Einfach, weil's wichtig ist.

ERGO
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Data Strategy and Data Governance in the Era of (Gen)AI

CDAO, Frankfurt

30.10.2024

Felix Wenzel
Head of Data Engineering & Strategy, ERGO Group

The ERGO brand. Our aspiration and the promise to our customers.

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We insure people and companies. Future orientation and sustainability are a matter of course for us.

The customers and their needs are our focus. For them it is important to be able to create their world. We manage the risks. As an insurer, we do this as simple, fast and convenient as possible.

The essence of our ERGO brand - "Making insurance easier" - is the compass for our actions. As an active companion at every stage in life, as an equal partner, and as a positive driving force for the future.
Simple because it matters.

›

Our Brand essence
ERGO makes insuring easier.

Our Claim
Einfach, weil's wichtig ist.
(Simple because it matters.)

Our comprehensive range of products and services is key to our success.

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Advice, insurance, pensions and services

ERGO — Life, property/casualty, direct and online insurance, legal protection insurance

DKV / ERGO Reiseversicherung — Health and travel

nexible — Pure digital insurer

International presence in over **20** countries

Part of Munich Re, a DAX company

Munich RE

€ 20.1 bn premium income

€ 136.4 bn investments

Over **38,600** employees and sales partners

All figures as at: 31.12.2023

Primary insurer and reinsurer under one roof.

ERGO is part of Munich Re – one of the leading reinsurers and risk carriers worldwide. Munich Re stands for exceptional solution-based expertise, consistent risk management, financial stability and client proximity.

Munich Re has well over a century of international experience and is a member of the DAX 40 and EURO STOXX 50.

Reinsurance

Munich RE

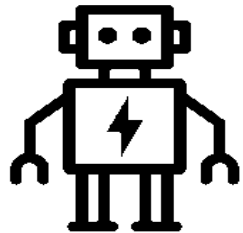**Primary insurance**

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Asset management

MEAG

(Asset manager for
Munich Re and ERGO, and funds for private
and institutional clients)

ERGO implements state-of-the-art technologies in real use cases in the insurance business
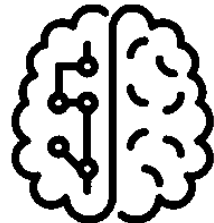
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Robotics
Robots relieve us with stereotypical tasks

NOW

Artificial Intelligence
We use AI in our day-to-day work to optimise our process efficiency

Voice
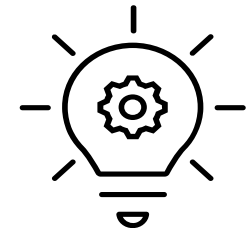ERGO as an industry pioneer in the use of of voice assistants

Virtual Reality
Used for meetings, workshops, training purposes and in sales

Process Mining
Leveraging Process Mining tools to achieve operational excellence

Analytics to drive ERGO's digital transformation

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**Competitive advantages
from Advanced Analytics**

**Systematic use of Advanced Analytics to
provide optimization along the entire value chain**

| Product Design & Pricing | Sales & Distribution | Under-writing | Risk Management | Customer Engagement | Claims | Service / Operations |

