



Industrialised AI

Data fabric round table 2021

Steven Bex

Industrialised AI

From one-time analyses to continuous business value



AI use cases should be considered as **Insight-generating assets**, and built, managed and operated as products



Next to data scientists, AI requires a **multi-dimensional team** with expert skills, to realise a true MLOps experience

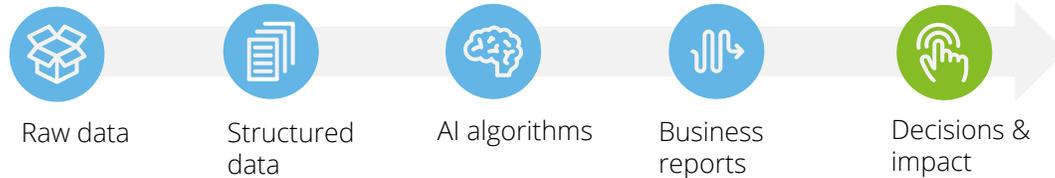


Open the black box to gain confidence in a world of increasing regulatory and compliance pressure, in a fast-evolving technical landscape



From AI use case to insight-generating asset

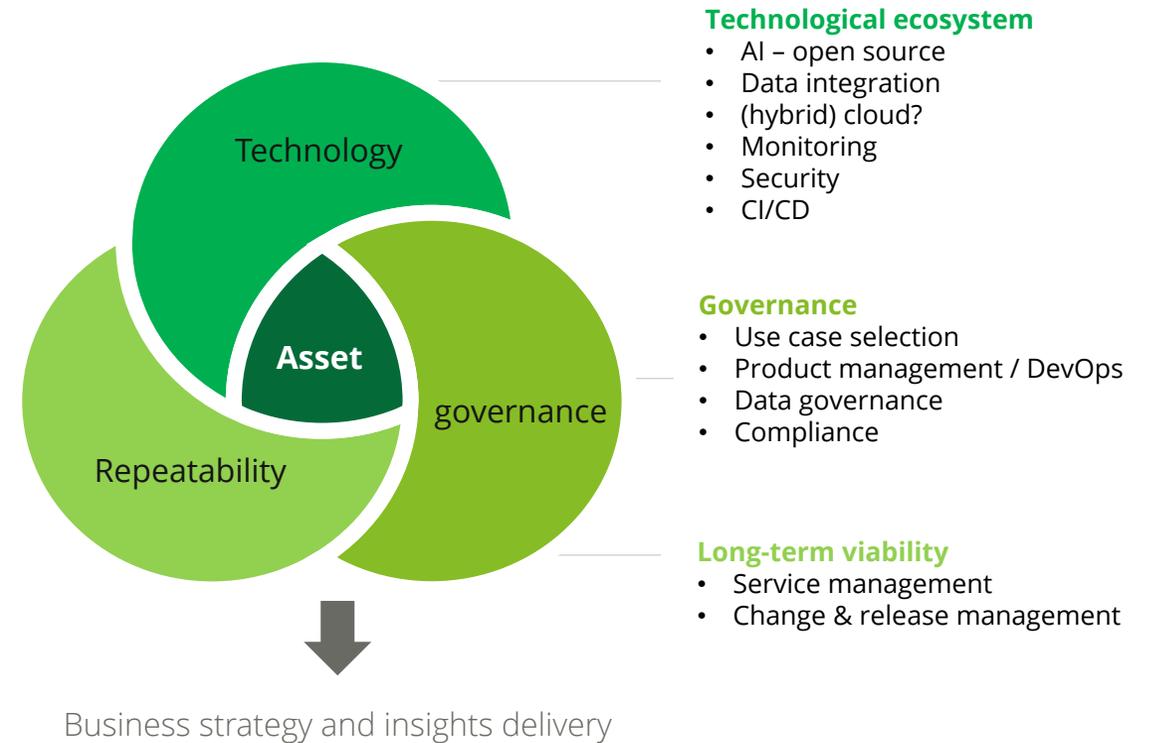
Example: fraud detection flow



Imagine: A user uses a daily report to steer manual fraud inspections. The report fetches data from several sources and uses AI algorithms to suggest the most likely fraudulent transactions. A human inspector begins his investigation and makes the final call.

For that user this report is an **insight-generating asset**. He doesn't understand the technology behind it—he just needs to **trust the result**.

Different Aspects to consider



AI requires a multi-skilled team



Data integrator

The **Data integrator** integrates different types of data, develops ETL data flows, manages the (meta)data.



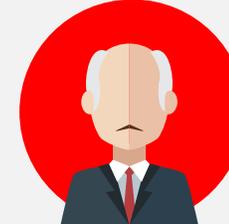
Information Builder

The **Information Builder** is responsible to govern the data and apply rules. Explores and visualize the data.



Data Scientist

The **Data Scientist** explores data, creates models and algorithms to answer a certain question, predictive analytics, ...



Information Consumer

The **Information Consumers** build dynamic dashboards or reports and visualizes data.



