

DATA GOVERNANCE WHY THIS MATTERS!

Boehringer Ingelheim BI Dataland

O1 O2 O3 O4

Who is Boehringer Ingelheim? Why is data so important for us at Boehringer Ingelheim? What is dataland? How does dataland enable data governance?



01

02

03

04

Who is Boehringer Ingelheim?

Why is data so important for us at Boehringer Ingelheim?

What is dataland?

How does dataland enable data governance?



Boehringer Ingelheim in brief

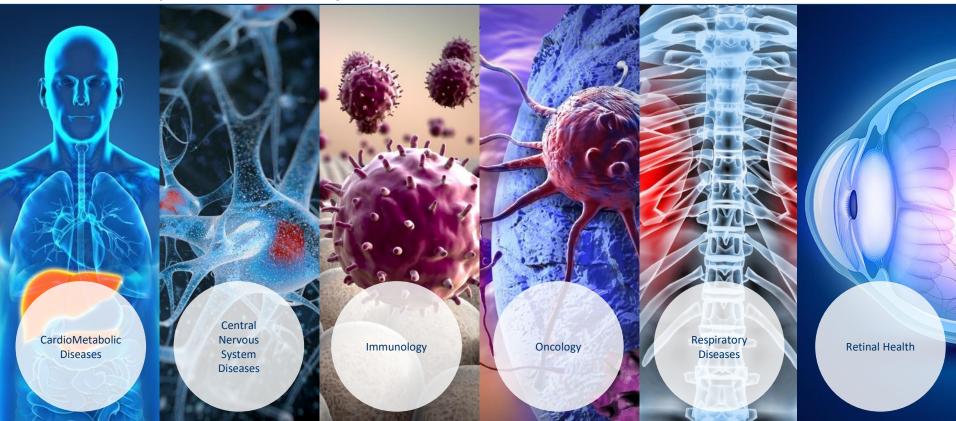


- Family-owned pharmaceutical company
- Founded 1885 in Ingelheim, Germany
- Focus on Human Pharma, Animal Health and Biopharmaceutical Contract Manufacturing
- More than 53,000 employees worldwide
- R&D expenses of 5 billion EUR
- 25 R&D sites worldwide for Human Pharma and Animal Health
- Net sales of 24.1 billion EUR
- 176 affiliated companies worldwide
- Investment in tangible assets: 1 billion EUR





Our research strategy: Building on our expertise and scientific leadership in our therapeutic areas





01

02

03

04

Who is Boehringer Ingelheim?

Why is data so important for us at Boehringer Ingelheim?

What is dataland?

How does dataland enable data governance?



What is needed to get the benefits out of data?



Data needs to be collected efficiently



Data needs to be in a format that can be used for analysis



Quality of data needs to be high



Multiple sources of data need to be accessible & context needs to be provided



Analytic tools need to be easy to use and work with the data



Employees need to be upskilled, gain data knowledge and develop a data mindset, leading to a general culture of data-centricity



Selected benefits of data-based insights



Get insights into how something works



Identify correlations and recognize patterns & behaviors



Predict future outcomes & scenarios



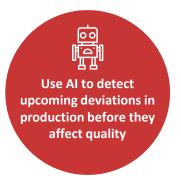
Get advice on the next best options to focus on



With data-based insights, we can take better decisions using a solid data foundation



Examples of how data can help us to solve complex problems







Data is everywhere at Boehringer Ingelheim and can be used in many ways









01

02

03

04

Who is Boehringer Ingelheim?

Why is data so important for us at Boehringer Ingelheim?

What is dataland?

How does dataland enable data governance?



Data is set as a key component of the company strategy by the

board

dataland is a strategic initiative set

by the board of management directors



We enable Boehringer Ingelheim to be leading-edge in generating value out of data.



To achieve this, dataland will establish a data-driven mindset and working culture worldwide.



This will be based on building and operating a user-centric end-to-end data ecosystem across the entire company.





Improve time-to-market, user experience and success rate of use cases



Identify and realize synergies and value across the Boehringer Ingelheim data landscape



Provide an ecosystem that reduces cost, ensures security and increases ease of data access



Strengthen our culture of data-centricity



dataland will help realize solutions to increasingly complex problems

What will dataland deliver in detail? (excerpt)



One-Stop-Shop for Analytics*:

- All kind of data: Operations. research, finance, marketing,...
- From all business units & geographical legal entities
- Supporting Self Service Analytics, ML / Al, ...



Reduced time to data for analytical use case while ensuring compliance



Enabled secondary use of data – aiming at analytics



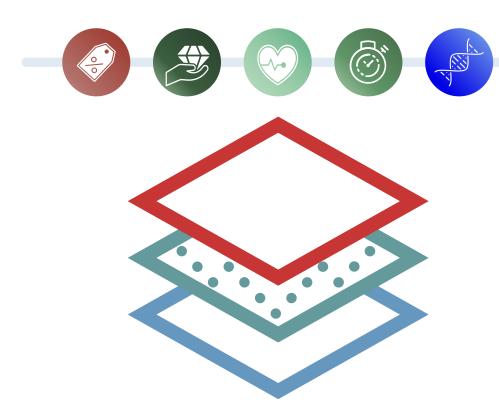
Monitored pipelines from primary systems into dataland



The idea was to kick-start dataland with a number of initial use cases to build capabilities & to build a broad data foundation which "magnetizes" further use cases



dataland is built on lighthouse use cases and three layers



Operational Model

- Processes and frameworks for use case prioritization and onboarding
- **>** Best practice process models for use case implementation
- Processes and frameworks for business value monitoring of use case

Data foundation

- > Data Governance framework incl. roles & processes
- > End-to-end data architecture and foundation
- Identify synergies and ensure cross use case reusability of data

Technology

- > Define dataland architecture based on use cases requirements
- Set up scalable modern data platform services for Data science & Analytics
- > Support use cases development lifecycle processes



01

02

03

04

Who is Boehringer Ingelheim?

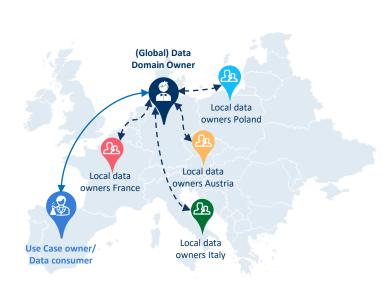
Why is data so important for us at Boehringer Ingelheim?

What is dataland?

How does dataland enable data governance?



Overcome time intensive processes with global Data Domains



Result: Time-intensive process to get buy-in for use case to access data while remaining compliant

Data accountability legally lies with local data owners in each country, split across functions

- Each country / function needs to be involved for access
- Specific person with data accountability often unclear
- Local data owners may not be inclined to process demand fast



Global Data Domain ownership

- (Global) Data Domain Owner who collaborate with local data experts/ data owners / Data Sharing Terms
- Global DDO has mandate and is accountable to take decision over data usage of data in their domain



The Journey of Data within dataland – Data Foundation Added

Value Data Foundation / Data Domains Data Simulation & Pre-assembled Data **Data Sources Raw Data Cleansed Data Curated Data Analytics** Time for use case to 60% Improvement 15% Improvement 25% Improvement work data Task executed / Data Ownership assigned Information added Policies added / Informed use of data



Get to know our Enterprise Data Catalog (EDGC)



- One-Stop-Shop for access to dataland's data
- Structured by data domains
- Catalogs all data in cleansed and curated layer
- Supports the governance processes for data access / shopping