Data-driven transformation of existing processes and systems

Skills

Technology

Agile Approach

2014: ERGO's structured Data were used to build powerful predictive churn models
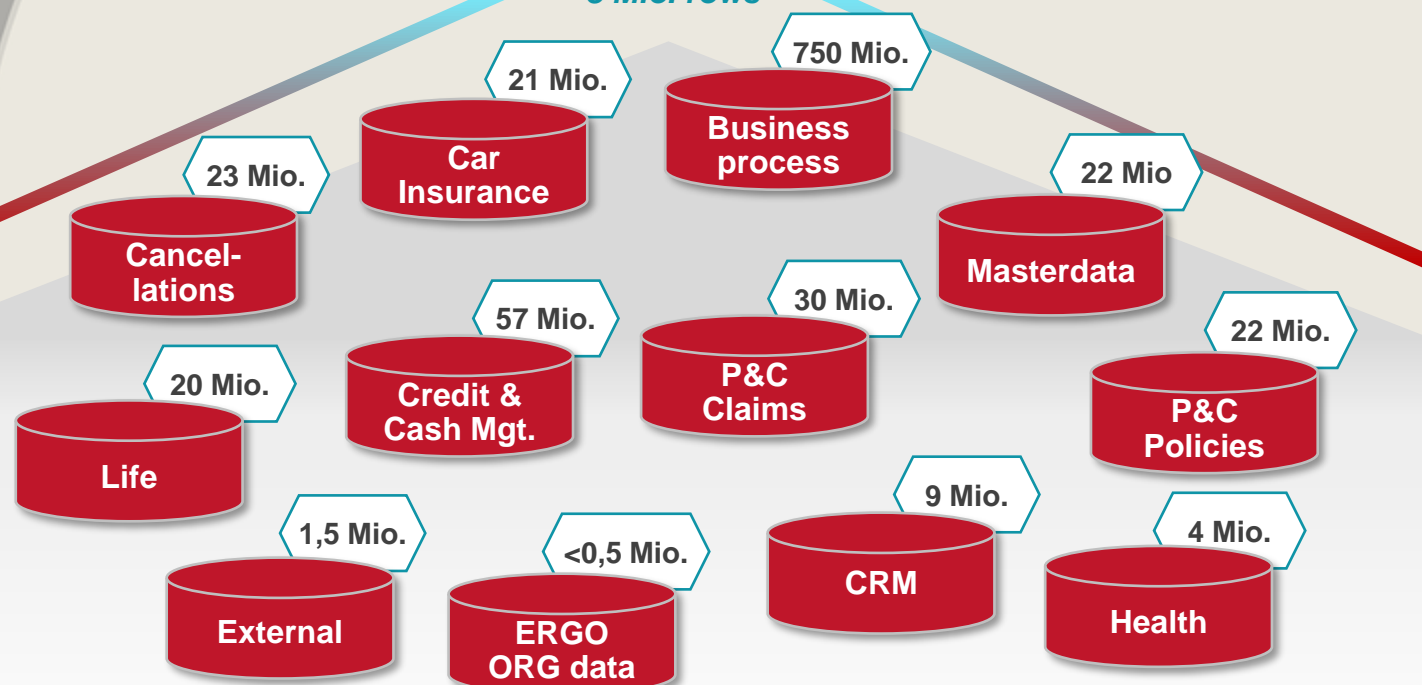
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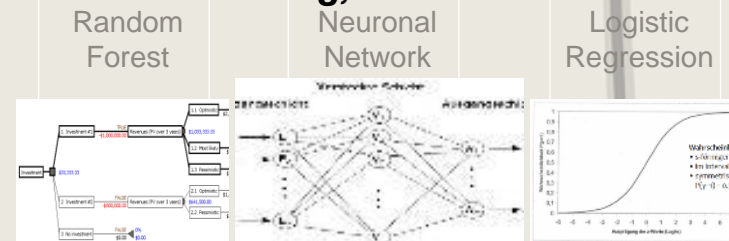| Kunden	Stammdaten	Int./ext. Daten zur Charakterisierung	Vertragsdaten (S/U)	Schadenfälle (S/U)	Vertragsdaten Leben	Vertragsdaten Gesundheit	...	...	...	...
Kunde x										
Kunde y										
Kunde z										
... ...										

Analytical Base Table

~ 8 Mio. rows

21 Mio. — **Car Insurance**

750 Mio. — **Business process**

23 Mio. — **Cancel-lations**

22 Mio — **Masterdata**

57 Mio. — **Credit & Cash Mgt.**

30 Mio. — **P&C Claims**

22 Mio. — **P&C Policies**

20 Mio. — **Life**

1,5 Mio. — **External**

<0,5 Mio. — **ERGO ORG data**

9 Mio. — **CRM**

4 Mio. — **Health**

❷ *Model building, evaluation & selection*

Random Forest   Neuronal Network   Logistic Regression

❸ *Scoring: Identify customers with high churn probability*

KNR	Expiration	OE-NR	Segment
4711	01.09.2018	00110-128	1
987654	15.09.2018	00128-110	1
192837	01.09.2018	04711-815	1
...	...	...	...

❹ *Implementation of measures to prevent cancellations*

❶ **ABT holds anonymized information at customer level (~ 2.3k features)**
transposition, aggregation and summarization of ingested data

Stand: 12/2016

The environment for insurance changed dramatically. AI & Data are not any more an *option*. It's a MUST.

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Generational shifts and customer expectations

Pricing pressures

Interest rate environment

Risk & compliance

Need for digital channels and digital products

Frequency and severity of claims

Legacy IT-infrastructure

Regulatory regimes

To boost value creation from AI, data must be seen as a core strategic asset

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Leverage knowledge

More data means more knowledge, more knowledge opens up competitive advantages – if you do it right.

For this, you need proper skills, modern technical capabilities, data-aware mind set and clear priorities in business and IT.

Stay competitive

New players - built on data - acting more opportunity oriented to make use of data.

Other market participants with established data strategies will have advantages in the data age.