Administrator

The **Administrator** is responsible for maintaining the different services that the other user may use for the implementation, support and realization of projects developed on the platform. Once deployed, the administrators are typically operating the AI algorithms as part of the AI DevOps cycle

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- AI integrated in daily work
- Business terminology
- (self-service) Reporting/ visualization



- Technical or mathematical explanation
- Performance / technical breakdown

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- Latest technology
- Collaboration
- Quick access to data, as flexible as possible
- Fit for purpose DevOps (update AI models when accuracy deteriorates)



- Administrative burden
- Being a sys admin

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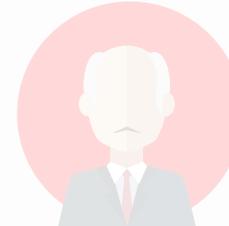
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- Consistent information model
- AI governance
- integrated in existing enterprise reporting



- By-passing data governance / privacy

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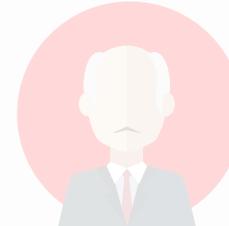
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- Use existing data flows where possible
- API / micro services
- Big Data / streaming



- Yet another technology

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- Integrated user management
- Enterprise grade security
- Monitoring / DRP
- ITIL service desk
- Release management
- Tools to operate AI
- On premise vs. cloud



- Manage open source variants
- Skill changes every project



Open the black box to gain confidence

AI explainability / bias detection

- How did my model reach that conclusion?
- Is my AI fair? Is it in line with our values?
- How do I ensure it does not drift?

Trust your data

- What definitions am I using?
- Where does this data come from?

GDPR / SOX / IFRS compliance

- What data is used?
- Who had / has access?

Trust your process

- Is my data up to date?
- Is this AI use case still worth the cost?

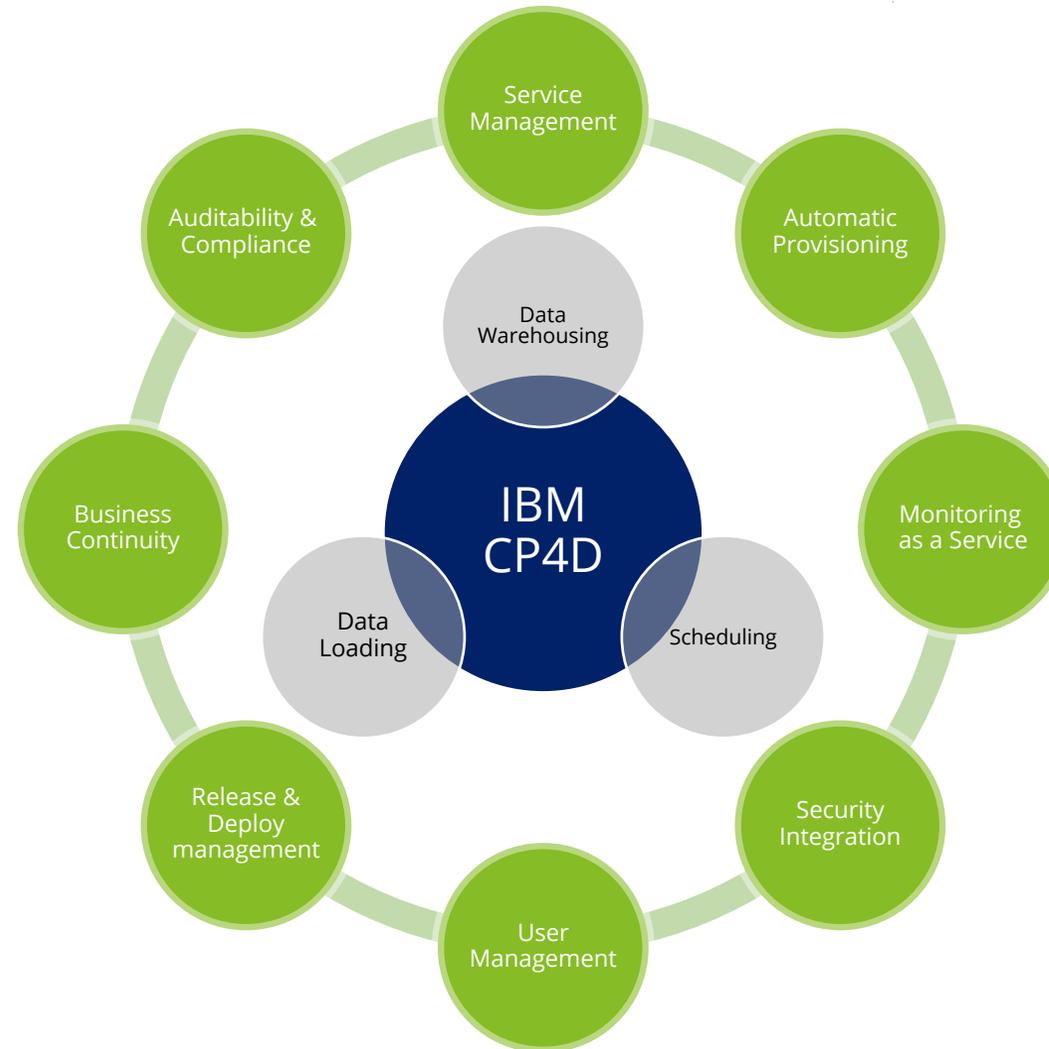
How IBM + Deloitte can help: DAPPER Managed Service

