB2 Bank... / BANK3	
SAVINGS_ACCOUNTS Table	AI Saving accounts data	AI Savings accounts transactional data...	DB2 Bank... / BANK3	Savings accou
SYSTEMS Table		AI Table containing system records.	DB2 Bank... / BANK3	AI 3 Suggest
SYSTEMS_2 Table		AI Table containing system records.	DB2 Bank... / BANK3	AI 2 Suggest

ACCOUNT_HOLDERS Details

Display name: AI Account holders

AI-generated content Confidence score: 83%

Assigned by Generative AI 95%

Source: DB2 Bank Connec..... / BANK3

Asset details: Table type: Table, Columns: 15, Rows: 2,941 (sampled), Format: application/x-ibm-rel-table

Asset owner: Jonathan Bruckbauer, email@ibm.com

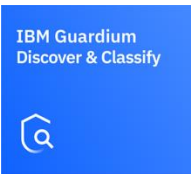
Enrichment details: Enrichment options, Profile data | Run basic quality analysis | Assign terms | Expand metadata, Sampling method: Moderate, Last enriched: Apr 15, 2024, 11:35 AM, Details of job run 17

Transform the way
risk and compliance
professionals work
with IBM
OpenPages



Protect Data, Simplify Compliance

Guardium Discover and Classify



Highly accurate discovery and classification of structured and unstructured data

Comprehensive Discovery

Automatically detect known and unknown sensitive data across hybrid environments, whether at rest, in motion, or in overlooked data sources

Business-Driven Tagging

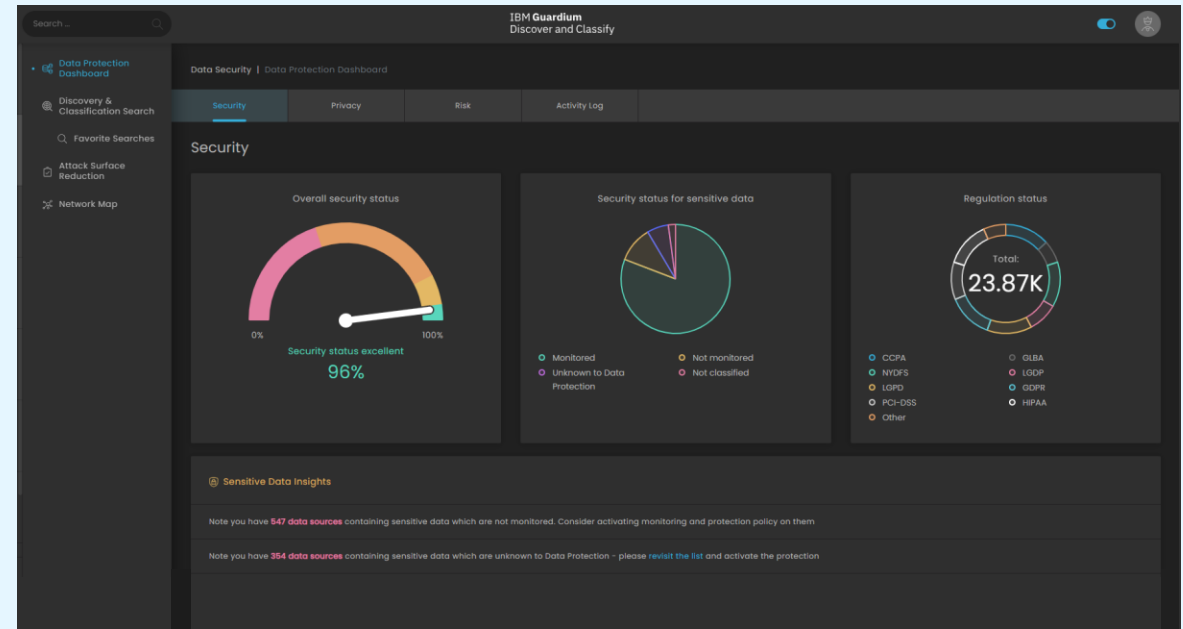
Enrich existing security and compliance tools with deep data-level context to enable smarter protection and better prioritization of defenses

Accurate Classification

Industry-leading classification accuracy for both structured and unstructured data using AI and contextual machine learning, which is verified by independent tests

Contextualized Insights

Reveal the business context of sensitive data, like a European citizen's credit card residing in a US data center without GDPR controls, to highlight true risk and trigger the correct response



99.7%
accuracy in data
classification
according to
independent testing,
assuming 80% of
business data is
unstructured

Financial Services Provider, US

Facing fragmented tools and increasing regulatory pressure, the organization needed a unified approach to data security and privacy. Guardium Discover and Classify delivered this at scale, scanning 3,000 databases in two weeks, and integrated seamlessly with existing tools. The solution streamlined audit readiness, cut DSAR response times from days to minutes, and gave business units self-service access to trusted data insights.

Unlock identities and enable more effective communications throughout the organization with IBM Security Verify

Admin user activity



User activity dashboards



Custom reporting



Webhook/CRM integrations



Marketing process workflow



Identify fraudulent users

Build on a robust platform



Scale and availability



Standards and compliance



Admin and dev tooling



API driven & customizable



Event monitor, log, & stream



IBM Security Verify

Capture / Engage with users



Registration & profiling



SSO / MFA / Risk authN



Password-less authN



Social login



Custom branding

Manage users and artifacts



Profile management and admin



Data privacy and consent



User governance



Account relationship and linking



Attribute mapping