Comply regulations

Due to growing business impact and new data related risks, regulatory requirements are increasing.

Core initiatives / projects as well as Audit and risk management asking for enhanced Data Governance capabilities.

The ERGO data vision

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Continuous Data Management
- Embed data management deeply in the day-to-day operations across ERGO
- Improve data management over time through dedicated roles, processes and tools

Data Literacy
- Build data capabilities on all levels across ERGO through field & forum approaches
- Enable easy-to-use self-service experimentation with data to generate new insights

Enabling New Opportunities
- Leverage data for identifying & pursuing new business opportunities and models
- Make data top-of-the-mind when tackling new challenges

We **continuously** strive to advance our **collective data access** and **data literacy** to **improve business outcomes** and ultimately **enable new opportunities** based on **high quality data assets**

Collective Data Access
- Make data universally discoverable and accessible by all and for all operational & analytical purposes
- Comply with regulatory, security, access rights and data protection guidelines

Improving Business Outcomes
- Prioritize data initiatives on high-impact business opportunities
- Contribute to state-of-the-art and sustainable business operations

High Quality Data Assets
- Make data quality assurance an integral part of ERGO
- Actively manage data as a product

ERGO Group's Data Strategy covers Data Culture, Data Management und Opportunities

Business Value €

indirect (hard to measure)

indirect (can be quantified)

direct (measurable in €)

Data Culture

Data Management & Governance

Data Opportunities

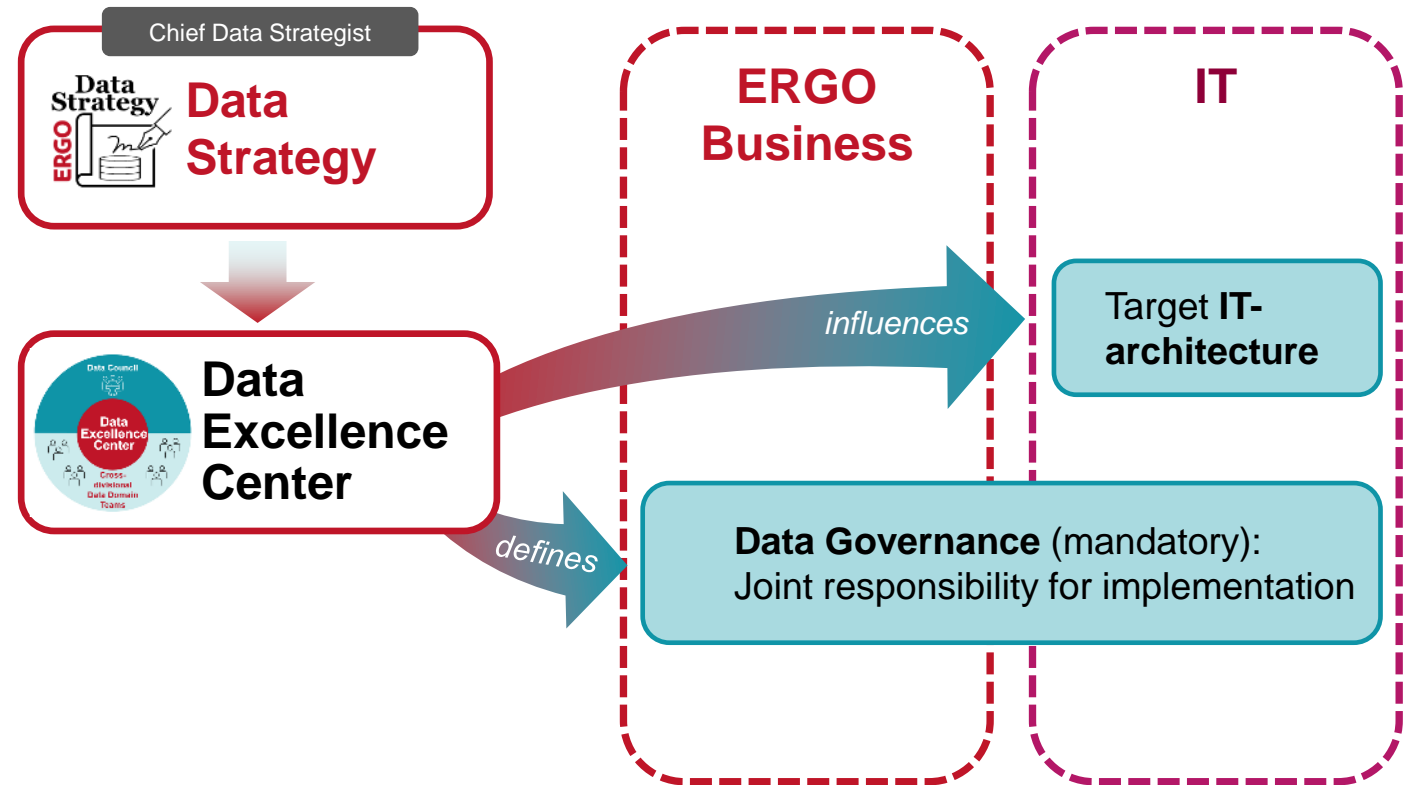# Governance, risk management and compliance topics