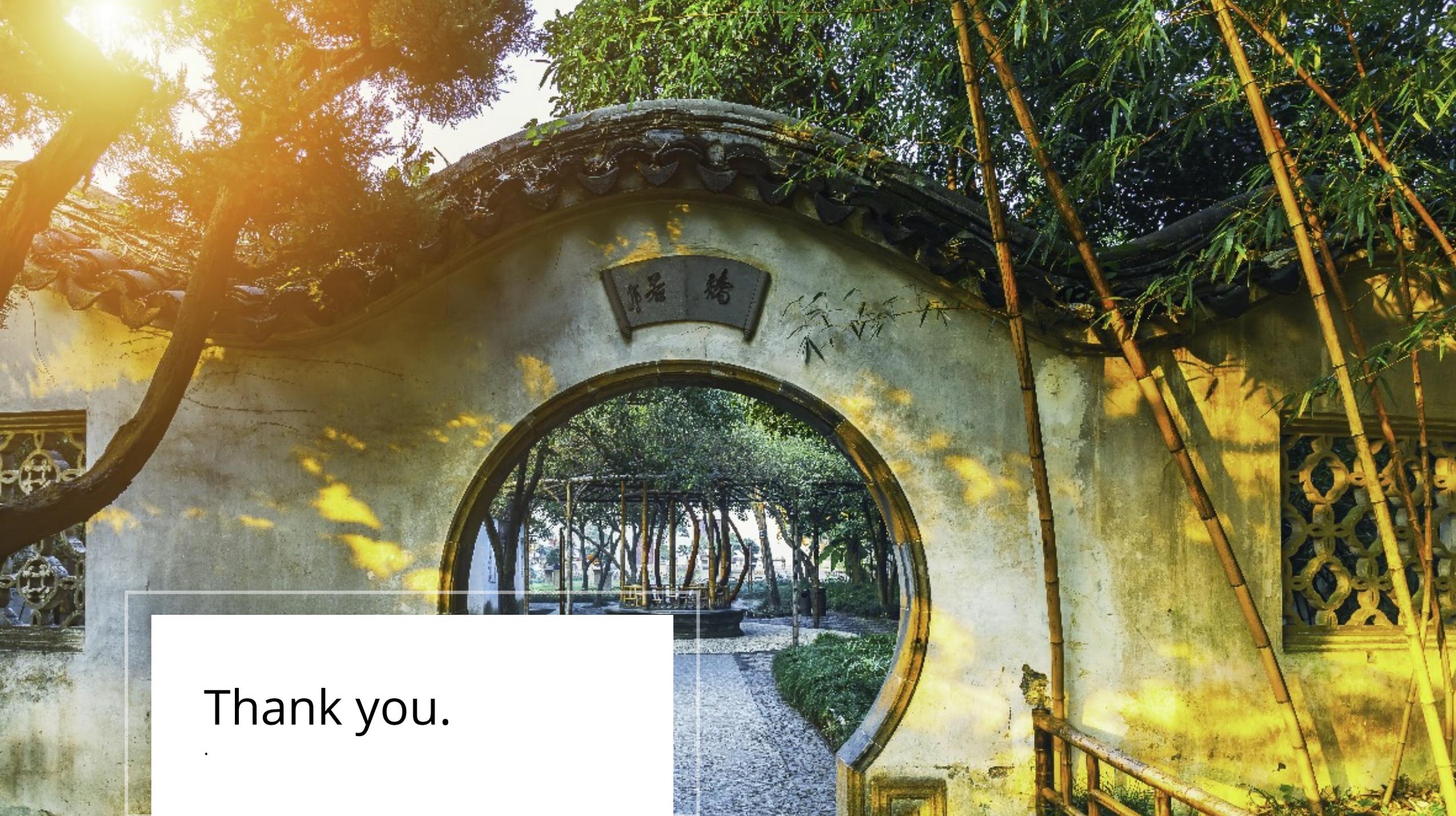
Data Management

- **Data Warehouse**
to securely connect and store to your data
- **Scheduling**
to orchestrate complex data flows inside or outside CP4D
- **Data Ingestion**
easily ingest or stream your data into the platform

Control Administration & Orchestration

- **Service Management**
SLA starting from day 1
- **Automatic Provisioning**
enabling fast end-to-end delivery
- **Monitoring as a Service**
to the level of your daily report
- **Security Integration**
integrated with your authentication providers
- **User Management**
for quick and complete user onboardings based on well-defined user roles
- **Release & Deploy management**
for a full separation of duties
- **Business Continuity**
backup and restore processes in place
- **Auditability & Compliance**
our Deloitte standards enable fast external compliancy checks





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Thank you.