Data Management

The systematic management of data through collection, storage, processing and provision for business requirements

Data Governance

Defines the framework for responsibilities, processes and standards to ensure data utilization, quality and compliance

Chief Data Strategist

Data Strategy

Data Excellence Center

ERGO Business

IT

influences

Target **IT-architecture**

defines

Data Governance (mandatory): Joint responsibility for implementation

> **Data management becomes a success factor when data governance is implemented effectively.**

Expectations with GenAI adoption are high…

KPMG on the opportunities in their Generative AI Survey [1]

77% of respondents expect generative AI to have the largest impact on their businesses out of all emerging technologies.

73% believe generative AI will increase workforce productivity.

71% will implement their first generative AI solution within the next two years.

64% believe generative AI will help their business gain a competitive advantage over competitors.

BCG predicts up to 40% potential work time reduction thanks to Generative AI automation / augmentation [2]

Function	Value
Strategy & Management	22
Product & Service	24
Sales & Marketing	28
Finance/Audit	30
Risk Management	32
Legal/Compliance	33
Human Resources	34
Technology	35
Operations	36
Customer Services	42

Productivity Gains: Low ▮ Mid ▮ High ▮

(1) KPMG Generative AI Survey (updated 06/2023), see: https://kpmg.com/us/en/articles/2023/generative-artificial-intelligence-2023.html
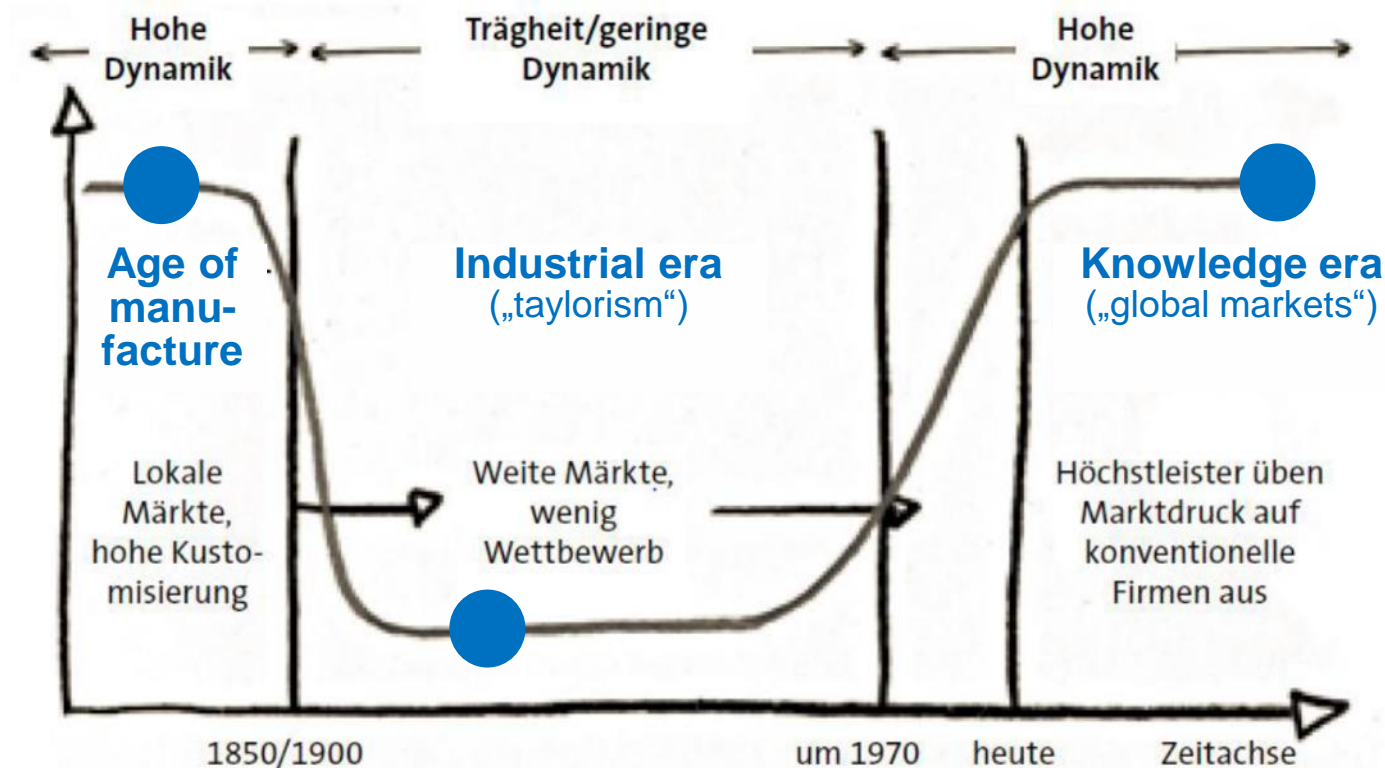(2) BCG 2023 YTD client diagnostic averages, see: https://www.bcg.com/publications/2023/assessing-the-impact-of-generative-ai-on-workforce-productivity

GenAI has the potential to achieve a new plateau of productivity

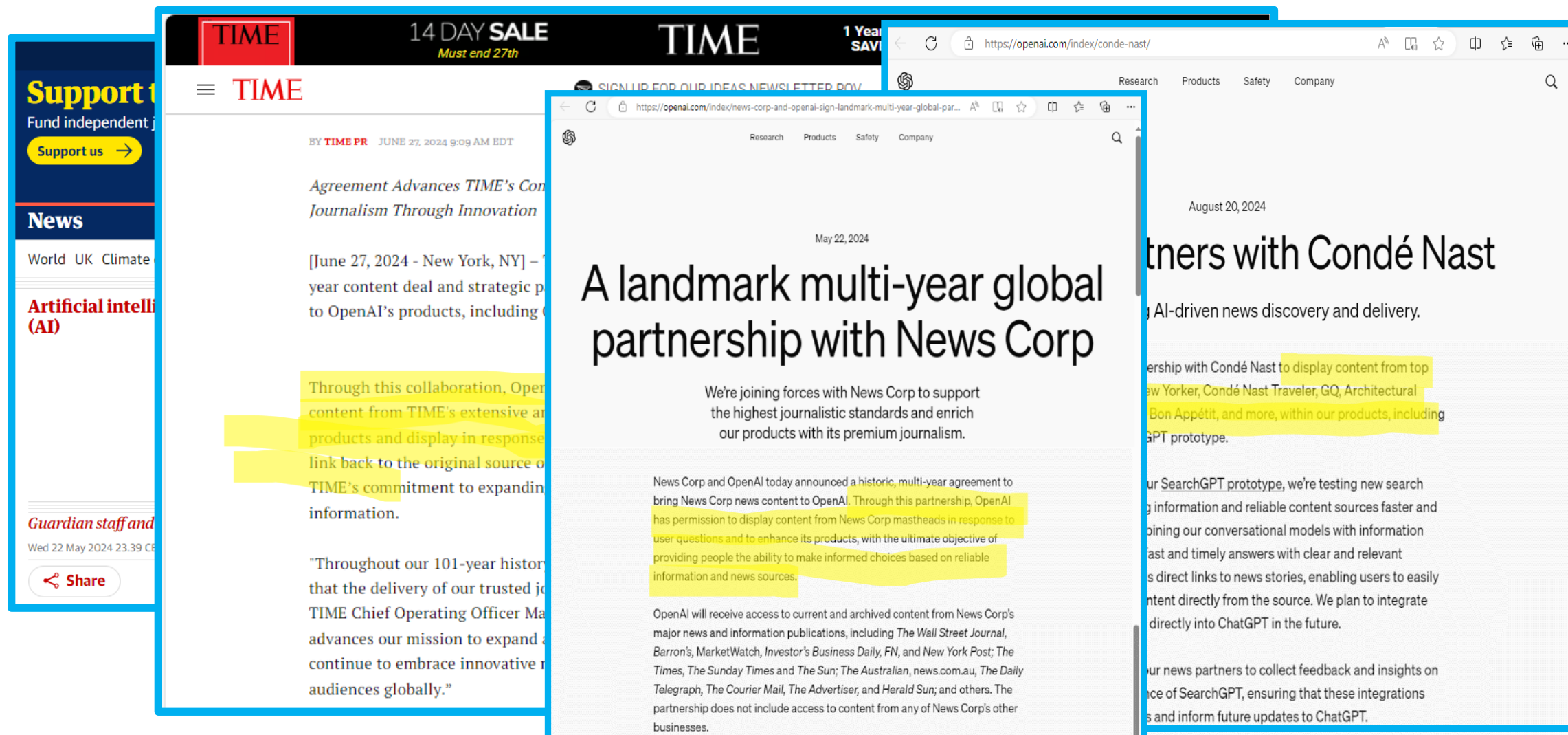Objective: **competitive advantages through ML**

Imperative: *keeping pace with GenAI*

Quelle: Pfläging, Niels: Organisation für Komplexität, BetaCodex Publishing, Band 2

Challenge: LLM's have an insatiable thirst for data

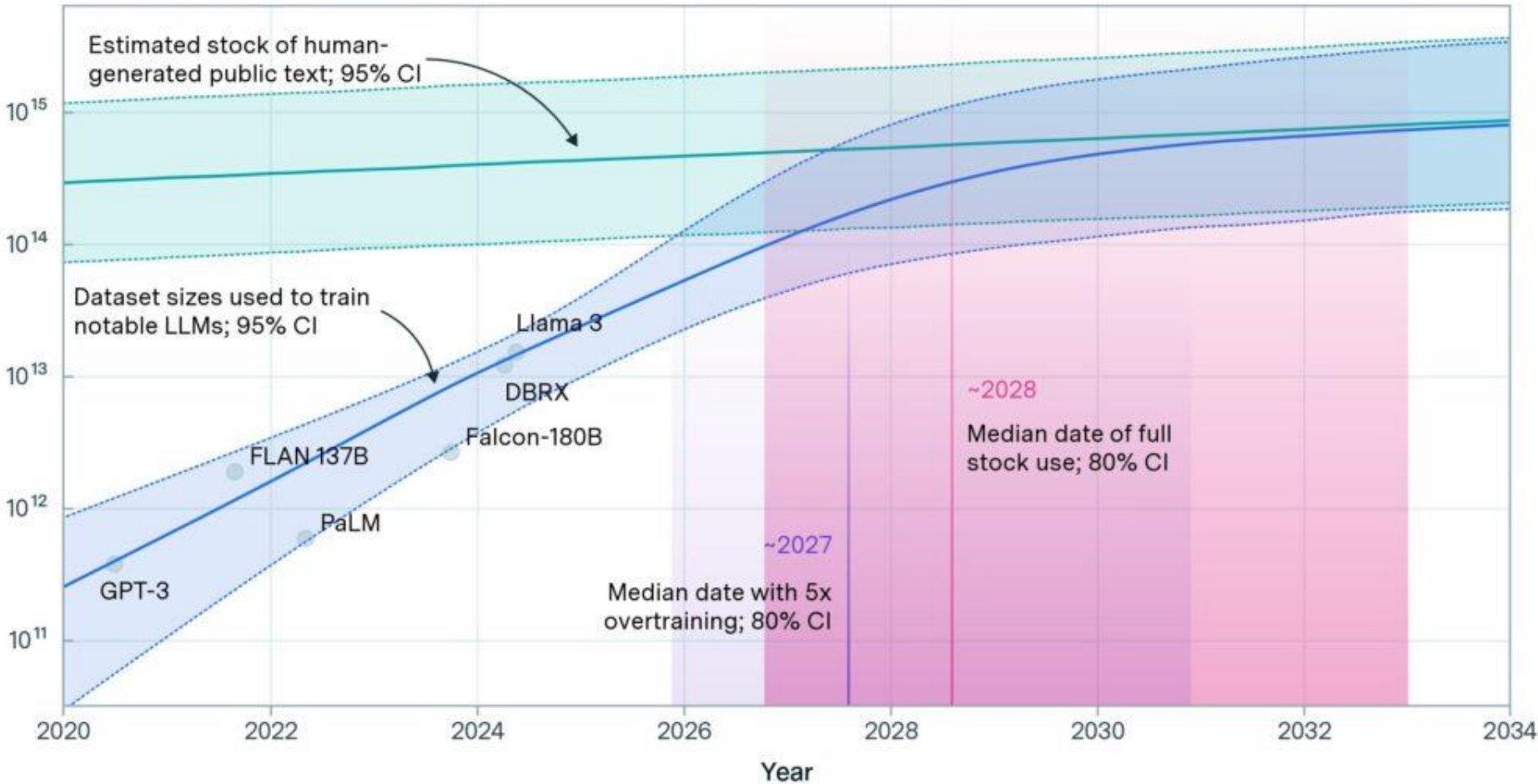# Challenge: LLM's have an insatiable thirst for data

Projections of the stock of public text and data usage

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EPOCH AI

Effective stock (number of tokens)

Estimated stock of human-generated public text; 95% CI

Dataset sizes used to train notable LLMs; 95% CI

Llama 3
DBRX
Falcon-180B
FLAN 137B
PaLM
GPT-3

~2028 Median date of full stock use; 80% CI

~2027 Median date with 5x overtraining; 80% CI

https://www.spiceworks.com/tech/artificial-intelligence/articles/is-llm-training-data-running-out/

So – what does it mean to have data that no one else has?
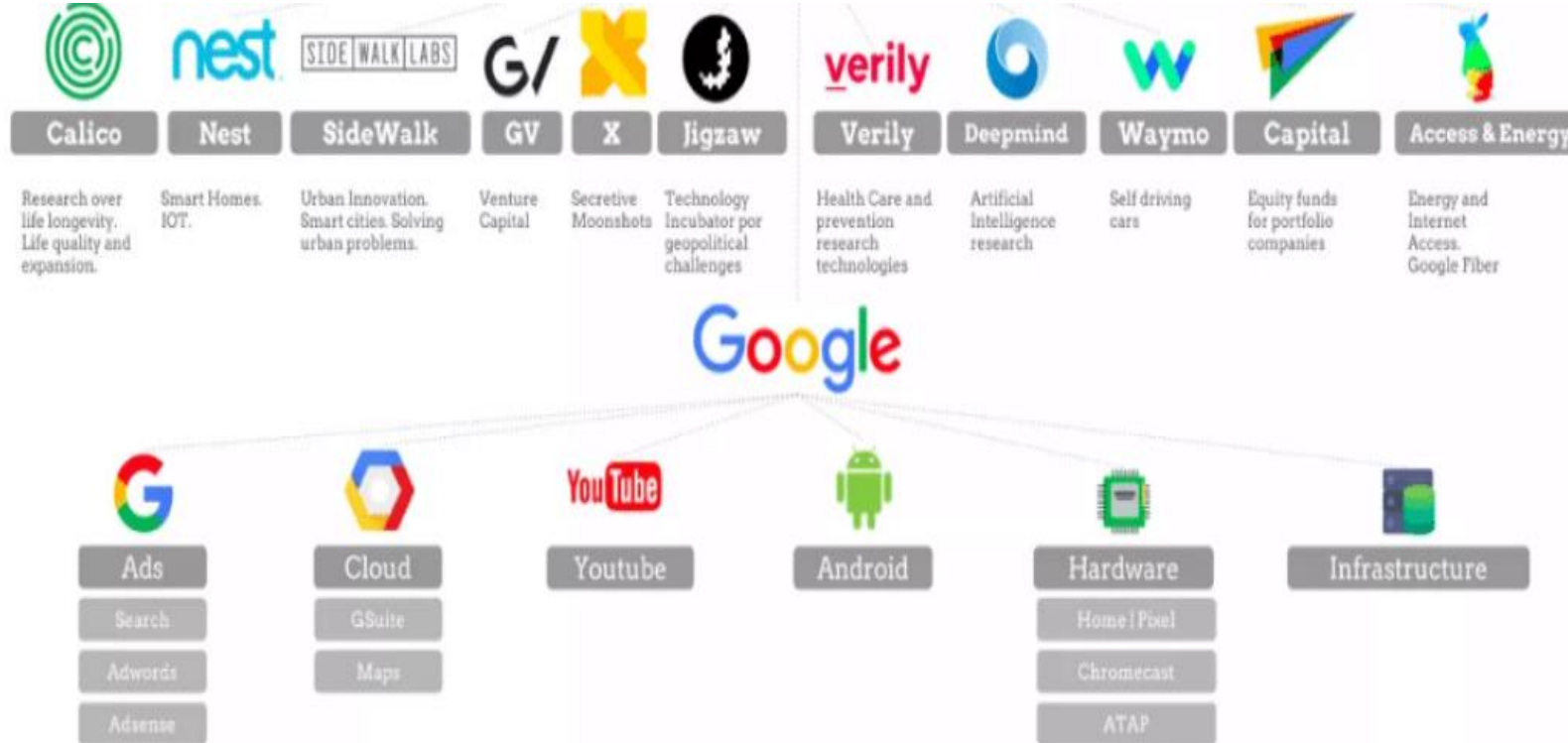
Proprietary semi- and unstructured data become ever more important: *"Any LLM needs your data"*

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EXEMPLARY

Lakehouse / Large Unstructured Data Hub

Enables at scale… *

Value creation through AI

(still) Pictures, e.g. damages

Text e.g. customer letters, expert opinions, ...

Sound / Video e.g. telephone calls, video consultation

LLM / GenAI

Analytical Content Hub

ERGO Data Management Layer

LoB's

Operations

Input Management
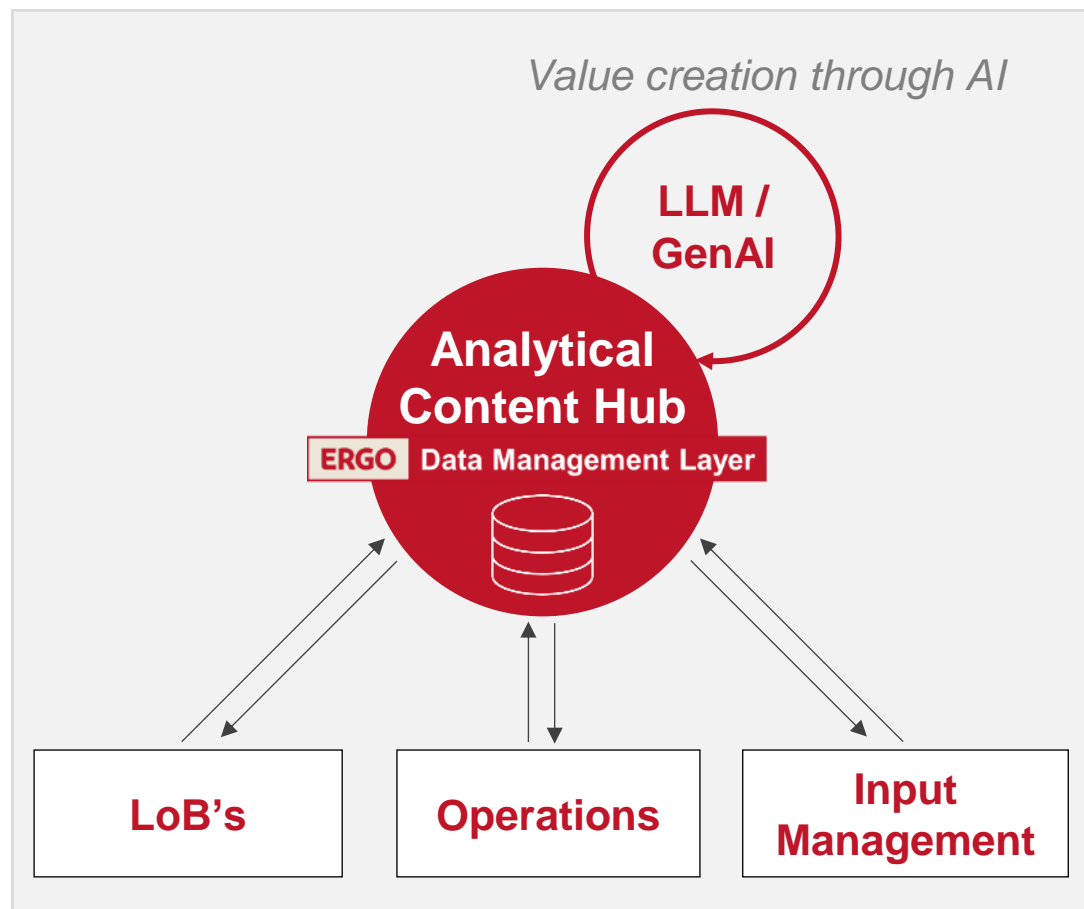
💬 **Central storage**

🌐 **Global access**

🧠 **(Gen-) AI functionalities**

🗔 **Intuitive usage**

🔍 **Context-based search**

🔄 **Automatic translation**

*indicative, non-exhaustive

Consistent use of data, technology, skills and culture must come together to make (Gen-)AI enterprise-ready

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ERGO AI FACTORY
GenAI

- Scaling on the basis of a centralized, cloud-based IT platform
- Implementation of use cases with support for ML + GenAI & LLM

Data Strategy
ERGO

- Value-creating data management with effective governance
- Implementation of a Target Data Operating Model
- Promotion of company-wide data competencies

(**ERGO** Data Management Layer

Data + **Artificial Intelligence**) * **Digital culture** = **Success**

Thank you for your attention.

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Finalist
KI INNOVATIONATION AWARD 2023
ERGO Group AG

DIN Normungs-roadmap KI 2.0
ERGO AI-Factory introduced as blue print for robust AI systems

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CONGRATULATIONS!
ERGO
WINNER
INSURER INNOVATION AWARDS 2022 - EMEA

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Die AI Factory der ERGO
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Pages 187–202

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